

# OPERATIONAL INFORMATION FUNDING AND SUPPORT PROGRAMS

# **OPERATIONAL HISTORY**

### 2003 - 2007

- Established the National Foundation for Science and Technology Development (NAFOSTED) under Decree 122/2003/ND-CP dated on 22 October 2003.
- Established NAFOSTED's Board of Trustees and NAFOSTED's Executive Office.
- Promulgated regulations on the financial management of NAFOSTED.

### 2008 - 2010

- Held the opening ceremony of NAFOSTED (26 February 2008).
- Promulgated regulations on funding and classification of fields for basic research, scientific activity funding, and cost estimation methods for basic research projects.
- Established Scientific Committees, implementing research funding programs in the fields of Natural Sciences and Engineering (NSE), and Social Sciences and Humanities (SSH).
- Supported projects to encourage enterprises to invest in scientific and technological activities under the Decree 119/1999/ND-CP.
- Signed Memorandum of Understanding (MOU) with Belgium's Research Foundation Flanders (FWO) and National Science Foundation of Germany (DFG).
- Built NAFOSTED's website and online management system (OMS).

### 2011 - 2013

- Promulgated regulations on NAFOSTED's loan and loan guarantee, implemented funding program for emergent & breakthrough projects.
- Established NAFOSTED's Board of Auditors.

- Implemented the TCVN ISO 9001:2008 compliant quality management system.
- Implemented the online submission system for basic research funding in Social Sciences and Humanities, the international peer review system for basic research funding in Natural Sciences and Engineering.
- Supported the Government's program on Key Mechanical Products.

### 2014 - 2015

- Issuied NAFOSTED's Statute of organization and activities according to Decree 23/2014/ND-CP on 3 April, 2014.
- Promulgated regulations on the management of basic research projects, emergent & breakthrough scientific research projects funded by NAFOSTED, and management of funding activities to enhance national S&T capacity.
- Organized the Ta Quang Buu Prize and other annual conferences to promote NAFOSTED's activities in all three regions of Vietnam.
- Signed the NAFOSTED NHMRC (Australia) Memorandum of Understanding.

### 2016 - 2017

- Promulgated regulations on managing and implementing the applied research program and loan program.
- Increased application submission, evaluation and fund for basic research programs in Natural Sciences and Engineering and Social Sciences and Humanities to twice per year.
- Signed the NAFOSTED RCUK (The UK) Memorandum of Understanding.

## **MISSION STATEMENT**

Towards creating a favorable research environment that meets international standards in order to enhance national S&T capacity, including improving research quality and developing high-quality human resources in S&T.

# STRATEGIC DIRECTION

- Enhancing the quality of scientific research, increasing the number of high-quality scientific research projects funded by NAFOSTED from which results are published in ISI-covered journals, building a favorable scientific research environment.
- Developing the research capacity of scientists, creating strong research teams, supporting young scientists, and supporting networking in research areas.
- Promoting academic exchange and international cooperation in scientific research, attracting resources for scientific research in Vietnam.
- Concentrating resources on basic research funding, allocating resources for applied research and translating research results into practice.

# **OPERATIONAL PRINCIPLES**

- Implementing funding and supporting programs openly, democratically and equally.
- Scientific assessment by the S&T Committees, independent experts.
- Managing the quality of research against international standards.
- Funding and supporting S&T projects proposed by organizations and individuals at the national level.

# **ORGANIZATIONAL STRUCTURE**

### **BOARD OF TRUSTEES**

#### 7 - 9 MEMBERS / 05-YEAR-TERM

Making decisions on the operational direction and plans of NAFOSTED; approving S&T projects and funding and supporting amounts of NAFOSTED; approving the annual financial plans and reports.

### INTERNAL AUDITOR

#### 3 - 5 MEMBERS / 05-YEAR-TERM

Monitoring and reporting to the Board of Trustees on the implementation of operational regulations and decisions of the Board of Trustees; examining and reporting complaints related to NAFOSTED's

### **EXECUTIVE OFFICE**

### 06 DEPARTMENTS / 55 STAFF

Organizing, administering and managing activities in accordance with NAFOST-ED's operational regulations and the Board of Directors' decisions; managing human resources, assets and capital of NAFOSTED.

