1. Energy Solutions

This call seeks STI solutions that promote supply of clean and affordable energy that, among other benefits, provide access to modern energy is imperative to our national development. The projects under this area should focus on any or some of the following goals: Locally Manufactured Renewable Energy (e.g. wind energy, bioenergy, solar energy, geothermal energy, smart energy systems) Production System. Electric Powered Carts for People and Goods, Solar dryers, or other renewable energy powered food preservative mechanism Innovative Research and Procedures leading to reduction in infant mortality, among others. The main and sub themes for this call are listed below;Main theme: Innovation and Energy. The sub themes for the proposed research should focus on: Renewable energy, Innovation, Sanitation Environment. All applicants should adhere to the following set of criteria: Must be researchers who are citizens of the Republic of Sierra Leone. The Principal Investigator (PI) must be an active researcher with preferably a maximum of PhD degree or a minimum of Masters, working as employee in higher learning Institutions/University or Research and Development Institutions (R&D institutions); Each research proposal must have a research team, led by a Principal Investigator. The Principal Investigator shall be the main applicant and will bear the overall responsibility for the project including its technical and administrative co-ordination as well as the timely delivery of scientific and financial reports.

1. Emerging Technologies

This call seeks to identify Artificial Intelligence niche areas of applications that will align the development of Sierra Leone with international best practice as well as benefit from the emerging products that will enhance its relevance in the application of technology solutions. The projects under this area should focus on any or some of the following goals: Locally developed tools and systems for E-Government to enable faster, better and efficient delivery of public goods and services , digitization and management of land record repository that is accessible to the public for download/ upload, user management and authentication , locally developed E-Commerce platforms that promotes private sector growth and development; among others. THEME AND SUB THEMES -The main and sub themes for this call are listed below; -Main theme: Management of Health services, Sanitation, Infant Mortality, Communicable and Non-communicable diseases. The sub themes for the proposed research should focus on: *Technology, Artificial Intelligence, Technology, Big Data.* All applicants should adhere to the following set of criteria: Must be researchers who are citizens of the Republic of Sierra Leone.The Principal Investigator (PI) must be an active researcher with preferably a maximum of PhD degree or a minimum of Masters, working as employee in higher learning Institutions/University or Research and Development Institutions (R&D institutions); Each research proposal must have a research team, led by a Principal Investigator. The Principal Investigator shall be the main applicant and will bear the overall responsibility for the project including its technical and administrative co-ordination as well as the timely delivery of scientific and financial reports.

1. Food Security

The main objective of the call is to find solutions to the poor yield, and low quality of agricultural produce in Sierra Leone. The call seeks solutions to improve farming and strengthen the value chain for agricultural products. The projects under this area should focus on any or some of the following goals: Development of indigenous technologies for value addition to agricultural produce; (e.g Value Additions to Cassava processing, Palm Oil Production, Coffee, Tea, Egg, Fish and other indigenous products like weaving (‘Kontri cloth’ weaving, gara tie-dying (batik) etc) ; Developing appropriate and innovative technologies for breeding, feeding, health, and management of livestock and poultry; among others. THEME AND SUB THEMES

The main and sub themes for this call are listed below; Main theme: Food Security, Technology and Agriculture. The sub themes for the proposed research should focus on: Agriculture, Innovative Technologies, Agro-processing, Smart Technologies. All applicants should adhere to the following set of criteria: Must be researchers who are citizens of the Republic of Sierra Leone.The Principal Investigator (PI) must be an active researcher with preferably a maximum of PhD degree or a minimum of Masters, working as employee in higher learning Institutions/University or Research and Development Institutions (R&D institutions); Each research proposal must have a research team, led by a Principal Investigator. The Principal Investigator shall be the main applicant and will bear the overall responsibility for the project including its technical and administrative co-ordination as well as the timely delivery of scientific and financial reports.

1. Health and Sanitation

The call seeks to identify solutions aiming at improving access and management of services in the general health care delivery system; or promote technologies in support of sanitation, environmental and occupational health; or research to reduce infant mortality and prevalent communicable and non-communicable diseases. The projects under this area should focus on any or some of the following goals: Provide solutions to improve access and management of services in the general health care delivery system; Provide solutions for Telehealth and Remote monitoring of patients; among others. The main and sub themes for this call are listed below;

Main theme: Management of Health services, Sanitation, Infant Mortality, Communicable and Non-communicable diseases.The sub themes for the proposed research should focus on: Management of Health services,Sanitation, Infant Mortality, Communicable and Non-communicable diseases*.* All applicants should adhere to the following set of criteria: Must be researchers who are citizens of the Republic of Sierra Leone. The Principal Investigator (PI) must be an active researcher with preferably a maximum of PhD degree or a minimum of Masters, working as employee in higher learning Institutions/University or Research and Development Institutions (R&D institutions); Each research proposal must have a research team, led by a Principal Investigator. The Principal Investigator shall be the main applicant and will bear the overall responsibility for the project including its technical and administrative co-ordination as well as the timely delivery of scientific and financial reports.