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Department: Human Resources Department,  
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**TO BE PUBLISHED ONLINE**

### CALL FOR EXPRESSION OF INTEREST

(For submission of proposals for the conclusion of a project lease contract)

The Research Committee (Special Account for Research Funds) of Aristotle University of Thessaloniki (ELKE AUTH), in the framework of the project "**Realizing Healthcare 4.0 Exploiting the 6G Network Evolution**" funded under – HORIZON 2021-2027, Marie Skłodowska-Curie, with Academic Head Prof. Amalia Miliou, Professor at the Department of Informatics, Aristotle University of Thessaloniki (AUTH), invites candidates to submit proposals for **one (1) position** as described below, through the award of a project contract, starting from the signing of the contract with duration of 36 months and with a total anticipated remuneration **145.238,40 €** (VAT and taxes included). The contract can be extended until the end date of the project 31/10/2027 (in case of extension until its completion) and within the approved limits of its budget.

#### 1. Project Description

The researcher will undertake the **preparation of a doctoral (PhD) thesis** within the framework of the ELIXIRION (**Realizing Healthcare 4.0 Exploiting the 6G Network Evolution**) project. Detailed information about the project can be found in the website: <https://elixirion-mc.eu/>.

The title of his/her Thesis is "**Joint access/X-haul network optimization targeting at high energy-/cost-efficiency in H4.0**".

Integrated Access Backhaul (IAB), proposed as a 5G New Radio fiber-alternative, will play a key role in 6G, along with multi-GHz bands and Non-Terrestrial Networks (NTNs) Base Stations (BSs), e.g., Unmanned Aerial Vehicles (UAVs). IAB can provide emerging data-hungry healthcare applications (e.g., hologram communication requiring up to few Tbps), with increased coverage via directional high-antenna-gain links, reliability via dual-connectivity-enabled IAB and reduced congestion via flexible routing. In parallel, widespread IAB adoption introduces significant challenges, which have not been fully addressed yet in terms of topology control, interference coordination and capacity sharing, especially for Time Division Duplex (TDD)-based Millimeter Wave (mmWave) transmissions and NTN BSs, thus necessitating the development of scalable routing and scheduling algorithms for joint control of IAB/non-IAB links sharing network/compute resources.

•The researcher who will participate in the project as doctoral candidate must not possess a doctoral degree at the date of the recruitment and must meet the mobility criterion\*. Researchers who have successfully defended their doctoral thesis, but who have not yet formally been awarded the doctoral degree will not be considered eligible.

• The researcher **will be enrolled as Doctoral Candidate in the School of Informatics AUTH** and he/she will collaborate with Academic Head and the other Researchers of the Project on the above-mentioned topic, which will be carried out in the context of the following work packages:

**WP1:** High reliability and high capacity green 6G infrastructures for Healthcare 4.0.

**WP3:** AI-driven E2E Healthcare service provisioning over 6G.

#### Expected outcomes:

To propose and implement new:

i) IAB algorithms and

ii) Radio access network and X-haul link optimization techniques targeting 75% higher energy and cost efficiency than the literature while supporting up to 1 Tbps capacity.

### Mobility requirements (Secondments):

The project includes the following two international secondments (training trips) of a total duration of 6 months:

- (a) Academisch Medisch Centrum Bij De Universiteit Van Amsterdam (AMC), Amsterdam, The Netherlands, duration 3 months and
- (b) NEARBY COMPUTING SL (NBC), Barcelona, Spain, duration 3 months.

### Payments

Maximum payment: 4.034,640 € per month

- Living allowance: 2.774,40 € per month
- Mobility allowance: 600,00€ per month
- Family allowance: 660,00€ (per month, if applicable)

### REQUIREMENTS

• The researcher who will participate in the project has to be a doctoral candidate within one month from the date of signing the employment contract (i.e., not already in possession of a doctoral degree).

• **\*Mobility Criterion (Mobility Rule):** At the time of recruitment, he/she must not have resided or carried out his/her main activity (work, studies, etc.) in Greece for more than 12 months in the 3 years immediately before the reference date (indicative start of the contract, January 2024).

Compulsory national service, short stays such as holidays and time spent as part of a procedure for obtaining refugee status under the Geneva Convention are not taken into account.

