TECHNICAL & FINANCIAL FILE

SUPPORT TO THE INNOVATION AND DEVELOPMENT OF BUSINESS INCUBATORS POLICY PROJECT (BIPP)

VIETNAM

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THE BELGIAN DEVELOPMENT COOPERATION .be

TABLE OF CONTENTS

TABLE OF TABLES

TABLE OF FIGURES

ABBREVIATIONS

BDS	Business Development Service(s)
BIPP	Support to the innovation and development of Business Incubators Policy Project
DOST	Department of Science and technology
GDP	Gross Domestic Product
HCMC	Ho Chi Minh City
HCM UT	Ho Chi Minh University of Technology
IPR	Intellectual Property Rights
PSC	Point Steering Committee
M&E	Monitoring and Evaluation
MOST	Ministry of Science and Technology
MPI	Ministry of Planning and Investment
MPI -EDA	Ministry of Planning and Investment – Enterprise Development Agency
ODA	Official Development Aid
NACENTECH	National Centre for Technology progress
NATEC	National Agency for Technology Entrepreneurship and Commercialization Development
NAFOSTED	National Foundation for Science and Technology Development
MTR	Mid-term Review
PMU / PMT	Project Management Unit / Project Management Team
S&T	Science and Technology
SME	Small and medium-sized enterprise
TVET	Technical and Vocational Education and Training
TBI	Technology business incubator
ToR	Terms of Reference
TFF	Technical and Financial File

EXECUTIVE SUMMARY

Vietnam has made significant progress in its socio-economic development, but, despite these achievements, the growth process has encountered serious problems that threaten national competitiveness.

The rapid growth of the Vietnamese economy resulting from the 'easy wins' achieved by the dynamism and flexibility of its emerging private sector enterprises may no longer exist. Factor- and investment-led growth must give way to innovation-led growth to a greater extent than in the past if growth is to continue and if that growth is to be sustainable in the long run.

However, Vietnam's limited technological readiness is a significant negative factor for the growth of competitive enterprises in Vietnam. This is not only in terms of the use, adoption and adaptation of technology, but also for innovation and research and development initiatives, which are critical for sustainable and competitive economic development.

Current State policies have not been entirely successful in encouraging the establishment and growth of business incubators and of S&T enterprises. However, whilst the need for policy change and more effective State support for technology business incubation is accepted by some key stakeholders within the Government, there remains a low level of understanding of the nature of the required reforms amongst many stakeholders and some resistance to change amongst others.

The BIPP strategy is therefore designed to:

- Address both the low level of understanding of the need for change and the nature of that change by supporting the MOST to improved awareness of international best practice in technology transfer, innovation and the incubation of science and technology enterprises. This is expected to lead to improvements in the policy and regulatory framework to encourage the establishment and operation of both technology business incubators and science and technology enterprises (Results Area 1)
- Pilot new initiatives in the operation of technology business incubation in two key locations (Hanoi and HCMC) with the objective of identifying best practice and learning experiences which can be fed back into further policy and regulatory development (Results Area 2).
- Pilot a support fund to provide assistance to technology business incubators to improve the quality and range of services that they provide their tenants and to support incubator clients with essential elements of incubation and pre-incubation support (Results Area 3). Best practice and learning experience will again be fed back into Results Area 1 to support further policy and regulatory development.
- Establish a high effective monitoring system that can capture the achievements of Results Areas 1, 2 and 3 and ensure that lessons learned are fed back regularly and reliably into improved policy and regulatory development and reform.

The project will have a duration of 5 years and an overall budget of €4,400,000 of which the Belgian contribution is €4,000,000.

The project partner is the Ministry of Science and Technology of Vietnam (MOST).

The project will be overseen by a joint steering committee co-chaired by MOST and BTC and managed on a day-to-day basis by a PUM headed by a MOST-appointed director supported, inter alia, by co-ordinators appointed respectively by MOST and BTC.

ANALYTICAL RECORD OF THE INTERVENTION

Title of the intervention	Support to the innovation and development of business incubators policy project (BIPP)
Intervention number	NN 3013558
Navision Code BTC	VIE 12 047 11
Partner Institution	Ministry of Science and Technology
Length of the intervention	60 months for execution (72 months from the date of signature of the Specific Agreement)
Date of the intervention	XX 2013
Contribution of the Partner Country	€ 400,000
Belgian Contribution	€ 4,000,000
Sector (CAD codes)	15110 / 32130
Brief description of the intervention	The project has been designed to improve the policy framework for technology business incubation: an essential element of increasing the competitiveness of Vietnamese enterprises. The project will support the Ministry of Science and Technology to develop an appropriate enabling environment for the establishment and growth of technology business incubators and their S&T clients. The resultant changes in policy and legal framework will be field tested through two technology incubators (one in Hanoi and one in HCMC) and through a pilot capacity building fund (Innofund) which will support the management of other established incubators and their tenants throughout Vietnam. Best practice and lessons learnt will be captured through a comprehensive monitoring system and the results fed back into further policy development.
Global Objective	The General Objective of this project aims to contribute to the social-economic development strategy of Vietnam and assist Vietnam to continue its economic growth to become an industrialized nation by the year 2020 through a strong force of S&T enterprises.
Specific Objective	The Specific Objective of the project is to support the MoST in developing an enabling environment for S&T SMEs based on an improved legal framework and a set of coherent mechanisms for starting and operating S&T incubators to enhance the S&T SME sector.
Results	Result 1: Enhanced legal framework for supporting S&T SMEs and TBIs Result 2: Incubator policy development enhanced through pilot testing with two one-stop shop TBIs to determine best practices and lessons learnt Result 3: Incubator policy development enhanced through the pilot operation of a seed fund (Innofund) to support the pre-incubation and

	incubation of potential S&T SMEs to determine best practices and lessons learnt Result 4: A monitoring and evaluation framework is established and operated to ensure project results are captured and feedback into the policy development process.

1 SITUATION ANALYSIS

1.1 Economic and social situation

Vietnam is a development success story. Political and economic reforms (Doi Moi) launched in 1986 have transformed Vietnam from one of the poorest countries in the world, with per capita income below $100, to a lower middle income country within a quarter of a century with per capita income of $1,130 by the end of 2010.

The passage of the 1999 Enterprise Law which allowed the rapid growth of the Private Sector was probably the single most important factor in Vietnam's economic development.

The ratio of population in poverty has fallen from 58 percent in 1993 to 14.5 percent in 2008, and most indicators of welfare have improved. Vietnam has already attained five of its ten original Millennium Development Goal targets and is well on the way to attaining two more by 2015.

Table 1: Key Indicators

Population (millions).	86.9
Population Growth (Average annual growth rate)% p.a.	1.1
Life expectancy (years)	75
Urban population %	28.8
HDI	0.593
HDI rank (out of 187)	128
UN Education Index	0.503
Gender inequality Index	0.305
GDP p.c.	US$ 3205
Gini Index	37.6
Poverty (Percentage of population living on less than $2 per day)	38.5
Aid per capita	US$ 42.9

Sources: The World Bank, World Development Indicators 2011 | UNDP, Human Development Report 2011.

Vietnam has been applauded for the equity of its development, which has been better than most other countries in similar situations. The country is playing a more visible role on the regional and global stage having carried out the Chairmanship of the Association of South East Asian Nations (ASEAN) in 2010.

The Eleventh Congress of the Communist Party of Vietnam in January 2011 called for a more comprehensive approach to the country's renovation, decided to promote greater citizens' participation and unity within Vietnam, and to engage proactively in international integration. The Congress re-affirmed Vietnam's approach to state-led development, but also revised key policy documents to place greater emphasis on market processes and non-state ownership of economic assets.

The Socio-Economic Development Strategy (SEDS) 2011-2020 gives attention to structural reforms, environmental sustainability, social equity, and emerging issues of macroeconomic stability. It defines three "breakthrough areas": (i) promoting human resources/skills development (particularly skills for modern industry and innovation), (ii) improving market institutions, and (iii) infrastructure development. The overall goal is for Vietnam to lay the foundations for a modern, industrialized society by 2020.

Vietnam's Human Development Index value for 2011 was 0.593 — in the medium human development category—positioning the country at 128 out of 187 countries and territories. Between 1990 and 2011, Viet Nam's Human Development Index value increased from 0.435 to 0.593, an increase of 37.0 per cent or average annual increase of about 1.5 per cent. Between 1980 and 2011, Vietnam's life expectancy at birth increased by 19.5 years, mean years of

schooling increased by 1.2 years and expected years of schooling increased by 1.8 years. Vietnam's Gross National Income per capita increased by about 228.0 per cent between 1990 and 2011.

Table 2: Vietnam's HDI indicators for 2011 relative to selected countries and groups

	HDI value	HDI rank	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (PPP US$)
Vietnam	0.593	128	75.2	10.4	5.5	2,805
Thailand	0.682	103	74.1	12.3	6.6	7,694
Philippines	0.644	112	68.7	11.9	8.9	3,478
East Asia and the Pacific	0.671	—	72.4	11.7	7.2	6,466
Median HDI	0.630	—	69.7	11.2	6.3	5,276

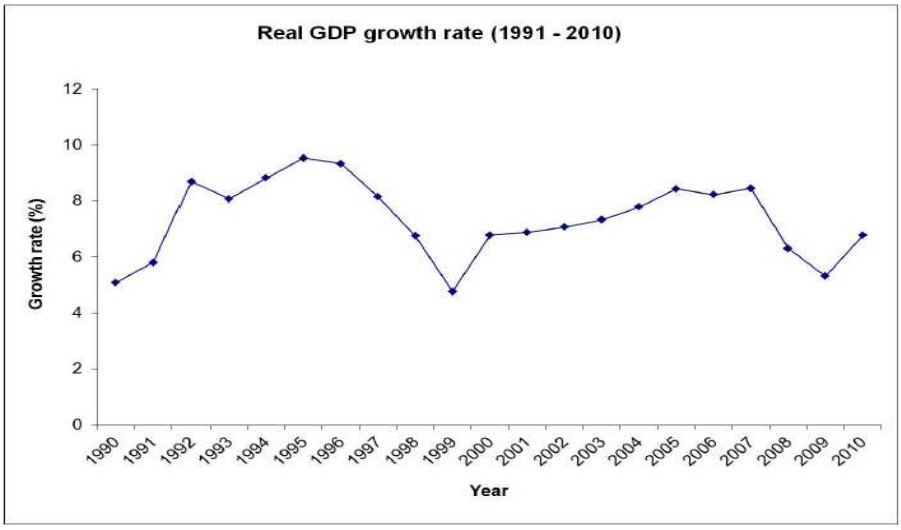
Source: Human Development Report 2011, UNDP

1.2 Sector Context

1.2.1 The competitiveness of Vietnamese enterprise

Continuous growth has raised Vietnam's income per capita to over US$1,000 since 2008 and improved other measures of living standards.[1]

Figure 1: Real GDP Growth Rate



Source: Presentation on Vietnam's Science and Technology Strategy 2011 – 2020, NIPASS

According to the World Economic Forum's 2012-2013 Global Competitiveness Report Vietnam ranks 75th out of 144 economies with respect to global competitiveness. Vietnam ranks 104th out of 145 economies in the World Bank's Knowledge Economy Index – an assessment of a country's preparedness to compete in the knowledge economy: a fall of two places since 2010.