### SCIENTIFIC COMMITTEES

# 15 SCIENTIFIC COMMITTEES IN BASIC RESEACH

Advising on the assessment of submitted applications; evaluating S&T projects and activities funded and supported by NAFOSTED; advising on research orientation and other related matters.

# **FUNCTIONS**

(FUNDING AND SUPPORTING PROGRAMS)



SUPPORTING

LOAN & LOAN GUARANTEE





Basic research projects Applied research projects Emergent or breakthrough projects

Potential S&T projects



Scientific activities to enhance national S&T capability



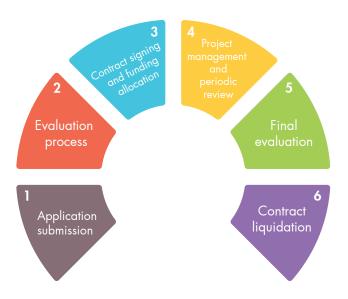
S&T projects aimed at applying R&D research results into reality and production

Specialized S&T projects



S&T projects at national level S&T projects as assigned by Minister of MOST

# IMPLEMENTATION PROCESS OF S&T PROJECTS



- NAFOSTED's Executive Office receives applications in both hard copy and electronic copy (applied to the basic research funding program and some bilateral joint funding programs) according to the regulations. The electronic copy is used in the evaluation process.
- NAFOSTED collects and checks the eligibility of all applications. Scientific experts of the same research field give peer-reviews. Scientific committees consult peer-reviews and evaluate the applications.
- NAFOSTED's Executive Office discusses and signs the scientific contract (the contract) with the Principal Investigator (the PI) and the Host Institution with the funding amount approved by NAFOSTED Board of Trustees. The initial funding will be provided immediately after signing the contract.
- NAFOSTED manages projects, ensures progress and quality of the project implementation, assists the research team to handle adjustments arising in the implementation of the project; conducts periodic evaluation of the progress and the content of the project.
- The Project Investigator and the Host Institution complete the final report and evidence for research results for the project; NAFOSTED conducts final evaluation of the project implementation according to regulations. The final evaluation result serves as the basis for registrating, storing and making decision on approval of the project research results.
- NAFOSTED conducts the contract's settlement and liquidation according to regulations.

### ONLINE MANAGEMENT SYSTEM (OMS)

The online management system is used to manage S&T projects funded and supported by NAFOSTED. The system provides an online platform for NAFOSTED funding and support programs, allows Principal Investigators to monitor the projects and submit reports during the research implementation (applied to the basic research programs and some other bilateral cooperation programs).

OMS's functions include: Create and maintain scientific curriculum vitaes of researchers; prepare application and apply for funding and support programs; monitor the implementation of project, submit periodic and final reports; conduct domestic and international peer review of applications and proposals submitted for NAFOSTED's programs.

# **BASIC RESEARCH PROGRAM**

### **FUNDING OBJECTIVES**

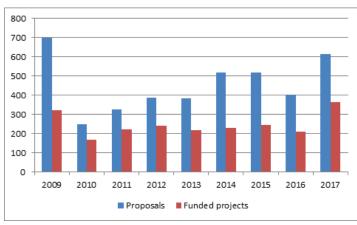
- Creating a favorable research environment in order to promote basic scientific research in S&T organizations in Vietnam.
- Enhancing research capacity, creating strong research teams; and contributing to the training of high-level S&T human resources.

### PERFORMANCE INDEX

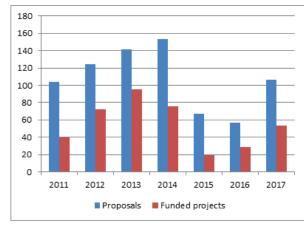
- Quantity and impacts of international publications from the funded research projects.
- Quantity and time of young scientists participating in the research.
- Postgraduate training.

### **EVALUATION CRITERIA**

- Project description (scientific value and feasibility).
- Research capacity (research team and principal investigator).
- Expected outcomes (scientific products, research team development and postgraduate training).