### 2. Required Qualifications

- University Degree in Electrical Engineering and Computer Engineering or Computer Science closely related degrees to Engineering which should comply with Level 7 of the European Qualifications Framework (such as Bachelor and Master, or Integrated Master, or Dipl. Ing.) entitling the candidate to embark on a doctorate.
- Very good knowledge of the English Language (Level B2)

### 3. Additional Qualifications

- Verified knowledge of "Cellular Networks" and/or "Resource Allocation" and/or "Optimization Theory".
- Verified knowledge of programming in MATLAB, and/or Java and/or Python.
- Note: The knowledge is documented with a relevant certificate or with a relevant bachelor's / master's dissertation / doctoral thesis or with relevant courses of the study cycle (detailed grade and if the correlation does not immediately result from the title of the course, the detailed course score must be accompanied by description of the course in the Study Guide) or with teaching of relevant courses (certificate of institution and / or contract).
- Additional knowledge of English Language.
- Publications in scientific journals in the area of Communication Networks.
- Announcements in scientific conferences in the area of Communication Networks.
- Interview

### 4. Qualifications Assessment

	Qualifications criteria	Credits (Researchers)
1	Bachelor's degree mark	mark * 40
2a	Foreign language (Level C2)	70
2b	Foreign language (Level C1)	50
3	Publications in scientific journals (per publication) – 6 max	40 (per publication)
4	Announcements in scientific conferences (per announcement) – 6 max	15 (per announcement)
5	Proven Knowledge of "Cellular Networks" and/or "Resource Allocation" and/or "Optimization Theory"	25
6	Proven knowledge of programming in MATLAB, and/or Java and/or Python.	25
7	Interview	≤300

**All the qualifications listed above are in relevance with the project requirements and objectives.**

## 5. Required Documents:

1. Submission of Proposal - Statement (see appendix)
2. Solemn Declaration of Law 1599/1986 (see appendix), in which it is stated that: At the time of recruitment, the candidate has not resided or carried out their main activity (work, studies, etc.) in Greece for more than 12 months in the 3 years immediately before the reference date.  
Compulsory national service, short stays such as holidays and time spent as part of a procedure for obtaining refugee status under the Geneva Convention are not taken into account.
3. Detailed Curriculum Vitae
4. Copies of the Degrees  
Special cases:
  - a) In cases where the degree grade is a qualification/criterion and is not indicated on the relevant copy of the degree, the transcript of records should be submitted in addition, otherwise the specific qualification requested will not be marked.
  - b) Postgraduate students should submit a recent certificate (within the last three months) from the relevant University Department, showing that they have the relevant status at the time of submission of the proposal,
  - c) If the scientific field/specialisation is not evident from the degree: For bachelor's and master's degrees, the transcript of records should be submitted.
5. Copies of certificates as well as any other document that will certify the information mentioned in the CV and which are related to the Required or Additional qualifications-criteria of this call for expression of interest.
6. In order to prove that the criterion of publications in journals and/or conference announcements has been fulfilled, the candidate should include the required minimum information in the detailed CV, for journals, the title of the journal, the issue, the date of publication, the title of the publication, the authors, and for conferences, the title, the date and venue and a copy of the programme.
7. Male candidates must submit a solemn declaration of law 1599/1986 that they have fulfilled their military obligations or have been legally discharged from them or have been deferred for the entire duration of the project.

## 6. Interview

Candidates who meet all the conditions and required qualifications of the call will be invited for an interview (after written information by e-mail). Candidates who do not attend the interview will be rejected.

The topics of the questions and the marking system to be used are shown in the following table:

Nr.	Interview topic	Level of Knowledge Units for Grading	Scoring range
1	Efficiency in oral communication	Basic 0-25 Good 26-50 Excellent 51-75	0-75
2	Ambition and dedication	Basic 0-25 Good 26-50 Excellent 51-75	0-75
3	Basic Knowledge of Communication Networks	Basic 0-25 Good 26-50 Excellent 51-75	0-75
4	Programming and analytical skills	Basic 0-25 Good 26-50 Excellent 51-75	0-75

## 8. Submission of proposals

Proposals and required documents should be submitted either via e-mail to [amiliou@csd.auth.gr](mailto:amiliou@csd.auth.gr) or in person or by post to the following address Department of Informatics AUTH, Biology Building, University Campus, 54124 Thessaloniki, Greece **within hours 9:00-14:00 no later than 11/12/2023**. Proposals will be attributed a reference number from the Secretariat of the Department of the Academic Head of the project.

## 9. Publication – Information

This Call will be published on the website of ELKE AUTH <https://rc.auth.gr/proskliseis-gia-apasholisi-se-erga> and on the website of "Diavgeia".

For more information and questions regarding the position, candidates may refer to 2310-998410 or [amiliou@cso.auth.gr](mailto:amiliou@cso.auth.gr) . For information on the proposal submission process candidates may contact ELKE AUTH at **00302310-994082, 4052, 4053**.