[1] Vietnam Competitiveness Report 2010 http://www.isc.hbs.edu/pdf/Vietnam_Competitiveness_Report_2010_Eng.pdf

On INSEAD/WIPO's 2012 Global Innovation Index Vietnam ranks 76th out of 141 economies – a fall from 71st out of 132 economies in 2009.

Table 3: Vietnam's Comparative Global Rankings

	Global Competitiveness Ranking 2012-2013 (out of 144 economies)	Knowledge Economy Index Ranking 2012 (out of 145 economies)	Global Innovation Index Ranking 2012 (out of 141 economies)
Vietnam	75	104	76
Belgium	17	15	20
China	20	84	34
Indonesia	50	108	100
Philippines	65	92	95
Thailand	38	66	57

Source: 2012-2013 Global Competitiveness Report; World Bank Knowledge Economy Index 2012; Global Innovation Index 2012

1.2.2 Technology and innovation

The nature of the globalised economy means that technology is an essential element of enterprise competitiveness. However, the annual investment on science and technology activities accounts for around 0.8% of GDP[2](compared to Belgium at around 1.96% of GDP and China at around 1.47% of GDP[3]) and only 2% of total state budget spending[4]: discussions with researchers during the formulation mission at the Vietnamese Academy of Science and Technology revealed that the budget of the Academy was split mostly (an estimated 99%) for research and 1% for the application of that research. The research infrastructure in Vietnam comprises around 600 research institutes and 150 universities[5]. The Vietnam Competitiveness Report 2010 states that "although the number of science and technology institutes increased [from 1995 to 2007], their quality remains low and ... there were only few practical results".

The extent to which an economy is able to adopt existing technologies to enhance the productivity of its enterprises, make use of modern information and communications technologies and innovate to increase its competitive advantage are quantified as its level of technological readiness. With respect to the technological readiness Vietnam's position is poor: ranking only one place higher than Burkina Faso on the availability of latest technology and one place higher than Lesotho on firm-level technological absorption[6].

Table 4: Technological readiness

Factor	Ranking (out of 144 economies)				
	BE	VN	CN	PH	TH

[2] Of which 0.5-0.6% is spent by the State and the balance by the private sector
[3] http://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS
[4] Vietnam Competitiveness Index 2010
[5] Presentation on Vietnam Science and Technology Strategy for Social and Economic Development during the period 2011 – 2020 by Dr. Ta Doan Trinh and Dr. Nguyen Quang Tuan, NISTPASS, Vietnam
[6] World Economic Forum Global Competitiveness Report 2012-2013

Factor	Ranking (out of 144 economies)				
	BE	VN	CN	PH	TH
Availability of latest technology	9	137	107	56	73
Firm-level technological absorption	31	126	77	46	54
Technology transfer	19	94	71	40	47
Broadband internet subscriptions/100 pop	9	79	49	91	73
International internet bandwidth kb/s per user	12	85	119	75	84
Mobile broadband subscriptions/100 population	50	52	60	93	128
Overall technological readiness	22	98	88	79	84

Source: World Economic Forum Global Competitiveness Report 2012-2013

This limited technological readiness is a significant factor for the growth of competitive enterprises in Vietnam. This is not only in terms of the use, adoption and adaptation of technology, but also for innovation and research and development initiatives, which are critical for sustainable and competitive economic development[7]. Enterprises can benefit from new production, process or organizational technologies in several ways:

- The application of new technologies allows enterprises to upgrade their capacities and products.

Moreover

- New technology often constitutes a major determinant in the development of new products and in improvements to the quality of existing products.
- New technology can lead to enhanced efficiency and thus a reduction in production costs.

However, labour intensive production practices remain the main element in Vietnamese manufacturing with 80% of enterprises using human-operated machines and only eight percent using only computer-operated machines[8]. The same survey found that only 12% of enterprises in Vietnam actively engage in research and development and that these were primarily large enterprises. Vietnam demonstrates a low level of innovation which is reflected in the low level of registered patents by Vietnamese inventors. In a recent survey[9] of business leaders in 25 economies Vietnam scored lowest as to concerns about protection of its intellectual property rights (with Germany and Singapore scoring the highest concern) reflecting the low valuation of Vietnam's intellectual property rights.

[7] Fagerberg, J., Srholec, M., Verspangen, B. (2010). "Innovation and Economic Development," in, Handbook of the Economics of Innovation. North Holland: Elsevier, 2010, pp. 833-872.
[8] Firm-level Competitiveness and Technology in Vietnam: Evidence from a Survey in 2010, Business Sector Programme Support (BSPS), Royal Embassy of Denmark in Vietnam
[9] GE Global Innovation Barometer 2013

Table 5: Patents granted in Vietnam from 1981 to 2008

	Patent granted for		
	Vietnamese	**Foreigners**	**Total**
1981-1989	74	7	81
1990	11	3	14
1991	14	13	27
1992	19	16	35
1993	3	13	16
1994	5	14	19
1995	3	53	56
1996	4	58	62
1997	0	111	111
1998	5	343	348
1999	13	322	335
2000	10	620	630
2001	7	776	783
2002	9	734	743
2003	17	757	774
2004	22	676	698
2005	27	641	668
2006	44	625	669
2007	34	691	725
2008	39	627	666
Total	360[10]	7,100	7,460

Source: National Office of Intellectual Property website

Enforcement of intellectual property rights remains a significant problem in Vietnam: there have been many cases where IPR violations are either inadequately sanctioned or not sanctioned at all. This has discouraged enterprises from renovating their technology. According to the National Intellectual Property Office there were 2,766 cases of intellectual property infringement in 2008 – up by 300 cases in comparison with 2007. The European Commission's 2009 IPR Enforcement Report classified Vietnam as one of the countries where IPR infringement is a serious problem – citing deficient enforcement of domestic IPR regulations, poorly trained enforcement officials and long and complex procedures to try to uphold one's IPR.

Innovation refers to the creation of better or more effective products, processes, technologies, or ideas. This can occur at many different levels, for example by creating products that are new just to the innovating firm, to the market, to the country, or completely new at the international level. Most of the innovation taking place among Vietnamese enterprises can best be described as relatively modest in nature, leading to new products or processes at the level of the firm (47% of firms undertaking R&D) and local market (39 percent), and rarely resulting in anything new internationally (under 2 percent).[11] These results show that very few firms in Vietnam innovate, and they are thus likely to use technology developed outside of the firm. For those that do innovate, they are in general not creating entirely new products or processes: most firms chose to

[10] 450 Vietnamese applicants were granted protection titles for Utility Solutions during the same period.
[11] Firm-level Competitiveness and Technology in Vietnam: Evidence from a Survey in 2010, Business Sector Programme Support (BSPS), Royal Embassy of Denmark in Vietnam

copy each other rather than innovate. Vietnam was ranked 24th out of 25 countries in a survey of the quality of the policy environment for innovation – with Nigeria coming last – both by self-evaluation and by evaluation by businessmen from the other 24 countries[12].

Over the last decade there has been increasing acceptance among policy makers globally of the idea that technology diffusion [technology transfer] produces most of the economic benefits of new technology. It is "not the creation of technological leadership in itself that affords a nation its competitive advantage, but the rate and level of diffusion of the technology into economic use"[13]. Technology adaption (a key element of diffusion), which involves the modification and refinement of already existing technologies rather than original research and development, is undertaken by 23% of Vietnamese enterprises with the majority being small in size: the adaptation activities cannot be defined as research-based or new-to-world, but they are innovative and directed at the development of appropriate technologies for the enterprises in question. The main motivation for enterprises to undertake technology adaption is to improve product quality and to increase productivity and capacities and the main reason for adaptation is not that an appropriate technology is not available in the market – but that it is considered too expensive.[14]Quality remains a significant problem: the World Bank's 2005 Enterprise Survey indicates that only 11.4% of enterprises having internationally recognised quality certifications compared to 22.4% for the region.

According to the 2008 Enterprise Survey of the 205,529 surveyed enterprises, 1,340 were in the field of science and technology – 0.65% of the total. Of these S&T enterprises, 26.3% were in the State sector, 63.3% in the domestic private sector and 10.4% in the foreign invested sector. The average technological and scientific research and development investment amongst these enterprises is equivalent to 1.15% of their pre-tax profit; of which 0.4% for R&D and 0.69% for technology absorption.

1.2.3 Business incubation

Business incubation, and especially technology business incubation is known for its positive effects and support for initiating technology led and knowledge driven enterprises. Studies also show that such mechanisms help not only in the growth of technology based new enterprises but also in improving their survival rate substantially. TBI are designed to bridge the gap between an idea and getting the technology transfer project off the ground, and assisting its development into a viable business.

TBIs also facilitate speedy commercialisation of research outputs.

In Vietnam, 11 incubators have been established nationally – but very few appear to have achieved commercial or financial viability to date and at least one has ceased operation (see following table)[15].

