



Saudi Basic Science Initiative

Project-level Funding

Research Consortium Grant (RCG)

Guidelines

Stable and Sustainable R&D Funding

Table of Contents

Introduction.....	3
The Saudi Basic Science (SBS) Initiative	3
Initiative Overview	3
Initiative Objectives.....	4
Initiative Research Focus	4
Initiative Core Activities (Discover Stage)	5
Research Consortium Grants (RCG)	6
Grant Overview.....	6
Grant Objectives.....	6
Grant Research Topics.....	7
Grant Budget and Duration.....	7
Eligibility & Admissibility	8
Eligible Participants	8
Eligible Projects	8
Research Ethics	8
Expectation of Successful Applicants.....	9
Communication and Acknowledgment	10
Use of Funds	10
Terms & Conditions for Submitting the Proposal	12
Administrative, Technical, and Financial Guidelines	15
General Disbursement Guidelines	15
Disbursement Authorities	15
Providing Equipment and Supplies	15
Allowances of the Project Team.....	16
Transfer between Budget Items	18
Application and Proposal Selection Process	19
Evaluation.....	19
Project Quality	19
Application Process	20
Review Process.....	20
Award Process	21
Management and Monitoring of Research Projects and Other Guidelines	22
Research Team Obligations.....	22
Project Monitoring.....	22
Reports	22

Procedure for Submitting Technical Reports.....	22
Postponement of Report Submission.....	23
Project Outputs.....	23
Nomination for an Award.....	24
Liability Waiver and Project Closure.....	24
In the Absence of a Specific Provision.....	25
The Right to Interpret or Amend the Rules.....	25
Implementation of the Rules.....	25
Terminology and Definitions.....	26

Introduction

The Research, Development, and Innovation Authority (RDIA) in the KSA is committed to promoting scientific research and innovation to drive economic growth and improve the quality of life. The RDIA seeks to provide researchers in the KSA with the necessary resources and support to conduct cutting-edge research that addresses the four national aspirations and priorities for RDI: Health and Wellness, Sustainability and Essential Needs, Energy and Industrials, and Economies of the Future.

RDIA's grants offer benefits that extend beyond the scientific community in the KSA. By supporting R&D, RDIA has the potential to drive economic growth and create new industries, while also addressing crucial societal challenges such as healthcare, energy, and food security. The RDIA's investment in human capital and infrastructure is building a highly skilled workforce and the resources needed to support cutting-edge research. This investment in R&D can lead to game-changing breakthroughs and scientific advancements that can transform industries and create value for society. The RDIA's funding initiatives are designed to promote intellectual property development, technology transfer, and commercialization, driving the growth of the innovation-based economy in the KSA. By fostering a culture of entrepreneurship and innovation, the RDIA is positioning the KSA as a global leader in innovation and contributing to the advancement of scientific knowledge and technological innovation worldwide.

RDIA's unwavering commitment to R&D is aligned with the national mission to build a sustainable future, achieve Vision 2030 goals, and position the KSA as a leader in scientific innovation and technological advancement, which will pave the way for the country to become a hub for cutting-edge R&D.

RDIA drives the KSA's transformation toward an innovation-based economy by supporting R&D and fostering innovation.

The Saudi Basic Science (SBS) Initiative

Initiative Overview

The Saudi Basic Science (SBS) Initiative is a project-level funding offered by RDIA, which supports basic and fundamental scientific research activities in the KSA aimed at expanding the pool of talented researchers. In addition, the initiative is a tool to activate and enhance the participation of the Kingdom's researchers in areas that will lead to the next generation of breakthroughs in each of the targeted fields, ultimately resulting in benefits for society and humanity as a whole. It will be focused on the national aspirations and priorities for RDI.

This initiative enables KSA researchers to pursue their scientific activities and ideas at the discovery stage of the Technology Readiness Level (i.e., TRL1–TRL3) with the possibility of advancing fundamental science.

It is an important opportunity that allows them to develop and strengthen research links and collaborations with the common goal of creating economic, social, and/or environmental benefits while contributing to the research ecosystem continuum.

This initiative is divided into three specific tracks: Young Scholars Grant (YSG), Basic Science Grant (BSG) and **Research Consortium Grant (RCG)**. This document focuses only on the RCG.

Initiative Objectives

- **Promote** foundational comprehension and exploration of the natural universe, incorporating the discovery of new edges in the fields of science, technology, engineering, and mathematics (STEM)
- **Forge** pioneering technologies and methodologies for scientific revelations to boost research potential and hasten scientific advances
- **Create** exceptional materials with innovative characteristics and functionalities for an array of uses, including but not limited to electronic equipment, energy storage, and catalysis, which bolster economic prosperity and technological innovation
- **Encourage** the growth of eminent and nascent career researchers, enabling them to contribute significantly to knowledge expansion
- **Establish** both domestic and global research groups to tackle multifaceted scientific obstacles and nurture innovative resolutions.

Initiative Research Focus

The initiative aims to promote cutting-edge scientific research spanning the four national aspirations and priorities for RDI and their goals.

1) Health & Wellness

- Solve the KSA's prevalent medical and behavioral health challenges
- Achieve early prevention of diseases through personalized wellness and healthcare services
- Disrupt digital healthcare to ensure health equity across the Kingdom
- Supply cutting-edge pharmaceutical and medical technology as well as biotech-based solutions and practices worldwide

2) Sustainability and Essential Needs

- Sustainably secure water, food and power supplies for the nation and industry
- Become a global exporter of advanced water and food technologies (e.g., water desalination)
- Establish the KSA as a global paradigm on environmental conservation
- Position the Kingdom as a regional supplier of sustainable and low-cost electricity
- Minimize local emissions by adopting the circular carbon economy (CCE) framework
- Increase KSA's sustainability footprint

3) **Energy and Industrials**

- Maintain & extend the KSA's global leadership position in energy supply
- Emerge as a leading nation in the supply of alternative energy
- Establish the KSA as a regional hub for specialty chemical derivatives
- Ensure hydrocarbon demand sustainability through advanced non-metallic products, blue hydrogen, and crude oil-to-chemicals (COTC)
- Transform the KSA's industrial sector toward high-value on-demand manufacturing
- Establish competitive and sustainable mining as the third industrial pillar