## **10. Evaluation**

Submitted proposals will be evaluated by a three-member Evaluation Committee in accordance with the procedure provided for in article 244 of Law 4957/2022 and in article 20 of the Funding and Project Management Guide of ELKE AUTH as applicable.

## **11. Objection**

Candidates are informed of the results through the website of the ELKE AUTH (<https://rc.auth.gr/proskliseis-gia-apasholisi-se-erga>) in the online posting of this call, as well as through the program Diavgeia. The candidate has the right to submit an objection against the results of this call (Decision of acceptance of results) within an exclusive period of five (5) calendar days from the day following the posting of the decision of acceptance of results on the website of the ELKE AUTH. The objection must be in writing and legally signed, accompanied by a photocopy of the objector's identity card and must be submitted either electronically at [prosk@rc.auth.gr](mailto:prosk@rc.auth.gr), or in person, or by post to the Special Account for Research Funds (ELKE) of the Aristotle University of Thessaloniki (KEDEA Building, 3rd September - University Campus, Thessaloniki, P.O. Box 54636, 1st floor, Office 101). No objections may be raised on the grounds of interview or skill test.

The procedure for objections is defined by article 245 of Law 4957/2022 and article 20A of the Funding and Project Management Guide of the ELKE AUTH as applicable.

If the objection concerns the qualifications of one or more candidates, it is communicated to the latter by e-mail, at the discretion of MODY. Each of them has the right to submit their opinion by electronic or paper submission to the MODY within three (3) calendar days of the notification. All the above shall be forwarded to the Objections Committee. Candidates who will not submit any opinion in accordance with the procedure as described above, may not submit an objection to the new Decision on the acceptance of results of the Research Committee, which will be issued after the approval of the recommendation of the Objections Committee on the acceptance of the objection.

For the effective exercise of the right to submit an objection, candidates have the right to access the data of their individual candidature file and the evaluation-scoring documents, both of themselves and of their other candidates, upon written request within the objection submission deadline and under the conditions of articles 5 of Law 2690/1999, 42 of Law 4624/2019 and 6 par. 1(f) of the GDPR (EU 2016/679). The application shall be submitted in the same way as the objection.

Taking into account that the data of the candidates' individual files submitted for participation in this Call for Expression of Interest constitute personal data within the meaning of Article 4 of the General Data Protection Regulation 2016/679, the access of the other candidates to these data is possible under the terms of the legislation on personal data and Article 5 of the Code of Administrative Procedure, as well as in accordance with the conditions consistently accepted by the Hellenic Data Protection Authority (decision 28/2018). In any event, by submitting their application, candidates accept that the documents and supporting documents they submit may be issued to their fellow candidates, subject to the above conditions.

Both objections and requests for access to candidate file data must be legally signed, i.e. either with an electronic-digital signature (gov.gr or other legally granted digital signature), or with a handwritten signature. A photocopy of a document with a handwritten signature (scanned pdf file) will be given a same-day incoming file number but will be examined only if the original document will be submitted within five (5) calendar days.

Requests for access to data and objections that do not meet the above requirements will not be examined.

## **12. Personal data**

ELKE AUTH takes all appropriate measures for the protection of personal data during the evaluation process and it is strongly recommended that you read about the data protection policy and your rights on the AUTH website <https://www.auth.gr/gdpr>.