Up to date, no specific national support scheme has been designed nor implemented in Vietnam to support TBI and incubation services.

[12] GE Global Innovation Barometer 2013
[13] Rothwell, R. and Zegfeld, W. (1985), Re-industrialisation and Technology, Essex: Longman
[14] Firm-level Competitiveness and Technology in Vietnam: Evidence from a Survey in 2010, Business Sector Programme Support (BSPS), Royal Embassy of Denmark in Vietnam
[15] Formulation mission discussions with incubators: of those met on Quang Trung ICT incubator and Topica (a virtual incubator) appear to be self-financing

Table 6: Business incubators in Vietnam

Incubator	Type of incubator	Year of establishment	Description	Status
FPT incubator	Private, ICT focus	Feb. 2004	FPT is a joint stock leading ICT corporation. Main objective of the incubator was to find new business ideas and invest to grow into a new subsidiary of the FPT corporation	Ceased operation in 2009
TOPICA	Private sector enterprise spun-off from CRC	Sept. 2004	The TOPICA Accelerator Center: a private enterprise which provides virtual business incubation activities, Institute of Light Industry TOPICA Founder Institute Vietnam. This was spun off from the CRC incubator set up under the CRC Center, Hanoi University of Technology. CRC was supported by an Infodev grant. The incubator has a link with IGG Vietnam Ventures to obtain investment capital for its clients. TOPICA has expanded into a major e-learning centre. Appears to be highly profitable	Fully functional without public funding.
Hanoi Food and packaging BI	Public, (Decree 43) under supervision of SME support centre (Hanoi DPI)	Nov. 2007	An EC-supported incubator currently operated by the SME Promotion Centre under Hanoi Department of Planning and Investment. Office units: 4000 m2, Production space: 10,000 m2 (10 workshops each of 110-240 m2). It has graduated 11 enterprises from the incubator and currently has 13 incubator tenants.	Operating with operational support from the People's Committee of around US$50,000 per annum.
Quang Trung Software BI	Limited liability company (PPP)	Mar. 2008	Initially supported by the EC and established under the Enterprise Law as a joint venture between Quang Trung Software park and the Ho Chi Minh Computer Association. Has graduated 3 enterprises and is at capacity at the moment with 24 tenants with 13 pre-incubatees and 4 virtual clients. Already self-financing and actively seeking new income sources. Very dynamic management.	Operating and self-financing
Hoa Lac Hi-tech business incubator	Public (Hoa Lac hi-tech park) under 115 Decree	12/2006	Focus on hi-technology (ICT, biotech/environment tech, nanotech/advanced materials, automation/ mechatronics). 25 incubatees and graduates. Due to its far location many incubatees are working off –site in their own places. Established under Decree 115 as a self-accountable entity. Focus on hi-technology (ICT, biotech/environment tech, nanotechnology/advanced materials, automation/ mechatronics). 25	Operating, financed by Hoa Lac hi-tech Park with an operational funding of around US$50,000

Incubator	Type of incubator	Year of establishment	Description	Status
			incubator tenants 5 virtual clients and 6 pre-incubatees 1000sq m incubator located about 30km from Hanoi centre.	
TBI of HCM city University of technology	University, registered under 115 decree status	Dec. 2009	Established under Decree 115 as a self-accountable unit. Receives around US$50,000 per annum from HCMC DOST. Focal areas - Food & Biotechnology, Chemical & material engineering, Telecommunications, Mechanical engineering and Mechatronics, New and renewable energy, Environmental engineering, Information Technology. Presently mostly undertaking pre-incubation activity Area 600m2 from the university, good location in the city. 6 pre-incubatees all from university researchers.	Operating with a US$50.000 per annum funding from DOST HCMC
TBI of Nong Lam University (Agriculture-forestry)	University, registered under decree 43		To promote application and commercialization of R&D results of the university, encourage researchers and students to get to the market. Area 2,000m2 of land from the university (need to build incubation areas), nearly 20km from the city centre.10 incubatees and 4 pre-incubatees - all from university researchers. Receive financial support from DOST Ho Chi Minh city for operating budget.	Operating, under the university, operation also financed by DOST HCM
Saigon Hi-tech BI	Public under Decree 43 (Saigon hi-tech park)	8/2006	Established by HCMC People's Committee, under the Saigon Hi-tech Park's management. Focus on hi-technology (ICT, biotech/environment tech, nanotech/advanced materials, automation/mechatronics). Facilities small but high quality. Receives operating support from the People's Committee of US$50,000 per annum. Appears to have a very low level of activity 1.8 ha of land, only 500m2 of office: plans to build more incubation areas. 5 incubatees and 2 virtual clients. In the beginning 2012 SHBI received Infodev (World Bank) support of US$380,000 for a two-year period to set up Lab project in Vietnam to promote mobile application business.	Operating financed by the SG hi-tech park (approximately US$50,000 per annum)
Agri-business incubator	Public, Ho Chi Minh City Agricultural High Technology Park under	10/2009	Established by Ho Chi Minh city people's committee, under Agricultural High Technology Park's management. Technology focus: Agricultural Biotechnology, Food Preservation and Processing, New or environment friendly materials and products …40+ km from the city centre. Receive financial support from DOST Ho Chi Minh city for operating budget.	Operating, under the Agricultural hi-tech park, operation financed by DOST HCM

Incubator	Type of incubator	Year of establishment	Description	Status
	Decree 115			
Start up Business Incubator - BSSC - Young Business Association	Decision from HCMC People Committee and City Youth union		2 rooms for rent Total 100m2	Active, but no information
5DESIRE	Private		According to their website “5DESIRE is a Vietnamese Incubator and Consulting Firm whose mission is to help accelerate the successful development of start-ups in different sectors through an array of business support resources and services”.	
Business incubators - Tan Thuan e-office park HCMC			According to their website “To support new software investors during the initial period, 3 buildings called Incubation Center were founded.”	

Source: Mission meetings and Identification Report

1.2.3.1 Overview of the two partners business incubators

HCMUT Technology Business Incubator

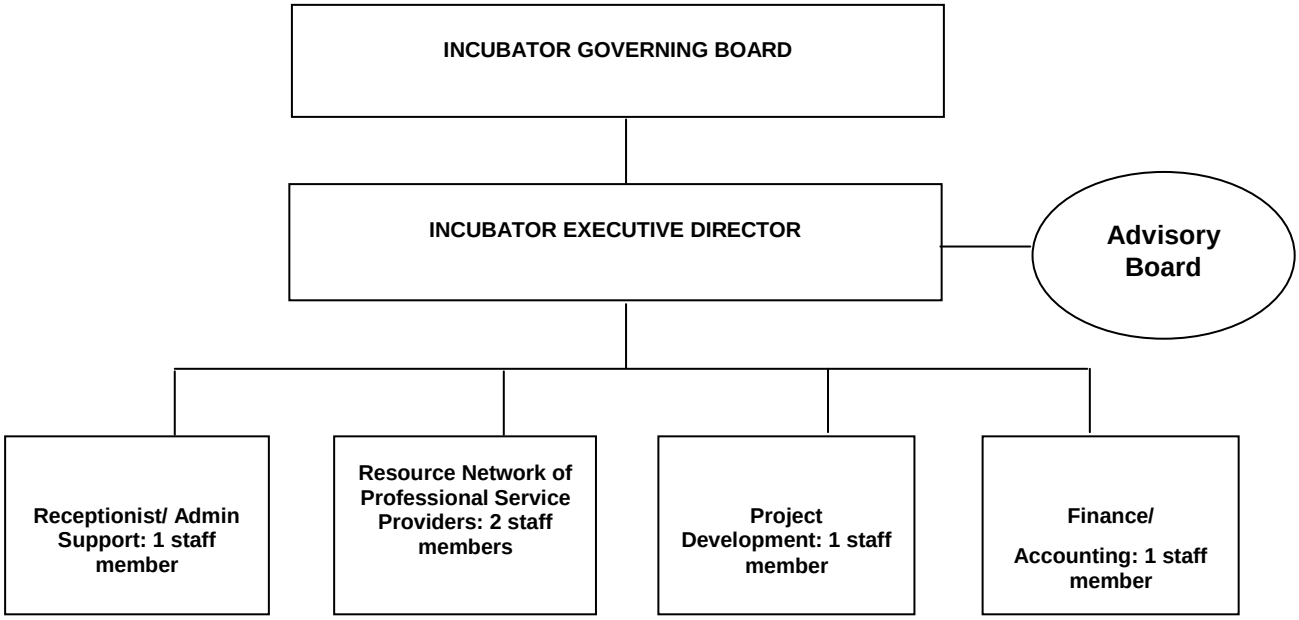
HCMUT-TBI is a public entity, science-technology organization registered under Decree 115 as a self-financing unit directly under Ho Chi Minh City University of Technology. It operates as a not- for-profit, mixed-use incubator.

Its purpose is to: (i) increase the number of successful technology-based companies; (ii) raise business awareness and (iii) commercialise research results.

It raises its income from the sale of services and from financial support provided by Ho Chi Minh City Department of Science and Technology (DOST).

HCMUT-TBI has the following staffing and structure

Figure 2: Organogram of HCMUT-TBI



It focuses on a number of technology sectors:

- Food & Biotechnology
- Chemical & material engineering
- Telecommunications
- Mechanical engineering and Mechatronics
- New and renewable energy
- Environmental engineering
- Information Technology

It operates out of a 600 m2 office building possible located on the HCMUT campus. It can incubate 10 clients. A client at TBI is provided a free single office space room including basic furniture:

- Two workstation tables
- One cabinet
- Two chairs
- One telephone
- One desktop computer
- Two connection jacks for high-speed internet access.

It provides the following shared facilities to its tenants:

- Conference room with seating capacity of 50 individuals
- High-speed Wi-Fi
- Photocopy machine
- Laser printers
- Projector
- Fax machine
- Market survey/ marketing assistance,
- Business planning and training,
- Organizing management/ Consultancy support,
- Information dissemination on product ideas/technologies,
- Syndicating finances,
- Arranging legal and IPR services,
- Work space for a limited period
- Using facilities of HCMUT at nominal charges,
- Common facilities of TBI such as communication, conference, computers.