4) **Economies of the Future**

- Reimagine the future of urban living in zero-carbon, zero-car, and hyper-connected cognitive cities
- Become a global space champion, creating economic value from RDI spillover effects and galvanizing the nation around futuristic ambitious goals
- Unlock the unexplored deep sea for scientific and entrepreneurial usage
- Foster digital technology frontiers in priority sectors to build a regional/global edge

Initiative Core Activities (Discover Stage)

The main purpose of this initiative is to enable KSA researchers to pursue basic research activities during the discovery stage. It is designed to allow researchers to exploit all possible scientific resources to understand fundamental science and advance them to the technological development stage to solve national challenges. The discovery stage is critical for generating new knowledge and understanding and laying the foundation for future innovation and development. Therefore, proposals must show the ability to conduct rigorous research, experimental or simulation activities, and data analysis as well as generate new insights that can inform future R&D activities. Successful proposals should demonstrate knowledge of the processes involved in conducting basic research and fundamental scientific activities.

- Planning and managing research
- Identifying knowledge gaps and generating ideas
- Creating and managing Intellectual Property (IP)
- Collaborating with public and private sectors, nonprofit organizations, and universities
- Leading or co-leading successful projects

Additionally, the proposal should clearly illustrate how the issues are being addressed and understood by utilizing one or more of the following approaches:

1. Identify basic principles and scientific observations
2. Formulate technological concepts and envision useful applications of the identified principles
3. Conduct experiments to validate the concept through analytical and experimental processes of critical functions and/or characteristic proofs of concept
4. Use one or a combination of scientific tools (e.g., labs, computer simulations, and data mining) to further enhance and comprehend the science of the subject under investigation

Research Consortium Grant (RCG)

Grant Overview

This grant aims to establish a number of ambitious, innovative, multi-disciplinary and multi-institutional collaborative research projects to address some of the national and global challenges. The grant is dedicated on promoting joint research efforts among partners, and it is a consortium-based collaboration between multi-institutions to exchange innovative ideas with interdisciplinary expertise where they collaborate to address national and global challenges, leveraging combined efforts for effective problem-solving. These projects have the potential to make significant advancements and breakthroughs in various fields. The grant requires a minimum of three separate institutions, whether they are local or international, to submit applications jointly. Moreover, it is necessary for at least one of these institutions to be in Saudi Arabia. The submitted application must clearly identify gaps in scientific knowledge, provide necessary details, and follow all required steps to address the selected research topic. In the Research Consortium Grants, the application must be a collaborative effort that provides new insights to lay the groundwork for future innovation and development. Successful applicants are expected to publish impactful research findings, develop patents for business creation, build skills and knowledge, organize knowledge-sharing events, collaborate with international researchers, address national challenges, promote academia-industry partnerships, improve research methods and infrastructure, and inspire future generations in research pursuits.

Grant Objectives

- **Fostering Collaboration:** Unite diverse researchers to exchange innovative ideas through interdisciplinary intelligence
- **Tackling National and Global Challenges:** Enable diverse experts to collaboratively address national challenges, leveraging combined expertise for effective problem-solving
- **Amplifying Collective Impact:** Amplify and drive transformative results through collaborative efforts and harnessing collective strengths
- **Accelerating Research and Innovation:** Accelerate research, innovation, and practical applications through information exchange, interdisciplinary synergy, and shared resources
- **Optimizing Resources:** Optimize resource allocation, maximizing efficiency and minimizing duplication for impactful research outcomes
- **Advocating for Research Priorities:** Promote for research priorities, shaping agendas and securing resources to address critical issues
- **Facilitating Knowledge Exchange:** Foster knowledge sharing, enhancing research quality through idea exchange, diverse perspectives, and collaboration
- **Building Robust Networks:** Build strong networks, fostering collaborations, expanding research opportunities, and enhancing collective capacity

Summary of the track's input and expected outcomes

Grant	Objectives	Expected Outcomes
Research Consortium Grants	<ul style="list-style-type: none"> • Aim: Drive collaborative research and development activities within the KSA • Target group: Researchers with a strong track record in the private/public sectors and distinguished faculty members 	<ul style="list-style-type: none"> • High-quality publications • High-valued patents • Attend well-recognized international conferences • Advance the knowledge gap in their respective field • Train graduate students

Grant Research Topics

This grant aims to promote breakthrough scientific research spanning the four national aspirations and priorities for RDI and focus research topics as follow.

- 1) Health & Wellness
 - **Developing Genetic Therapies for KSA's Top Rare Diseases.**
 - **Prevention and Management of Non-communicable Diseases in Saudi Arabia.**
- 2) Sustainability and Essential Needs
 - **Sustainable Water Management.**
 - **Achieve Net-zero Emissions.**
- 3) Energy and Industrials
 - **Technologies for High Conversion of Crude Oil to Chemicals.**
 - **Technologies for Clean Hydrogen Production.**
- 4) Economies of the Future
 - **Enabling Cognitive Cities: Advancing Beyond Smart Cities.**
 - **Building Future of Connectivity: Sustainable 6G Technologies**

Grant Budget and Duration

The general guideline to formulate proposals is to maintain short- to medium-term targets. **The grant provides grants ranging up to SAR 10,000,000, and urges applicants to create proposals that can be implemented within five years from the date of receiving the award.** The budget requested by applicants must be fully justifiable. The following timeline will be strictly followed for this round.

