QRDI- TÜBİTAK JOINT FUNDING Call

ACADEMIA-INDUSTRY COOPERATION CALL (AICC) ON:

"SMART CITIES

SHAPED BY DIGITAL AND SPACE TECHNOLOGIES"

REQUEST FOR APPLICATION

SIXTH CYCLE

April 2024

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Section 1. Acronym List

AICC	Academia-Industry Cooperation Call
GAC	General Application Center
GAG	Grant Application Guide
IP	Intellectual Property
KI	Key Investigator
LPI	Lead Principal Investigator
PI	Principal Investigator
PR	Peer Reviewer
QRDI	Qatar Research Development and Innovation
R&D	Research and Development
RFA	Request for Application
RO	Research Office

Section 2. Snapshot

SCOPE		
Competition Opens	**1 April 2024**	
Submission Deadline	Proposal submission by LPI to TÜBİTAK: **11 June 2024 (11:59pm, Istanbul time)** Proposal submission by LPI to QRDI: **12 June 2024 (12pm, Doha time)** Final submission and RO vetting for QRDI: **26 June 2024 (12pm, Doha time)** Final date for Turkish partners to finalize the e-signatures: **25 June 2024; 11:59pm Istanbul time**	
Announcement of Awards	**October/November, 2024**	
Priority Areas	• Smart Transportation • Smart Logistics • Smart Healthcare • Smart Environment • Smart Sports	
Applicant Eligibility	**Qatar Side**	**Türkiye Side**
	• The LPI must be affiliated with an approved submitting institution inside Qatar. • The LPI must hold an approved terminal degree as defined in the list of terminal degrees link To be eligible, the proposal must have at least one Qatar-based Submitting Institution that collaborates with at least, one Türkiye -based Submitting Institution.	The proposal must have at least one **Türkiye-based company (industrial sector)** that collaborates with at least one Qatar-based Submitting Institution. Turkish academy partners (including public institutions or organizations/ research institutions/ universities/ training and research hospitals) are allowed to apply to this call only in collaboration with a Türkiye-based company (industrial sector). The Principal Investigator (PI) and Lead Principal Investigator (LPI) from academia are expected to hold PhD. The LPI/PI from public

		institutions/organizations and private sector are expected to hold at least BA/BSc degree. For further details please visit here.
Awards Parameters	Each award is up to **QAR 730,000 ($200k)** per year for a duration of **up to 2-years**.	**TÜBİTAK** funds up to **twelve million (12.000.000 TL) Turkish Liras (excl. overheads and Project Incentive Premium (PIP))** per project. The project duration is **up to two years**. The total budget of the partner(s) from academia / public institutions / organizations **cannot exceed 40% of the total project budget**.
Co-Funding/cost-sharing Opportunities	QRDI encourages co-funding/cost-sharing contributions, in cash or in-kind.	Cost-sharing: SMEs are expected to contribute 25% of the total budget, large enterprises are expected to contribute 40% of the total budget.
IP Policy	QRDI Intellectual Property (IP) Policy can be found at link.	For information on the IP policy for TÜBİTAK beneficiaries, please visit Link.
How to Apply	For Qatar-based LPIs, proposals 'submission is made via: https://oss.qgrants.org/. The Grant Application Guide (GAG) is available in the document library at the link.	For Türkiye-based LPIs, proposals' submission is made using E-Signature via uidb-pbs.tubitak.gov.tr. For E-signature details; please contact ardeb.e-imza@tubitak.gov.tr or visit (Link).
Related Documents	Applications must comply with all the policies and guidelines available at link and in the the document library at the link.	Applications must comply with all the policies and guidelines available on National Rules Document at link.
QRDI/TÜBİTAK Contacts	All enquiries and requests should be submitted via QRDI support system, at link	Please contact Nihad Abunasser at uidb@tubitak.gov.tr.

Section 3. Overview and Call Objectives

QRDI and TÜBİTAK are jointly launching the sixth cycle the AICC program dedicated to the topic of: Smart Cities Shaped by Digital and Space Technologies. This AICC program aims to boost R&D outcomes to higher TRL, lay the foundation for a lasting innovation, and build human talents in the field of Smart Cities. The objectives of this cycle are to:

- Address the continuous geographical and economic growths of cities through insightful and persistent R&D efforts.
- Assign multidisciplinary R&D efforts, leveraging ICT and space techs, to create resilient, inclusive, and sustainable smart city solutions.
- Provide added value to city operators and residents from the massive 24/7 data streams, delivered from communication and observation-based satellites.
- Realize the ambitions and national strategies objectives of Türkiye and Qatar for city urbanization and society development, through R&D efforts.