It has 10 incubation and pre-incubation clients at present.

Table 7: Incubation and pre-incubation tenants of HCMUT-TBI

N°	Company	Start date	Products/Services
1	INEXT TECHNOLOGY JSC	1/2010	- RFID Technique based products - Software packages for VoIP - Management information systems for securities companies
2	CENFOTECH Co., Ltd	1/2010	- Water-DO emulsion for engines - Solid fuels from waste plastics and rice husk - Protein recovery from side products for food processing
3	DIANOTECH-VIEGRID Group	1/2010	- Software packages for industrial management - Software packages for mistake diagnoses
4	HI-TECH MECHATRONICS	1/2010	- Automation for industrial equipment - Robot manufacture
5	RENEWABLE ENERGY TECHNOLOGY	1/2010	- Technology for absolute ethanol production - Biodiesel
6	BK GTECH Co., Ltd	5/2011	- Solar energy converter - Battery charging circuit, - Monitoring and transmitting data circuit based on Zig-Bee & TCP/IP for wind power and solar cells
7	BK 368 Co., Ltd	5/2011	- Product counter - Industrial management software package

N°	Company	Start date	Products/Services
8	E2TECH Co., Ltd	4/2012	- High capacity electric generator using biogas - Multi-fuel motorcycle - Motorcycle testing platform
9	MOBILE & AUTOMATION TECHNOLOGIES GROUP	4/2012	- Mobile commerce integrated vending machine
10	VIETBURNING JSC	4/2012	- Internet-based commerce and - Information technology

NACENTECH Business Innovation Centre

The National Centre for Technology Progress (NACENTECH) is a multi-disciplinary and cross-sectorial R&D institution which belongs directly to the Ministry of Science and Technology. It is a public entity (see section 1.2.5 for further detail on NACENTECH).

The NACENTECH technology business incubator does not exist at present. The purpose of establishing a NACENTECH Business Innovation Centre (the name planned for the technology business incubator) is to:

- actively facilitate the commercialization of good scientific and technological results into the market by incubation, in the process providing a wide range of workspace management, business support services, business development and access to finance services;
- provide S&T entrepreneurs with the opportunity to develop their ideas in a physical location one-stop shop with R&D facilities, expert advice and business development services that can greatly increase the chance of success;
- enhance the efficiency of the public administration of the S&T enterprises (such as the certification process) in the one-stop shop;
- enhance efficiency and enable the entrepreneurs to focus on the challenges of R&D and business
- pave the way for the development of more S&T SMEs

The NACENTECH BIC would focus on three main target groups:

i) spin-off companies originating from NACENTECH that aim to establish themselves as STEs in the market;
ii) spin-off companies not originating from NACENTECH that aim to establish themselves as S&T enterprises;
iii) researchers, private sector companies and technological institutions that need a particular business development service in the field of technology-related training and counseling.

The BIC would primarily focus on four main sectors:

i) biotechnology, a priority sector for the government with a clear growth potential in functional products and medicine preparation;
ii) electro-optical, another priority sector for the government with growth potential in the optical fiber modules, LED panel displays and solar cells;
iii) IT, a very dynamic and growing sector with relatively low equipment costs;

iv) medical equipment, a growing market though still strongly dependent on imports.

Further information on the planned NACENTECH BIC is contained in the report attached in annex.

1.2.3.2 Needs of spin-offs

During the formulation mission an analysis of the support needs of potential spin-offs in both Hanoi and HCMC was undertaken using a questionnaire survey of 26 researchers from NACENTECH, the Vietnam Academy of Science and Technology, the Vietnam Cleaner Production Center and the HCM University of Technology – Technology Business Incubator: all were either actual or potential spin-offs.

The key findings of the analysis are:

- There is a perceived need for the services of an upgraded S&T TBI in both Hanoi and HCMC.
- There is a strong demand (and need) for capacity development in management disciplines including marketing, accounting, human resource management, negotiation skills and project management).
- Potential start-ups in Hanoi stressed more than their counterparts in HCMC the need for support with human resource development and in networking with potential customers. There is a need for support from mentors.
- HCMC potential start-ups stressed the need for individual business counselling, accounting services and expressed need for office space and production facilities.
- Potential spin offs in both city needs support in obtaining accessing to financial resources for investment. This includes support in networking with venture capitalists and other investors and improved information on possible financing sources.
- Access to advanced research and development equipment, including prototyping is seen as core requirement crucial to the success of spin offs and should be supported as it is scarce at present
- Prototyping, scaling up, certification, standardization, market research and product commercialization are all viewed as of critical importance.
- Potential spin offs would be, in general, willing to pay a reasonable price for the incubator space
- The potential technology fields of the spin-offs included applications in the fields of environment, renewable energy, ICT, and applications in agriculture, food and health.

More detailed information is shown in the following table.

Table 8: Most important needs of potential spin offs

HANOI	HCMC
Technology Needs	
Biotechnology New Materials Information and communication technology Water supply and sanitation Bio Fuels, bio mass from agriculture residuals	Cleaner production technologies Bio Fuels, bio mass from agriculture residuals Waste management / smart recycling – reuse of material Information and communication technology Solar electricity applications
Research and development needs	
Use of specialized instruments	Standardization

HANOI	HCMC
Interaction with specific researchers Use of product prototyping facilities Product commercialization Certification Scale up Market research Standardization	Certification Market research Scale up Interaction with specific researchers
Service Needs	
Connections to funding sources Market research Marketing HR development, access to talents Networking with potential customer locally Networking with potential customer international Networking with investors Access to mentors Access to International mentors	Market research Access to Capital Availability of governmental R&D funds. Office rental – affordable price Accounting Marketing Individual business counselling (business plan, marketing, financing, strategies...) Networking with investors Production facilities Access to financing options information (financial institutions, venture capital funds, government, donor grants, etc.)
Training needs	
Marketing Financing Business development HR development Business and Management Prototyping Negotiations Project management	HR development Business development Marketing Financing Project management Negotiations

Source: Formulation Mission survey

The following table indicates the potential ideas for commercialization indicated by researchers in Hanoi and HCMC during the survey.

Table 9: Potential commercialization concepts

Hanoi	HCMC
Environment, Renewable sources and energy	
Applications in materials processing environment Wastewater treatment Research and application of energy-saving technologies	Generator biogas high performance ignition system and automatic speed Renewable energy biodiesel oil, Recycling of waste oil Clean / green energy

Hanoi	HCMC
ICT	
	Software Development Strategy Vending machines on wireless technology Software printing Control software spelling English Diagnostic technology
Equipment	
Medical Equipment (Laser equipment) YAG, Co2 Fractional Laser, 45W super pulse laser, which helps the patient was treated with cheap technology, import substitution, are warranted in Vietnam Manufacturing equipment measuring the dose of radiation in medical radiotherapy, replacing expensive imported equipment Robot devices Electronic equipment	
Agriculture, food and health related	
Production of bio-fertilizers Cheese production Production of food supplements pharmaceutical development and clean technologies, Processing of medicinal products	Distribution of mushrooms Distillation system,

Source: Formulation Mission survey

1.2.4 Review of current Government support policies

a. Vietnam's Science and Technology Strategy for Social and Economic Development 2011 – 2020 sets challenging objectives[16]:

- Total expenditure on R&D rising to 2.0% of GDP by 2020 with the private sector contribution rising from the current 0.25% to around 1.4% of GDP
- 9-10 researchers/10000 people by 2015 and 11-12 researchers/10000 people by 2020.
- Contribution of high-tech to GDP is 45% by 2020;
- The technological innovation rate achieve 10 -15% (2011 – 2015) and > 20% (2016 – 2020)
- International publications increase by 15-20% per annum.

The strategy also has the objective of 5,000 S&T enterprises, 60 high-tech incubators/business incubators by 2020.

The strategy (Prime Minister's Decision No. 418/QD-TTg approving the Strategy for Science and Technology Development) proposes ***the following major solutions***:

1. To focus resources on implementation of national science and technology programs and projects and improve the national science and technology capacities. To formulate and implement national science and technology programs and proposals in order to mobilize consolidated powers for the fulfilment of socio-economic and science and technology development objectives mentioned in the Strategy. For the 2011-2020 period, to focus on implementation of 2 groups of national science and technology programs and proposals: One group of national science and technology programs and proposals for the socio-economic development and increase the competitiveness of the economy; another group of science and technology programs and proposals to improve the national science and technology capacities.

2. To reform mechanisms on use of the State funds for science and technology, and mobilize social resources for science and technology. To clearly stipulate the State budget proportion for science and technology according to following tasks as strengthening science and technology potentials; reforming basically, comprehensively and synchronously science and technology organization, management mechanisms and operational mechanisms; promoting research and development; carrying out international integration on science and technology. To execute mechanisms in which the State orders science and technology tasks, firstly for national products and hi-tech products; using modes of purchasing and contracting products suitable with characteristics of each form of science and technology activities. To increase expenditures, add and extend expenditure items, simplify procedures and invoices appropriate with characteristics of science and technology activities. To apply investment policies for science and technology organizations based on their operational efficiency and output results. To use some breakthrough mechanisms and policies in order to promote socialization of investment in science and technology, especially investments of enterprises in technological study and innovation. To propose amendments which allow enterprises to deduct over 10% of their annual taxable incomes for investments I science research and technology development. To develop

[16] Presentation on Vietnam Science and Technology Strategy for Social and Economic Development during the period 2011 – 2020 by Dr Ta Doan Trinh and Dr Nguyen Quang Tuan, NISTPASS, Vietnam

policies to attract foreign investment resources in science and technology activities.