Grant Announcement	30-Aug-2023
Deadline to Submit the Proposal	30-Sep-2023
To submit your application, please visit the link: https://rdia.gov.sa/grants	

Eligibility & Admissibility

Eligible Participants

The grant will support proposals for project-based funding in basic scientific research, with a focus on the aforementioned research topics. Successful applicants should meet the following criteria:

- Joint applications from at least three different institutions (mix of non-profit and for-profit institutions)
- The application must clearly assign a Primary Principle Investigator (PPI) and Secondary Principle Investigators (SPIs) after obtaining the necessary approvals
- The PPI must be affiliated with a Saudi-based institution
- The PPI and SPIs must have doctoral degrees with strong research records in their respective fields
- The PPI and SPIs must be affiliated with an institution, such as a university, a research center, a ministry, a corporation, or a company
- The applicants should be able to understand and distinguish between the different stages of the TRL
- Past involvement of the applicants in a national- or global-level research project or with the industry is favorable

Eligible Projects

- Project must be STEM-based and in the aforementioned research topics
- Project must consider the applicability of the output
- Project should contribute to the R&D ecosystem within the Kingdom
- Project should be aligned with the national objectives, Vision 2030 goals, and RDI sector
- Project must contribute to scientific knowledge and practice

Research Ethics

It is required that the research is designed and conducted in such a way that it meets specific ethical principles and is subject to appropriate professional and institutional oversight in terms of research governance. Please refer to the following principles:

- The research should aim to maximize benefit for individuals and minimize risk and harm
- The rights and dignity of individuals and groups should be respected
- Wherever possible, participation should be voluntary and appropriately informed
- Research should be conducted with integrity and transparency
- Lines of responsibility and accountability should be clearly defined
- Independence in the research should be maintained, and where conflicts of interest cannot be avoided, they should be made explicit

- All necessary ethical approvals and permissions must be taken prior to the commencement of the project

RDIA will:

- Only fund research that has an adequate and appropriate ethics statement, which takes the ethical dimensions of the research seriously
- Consider reviewer or panel member disagreement with the suggested project approach to ethics as either grounds for a conditional grant or rejection of the proposal (where it calls into question the researcher's competence or the feasibility or validity of a proposal)
- Consider the suspension of payments and grant termination if the review shows that a project requires major changes that will alter it to the extent that it can no longer retain RDIA support
- Only fund research organizations that have processes in place to follow the guidance in this framework and comply with the grant conditions and RDIA's policy and guidelines
- Hold the PPI and researchers involved in any allegations of research misconduct and breach of compliance accountable with the grant conditions; this can result in the immediate suspension of the individual project and other projects

Expectation of Successful Applicants

- Demonstrate awareness of the wider environment and context in which their research takes place
- Publish impactful research findings that drive innovation and advance knowledge.
- Develop patents with potential for creating businesses, generating jobs, and fostering economic growth.
- Active engagement with the public at both the local and national levels regarding their research and its broader implications
- Enhance the skills and knowledge of researchers and professionals through continuous learning and development.
- Organize workshops and events to facilitate the sharing of knowledge and exchange of ideas.
- Collaborate with international researchers to achieve global impact and address pressing challenges.
- Identify potential benefits and beneficiaries from the beginning and throughout the life cycle of the project(s)
- Contribute to sustainable development by addressing national issues and promoting positive societal change.
- Promote partnerships between academia and industry to facilitate the transfer of technology and knowledge.
- Improve research methods and infrastructure to ensure high-quality outcomes and reliable findings.

- Inspire future generations to pursue research, fostering scientific understanding and nurturing a culture of innovation.
- Demonstrate awareness of the industry impact of their research beyond the usual research considerations

Communication and Acknowledgment

Effective communication and acknowledgement policies are integral to maximizing the impact of quality research. The RDIA's communication policy aims to enhance the communication of RDIA-funded research with potential users and beneficiaries of the research. Compliance with this policy is mandatory for receiving funds from an RDIA research grant. The communication policy includes the following obligations:

- Provide initial publicity for the grant with the host research organization(s)
- Acknowledge RDIA support to the extent possible, including all external communication, such as press releases, PowerPoint presentations, and papers
- Give advance notice of press releases at least two working days before they are distributed and, where possible, advance notice of likely newspaper articles or media appearances to RDIA
- Communicate the research findings through publications, seminars, conferences, electronic outlets, and the media to both academic and non-academic audiences, potential users, and beneficiaries (especially businesses, governments, volunteer organizations, community groups, and the public)
- Submit details of outcomes from the grant for up to five years after the end of the grant period
- Successful applicants should extend their appreciation to RDIA for all scientific outputs of the project by acknowledging it (for example, **The authors acknowledge funding from the Research, Development, and Innovation Authority (RDIA), Saudi Arabia, Riyadh, Saudi Basic Science Initiative - Research Consortium Grants (RCG), number XXXX**)

Prior permission must be sought before the RDIA's name can be used in connection with the title of any unit, center, or department that it supports, either wholly or in part. The words "RDIA project" may not be used as a title in correspondence, reports, or questionnaires.

Use of Funds

Funding received from the initiative may be used for the following categories:

- Salary and incentives for researchers.
- Equipment purchase, maintenance, and upgrades.
- Software purchase, maintenance, and upgrades.
- Event and conference organization fees.
- Materials and supplies.

- Prototyping and pilot setup demonstration.
- Domestic and international travel expenses (separate categories).
- Fees for IP management and publication.
- Legal and professional services, including consulting fees.
- Research personnel and staff training.
- Other supporting services, such as feasibility studies.

Although the above expense categories are used to provide applicants with high-level guidance, the grant does not set any limits or stringent criteria on how the funding can be efficiently utilized to achieve the intended goals. Rather, it offers them reasonable degrees of freedom to submit high-quality proposals with a cap limit on expenses.

Terms & Conditions for Submitting the Proposal

Applicants

- 1) The grant accepts joint applications only from at least three different institutions (mix of non-profit and for-profit institutions) with at least one Saudi-based institution
- 2) Applicants must ensure that their research proposal is submitted within the specified timeline
- 3) Applicants should carefully read all the grant documents prior to the proposal preparation
- 4) The similarity report of the submitted proposal must be at most 10%
- 5) Applicants must ensure that their proposal adheres to RDIA's policies and guidelines
- 6) All applicants are required to submit their proposals through the grant portal and upload a separate PDF or Word file to the portal according to the proposal template's descriptions
- 7) The research team must clearly assign a Primary Principle Investigator (PPI) and Secondary Principle Investigators (SPIs) after obtaining the necessary approvals
- 8) The PPI must be from a Saudi-based institution and will be responsible for submitting the proposal application through the PPI's Science and Technology Unit (STU)
- 9) The PPI and SPIs are responsible for directing the research and comply to terms and conditions
- 10) The PPI, SPIs and named research staff must adhere to the time commitment to the project, as stated in the proposal
- 11) The consortium proposal is required to establish a consortium board comprising members from the participating institutions.
- 12) The primary responsibilities of the consortium board include ensuring the project's success, and the objectives and plans are accomplished, overseeing the timely completion of activities, facilitating effective communication between participating institutions, and independently electing its chairperson and members.
- 13) All consortium participants must maintain the confidentiality of any confidential information received from other participants.
- 14) Prior written consent from the consortium board is required before disclosing or publishing any confidential information.
- 15) This provision does not restrict the sharing of confidential information with RDIA or the STU for reporting obligations under the contract.
- 16) Publication plans must be submitted to the consortium board by the consortium participant that achieved results.
- 17) Consortium participants have 30 days from the date of the publication notification to request a delay in publication to implement essential protection measures.
- 18) The deadline for patent registration will be set as 90 days after a consortium participant has submitted a postponement request.