Section 4. Priority Areas

The proposals must be within one or more of the research priority areas described below provided they considers implementing/developing/adopting advanced digital and space techs.

1. **Smart Environment:** Drive sustainable consumption of natural resources, minimize food waste and ensure water and food security, soil, and other city's natural assets, to ensure the protection of the environment and the sustainability of nature.

2. **Smart Healthcare:** Generate an increment in population access to quality healthcare using smart services to mitigate the impact of chronic and systemic diseases. It considers integrated and collaborative systems for provisioning and access to care outside clinics and hospitals.

3. **Smart Logistics:** Grow a competitive logistics sector that promotes international trade and business development. This area covers effective logistics management and decision-making delivered through consolidated digital channels. It also covers advanced technologies to predict and protect against disasters and threats to protect citizens and ensure crisis management.

4. **Smart Sports:** Establish a world-class, personalized, and memorable sports fan journey (connected fans) through intelligent and immersive live game experience. It includes smart crowd/events/facilities management and leverages the latest sports innovation processes and technologies.

5. **Smart Transportation:** Facilitate mobility through a safe, reliable, and environmentally friendly transport network. This area considers ICT-supported and integrated systems, including tram, bus, train, subway, car, sea and air transport, bicycles and pedestrians, creating sustainable, secure and interconnected transportation systems.

Applicants are expected to address challenges associated with one or more of the above areas, considering digital and space technologies. The research technologies include:

- Advanced sensors & IoT,
- Next generation networks,
- Satellite communication, internet & GPS,
- Space inspired techs, elite image processing, vision sensors, earth observatory, etc.,
- Big data & data analytics,
- ML, robotics & AI,
- Infinite computing & cloud/fog/edge computing, and
- Blockchain.

The **Anticipated Outcomes** include (but not limited to):

- Developing new/competitive standalone solutions, use cases and services that can bring short-term economic or societal impacts.
- New/customised and improved city-scale digital platforms aiming to establish a solid footstep towards sustainable development.
- Integrating digital/space sensing, data analytics, IoT, blockchain, and biometrics technologies for city monitoring, management, and planning purposes.

Section 5. Eligibility

5.1. Eligibility of the Proposal

- To be eligible, the proposal must have at least one Qatar-based Submitting Institution that collaborates with at least one Türkiye-based company.
- The eligibilities of the Qatar-based Submitting Institution and Türkiye-based Submitting Institution are mentioned respectively in section 5.2.1 and 5.3.1.

- Once the prerequisites listed above are fulfilled (Qatar side and Türkiye side), other Qatar-based academic institutions or research end-users are encouraged to join the consortium. Similarly, Turkish academic institutions (higher education institutions, training and research hospitals, public research centers) and other public institutions (e.g., metropolitan/city municipalities) are welcome to join the project consortium only after the prerequisites stated above are met.
- Turkish and Qatar-based teams must each be led by a Lead Principal Investigator (LPI).
- Each proposal should have a Project Coordinator who will be selected from the LPIs of the proposal and will be responsible for coordinating the application form and progress reports.

5.2. Qatar-based Team

5.2.1 Eligibility of Submitting Institution

- All academic, public, private, and other (e.g., non-profit and NGOs) entities in Qatar with QRDI-approved Research Offices are eligible to apply to this call (see link).

5.2.2 Eligibility of Collaborative Institutions

- Collaborative institutions must include at least one affiliated PI.
- Only Institutions inside the state of Qatar are eligible to collaborate with the submitting institutions.

5.2.3 Eligibility of Lead Principal Investigators (LPIs)

- The LPI must be full-time affiliate of an approved submitting institution inside Qatar.
- The LPI must hold an approved terminal degree as defined in the list of terminal degrees link.
- The LPI can submit only one application to this call. In addition, the count of an individual's participation in all ongoing projects under this program as LPI or PI, must not exceed three roles, excluding participation in projects ending before 31 December 2024.
- Other research team members eligibility, please refer to the "Personnel Requirements" document available at the link.

5.3. Türkiye-based Team

5.3.1 Eligibility of Submitting Institution

- The proposal must have at least one Türkiye-based company (industrial sector) that collaborates with at least one Qatar-based Submitting Institution.

- Turkish academic partners (including public institutions or organizations/ research institutions/ universities/ training and research hospitals) are allowed to apply to this call only in collaboration with a Türkiye-based company (industrial sector).