3. To synchronously formulate policies on attracting, employing and applying important preferential treatments for science and technology officers. To formulate policies on training and employment of science and technology officers, especially high-qualified young personnel in social sciences and humanities, natural sciences, and technical science and technology. To set up mechanisms to assigning potential science and technology tasks to young scientists and good student groups in key universities and research institutes. To promulgate policies on employment and promotion of science and technology officers, which clearly define specialized financial autonomy mechanisms, regime of special preferences applicable to science and technology officers assigned to be in charge of implementation of national science and technology tasks. To propose adding titles of general engineers and chief engineers in the system of science and technology civil officer ranks, and State honourable titles for science and technology officers. To amend, supplement and finalize policies on attracting Vietnamese overseas scientists and foreign scientists to participate in science and technology activities in Vietnam; and apply mechanisms of hiring domestic and foreign experts funded by the State budget. To promulgate and enforce regulations on democracy in science and technology activities, especially in social sciences and humanities in order to promote creativeness and enhance responsibilities of scientists in consultations, social feedbacks and assessment for guidelines, policies and projects on socio-economic development. To develop programs on training, foster and improve qualifications of science and technology managers. To carry out implementation of training programs for science and technology experts on directions and fields of prioritized science and technology.

4. To develop science and technology markets with linkages to the enforcement of intellectual property rights. To formulate and promulgate mechanisms and policies on creating the most favourable conditions for domestic and foreign science and technology products to be exchanged and traded on markets. To establish mechanisms and policies on encouraging enterprises to import modern technologies, firstly for leading and key and spearhead sectors and fields so that they can be quickly used for production and business to create new products with high added value. The State invests in establishing a number of centres for science and technology services and technology transfer centres as the core of systems of service organizations on technology broker, transfer, consultancy, evaluation, valuation, appraisal and assessment. To promote the enforcement of law on intellectual property. To formulate a national program on intellectual property. To study and add institutions relating to intellectual property and develop a system of administrative and civil courts on intellectual property.

5. Active and proactive international integration in science and technology: To develop and implement general research programs, projects and tasks within the framework of bilateral or multilateral agreements. To encourage cooperation on science research and technology development among enterprises, universities, research institutes, domestic individuals and foreign partners. To attract foreign funds through research projects in Vietnam. To strengthen organization and chairing of international scientific conferences and workshops in Vietnam and participation in scientific conferences and workshops overseas. To organize exhibitions to introduce new and advanced science and technology achievements of other countries and Vietnam. To promote the performance efficiency of Vietnam's network of science and technology representatives in foreign countries. To attract foreign and overseas Vietnamese experts and scientists to participate in programs and projects on science and technology research and human resource training, form strong research groups in Vietnam in which special attention is paid to groups of young scientists. To develop and carry out contents and plans on national science and technology cooperation with countries which are strong in science and technology and are Vietnam's strategic partners. To establish outstanding research centres on the basis of long-term cooperation between Vietnam's science research organizations and those of foreign countries. To pilot cooperation on establishing a number of advanced science and technology institutes funded by foreign capital in Vietnam.

6. To promote communications and raise awareness of the pubic on roles of science and technology. To promote advocacy and communication activities in the society, especially in enterprises on guidelines, policies and laws on science and technology, on key dynamic roles of

science and technology for the country's construction and development in order to enhance spirits of self-reliance, consensus and strong support of the whole political system for science and technology activities; create the atmosphere of competition and creative labour, carry out research and development of science and technology in production, business activities and all fields of social life; and enhance accountabilities of organizations and people working in science and technology field for the country's construction and defence.

b. Prime Minister's Decision No. 1244/QD-TTg of 25 July 2011 "approving major scientific and technological orientations, objectives and tasks during 2011-2015" sets the objectives of:

- "To improve mechanisms and policies to support the development of science and technology businesses.
- To seek and detect young potential and strong research groups from universities and research institutes to support technology incubation and science and technology business incubation, commercialization and transfer of scientific research and technological development outcomes".

c. According to Prime Minister's Decision 49/QD-TTg on the list of prioritized technologies, the main tasks of the Science and Technology Development Strategy 2011 – 2020[17] are:

i. Reforming the R&D system and management mechanisms {Restructuring the research organization system in Vietnam; Changing the financing mechanism for R&D, Encouraging PPP in R&D];

ii. Developing national science and technology capacity [R&D excellence centres; High-tech parks; Human resources; Technology transfer systems]; and

iii. Setting priorities [Information technologies; Biotechnologies; New material technologies; Mechanic – automation technologies].

d. The Law on Technology Transfer (80/2006) provides a legal basis for technology transfer. This Law provides the basis for the transfer of technologies in Vietnam, from Vietnam to abroad and from abroad into Vietnam; the rights and obligations of organizations and individuals engaged in technology transfer activities; the competence of state management agencies; and measures to encourage and promote technology transfer. The Law applies to Vietnamese organizations and individuals, overseas Vietnamese, and foreign organizations and individuals that are engaged in technology transfer.

e. Decree 80/2007/ND-CP on science and technology enterprises provides the basis for defining and certifying science and technology enterprises. It also provides a wide range of support policies for those S&T enterprises which register with their provincial DOST. Additional detail on the implementation of Decree 80 is given in Joint Circular 06/2008/TTLT-BKHCN-BTC-BNV and Joint Circular No: 17/2012/TTLT-BKHCN-BTC-BNV.

As at March 2013 10 S&T enterprises had been certified under Decree 80 in HCMC and 11 S&T enterprises in Hanoi.

f. Decree 115/2005/ND-CP provides the mechanism for public scientific and technological organizations to achieve autonomy and self-management, which is specified as an essential requirement so as to reduce the demands on the State budget. The Decree states that

[17]For further information on the strategy please see: http://www.sstforum.org/data/sp/1-5.Ta%20Doan%20TRINH.pdf

"scientific research and technological development organizations as well as scientific and technological service organizations that are unable to self-finance their regular activities shall, by December 2009 at the latest, have to transform themselves into ones organized and operating in either of the two forms specified in Clause 1 of this Article [that is, self-financing], or be merged or dissolved".

g. Article 14 of Decree No: 56/2009/ND-CP prescribing the policies and management support state assistance for development of small and medium enterprises states that the State "encourages the establishment of business incubators" and gives responsibility to the Ministry of Science and Technology to coordinate with concerned agencies in "formulating policies which give priority to small and medium enterprises to participate in such incubators.

1.2.5 Review of key Government support institutions

1.2.5.1 The Ministry of Science and Technology

The Ministry of Science and Technology is the government agency which performs the function of state management of science and technology, including:

- scientific and technological activities
- development of scientific and technological potential
- intellectual property
- standardization, measurement and quality control
- atomic energy, radiation and nuclear safety
- State management of public services in the domains under its management in accordance with law.

Decree No. 20/2013/ND-CP (February26, 2013) defines the functions, tasks, powers and organizational structure (see Figure 3) of the Ministry of Science and Technology.

The Ministry of Science and Technology has assigned the Department of Organisation and Personnel to be responsible for BIPP.

1.2.5.2 Department of Organization and Personnel (within MOST)

The organisation and operation of the Department of Organization and Personnel are governed by Decision No 1999 /QĐ-BKHCN of the Minister of Science and Technology (dated September 28, 2010).

Decision 1999 makes the Department responsible, with respect to the system of S&T organisation and human resources, for:

- Chairing, providing guidelines, examining the implementation of self-controlled and self-managed mechanism of S&T organizations, the establishment and development of S&T enterprises; the development and implementation of organizational and operational model of S&T management agencies and organizations.
- Chairing, coordinating with agencies to establish, provide guidelines, organize the implementation of Programs, projects on planning, supporting and developing S&T enterprises, organizations and enterprise incubators,

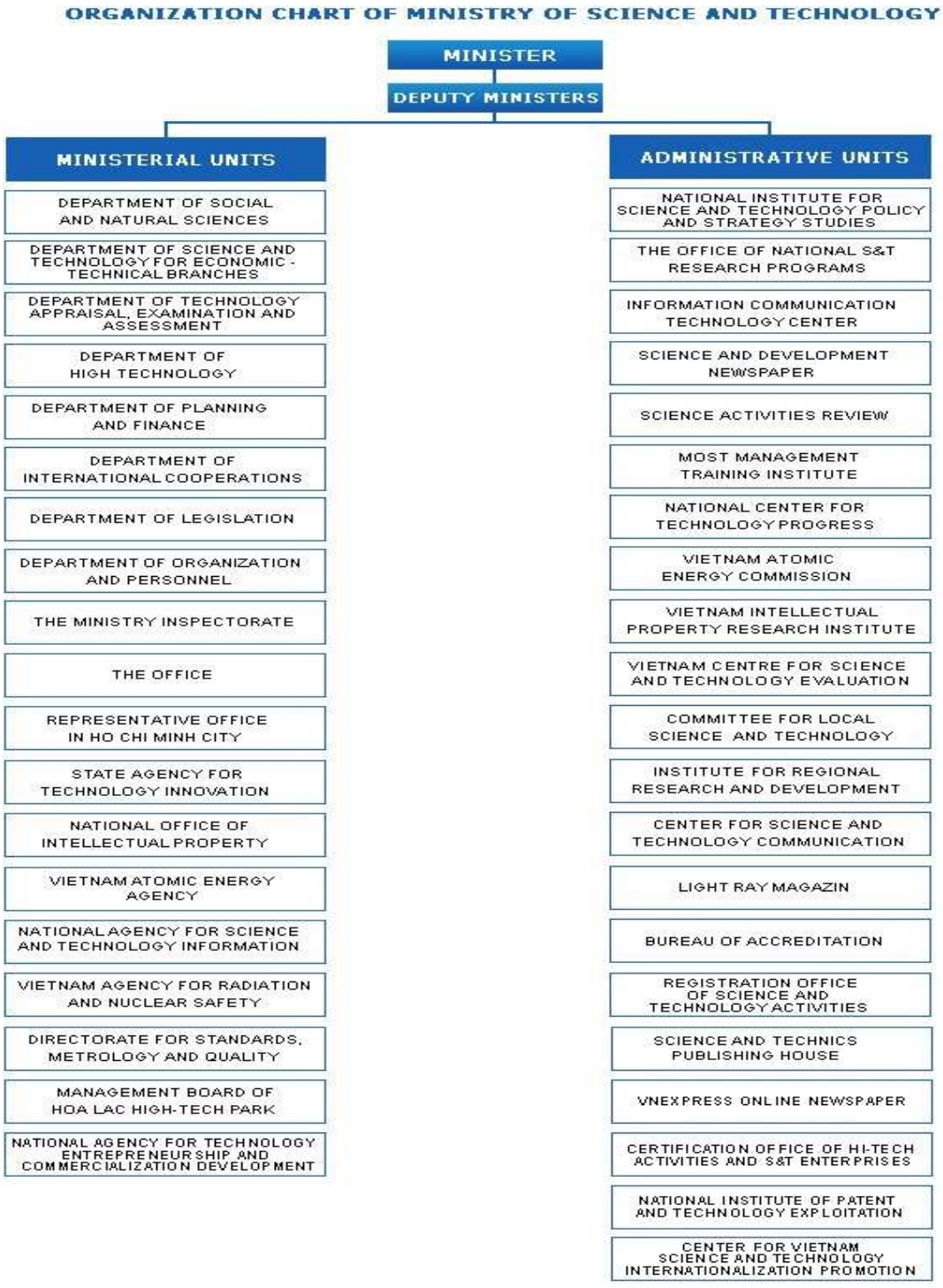
The Department is divided internally into three sections:

- Section of General Affairs;
- Section of Organisation and Personnel;
- Section of Scientific Organization and Personnel.