Science and Technology Unit (STU)

The STU of the PPI's institution will:

- 1) Receive the proposal and review them for compliance with the RDIA's guidelines and policies, and notify the PPI.
- 2) Verify all documents for research integrity and ethics
- 3) Check all documents for similarity (maintain a record of the similarity report)
- 4) Support applicants in preparing their proposals, submitting it, and receiving funding
- 5) Monitor progress against the given timeline
- 6) Receive and review all required project reports and submit them to RDIA
- 7) Manage the grant cycle and any request from RDIA

RDIA

- 1) RDIA will review and verify the proposals
- 2) RDIA will carefully examine the proposed research projects to confirm that they meet all the submission requirements
- 3) Once this review is completed, RDIA will provide recommendations for each proposal
- 4) RDIA will verify that the research proposals adhere to the submission guidelines and standards prior to the evaluation
- 5) RDIA will notify the STUs of the research proposals submitted for evaluation and those that have not been sent due to noncompliance with the submission guidelines and standards
- 6) The scientific evaluation results of research proposals will be presented to the RDIA for approval
- 7) RDIA will issue funding decisions for the research projects
- 8) RDIA will only sign a project implementation contract with the PPIs through their respective STUs after the necessary funds for the project have been secured
- 9) Take responsibility for the curation, management, and exploitation of data for future use

Important Documents

The following documentation will be required throughout the grant:

Pre-award:

- a. Comprehensive research proposal, see the grant proposal template document
- b. CVs of all PIs (PPI and SPIs) and Co-PIs
- c. Approval forms of joint project from each institution
- d. Ethical approvals, if needed
- e. Letter of intent from a consultant or external researchers (if applicable)

Post-award:

- a. Semi-annual Reports
- b. Annual Reports
- c. Final Project Report

Table 1: Summary of the important documents

Document	Requirements
Comprehensive Research Proposal (Please see the proposal template document)	Comprehensive Research Proposal should contain the full details of the following information: <ul style="list-style-type: none"> • The research topic for the proposed research • Roles and responsibilities of each member • Summary knowledge in the field of research • Scientific methodology to be used throughout the research • Expected outcomes of the research • Expected benefits to the Kingdom (societal, economic) • Plans for involving and disseminating results to potential users (e.g., policymakers) • Potential contribution to scientific knowledge and practice • Compliance measures throughout the initiative cycle
Periodic Reports	Provide an update on ongoing outputs, impacts, and outcomes as the grant cycle progresses
Final Project Report	Provide a final statement on outputs, impacts, and outcomes at the conclusion of the grant cycle

Administrative, Technical, and Financial Guidelines

General Disbursement Guidelines

The disbursement responsibility for the supported research projects will be assigned to the authorized person in accordance with the following regulations:

- The budget for the following year of the project will be released upon submission and approval of the annual technical and financial reports.
- Approval of the annual and final technical and financial reports is required to disburse the allowance to the research team, participants, and project manager
- The allowance for the research team will not be not paid during project extension periods
- No participant in the research team can receive two allowances for the same project
- The total allowance received by any member of the research team (PPI, SPI, Co-PI, or project manager) should not exceed the allowances for three projects per month
- The consultant's allowance will be approved after a comprehensive report from the PPI to the STU on what was accomplished during the consultation is submitted and accepted by the STU
- The budget for the project should not include expenses related to purchasing a car
- Renting a car from the project budget is allowed only for specific tasks approved in the project's work plan
- The total budget of international partner must not exceed 40% of the total budget of the project

Disbursement Authorities

The determination of the disbursement authorities, check signing, proposal approval, contract signing, and vendor accreditation should align with the national laws and regulations.

Providing Equipment and Supplies

1. Equipment and supplies approved in the project budget should be provided in accordance with the guidelines applicable to the entity.
2. If the project requires equipment or supplies other than those proposed in the research project, the PPI must follow the following procedure:
 - Submit a request to the STU for the required change, including justifications and detailed information on alternative equipment or supplies
 - If the STU approves a change request, the guidelines for providing the equipment or supplies should be followed, provided that the request does not result in a change in the approved budget for the overall project equipment category.

Allowances of the Project Team

1. This article applies to individuals working on research projects supported by RDIA's grant funding, including the following categories:
 - Faculty members, research faculty, postdocs, graduate students, and those in similar positions
 - Researchers, their assistants, technicians, administrators, and accountants
 - Project managers and their assistants
 - Consultants, referees, and individuals providing expertise relevant to the project
2. Salaries and allowances will be disbursed based on the approved budget for a three-year project in accordance with Table 2. In case of longer project, any subsequent years will follow a similar pattern.

Table 2: Salaries and allowances disbursement guidelines.