5.3.2 Eligibility to become Lead Principal Investigator (LPI) and Principal Investigator (PI)

- University; must hold a PhD degree (Proficiency in art/specialty in medicine). This rule also applies for employees of training and research hospitals.
- Public or private sector staff; must hold at least a BA/BSc Degree.

5.3.3 Researchers and Consultants

- Researchers and consultants must hold at least a BA/BSc Degree.
- Overseas researchers cannot be appointed to the Turkish project team under this call.

5.3.4 Scholarship Students

- Undergraduate and postgraduate students continuing their education in higher education institutions in Türkiye or "Research/Teaching Assistants" with student status and postdoctoral researchers can take a role in the project team as scholarship students.
- For more information, please refer to national rules document on the link.

Section 6. Timeline

The following table shows important dates for the **AICC-06th** cycle.

Timeline for AICC-06th Cycle	
Description	**Dates**
Online registration of ROs and key investigators	**Always Open**
Open proposal submission to QRDI and TÜBİTAK and RO vetting* process	**1 April 2024 12pm (Doha/ Istanbul Time)**
Close proposal submission by the Türkiye-Based LPI to TÜBİTAK	**11 June 2024, 11.59pm Istanbul Time**
Close proposal submission by the Qatar-based LPI to QRDI	**12 June 2024, 12pm, Doha Time**
RO final proposal submission and vetting by the Qatar-based team to QRDI	**26 June 2024, 12pm Doha/ Istanbul Time**
Final date for Turkish partners to finalize the e-signatures:	**25 June 2024; 11.59pm Istanbul time**
Awards announcement	**October/November 2024**

*RO vetting starts once the proposal is submitted.

Section 7. Application

7.1. Application Submission

- Turkish and Qatari applicants need to prepare their joint application offline using the application form available at LINK or Link.

- Once ready, each LPI will submit it online to their respective funding agencies.
    - The Türkiye-based LPI needs to submit the joint application to TÜBİTAK through http://uidb-pbs.tubitak.gov.tr.
    - The Qatar-based LPI needs to submit the joint application to QRDI through https://oss.qgrants.org/.

- LPIs must ensure that the information in the application form is matching the information entered on QRDI and TÜBİTAK submission systems and that the application form files submitted to QRDI and TÜBİTAK are matching.
- Submitted proposals should be vetted by the RO of the submitting institution to be considered as officially submitted.

7.2. Application Type
- LPIs must select "**New**" for newly submitted proposals.
- New application may also include proposals that did not pass QRDI screening in previous cycles.
- Proposals that passed screening but were not awarded are allowed to be resubmitted in the subsequent cycle as "**Resubmission**".

Section 8. Budget

8.1. Qatar-based Team

8.1.1 Grant Size and Duration
o The award is up to **QAR 730,000 ($ 200k)** per year for up to **2 years**.

8.1.2 Budget components
o Please refer to the budget components document in the document library at the link.

8.1.3 Co-Funding and Cost-Sharing
o Co-funding and cost-sharing are encouraged, (see co-funding and cost-sharing policy link).

8.1.4 Grant and Effort Allocation
o At least 100% of effort and 100% of total annual budget should be expended inside Qatar.

8.2. Türkiye-based Team

TÜBİTAK funds up to twelve million (12.000.000 TL) Turkish Liras per project (excl. overheads and Project Incentive Premium (PIP)) per project. The project duration is up to two years. The total budget of the partner(s) from academia / public institutions / organizations cannot exceed more than 40% of the total project budget.

Turkish small and medium sized enterprises (SMEs) can receive 75% (support rate) of their approved budget; Turkish large-scale enterprises can receive 60% of their approved budget. Higher education institutions, their institutes, public R&D centers can receive 100% of their approved budget. Requested funding from TÜBİTAK is obtained by multiplying the project budget with the support rate. In projects involving more than one executive institution, requested funding from TÜBİTAK is the sum of the amounts obtained by multiplying the project budget of each executive institution with the support rate.

Eligible costs are:
- Personnel Expenses
- Consumable Expenses.
- Travel Expenses (The sending party will meet all related costs connected with travel, lodging, and allowances according to their own regulation).

- Service Procurement Expenses (Consultancy and service purchase expenses from national and international project partners are not supported).
- Tools and Equipment Expenses.
- A balanced distribution between the project budget items is required.
- For more information, please visit Link

Section 9. Proposal Vetting and Screening

For the Qatar-based teams, all proposals are expected to be vetted by the research office of the submitting institutions to ensure compliance with the institutions' and QRDI policies. Proposals will also be screened by QRDI for the Qatar-based team to ensure compliance with the program's rules and regulations. QRDI screening criteria are available in the document library at the link.