1.2.5.3 National Agency for Technology Entrepreneurship and Commercialization Development (NATEC)

Another important agency with respect to technology incubation is the National Agency for Technology Entrepreneurship and Commercialization Development, whose organisation and operation are governed by Decision No 3186/QD-BKHCN (dated October 12, 2011) of the Minister of Science and Technology). Amongst the tasks of the National Agency for Technology Entrepreneurship and Commercialization Development is "taking measures to support incubation of S&T enterprises in research agencies, universities, S&T organizations and enterprises".

Figure 3: Organisational Chart of the Ministry of Science and Technology



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1.2.5.4 National Foundation for Science and Technology Development (NAFOSTED)

Article 3 of Decree No: 122/2003/ND-CP on the establishment of the National Foundation for Science and Technology Development states that NAFOSTED can finance or lend capital to:

- "Trial production projects; scientific and technological tasks in line with the State's priority scientific and technological directions, which are performed by enterprises;
- Projects on the application or transfer of scientific and technological research results in order to raise the competitiveness of products and the efficiency of socio-economic activities".

Article 5 states that "the Foundation shall finance or lend capital for the performance of scientific and technological tasks not belonging to the scientific and technological programs, schemes or projects included in the State's plans, which are of national, multi-branch or regional significance and proposed by organizations and individuals of all economic sectors. This indicates that funding of S&T enterprises and S&T incubators is legally possible, NAFOSTED provided grants equating to approximately VND 150 billion and advises that around 20% of the funding went to approximately 30 enterprises. No funding has been provided to incubators to date. There is no legal reason why NAFOSTED could not fund either S&T incubators or the tenants of S&T incubatees. However, in order that it actually did so it would probably need a specific instruction from the Minister of Science and Technology. There is probably a need to demonstrate the importance of the concept and the planned Innofund could ask as an appropriate demonstration model.

1.2.5.5 National Innovation Fund

Additionally, on 5th August 2011, the Prime Minister approved the establishment of the National Innovation Fund (No.1342/QĐ-TTg). This is a state non-profit financial institution. It can provide preferential loans, loan interest support, credit guarantees for organisation, individuals and enterprises to undertake research, technological transfer or innovation. The registered capital for this Fund is intended to be VND 1,000 billion VND (US$50 million), financed by the state budget for science and technology. The fund is expected to be replenished every year to maintain the registered capital level. The fund is not yet functional according to MOST.

All these structures have an important role to play at a national level with respect to the BIPP.

1.2.5.6 Provincial Departments of Science and Technology

At a provincial level the Departments of Science and Technology act as advisers to their respective People's Committees for the State management of science and technology activities and development, measurement standards, and quality, intellectual property, the application of radiation and radioactive isotopes, radiation and nuclear safety, as well as public services under the purview of the Departments of Science and Technology and in line with the law. The most important Departments from this perspective are the Departments of Science and Technology of Hanoi and HCMC. The HCMC Department of Science and Technology gives, inter alia, its responsibilities as to "guide and supervise the implementation of the organizational transformation of scientific and technological activities in public autonomy, self-responsibility, the establishment and development of business and technology scientific institutions guide individuals, technology incubators, business incubators, science and technology to support organizations and individuals to technological innovation, promote innovation, technical innovation, and streamline manufacturing operations".

1.2.5.7 National Centre for Technology Progress (NACENTECH)

The National Centre for Technology Progress (NACENTECH) is a multi-disciplinary and cross-sectorial R&D institution for applying science and technology. It was founded by the Government in 1984. Since1994 it has belonged directly to the Ministry of Science and

Technology. Its mission is to spearhead high/new technology and strengthen existing industries through technology infusion. Its main activities are:

- research and development
- technology transfer and evaluation
- pilot production
- industrial services
- manpower training

Its main fields of operation are:

- Laser Technology
- Microelectronics Technology
- New Material Technology
- Information Technology
- Optical and Opto-Electronics Technology
- Bio-Technology

As of August 2012 it had a staff of 242(Doctorate level staff 21, Master's level staff 34, Bachelor's level staff 134, College level staff 23,and other staff 30). It had a revenue of US$3.4 million in 2012. NACENTECH took part in 30 State-level projects belonging to 4National R&D Programmes:

- ICT
- Automation
- New Materials and
- Bio-technology

In the period 1995 – 2010 NACENTECH implemented more than 150 ministerial R&D projects and is currently the owner of 45 exclusive patents.

1.3 Lessons learnt and complementarity

1.3.1 Lessons learnt

The German Government and the EC have piloted TBI development in Vietnam (see section 1.3.3). The key lessons learnt are:

- Financial sustainability of TBIs is a critical factor: financial self-sustainability is achievable but is likely to take at least 4 years to achieve and TBIs should not be supported if they are unable to forecast - on a reasonable and realistic basis - that they can become financially self-sustainable within this period unless the Government accepts on-going financial responsibility.
- TBIs must be integrated into an overall Government policy on incubation that actively coordinates the roles of the key Government agencies and ministries who are stakeholders in the process.
- Success of a TBI depends upon the leadership given by its director: successful incubators all have a "champion".
- TBIs need to provide a close link between research and innovation activities and not be located far from potential tenants as most tenants are spin-offs from the university/research institution. Vietnamese TBIs which are located at some distance from such facilities have experienced difficulties in attracting tenants.
- Transfer of international best practice is an essential element of the TBI development process: the necessary best practice knowledge to be transferred to both incubator management teams and their incubatee clients is often not available in Vietnam.
- There needs to be a consistent and predictable level of support over several years (rather than ad hoc support).

1.3.2 Donor coordination

The Ministry of Planning and Investment's Department for Foreign Economic Relations is responsible for aid coordination in Vietnam[18]. It is supported in this process by the Consultative Group and by sectoral-level Ministries/Agencies. Circular 06/2001/TT-BKH states that "sectoral aid coordination meetings shall be organised to enhance the effectiveness in Official Development Assistance mobilisation and utilisation based on sectoral approaches and in line with national socio-economic development strategies, sectorial development master plans and strategies, five-year sectoral development plans. Ministerial-level agencies and sectoral management agencies take the lead in the preparation and organisation of sectoral aid coordination meetings while MPI plays a coordinating role."

The Consultative Group brings together participants from the Government of Vietnam, representatives of about 50 bilateral and multilateral donors to Vietnam, representatives of the Vietnam Business Forum and International NGOs. Vietnamese NGOs representatives participate as observers. The Consultative Group meets every year, usually in December. The consultative group will we replaced from December 2013 by the Vietnam Development Partnership Forum (VDPF).

The Partnership Group for SME Promotion and Private Sector Development is co-chaired by the Agency for Enterprise Development and Japan/IFC (the donor co-chair rotates between member donors). It aims to coordinate ODA supporting private sector development, including those described in section 1.3.3. It reports annually to the Consultative Group.

The Partnership Group for SME Promotion and Private Sector Development has established a number of thematic groups (business regulatory reform, local economic development, business development services, sectoral approaches, sustainable business practices, SME finance, etc.). The working groups are established at an operational level (national and international project staff and professionals rather than at the donor representative level. They seek practical solutions to information exchange and networking for improved coordination and exchange of lessons learnt.

There is currently no comparable partnership group for science and technology.

[18] In accordance with Decree 17/2001 on the management and utilization of Official Development Assistance, MPI Circular 06/2001/TT-BKH which provides the implementation basis for Decree 17/2001, Decree 61/2003, and Decision 603/QD-BKH which defines the mandate and tasks of the Foreign Economic Relations Department.

1.3.3 Complementary donor support for business incubation and related sectors

The following projects have been identified as being both current or planned and relevant to the implementation of the BIPP.

Table 10: Key donor supported projects

Project	Donor commitment	Donor and partner	Description
Green Growth Strategy Facility	€5 million	Belgium/ MPI	Increase exchange of know-how between Belgium and Vietnam in the area of climate change mitigation, low carbon development and sustainable urban planning
Inclusive Innovation Project (Project managed by MPI-EDA and supported by lDA borrowing from WB)	US$55 million	MPI-EDA, WB	Lending Project to help strengthen Vietnam' capacity to encourage innovation for improving the lives of the poor and underserved. This will be achieved by: (i) Adopting, upgrading and developing inclusive innovation technologies (primarily through SMEs); and (ii) Strengthening SMEs' technological and innovation capabilities thereby enhancing their competitiveness.
Fostering Innovation through Research, Science and Technology project (FIRST)	US$100 million	WB/MOST	The project will support the development of Science and Technology by (i) knowledge and policy development and (ii) supporting governmental research institutes reform and enterprise innovation.
Green Credit Trust Fund	US$ 5 million	SECO Joint Stock Banks (ACB, Techcombank and VIB) Vietnam Clean Production Centre (VNCPC)	Incentivise SMEs to invest in cleaner production technologies Support SMEs to access to finance

Project	Donor commitment	Donor and partner	Description
Innovation Partnership Programme I and II (IPP I is expected to be completed in 2013 and be followed immediately by IPP II)	€ 5.618.000 (IPP I) IPP II budget is unknown	Finland/MOST	Policy, strategy and regulatory support to MOST Capacity development to central and local government as well as the private sector on managing innovation processes Strengthening innovation partnerships between business, universities and government Supporting innovation partnerships between Vietnamese and Finnish businesses and institutions
Infodev (World Bank)	US$ 38,000		Support to a Mobile Lab project in the Saigon Hi-tech Business Park's incubator to promote mobile application business for the period 2012-2014.