Year	Payment	Description	Disbursement date
First	First	Salaries and allowances to the project staff for the first half of the first year, except researchers	After the contract is signed, implementation plan is approved, and the periodic technical report #1 for the project is submitted
	Second	Salaries and allowances to the project staff for the second half of the first year, except researchers	After the annual technical #1 and financial report #1 is submitted
	Third	Researcher allowances for the first year will be disbursed	After the annual technical #1 and financial report #1 is approved
Second	Fourth	Salaries and allowances to the project staff for the first half of the second year, except researchers	After the contract is signed, implementation plan is approved, and the periodic technical report #2 for the project is submitted
	Fifth	Salaries and allowances to the project staff for the second half of the second year, except researchers	After the annual technical #2 and financial report #2 is submitted
	Sixth	Researcher allowances for the second year will be disbursed	After the annual technical #2 and financial report #2 is approved
Third	Seventh	Salaries and allowances to the project staff for the first half of the third year, except researchers	After the contract is signed, implementation plan is approved, and the periodic technical report #3 for the project is submitted
	Eighth	Salaries and allowances to the project staff for the second half of the third year, except researchers	After the annual technical #3 and financial report #3 is submitted
	Ninth	Researcher allowances for the third year will be disbursed	After the final technical and financial report is approved, along with an electronic copy of all scientific outputs for the project

3. Project-related allowances received by any member of the research team, including the PPI, SPI, co-PI, and project manager, should not exceed the amount received for three projects per month.
4. Before disbursing allowances to the research team, technical reports must be approved as specified in the contract.
5. It is not permissible to combine two allowances for any member of the project team.
6. Allowances will not be disbursed until the project has commenced.
7. Project funds will not be disbursed until the contract has been signed.
8. Work on the project will not commence until the entity's account has received the funding.
9. Allowances will only be disbursed for research projects that have been approved as specified in the project budget. Participants will receive allowances based on the completion of their assigned tasks and roles, and the amount of allowances will be determined by the STU and based on the RDIA's regulations and policies.
10. Table 3 outlines the guidelines and spending limits for the human resources budget for the research project. Table 4 outlines the guidelines and spending limits for consultants in the research project.

Table 3: Guidelines and limits for expenditure on the human resources item in the research project

Member	Maximum Allowance (SAR)	Yearly Allowance (Months)	Total (SAR)
Researchers			
Principal Investigator¹	6,000	10	60,000
Co-Principal Investigator	5,000	10	50,000
Assistants – Part time			
Project Manager	3,000	10	30,000
Masters / PhD holders	3,000	10	30,000
Assistants – Full time (Salaries Exclusively for Project Contracts)²			
PhD Holder²	12,000	12	144,000
Master²	9,000	12	108,000
Bachelors²	7,000	12	84,000
Technicians and Administrators			
Technicians	2,800	10	28,000
Administrators	2,400	10	24,000
Professionals (Skillful Labors)			
Staff/Workers and the like	1,600	12	19,200

¹ This Principle investigator allowance is designated for the PPI and SPI

² These are salaries that are exclusively allocated to full-time individuals contracted for the designated project.

Table 4: Guidelines and limits for expenditure on the consultants in the research project.

Item	Allowance Including Per Diem Allowance (SAR/Day)	Maximum Consultation Duration (In Days)	Maximum Visits During The Project Period	Providing Tickets	Total	The Total Including The Tickets
Within the administrative region for research implementation	1,000	15	unlimited	X	15,000	15,000
Outside the administrative region for research implementation	2,000	10	2	√	20,000	25,000
Outside the Kingdom	3,000	10	1	√	30,000	50,000

Transfer between Budget Items

The PPI is permitted to modify or transfer certain approved budget items of the project as per RDIA's guidelines and regulations, provided that the following conditions are met:

- Budget adjustments may be made only twice during the project period, in accordance with the guidelines mentioned above.
- The STU is responsible for transferring funds between the approved budget items of the project and must inform the RDIA of any decisions made and the reasons behind them.
- Approval of the STU for the request must be obtained.
- Final approval must be obtained from the STU, and RDIA must be notified.

Table 5: Transfer guidelines between items of the research project budget.

Budget Items	Human Resources	Equipment and Devices	Materials and Chemicals	Travel and Trips	Others
Human Resources	√	√	X	X	X
Equipment and Devices	X	√	X	X	X
Materials and Chemicals	X	√	√	X	X
Travel and Trips	X	√	X	√	X
Others	X	√	X	X	√

Application and Proposal Selection Process

Evaluation

Submitted proposals will be evaluated based on the following criteria:

- **Relevance:** Relevance to the targeted area of the RDI sector and Vision 2030 goals
- **Applicability:** The potential applicability of the results
- **Potential Impact:** Potential benefits to academia, industry, and the KSA's R&D ecosystem in its entirety
- **Technical Merit:** Scientific and intellectual rigor, potential to create new and important knowledge, and appropriateness of the research design
- **Partnership Building:** Potential to catalyze the development of domestic university industry partnerships
- **Quality of the Research Team:** Capabilities and track record of the proposed research team
- **Execution:** Coherence in the proposed execution plans, feasibility of carrying out the research (e.g., data accessibility) within the given timeframe, and cost effectiveness
- **Novelty** of the work or how well the competitive landscape has been explored or described, if relevant
- **Quality and Clarity** of the research/project plan with associated milestones
- **Benefits** to the KSA and society
- **Accurate Assessment** of the existing TRL position and setting a realistic TRL goal in the project

The grant's Key Performance Indicators:

- Knowledge generation (publications, patents, proof of concept)
- Career advancement (awards, training)
- Public engagement (conferences, symposia, events)
- Socioeconomic benefits (royalty fees generated by the research, IP licensing, change of policies, and development of services)
- Number of partnerships and scientific collaborations that attracted funds (public sector, private sector, nonprofit organizations, and universities)

Project Quality

Based on the RDIA's system, funding allocations will be performance-based. When applying for grants, it is important for researchers to be aware of the requirements for grant closure to ensure successful completion of the project and proper use of grant funds. These requirements may vary depending on the specific grant but typically include completion of all project activities, submission of all required reports, compliance with RDIA's policies and regulations, and preparation and submission of closeout documentation.

It is important for applicants to include the expected outcomes of the proposed project in the grant application. These outcomes may include various forms of scientific output (e.g., publications, patents, prototypes, and other acceptable results, depending on the type of fund). By including these expected outcomes in the grant application, the applicant is providing a clear indication of the potential impact and significance of the proposed research. This information is important for the RDIA in evaluating the feasibility and potential success of the proposed research project. Additionally, by setting clear expectations for the research outcomes, applicants can better track and document their progress throughout the project, which is critical for a successful grant closure.

Application Process

The grant solicits applications in a pre-designed format to facilitate comparable, consistent, and expedited reviews. The portal is available to applicants through the RDIA website (<https://rdia.gov.sa/grants>) after registration and account activation. The applicant must read and understand the guidelines under each section of the application form before completing the full application. No other means of submission is acceptable. All the applications must be submitted no later than the deadline stipulated in the Call for Proposals.