## OTHER CONDITIONS

1. From all the proposals submitted according to the above specifications, the one that best meets the project's requirements will be selected and awarded a work contract on the basis of contractual freedom.
2. Only proposals / objections that will be received by the set date and time will be considered. In the case of postal submission, the deadline is judged on the basis of the date mentioned in the shipping file, provided that it will be received by ELKE AUTH no later than the approval of the results. ELKE AUTH bears no responsibility for the content of the candidacy files that will be sent.
3. Changes to the proposals (replacements, corrections or submission of additional documents) are not allowed after the expiration of the deadline.
4. For the employment of teaching, research and scientific staff, the recognition of academic qualifications awarded by foreign institutions that are not accompanied by DOATAP - Hellenic National Academic Recognition and Information Center (Hellenic NARIC) recognition certificates, is based on the National Registry of Foreign Recognized Higher Education Institutes and the National Registry of Foreign Recognized Academic Title Types, <https://www.doatap.gr/anagnorish/mitroa>. If the degree is awarded by a foreign institution included in the list of article 307 of Law 4957/2022 (list of foreign institutions with a franchise agreement with private institutions in Greece), the candidate must submit a Certificate of Place of Study from the foreign institution. If the place of study or part of the studies is confirmed as the Greek territory, the degree is not recognised, unless the part of the studies undertaken in the Greek territory is in a public higher education institution. In addition, if the call for applications has a grading/marking scale for the degree, candidates must provide a certificate of the Overall Mark from the foreign institution. The matching of marks is carried out according to the system of matching marks of domestic and foreign qualifications as defined by the decisions of the Plenary Board of the DOATAP (Proceedings 144/7.2.2014 and 145/14.2.2014) <https://www.doatap.gr/anagnorish/systima-antistoichias-vathmologisis-imedapon-kai-allodapon-titlon-spoudon/>. In case of failure to provide a certificate of the overall final grade, the proposal will not be rejected, but the specific qualification requested will not be marked.
5. For the employment of administrative, technical and other staff, academic qualifications, if they are required or taken into account and have been awarded by foreign institutions, must be accompanied by certificates of recognition of DOATAP-Hellenic National Academic Recognition and Information Center (Hellenic NARIC). In addition, if the call for applications has a grading/marking scale for the degree, a certificate of equivalence issued by the DOATAP is required. If the certificate of equivalence of marks is not provided, and only the certificates of recognition issued by the DOATAP are submitted, the candidate's proposal will not be rejected, but the specific qualification requested will not be marked.
6. It is pointed out that the procedure for submitting proposals for the conclusion of a project lease contract is not competitive, while the selection of a contractor has the character of accepting the proposal and not "recruitment". The evaluation process will be completed by compiling a ranking list and / or a list of excluded, while those selected will be notified individually. In case of a tie, the proposal of the interested person is selected in order a) with the longest experience, b) with the highest bachelor's degree mark, c) with the highest master's degree mark.
7. The proposal that is first in the ranking table and has the highest score in all the scoring criteria will be the one that will be selected. In case of obstruction of the person who submitted it, the next proposal is selected until the ranking order is exhausted.
8. Any submitted proposal that does not meet the criteria of the call of the expression of interest will not be examined any further and will be automatically rejected.
9. Throughout the execution of the project and according to the terms of the contract, following a relevant decision of the Research Committee, the selected person may be replaced by the next candidate in the ranking order, either due to his/her resignation or due to improper execution of the contract, following a written notice of termination of the contract that will be duly served on him/her and after the deadline for compliance set in the same document has expired without effect.
10. The contract may be extended without restriction, following a decision of the competent body of ELKE AUTH and if the required budget of the project allows it, without a new invitation, until the end date of the project (and in case of extension of the project until its new end date).
11. ELKE AUTH does not undertake any commitment to conclude a contract, as it is left to its full discretion to conclude or not contracts, as well as their number, excluding any claim of the interested parties.
12. The project assignment will take place in accordance with the provisions of the Program Implementation Guide.
13. The knowledge of foreign languages is certified in accordance with the provisions of the Presidential Decree 85/2022 "Determining the qualifications for appointment to positions of public sector" (A' 232/17.12.2022), especially according to the articles 10, 14 par. 3 and 15 par. 7.
14. Foreign documents, other than those in English, must be accompanied by photocopies of their official translation into the Greek or English language, except for English, French, German, Italian and Spanish language certificates which, if they meet the conditions of the P.D. 85/2022, are accepted without requiring their translation.
15. For candidates, computer skills shall be certified according to the Presidential Decree 85/2022 "Determining the qualifications for appointment to positions of public sector" (A' 232/17.12.2022), especially according to the article 9.
16. It should be noted that the project assignment to candidates employed in the Public Sector, in Public and Private Bodies, etc. is subject to the prohibitions/restrictions imposed by national legislation, the regulatory framework of the project management and the Funding and Management Guide of ELKE AUTH.

The President of the Research Committee

Professor Efstratios Stylianidis  
Vice Rector Research and Lifelong Learning

**SUBMISSION OF PROPOSAL - STATEMENT\***  
(with consequences of law on false/inaccurate statement)

Name: ..... Surname: .....

Mobile phone: ..... E-mail: ..... VAT or password number: .....

**Please note in this proposal - statement and outside of the postal file the following**

**(To be completed by the candidate):**

The reference number of this call

I affirm that:

- a. I have read and understood all the terms of this Call, which I accept unconditionally,
- b. the information given in all the forms in this proposal is accurate and true,
- c. I give my explicit and unconditional consent to the collection and processing of my personal data, as indicated in this proposal and in the documents submitted with it, exclusively for the purposes of implementing this Call for expressions of interest, including the posting of the results thereof on DIAVGEIA, in accordance with the provisions of the General Data Protection Regulation (GDPR) and Law 4624/2019.

**SIGNATURE**

Date : \_\_\_/\_\_\_/\_\_\_\_\_

Find attached : 1.  
2.

***\*Incomplete filling of the proposal – statement constitutes a criterion for exclusion***