The following projects have been identified as having been completed but are relevant to the implementation of the BIPP.

Project	Donor and partner	Description
Technology management and innovation in South east Asia/Vietnam	Germany/ MOST	The project was formally implemented for the period 2005-2006, aimed at promoting technology business incubators in seven provinces of Vietnam (Hanoi, Ha Tay, Hai Phong, Da Nang, Ho Chi Minh City, Binh Duong, and Dong Nai). The main activities were capacity building through training and coaching programs with three pilot incubators in Hanoi (CRC incubator, Hanoi University of Technology), Hoa Lac hi-tech incubator (Hoa Lac hi-tech Park in the former Ha Tay province), and HCMC University of Technology (Phu Tho incubator). These three incubators were set up with their starting and operational budgets from sources other than MoST.

Project	Donor and partner	Description
EC Private Sector Development Programme	EC/MPI-EDA	Several results areas in the programme: one aimed to foster SME development through the establishment of two replicable business technology incubators in selected sectors of industry, namely the food processing incubator in Hanoi and ICT in Quang Trung software park in HCMC
Mekong Capital	BIO	Capital investment (€2.5 million) by the Belgian Investment Company for Developing Countries SA/NV in Mekong Capital: an investment capital vehicle targeting private sector SMEs in Vietnam, Laos and Cambodia

1.4 Key conclusions

Vietnam has made significant progress in its socio-economic development, but, despite these achievements, the growth process has encountered three serious problems that threaten national competitiveness:

1) Opting for capital intensive production processes[19] has seen a steady rise in labour productivity – but at the expense of capital productivity[20] – and labour productivity is still low by international standards.

2) The income gap between the richer and the poorer has widened. Environmental quality is degrading.

3) According to the World Economic Forum's 2012-2013 Global Competitiveness Report Vietnam ranks 75th out of 144 economies with respect to global competitiveness. The report states "over the last two editions, Vietnam has lost ten places and is now the second-lowest ranked among eight members of the Association of South-East Nations (ASEAN) covered by the report. The country loses ground in 9 of the 12 pillars of the Global Competitiveness Index[21]. It ranks below 50th in all of the pillars. And dangerously close to the 100th position on a majority of them."

The rapid growth of the Vietnamese economy resulting from the 'easy wins'[22] achieved by the dynamism and flexibility of its emerging private sector enterprises may no longer exist. Factor- and investment-led growth must give way to innovation-led growth to a greater extent than in the past if growth is to continue and if that growth is to be sustainable in the long run.

However, Vietnam's limited technological readiness is a significant negative factor for the growth of competitive enterprises in Vietnam. This is not only in terms of the use, adoption and adaptation of technology, but also for innovation and research and development initiatives, which are critical for sustainable and competitive economic development[23].

Vietnam also demonstrates a low level of innovation which is reflected in the low level of registered patents by Vietnamese inventors. Inadequate enforcement of intellectual property rights has discouraged enterprises from renovating their technology.

Investment in R&D by both the State and private enterprises remains low: and future growth in R&D expenditure is somewhat unrealistically expected to come almost entirely from the private sector.

The situation analysis reveals that:

- There is "insignificant technology transfer from research institutes to enterprises and universities[24] focus on pure basic research".[25]
- Expenditure on state R&D is still focused on research rather than the application of that research.

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[19] For example, through foreign direct investment in automobile, motorcycle, and steel production – which all need very high capital investments and result in a relatively low jobs created/capital invested ratio.

[20] The ratio of the output of goods and services to the input of physical capital. Vietnam is not attracting low capital intensive industries - neither labour intensive industries (such as garment production) nor knowledge based industries.

[21] http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2012-13.pdf

[22] Notably the high labour mobilization rate resulting from its "golden" population structure and the structural shifts from agriculture to manufacturing and services. However labour productivity remains low and sectoral productivity growth remains a major concern.

[23] Fagerberg, J., Srholec, M., Verspangen, B. (2010). "Innovation and Economic Development," in, Handbook of the Economics of Innovation. North Holland: Elsevier, 2010, pp. 833-872.

[24] "University faculties: little research, overload of teaching. Only a limited number of university faculties have adequate resources for significant R&D: about 4% of total investment" Dr Tran Ngoc Ca, Chief of Secretariat, National Council for Science and Technology Policy (NCSTP) – presentation to the Conference on Global Innovation Ecosystem

[25] Presentation on Vietnam's Science and Technology Strategy for Social and Economic Development during the period 2011 – 2020. Dr Ta Doan Trinh and Dr Nguyen Quang Tuan, NISTPASS

- Of the approximate 1,300 S&T enterprises in the country only 10 in HCMC and 11 in Hanoi have registered under Decree 80: despite its apparent significant benefits.[26]
- As of 2009, according to MOST[27], only 45% of scientific and technological institutes had changed their organisation and operating mechanism towards becoming self-financing.
- There are no specific strategies, policies or legislation for supporting the development of technology business incubators.
- 11 incubators have been established nationally – but very few appear to have achieved commercial or financial viability to date and at least one has ceased operation. There is a strong perceived need amongst researchers for the services of an upgraded S&T TBI in both Hanoi and HCMC.
- The process of business incubation is poorly understood (amongst all key stakeholders including some operators of incubators) and the need for pre-incubation as a critical factor of success seems very poorly understood. Access to advanced research and development equipment, including prototyping is seen as core requirement crucial to the success of spin offs and should be supported as it is scarce at present
- Financial sustainability of technology business incubators is a critical factor: financial self-sustainability is achievable but is likely to take at least 4 years to achieve and TBIs should not be supported if they are unable to forecast - on a reasonable and realistic basis - that they can become financially self-sustainable within this period.
- Technology business incubators must be integrated into an overall Government policy on incubation that actively coordinates the roles of the key Government agencies and ministries who are stakeholders in the process.
- Transfer of international best practice is an essential element of the technology business incubation process: the necessary best practice knowledge to be transferred to both incubator management teams and their incubatee clients is often not available in Vietnam.
- There needs to be a consistent and predictable level of support over several years (rather than ad hoc support).

Current State policies have not been entirely successful in encouraging the establishment and growth of business incubators and of S&T enterprises.

However, whilst the need for policy change and more effective State support for technology business incubation are accepted by some key stakeholders within the Government, there remains a low level of understanding of the nature of the required reforms amongst many stakeholders and some resistance to change amongst others.

The BIPP strategy is designed to address both the low level of understanding of the need for change and the nature of that change and the conclusions that have been drawn above as to the nature of the required State support policy.

SWOT analysis

These conclusions can be summarised in the following SWOT analysis which has directed the definition of the project strategy.

[26] Source – verbal communication with DOST HCMC and Hanoi
[27] Deputy Minister of Science and Technology Nguyen Quan, Vietnam News, 2009

Strength	Weakness
High-level political support for the growth of the private sector	Steady decrease in national competitiveness
High level of entrepreneurial enthusiasm in young Vietnamese engineers and researchers	"Insignificant technology transfer from research institutes to enterprises and universities focus on pure basic research".
Steady rise in national labour productivity	Capital productivity is low and labour productivity remains relatively low
Strong commitment to reform contained within the National Strategy for Science and Technology	Expenditure on state R&D is still focused on research rather than the application of that research.
Clear understanding in senior policy makers that current TBI support system is not functional and needs reform	Limited understanding of the nature of the required reforms amongst many stakeholders and some resistance to change amongst others.
There is a strong perceived need amongst researchers for the services of an upgraded S&T TBI in both Hanoi and HCMC.	Current State policies have not been entirely successful in encouraging the establishment and growth of S&T enterprises: available state support for S&T enterprises is not working to increase enterprise competitiveness
	There are no specific strategies, policies or legislation for supporting the development of technology business incubators.
	Few existing TBIs are fully operational and very few demonstrate capacity for financial viability
	The process of business incubation is poorly understood (amongst all key stakeholders including some operators of incubators) and the need for pre-incubation as a critical factor of success seems very poorly understood.
	Access to advanced research and development equipment, including prototyping is seen as core requirement crucial to the success of spin offs and should be supported as it is scarce at present
	Best practice knowledge on incubator management and support policies to encourage incubation is often not available in Vietnam

Opportunities	Threats
Increased competitiveness of enterprises through absorption of appropriate technology developed by Vietnamese R&D institutions	Steady and increasing decline in national competitiveness
Increased level of commercial spin-offs and selling of IPR reduces the demands on the state budget of funding all R&D	Increasing levels of unemployment and underemployment
A network of TBIs provides the support needed to help S&T enterprises grow in a manner that is cost effective and sustainable.	TBIs continue to decline in importance as their operation remains ineffective

2 STRATEGIC ORIENTATIONS

2.1 Project strategy

The project strategy reflects the important conclusion that the competitiveness of Vietnamese enterprises can be significantly improved through technology transfer and absorption (which are both weak in Vietnam at present).

Technology business incubators have a demonstrably important role in improving the transfer of technology from research institutions and the absorption of such technology by enterprises. Research in the EU[28] demonstrates that the gross cost per job in terms of public sector funding compares highly favourably to other forms of State intervention – particularly when the multiplier effect of incubators is taken into account.

In the European Union most technology business incubators are established as a result of State policy: a2002 review[29] of EU business incubators suggests that public funding accounts for a high proportion of the set up costs of most incubators (which average around €4 million) and for around 37% of operating revenue.