Review Process

This grant adheres to the global best practices in initiative management to ensure the highest degree of objectivity and quality. A qualified Scientific Review Committee appointed by the Oversight Committee will monitor, guide, and facilitate the review process. Throughout this process, the grant personnel and selected external reviewers will adhere to all conflict-of-interest and confidentiality requirements. In keeping with best practices, the grant has adopted a two-phase process, each phase with its own application review steps:

- In the first phase, an initial review of every application will be conducted upon receipt of the grant application forms to ensure that the proposal meets all the requirements specified in the call for proposals. The STUs in the institutions will ensure the completeness of the applications per the guidelines and policies and will check for plagiarism. Subsequently, the STU will send the documents to the Initiative Secretariat. The Secretariat will interact with STUs and applicants as needed to solicit any missing information.
- In the second phase, complete grant applications that meet initiative priorities and budget constraints will be, subsequently, evaluated in terms of technical merit. This step is conducted by at least two independent reviewers and/or a panel committee. The Scientific Review Committee will select reviewers for each application based on relevant expertise and/or experience. Following the receipt of the reviewers' feedback, a summary statement report for each application is prepared, which includes the reviewers' written critiques, recommendations, and an average final score. The summary statement is forwarded to the Oversight Committee, and funding recommendations for high-scoring applications will be approved. A notice of approval or rejection will be sent to the STUs or applicants once the review process is complete.

Award Process

Upon receiving a notice of the award, the procedure for commencing the approved project is set into motion. The grant Secretariat will communicate with the researcher for necessary documentation and hand over the coordination to the STUs. Henceforth, the operational follow-up for the granted proposals will be carried out by STUs.

Management and Monitoring of Research Projects and Other Guidelines

Research Team Obligations

1. The research team must comply with the regulations, policies, and guidelines approved by the RDIA, including scientific integrity guidelines, intellectual property policy, ethics guidelines for research on living creatures, and other policies or guidelines adopted by the RDIA.
2. The research team must take full responsibility for any violation of these guidelines.

Project Monitoring

The grant adopts a balanced and systematic approach for monitoring. The grant Secretariat, in consultation with the STUs, sets forth periodic reviews to ensure that all funded projects progress toward timely completion. Researchers are expected to consistently submit technical and financial reports. The researchers of the winning proposals will be provided with data collection forms, report templates, and guidelines upon a grant award.

Reports

Three key reports for project monitoring and evaluation will be requested:

1. **Semi-annual Reports:** To enable oversight across the Initiative, while minimizing the burden on the researchers, semi-annual reports will be collected by the STUs using simple forms and report templates approved by the RDIA.
2. **Annual Reports:** For projects spanning more than a year, an annual report will be submitted by researchers to STUs for evaluation. In this report, comprising technical, management, and financial sections, the researchers are expected to show completed activities, ongoing activities, progress accomplished toward the stated goals, and any risks that may affect the project's progress.
3. **Final Project Report:** Researcher will submit a final report to the STUs within 30 days of project completion. Similar to the Annual Report, the Final Report will comprise technical, management, and financial sections. In addition, the report should clearly articulate the results and deliverables. The STUs will prescreen the reports before they are reviewed by external reviewers.

Procedure for Submitting Technical Reports

1. The PPI is obligated to submit periodic technical and financial reports on the progress of the project as follows:
 - The technical reports should be submitted to the STU.
 - The PPI should submit a periodic technical and financial report to the STU every six months, outlining the technical progress of the project as well as its financial status.
 - The PPI must submit an annual technical report for the previous year and a final technical report upon completion of the project's execution period.

- If the project duration is a year or less, the PPI is only required to submit the final technical and financial reports.
 - The PPI must submit the final technical and financial reports to the STU at the end of the project, including any extension period, in accordance with RDIA's requirements.
 - The STU will evaluate the annual and final technical reports of the research projects through a neutral scientific body.
2. The PPI must make modifications according to the recommendations and comments provided by the RDIA regarding the annual technical report and take them into consideration when preparing the next technical report.
 3. The cost of evaluating rejected technical reports will be deducted from the project budget.
 4. The PPI is authorized to delegate some of their tasks to the project manager.
 5. If the final report is not submitted within the designated timeframe, the STU may withhold some or all of the research team's allowances, in coordination with the RDIA.
 6. If the technical report is rejected more than twice, the project will be classified as a stalled project, and the RDIA, in coordination with the STU, has the authority to appoint another research team from project members/others to continue the research or cancel the project. The research team is responsible for all the repercussions of this decision, including the repayment of any paid allowances.

Postponement of Report Submission

The PPI is permitted to request postponement of the submission deadline for technical or financial reports, subject to the following regulations:

- The request for postponement must be supported by compelling justifications.
- The request for postponement must be submitted at least 30 days before the report's due date.
- The request for extension of the annual or final report submission cannot exceed 60 days.

Project Outputs

1. The PPI is obligated to submit the minimum required research outputs as specified for each grant.
2. A weighted-points system is used to evaluate the performance of projects under the SBS initiative, prioritizing quality over quantity. The system is designed to recognize and reward researchers who produce high-quality research with a significant impact, as specified in Table 6.
 - The minimum points required for Research Consortium Grants is 400 points.
 - The RDIA encourages researchers to publish their research outputs in scientific journals, file patents that have the potential for economic impact, and participate in conferences.

Table 6: Weighted-Points System for the Saudi Basic Science Initiative.

#	Project Output	Weighted Points
1	Published a paper in the top 100 scientific journals listed in the database ^{3,4,5}	60
2	Published a paper in (Q1) scientific journals (not in top 100) listed in the database ^{1,3}	40
3	Published a scientific paper in (Q2) scientific journals listed in the database ^{1,3}	20
4	Granted patent	50
5	Patent filing ⁶	20
6	Organize a conference, workshop or event (1 event /year max)	5
7	Each postdoc who is participating in the project (2 postdocs/institution max)	5
8	Each postgraduate who is participating in the project (2 students / institution max)	5

3. Tracking these outputs is crucial to assess a project's success and ensure that it meets its intended objectives; this evaluation helps to determine the effectiveness of the project and whether it has achieved its goals.
4. The evaluation process of the research outputs shall be conducted by the STU, who shall notify RDIA.
5. The evaluation process of research outputs will be conducted in accordance with the guidelines and regulations established by RDIA.