Basic Research - Natural Sciences & Engneering



Basic Research - Social Science & Humanites

- Regulations on the program execution and application forms: Circular 37/2014/TT-BKHCN.
- Time for application submission: Basic research programs in Social Sciences & Humanities: March and September; Basic research programs in Natural Sciences & Engineering: June and December.
- Guidance for preparation and submission of applications: according to NAFOSTED's announcement on website: www.nafosted.gov.vn.

# APPLIED RESEARCH PROGRAM EMERGENT & BREAKTHROUGH PROGRAM

### FUNDING OBJECTIVES OF APPLIED RESEARCH PROGRAM

- To develop and extend the results of basic research projects which are appropriate for the needs and characteristics of Vietnam in the fields of science & technology.
- To create new technology with possibility to be developed and finalized for production and life.

### FUNDING OBJECTIVES OF EMERGENT & BREAKTHROUGH PROGRAM

- To research, resolve emergent and urgent S&T issues; to conduct projects with high potential to create new research approach and technological products.
- To encourage Intellectual Property registration of research results and to connect the application of the research results with practical issues.

### PERFORMANCE INDEX

- Solved problems, new research approach, new technological products.
- Patent, utility solution, domestic and international publications.
- Research results which are applied into practice.

### **EVALUATION CRITERIA**

- Research proposal (scientific value and feasibility).
- Research capability (research team, principal investigator, facilities and equipment).
- Applicability and plan to translate research results of the project.
  - Regulations on the program execution and application forms: Circular 40/2014/TT-BKHCN and Circular 15/2016/TT-BKHCN.
- Guidance for preparation and submission of applications: According to NAFOSTED's annoucement on website: www.nafosted.gov.vn.

# INTERNATIONAL COLLABORATION PROGRAM

### **FUNDING OBJECTIVES**

- To encourage international collaboration in scientific research and support academic exchange between Vietnamese and international scientists.
- To attract international resources for scientific research in Vietnam.
- To enhance networking and develop international networks in S&T research.



# **LOAN & LOAN GUARANTEE PROGRAM**

### LOAN PROGRAM

Financial support (loan with preferential interest rates) for S&T projects proposed by individuals and organizations with the aim of applying results of scientific research and technological development into production and life.

### LOAN GUARANTEE PROGRAM

Provide loan guarantee for enterprises to borrow capital from credit institution to implement projects on energy conservation and efficiency.

# SUPPORT PROGRAM FOR ENHANCING NATIONAL S&T CAPABILITY

### SUPPORT OBJECTIVES

To enhance capability and quality of scientific research in Vietnam through of a favorable environment for scientists in academic exchange, research results publication, and international integration in scientific research.



### **FUNDING ALLOCATION**

NAFOSTED provides funding for a number of national-level S&T tasks directly managed by the Ministry of Science and Technology, including national S&T tasks and other S&T tasks assigned by the Minister of Science and Technology.

Since 2015, NAFOSTED has begun providing fund for national S&T tasks under the program on developing science and technology market by 2020 (approved in Decision No.2075/QD-TTg dated on November 08, 2013 by the Prime Minister). NAFOSTED has coordinated with National Agency for Technology Entrepreneurship and Commercialization Development to agree on the modalities and procedures for allocating funds to the projects under the program.

# SOME OPERATIONAL RESULTS

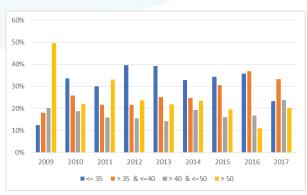
### Advancing national S&T human resources

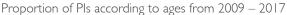
- A large number of scientists and research team funded.
- Good proportion of researchers supported (in terms of age and geographical region/area).
- Enhancing quality of human resources, approaching international standards.

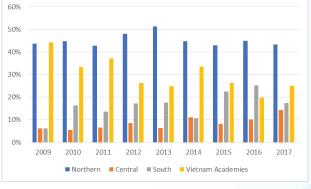
- Creating a favorable research environment.

+10.000
Scientists supported

+2.400
PhD students trained through funded projects







Proportion of Pls according to areas from 2009 – 2017

(Statistics from basic research funding program in Natural Sciences & Engineering and Social Science and Humanities)

### Improving national S&T productivity

- Funding for a large number of S&T projects with outstanding results and scientific products.
- Contributing a large proportion in quantity and quality of international publications.