All submitted proposals are subject to screening by TÜBİTAK according to their national rules. Screening outcomes must be agreed upon from both parties – QRDI and TÜBİTAK.

Section 10. Proposal Evaluation

10.1. Peer Review (40% of the overall score)

Proposals are peer-reviewed by a minimum of three international experts in the field of the proposal. The reviewers are solicited by TUBUTAK to evaluate each proposal against the criteria listed below. The reviewers will evaluate the proposals and provide narrative feedback to applicants. This feedback would benefit successful applicants in conducting their projects and help unsuccessful ones improve their resubmissions. Any proposal that scored "Poor" overall or in any individual criterion, will not be considered for funding. The evaluation criteria are as follows:

10.1.1 Scientific Excellence (Excellent, Good, Average, Unsatisfactory, or Poor) (40%)

- The proposal describes novel and original ideas or objectives.
- The project addresses an important problem or a critical barrier to progress in the field.
- The scientific premise of the proposal is sound and significant.
- The methodology is robust and feasible.
- The alignment of the proposal to the call's priorities areas is clear and strong.

10.1.2 Implementation (Excellent, Good, Average, Unsatisfactory, or Poor) (40%)

- The proposal describes clear, measurable, feasible, and achievable objectives within the proposed timeframe and budget.
- The work plan describes clear, measurable and well-coordinated tasks and milestones.
- The allocation and deployment of resources, i.e., personnel, equipment, time, etc., is adequate and justified.
- The research team members are well qualified, relevant and complementary.
- The LPI track record in research management and leadership is satisfactory.
- The collaboration, esp., international, is well justified. The collaborative institutions are of good standing and adequately resourced.

10.1.3 Budget (Excellent, Good, Average, Unsatisfactory, or Poor)

- The budget is appropriate and justified.
- The co-funding/cost-sharing commitments, if any, are realistic and reasonable.
- The appropriateness of project team expenses (personnel costs).
- Travel Expenses.
- Device / Equipment / Software / Publication Purchases.
- Consultancy Services and Other Service Procurements.
- Appropriateness of material purchases and quantities.

10.1.4 Potential Impact (Excellent, Good, Average, Unsatisfactory, or Poor) (20%)

- The potential of the proposal to generate or further knowledge; in terms of being a breakthrough or a step change.
- The potential for the research outputs to generate/contribute to economic and social benefit.
- Potential to disseminate scientific outcomes and transfer knowledge and technology.
- Enhance scientific capacity in the proposal's research area.

10.1.5 Research Compliance (Comments only)

- The proposal is compliant with the relevant regulations to ensure protection of human subjects.
- The proposal is compliant with the relevant regulations to ensure protection of children, if applicable
- The proposal is compliant with the relevant regulations to ensure vertebrate animals.
- The proposal is compliant with the relevant regulations to ensure protection from biohazards.

10.2. Programmatic Review (60% of the overall score)

Following the peer-review evaluation, proposals will be shortlisted on the basis of the procedure available at the link. Subsequently, a panel of experts will perform a programmatic review designed to assess and rank all shortlisted proposals in terms of relevance, importance and potential to generate impact. The programmatic criteria are listed below:

10.2.1 Relevance for Qatar and Türkiye - (Excellent, Good, Average, Unsatisfactory, or Poor) (25%)

- **Strength of alignment**
  - The proposal is well aligned to the general objectives and the priority areas of the call.
  - The proposal is capable to address local challenges and realise opportunities.
- **Budget Appropriateness**
  - Budget is realistic and well justified.
  - The co-funding/cost-sharing commitments, if any, are realistic and significant.

10.2.2 Potential impact for Qatar and Türkiye - (Excellent, Good, Average, Unsatisfactory, or Poor) (75%)

- **Involvement of End-Users**
  - The proposal has the potential to involve and address the needs of research end-users and enhance their capacity to utilise the research outcomes and benefit from them.

- **Plans to disseminate the project's results.**
  - The proposal outlines adequate plans to disseminate its outcomes to the local end-users and the public at large.
  - The proposal has the potential to create positive international visibility for Qatar and Türkiye.

- **Potential contribution to Qatari and Turkish society and economy**
  - The proposal has the ability to produce tangible measures (creation of intellectual property, start-up companies, spin-out, enterprises, etc.) or potential for commercialisation into new products/services/ technologies.