Nomination for an Award

The research team can nominate the research or part of its results for an award according to the following procedure:

- Obtaining prior approval from the project's affiliated entity
- Financial benefits, if any, from this nomination shall be divided according to the regulations followed by the project's affiliated entity.

Liability Waiver and Project Closure

1. Upon submission and acceptance by the RDIA of the following documents, the responsibilities and obligations of the research team for the project shall come to an end:
 - Accepted final technical report
 - Approved final financial report
 - A copy of the published scientific outputs from the project
2. All the aforementioned documents must be submitted within one month of the STU's notification of the acceptance of the final technical report.

³ The database: <https://jcr.clarivate.com/jcr/browse-journals>

⁴ The top 100 journals that are listed in the default indicators, that is, all journals, country/region, and categories

⁵ Note that the journal category/rank will only be considered in the publication year

⁶ Only if the patent is under the review process

3. Upon receiving the aforementioned documents, the RDIA will issue a notice to the entity to close the project within a maximum period of one month. If no notice is received from the RDIA, the project shall be deemed closed.

In the Absence of a Specific Provision

In case these rules do not contain a specific provision, then the regulations approved by the RDIA or any applicable entity regulations, as well as any decisions issued by the RDIA, shall be followed.

The Right to Interpret or Amend the Rules

The RDIA holds the exclusive right to interpret or modify any provision of these rules and guidelines. Decisions and supplementary regulations concerning research grants regarding RDIA issues are an essential part of these rules and guidelines.

Implementation of the Rules

1. These rules apply to all grant projects as of their approval date and replace the previous rules and instructions; all conflicting provisions or exceptions shall be annulled.
2. These rules are subject to revision every five years from the date of issuance or as needed.

Terminology and Definitions

The following terms and expressions have the meanings indicated unless the context requires otherwise:

Regulation: Executive Research Grants Regulation.

Authority/RDIA: Research, Development, and Innovation Authority.

Entity: Any entity, whether fully or partially involved in conducting any research, development and innovation activities and marketing their outputs, including but not limited to research chairs from the public, private, or nonprofit sectors.

Authorized Representative: The designated individual, duly authorized by the entity, with the power to sign executive contracts for research grants provided by the Authority. The authorized representative is responsible for overseeing their implementation.

The Science and Technology Unit (STU): A specialized administrative unit established within the entity as an independent entity directly linked to the authorized representative of the entity. It is responsible for managing, executing, and monitoring the administrative, technical, and financial tasks of research grants for the entity and its affiliated entities, in accordance with the governing rules, regulations, and instructions issued by the Authority.

Research/Research Project/Research Grant: This is systematic work with a defined beginning and end executed according to established scientific principles to obtain a scientific outcome. It is conducted by a specialized research team with specific resources, including human resources, financial resources, and the necessary facilities for project implementation.

Research Proposal: A scientific and methodological description of the nature and significance of the research problem, objectives, qualified human resources, working methods, implementation timeline, necessary resources and their financial costs for executing the proposed research, expected results, and a mechanism explaining how to utilize the outcomes of the research project and the beneficiaries of such outcomes.

Grant Start Date: The date on which the implementation of the research grant begins according to the approved work plan, which includes scheduling for the submission of the required technical and financial reports.

Budget: A document approved by the funding entity that includes details of the financial support required for the implementation of the research grant in accordance with the approved work plan.

Grant Duration: The period approved by the funding entity for the execution of the research grant.

Human Resources: All the accredited individuals involved in the research grant, including the research team, assistants, and consultants.

Research Team: A group of specialized researchers in the field of the research grant who are assigned to carry out the research as stated in the Researchers' Declaration. It consists of the Principal Investigator, Co-Principal Investigator, Researchers according to the nature of the grant, and the grant project manager.

Principal Investigator: A person who is academically and technically qualified and has direct expertise related to the subject of the research grant. They are responsible for managing, executing, and closing the grant.

Primary Principal Investigator: A person who assumes the lead role and overall responsibility for a consortium research project, and have primary accountability for the project's planning, execution, and reporting.

Secondary Principal Investigator: A person who works alongside the Primary Principal Investigator in contributing to the research project, and have specific responsibilities, expertise, or a complementary role in the consortium research project.

Co-Principal Investigator: A person who is academically and technically qualified and has direct expertise related to the subject of the research grant. They act as a substitute for the Principal Investigator, including primary or secondary PIs, in case of their absence or withdrawal, in addition to their responsibilities as a Researcher.

Researcher: A person who is academically and technically qualified and participates in the research team. They are responsible for the portion of the research grant assigned to them, according to the Researchers' Declaration.

Project Manager: A qualified individual or experienced professional in project management engaged in contributing to the achievement of the research grant's objectives according to the approved timeline.

Consultant: An individual with high academic qualifications and expertise who provides scientific and consultation services in the specialized field of the research project.

Assistants: Individuals assigned to executive tasks in a research project, such as conducting experiments, analysis, and other related activities. This includes

- **Graduate Students:** Students pursuing a master's or doctoral degree (or equivalent) directly related to the research project.
- **Technicians:** Individuals with technical and technological qualifications and expertise required to accomplish necessary tasks.
- **Administrators:** Qualified individuals responsible for performing the required administrative tasks.
- **Professionals/Skillful Labor:** Skilled individuals from various professions are necessary to facilitate professional work.

Review: The process of peer reviewing research grant proposals or periodic and final technical performance reports of supported grants according to specific scientific criteria. This process is carried out by a group of reviewers with expertise, impartiality, and scientific integrity.

Reviewer: A qualified individual assigned to review proposals scientifically, assess their merits, and determine their suitability for funding. They also review the technical reports of the grant to evaluate the extent to which it achieved its approved objectives according to the adopted timeline.

Technical Reports: Reports submitted by the Principal Investigator describing the progress of the grant toward achieving its objectives based on the approved timeline and methodology. These reports are categorized into annual and final technical reports.