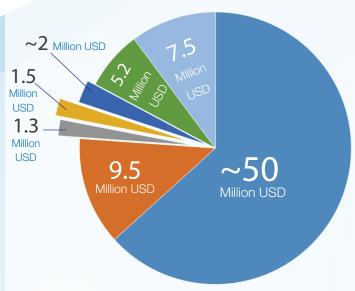
+2,500

Basic research projects in Social Sciences & Humanities and Natural Sciences & Engineering funded

+3,500

ISI papers recognized as results of +1400 completed projects

Scope of funding, supporting (Allocated fund, number of approved projects)



- 2217 basic research projects in NSE
- 384 basic research projects in SSH
- 11 application-oriented research projects
- \_ 35 projects in bilateral cooperation
- 847 cases in support program to enhance national
- S&T capability
- 51 emergent & breakthrough projects
- 75 S&T tasks in the 119 program; program on key mechanical products; Vietnam history collection project.

# **OTHER ACTIVITIES**

### TA QUANG BUU PRIZE

Ta Quang Buu Prize is an annual prize held by the Ministry of Science and Technology to honor and encourage scientists who have outstanding achievements in basic research in natural sciences and engineering, contributing to the integration and development of science and technology in Vietnam.

Launched in 2014, the Ta Quang Buu Prize is increasingly proving its prestige in the scientific community in Vietnam, highly recognized and supported by the Vietnamese scientists. Fields for the award include Mathematics, Information and Computer Science, Physics, Chemistry, Earth and Environmental Sciences, Engineering, Biomedical and Pharmaceutical Science, and Agricultural Science.

Over the past five years, the Prize has received compliments from the scientific community, with 14 awardees being the main authors of scientific work in Mathematics, Physics, Chemistry, Information and Computer Science, Earth and Environmental Sciences, Agricultural Science. Recently, based on the result of Ta Quang Buu Prize 2017, the Asian Scientist Magazine of Singapore has chosen two Vietnamese scientists for the list of the Asian Scientists 100 in 2017.

### VIETNAM HISTORY COLLECTION PROJECT

The "Vietnam History Collection Project" is a national social science and humanity project hosted by the Ministry of Science and Technology and conducted under the policy of the Government and the Secretariat of the Party's Central Committee. The results of the project will be 25 volumes of Vietnam history, 5 volumes of Chronicles of Vietnamese history and Database of Vietnamese history. The Vietnam History Collection has the nature of a national history collection, summarizing study results of Vietnamese and international historians on the history of Vietnam to date, while at the same time adding necessary contents to ensure the continuity, completeness and comprehensiveness of Vietnamese history with scientific, objective and up-to-date demands.

### NAFOSTED CONFERENCE ON INFORMATION & COMPUTER SCIENCE (NICS)

NICS conference is part of a series of activities for supporting scientific research, funded by NAFOSTED to support and encourage scientific research activities at universities, research institutes and to enhance the research capacity of young scientists. The NICS is held annually (from 2014) with the aim of boosting the dissemination of research results in Vietnam, creating a quality academic forum between Vietnamese and international scientists to discuss about recent achievements and future directions in the field of information and computer science.

### COMMUNICATIONS AND PUBLIC RELATIONS/WEBSITE

Training seminars in the Northern, Central and Southern Vietnam: With the purpose of providing information on NAFOSTED's activities, funding and support programs, the communication and public relation task is carried out through several training seminars and conferences in the Northern, Central and Southern Vietnam. Annually, these conferences attract hundreds of researchers and administration officers in the fields of sciences and technology to participate.

NAFOSTED's website provides detailed information on funding and support programs, and results from NAFOSTED's funding as well as allowing searches of relevant regulations. Researchers can send questions directly to NAFOSTED's general email account (nafosted@most.gov.vn). These questions will then be forwarded to relevant departments and responded to promptly in order to support researchers in carrying out their project.



### NATIONAL FOUNDATION FOR SCIENCE AND TECHNOLOGY DEVELOPMENT

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