- The proposal is capable of developing solutions to national needs (e.g., socio-economic, health, and environmental aspects).
- The proposal contributes to developing local talent (training of graduate students in the project/involvement of RAs, postdocs, and junior researchers in the project)

Ethical compliance is also assessed by experts as part of the programmatic review.

At the end of the review and ranking processes, proposals are categorized in terms of their competitiveness and grouped as shown below. The final funding decision will group proposals as shown in the table below:

Final Review Ranking

Group	Description
A	The proposal was evaluated to be highly competitive.
B	The proposal was evaluated to be moderately competitive.
C	The proposal was evaluated to be uncompetitive.
D	The proposal was not shortlisted for panel review.

At the end of the review and ranking processes, proposals to be funded will be selected jointly by QRDI's and TÜBİTAK's management after considering their budget, national strategies, and priorities.

Section 11. Post-Award

11.1. For each awarded proposal, the pre-funding and the post-award will be managed by the research team local funding agency according to its policies and procedures.

11.2. The project coordinator of each project needs to provide the Consortium Agreement to QRDI and TÜBİTAK once the project is awarded and within the first six months of the project start date.

11.3. The project coordinator of each project has to prepare financial and scientific/technical progress reports to be submitted to both QRDI and TÜBİTAK.

11.4. The projects will be monitored through progress reports and the final report by both TÜBİTAK and QRDI for its content and progress.

Section 12. Intellectual Property Policy

QRDI Intellectual Property (IP) Policy can be found at link. TÜBİTAK IP policy concerning this call is available at Link. In the event that Intellectual Property has been jointly created by QRDI and TÜBİTAK beneficiary(ies), the joint owners shall enter into an Intellectual Property Management Agreement, which shall govern how the jointly owned results will be protected, managed, and exploited.

Section 13. Annex I: Definitions

Consortium Agreement: An agreement that participants conclude between themselves for the implementation of the project. It allows the participants to determine the detailed administrative and management provisions necessary to carry out their project. With this agreement, parties also outline the rights and responsibilities of each member of the consortium concerning intellectual property. This agreement cannot contradict or negate the provisions established by the project contracts and regulations of TÜBİTAK and QRDI.

Co-Funding: The mechanism through which Third-Party institutions contribute in-cash or in-kind funding to a project.

Cost-Sharing: The mechanism through which any of the participating institutions (submitting and/or Collaborative institution(s)) contribute in-cash or in-kind funding to a project.

Grant: Term used to describe the funding instrument used by TÜBİTAK/QRDI for the execution of material support after signing the Grant Agreement/Master Research Funding Agreement.

Intellectual Property (IP): All intellectual property rights, of any kind or nature throughout the world, whether existing now or in the future, including without limitation the rights with respect to (i) inventions (whether or not patentable and whether or not reduced to practice), designs, patents and patent applications; (ii) trademarks and service marks together with all goodwill associated therewith and worldwide registrations, applications, and renewals related thereto; (iii) copyrights, copyrightable works (in whatever form or medium), and all registrations, applications, and renewals for any of the foregoing; (iv) trade secrets, data, database rights, and confidential information; and (v) all claims, causes of action, and remedies of any kind related to the foregoing.

Lead Principal Investigator (LPI): The Principal Investigator who is identified in the research proposal as the leader and manager of the research team in each country and who has the ultimate responsibility for all administrative and programmatic aspects of the proposed project, in addition to their research role.

Project(s): General term used to describe individual grant awards made to the principal investigators by QRDI and TÜBİTAK.

Principal Investigator (PI): The person designated on the research proposal as a principal individual involved in the scientific development and execution of a project.

The Project Consortium: It represents the whole project and is composed of project Research Teams (RT) from both countries.

Project Coordinator (PC): The person who coordinates the whole consortium. PCs are selected from among the LPIs of any project's research teams.

Project Incentive Premium (PIP): Payments made by TÜBİTAK to principal investigators, researchers, and consultants of the accepted projects, according to the amount determined in the project contract. These payments can only be made to permanent staff of universities/public institutions.

Researcher: The person who carries out scientific research as a part of the project research team.

Research Team (RT): It is composed of project members from each country's project.

Work Package: A major subdivision of work within the research project as a whole. The work package may be composed of one of several tasks (for example, project coordination, literature survey, experimental phase, data acquisition phase, data treatment of modeling phase, implementation phase, dissemination of results and so on).

QRDI Specific Definitions:
For definitions specific to QRDI, see definition at Link.