Financial Reports: Reports submitted by the Principal Investigator documenting the expenses of the grant according to the approved budget. These reports are categorized into annual and final financial reports.

Research Output: The Results obtained during or after the completion of the research project. These include scientific papers published in internationally recognized journals, granted patents, prototypes, industrial products, experimental products, computer programs, integrated circuit designs, plant varieties, copyrights, and trademarks.

Reporting Extension: A procedural process where the Principal Investigator of the research grant requests an extension for submitting periodic technical or financial reports or final reports for a specified period of time, as specified in the approved research proposal for completing the research grant.

Report Postponement: Failure to meet one of the requirements for submitting project report(s) within a specified timeframe.

Grant/Project Extension: An official administrative procedure carried out by the Authority to extend the duration of the grant for a specified period for valid reasons without additional financial obligations.

Grant Closure: A series of administrative procedures executed to conclude all activities of the research grant. This involves an official announcement by the Authority of the completion of the project, leading to the termination of the relationship between the research team and the funding entity.

Account: Bank accounts designated for support funds and related financial transactions concerning supported grants. It is used for the management and operation of supervisory departments overseeing the support, whether within the Authority or in science and technology entities and Units.

Intellectual Property Rights: The set of organized rules that determine the ownership rights of intellectual property resulting from the research grant and the responsibilities of the involved parties. It clarifies the obligations related to the protection, generation, management, and investment of intellectual property resulting from the grant.

Scientific Integrity Guidelines: A set of guidelines that includes scientific obligations based on fundamental and professional principles for the preparation and implementation of scientific research and its outputs, in accordance with internationally recognized scientific integrity standards.

Start-up Company: A newly established company, typically with the goal of developing and bringing innovative products or services to the market.

Direct / Indirect Job Creation: The creation of new jobs either directly through the hiring of new employees or indirectly through the creation of new business opportunities that result in jobs being created elsewhere in the economy.

Spin-off Company: A company created as a result of the research and development activities of an existing company or organization.

Policy Changes: Changes to laws, regulations, or policies created as a result of research outputs or recommendations.

Industry Implementation: The application of research outputs or technologies in the development of new products, services, or processes within a particular industry.

Business Contract: A formal agreement between two or more parties that outlines the terms and conditions of a business transaction or relationship.

Prototypes: A preliminary version of a product or service created for testing and evaluation purposes.

Minimum Viable Products (MVPs): A product or service with sufficient features to satisfy early customers and provide feedback for future product development.

Efficiency Gain: The improvement in productivity or resource utilization resulting from the implementation of new research outputs, technologies, processes, or practices.

Table 7: Technology Readiness Level (TRL) definitions.

TRL	Stage	Definition	Hardware Description	Software Description	Exit Criteria
1	Discovery	Basic principles observed and reported	Scientific knowledge generated underpinning hardware technology concepts/applications	Scientific knowledge generated underpinning basic properties of software architecture and mathematical formulation	Peer reviewed publication of research underlying the proposed concept/application
2		Technology concept and/or application formulated	Invention begins, practical application is identified but is speculative, no experimental proof or detailed analysis is available to support the conjecture	Practical application is identified but is speculative, no experimental proof or detailed analysis is available to support the conjecture; Basic properties of algorithms, representations and concepts defined; Basic principles coded; Experiments performed with synthetic data	Documented description of the application/concept that addresses feasibility and benefit, or patents
3	Discovery/Development	Analytical and experimental critical function and/or characteristic proof of concept	Analytical studies place the technology in an appropriate context and laboratory demonstrations, modeling and simulation validate analytical prediction	Development of limited functionality to validate critical properties and predictions using non-integrated software components	Documented analytical/experimental results validating predictions of key parameters

TRL	Stage	Definition	Hardware Description	Software Description	Exit Criteria
4	Development	Component validation in laboratory environment.	A low fidelity system/component is built and operated to demonstrate basic functionality and critical test environments, and associated performance predictions are defined relative to the final operating environment	Key, functionally critical, software components are integrated, and functionally validated, to establish interoperability and begin architecture development; Relevant environments defined and performance in this environment predicted	Feasibility documented test performance demonstrating agreement with analytical predictions; Documented definition of relevant environment
5		Component validation in relevant environment	A medium fidelity system/component is built and operated to demonstrate overall performance in a simulated operational environment with realistic support elements that demonstrates overall performance in critical areas; Performance predictions are made for subsequent development phases	End-to-end software elements implemented and interfaced with existing systems/simulations conforming to target environment; End-to-end software system, tested in relevant environment, meeting predicted performance; Operational environment performance predicted; Prototype implementations developed	Feasibility documented test performance demonstrating agreement with analytical predictions; Documented definition of scaling requirements
6		Sub-system model or prototype demonstration in an operational environment	A system/component prototype that adequately addresses all critical scaling issues is built and operated in a relevant environment to demonstrate operations under critical environmental conditions	Prototype implementations of the software demonstrated on full-scale realistic problems; Partially integrate with existing hardware/software systems; Limited documentation available; Engineering feasibility fully demonstrated	Model or Prototype documented test performance demonstrating agreement with analytical predictions

TRL	Stage	Definition	Hardware Description	Software Description	Exit Criteria
7		System prototype demonstration in an operational environment	An engineering unit that adequately addresses all critical scaling issues is built and operated in a relevant environment to demonstrate performance in the actual operational environment and platform	Prototype software exists having all key functionality available for demonstration and test; Well integrated with operational hardware/software systems demonstrating operational feasibility; Most software bugs removed; Limited documentation available	MVP documented test performance demonstrating agreement with analytical predictions
8	Deployment	Actual system completed and qualified through test and demonstration	The final product in its final configuration is successfully demonstrated through test and analysis for its intended operational environment and platform	All software has been thoroughly debugged and fully integrated with all operational hardware and software systems; All user documentation, training documentation, and maintenance documentation completed; All functionality successfully demonstrated in simulated operational scenarios; Verification and Validation (V&V) completed	Product validation documented test and performance verifying analytical predictions
9		Actual system proven through successful operations	The final product is successfully operated in an actual environment	All software has been thoroughly debugged and fully integrated with all operational hardware/software systems; All documentation has been completed; System has been successfully operated in the operational environment	Mass production documented and operational results