Table 11: Sources of Set-up Costs for EU Business Incubator

Sources of funding	Percentage
EU and other international agencies	**22**
national authorities and public agencies	**46**
Payments from banks and other private sector organizations	**13**
Payments from universities and other R&D organizations	**5**
Other sources	**13**
Total	**100**

Source: Benchmarking of EU Incubators: Centre for Strategy & Evaluations Services, EC February 2002

Table 12: Sources of Operating Costs for EU Business Incubator

Sources of funding	Percentage
Subsidies - EU and other international agencies	**10.1**
Subsidies - national authorities and public agencies	**27.3**
Payments from banks and other private sector organizations	**2.6**
Payments from universities and other R&D organizations	**3.0**
Rental income and other incubator charges	**39.5**
Other revenue, e.g. from service contracts	**11.1**
Other sources	**5.6**
Total	**100**

Source: Benchmarking of EU Incubators: Centre for Strategy & Evaluations Services, EC February 2002

[28] Benchmarking of EU Incubators: Centre for Strategy & Evaluations Services, EC February 2002
[29] Benchmarking of EU Incubators: Centre for Strategy & Evaluations Services, EC February 2002

77% of European incubators operate on a not-for-profit basis. Whilst many incubators are able to recoup a significant proportion of these costs (averaging around 40%) from tenants, the element of public funding remains high in most cases.

The situation is likely to be the same in Vietnam: technology business incubation will need state support to operate – and that State support must be more focussed and effective than it is at present.

In order to achieve the required impact the Project Strategy aims to operate at three different levels: macro, meso and micro.

Macro level

Bearing in mind that the State is likely to have an on-going role in supporting technology business incubation, it is vital to increase the awareness and understanding of the principles of successful technology business incubation amongst State policy makers as a precursor to meaningful policy change and the development of an effective state support policy for technology incubation.

The project will prepare a Road Map for the development of all aspects of pre-incubation and incubation. This will significantly increase understanding amongst policy makers and practitioners. It will also set a reform agenda and allow policy makers to benchmark Vietnam against its regional economic competitors.

The reform agenda in the road map should lead to policy reform, the development of support policies and programmes and regulatory simplification necessary for the growth of S&T incubators and their S&T clients.

Technology business incubation is a horizontal discipline that crosses the mandates of several Government ministries: effective coordination of the policies and regulations of these key stakeholders is essential if a State support policy is to be effective. BIPP activities should always strive to improve inter-ministerial, inter-agency, central-provincial level and public-private cooperation and coordination as this is vital to the development of incubation in Vietnam. There is a need for an innovation platform to be based on a joint effort of the State administration (provincial and local), enterprises, and knowledge institutions (the so-called Triple Helix). BIPP will help develop such an innovation platform.

Additionally, BIPP will also support the development of a Ministerial Circular on Technology Business Incubation, which will make it simpler for State entities to establish technology business incubators and receive State support to do so.

State policy with respect to business incubation has suffered from being almost entirely theoretically based: there has been little feedback from the experiences (positive and negative) of operating business incubators in Vietnam.

Policy development should ensure a consistent and predictable level of support over several years (rather than ad hoc support): this is why it is important to embed the support activities in national/provincial development policies.

The BIPP aims to ensure that practical experiences at both meso and micro-level will be fed back into further policy formulation.

Meso level

The establishment of a new technology business incubator in Hanoi and the expansion of an existing technology business incubator in HCMC will provide a practical field test of the pilot policy reforms at meso level. It will allow an assessment of the cost effectiveness, utility, and efficiency of State support to business intermediary organisations.

Both incubators (Nacentech and HCMUT TBI) are public entities depending directly from the MOST and will be best placed to act as pilot TBIs to directly feed in the work on enhancing the legal framework for supporting S&T SMEs and TBIs. They have a monopoly when it comes to business incubation in science and technology. They both receive public funding from MoSt and/or DoST to increase the number of successful technology – based companies and spin-offs of research institutes. As such, Nacentech and HCMUT TBI are confined with the operationalization of part of the mission of the Department of Personnel and Organisation of the MoST as described in decision No 1999/QD-BKHCN of the MOST.. (Belgian law of the 15th of June 2006, art. 26, §1, 1°, f)

The need to test policy should reflect that incubators need to build on regional resources and competencies in such a manner as to address different but complementary technology fields which allow the clustering of research and business activities. The differences between the regional economies of HCMC and Hanoi highlight the need for testing to be made in two different locations.

For the two pilot incubators support will include:

- Support to operational funding over a fixed period until the incubator achieves financial viability (in no more than 4 years) in accordance with an approved business plan. Research indicates that 60% of EU incubators achieve breakeven within this period. The BIPP is based on the clear strategy that the technology business incubators should only receive support from BIPP if it can be forecast on a reasonable and realistic basis that they can become financially self-sustainable (including with any on-going state support) during the duration of the BIPP: the BIPP should not encourage the establishment or expansion of activities that are likely to be beyond the scope of a future State support policy in this area.
- Support to improve: (i) the management and advisory services offered by the incubator to its tenants; (ii) their national and international networking; (iii) the level of awareness of the operations and objectives of the incubator amongst key target audiences and (iv) the scope of their services through virtual incubation.

Support in depth for two incubators in different stages of their life cycle is justified as it will allow their different needs to be assessed and addressed. The justification for supporting two in depth (rather than more at a lower level) is that it is only through providing comprehensive support that access to the financial and managerial data on the operation of the incubators can be achieved and this is essential for determining lessons in these key areas.

There is also a need to support other established incubators so as to broaden the lessons learned for future policy development and to draw conclusions based on the experiences of a wider pool. Drawing policy conclusions based on a sample of two would be unwise. Support to these other incubators will not include operational funding but will address ways of improving their operational performance.

A feedback loop into further policy reform will be achieved by establishing highly effective monitoring and evaluation systems.

Micro-level

At the micro-level BIPP will pilot innovative State support to the tenants of both the two pilot technology business incubators and the tenants of other established incubators. These services will be provided through a new State fund, the Innofund.

The Innofund will provide funding through financing agreements for a range of essential capacity building support to potential and existing tenants of S&T incubators: again allowing field testing to determine what forms of support have most impact, are most cost effective and have the greatest impact. The results will again be fed back into policy. Additionally, options for a longer term, sustainable Innofund will be explored to determine their viability, or to extend to a system of revolving funds. This will include attempting to ensure that one of the existing foundations or initiatives (such as (NAFOSTED, the National Fund for Technological Innovation or any other) accept on a permanent basis the responsibilities and tasks inherent in the Innofund.

The Innofund will support all aspects of pre-commercial development including procurement of essential raw materials and the leasing/purchasing of equipment for prototype development – but commercial investment and recurrent costs will not be supported by BIPP. BIPP should support MOST to develop a network of public, private and donor investors so as to increase the resources available for a wide range of commercial investments.

Again, the lessons learnt from the Innofund will be captured through a highly effective monitoring and evaluation system and fed back into the revised State policies for the Innofund and NAFOSTED and the National Fund for Technology Innovation in areas such as encouragement of S&T venture capital funds and business.

Project Management

The conclusions of the situation analysis have also impacted upon the design of the project management system: an integrated and coordinated approach to the implementation of the three

results areas of the BIPP is essential and Consultancy support and consultancy support should be designed to encourage such an approach and avoid fragmentation.

Transfer of knowledge is an essential element of the BIPP (to MOST, to technology business incubators and to other key stakeholders) and therefore Consultancy support and consultancy – particularly international Consultancy support and consultancy – is vital to the success of the project. Such an approach should ensure that both technology business incubators and the clients of the technology business incubators have access to specialized support through a regional and preferably global network of experts.

Project design and linkages

The project is policy-driven and all results areas/activities of the project should be viewed as supporting policy development through pilot testing of policy and therefore should not be supported beyond that purpose.

The project has been designed with four results areas:

- Result 1: Enhanced legal framework for supporting S&T SMEs and TBIs
- Result 2: Incubator policy development enhanced through pilot testing with two one-stop shop TBIs to determine best practices and lessons learnt
- Result 3: Incubator policy development enhanced through the pilot operation of a seed fund (Innofund) to support the pre-incubation and incubation of potential S&T SMEs to determine best practices and lessons learnt
- Result 4: A monitoring and evaluation framework is established and operated to ensure project results are captured and feedback into the policy development process.

Their linkage and the linkages to the macro, meso and micro levels are shown in the following matrix.

Table 13: Linkages Matrix

Linkages Matrix		**Result 1: Enhanced legal framework for supporting S&T SMEs and TBIs**	**Result 2: Incubator policy development enhanced through pilot testing with two one-stop shop TBIs to determine best practices and lessons learnt**	**Result 3: Incubator policy development enhanced through the pilot operation of a seed fund (Innofund) to support the pre-incubation and incubation of potential S&T SMEs to determine best practices and lessons learnt**	**Result 4: A monitoring and evaluation framework is established and operated to ensure project results are captured and feedback into the policy development process.**
Macro-level	A policy and regulatory environment conducive to the establishment and growth of S&T enterprises and TBIs	The preparation of a Road Map for the development of all aspects of pre-incubation and incubation should lead to improvements in the policy and regulatory environment The circular on technology business incubation will have a positive impact on the policy and regulatory environment	The capacity of TBIs to lobby effectively for changes in the policy and regulatory environment should be significantly enhanced through BIPP Feedback from the operation of supported TBIs will be fed back into the reform of the policy and regulatory environment: specific barriers to growth will be identified and removed	The capacity of the tenants of supported TBIs (S&T SMEs) to lobby effectively for changes in the policy and regulatory environment should be significantly enhanced through BIPP Feedback from the operation of the Innofund will be fed back into the development of State support policy for TBI tenants	The monitoring and evaluation framework will gather data from the other three results areas and feed this into further policy formulation.
	A national strategic approach to TBI development	The Road Map for the development of all aspects of pre-incubation and incubation should provide a sound basis for a national TBI development strategy[30] The inter-ministerial Task Force will allow inter-ministerial discussion of the need for reform to achieve a strategic	The capacity of TBIs to input meaningfully into the formulation of a national TBI development strategy should be significantly enhanced through BIPP Feedback from the operation of supported TBIs will be fed back and made available for	Feedback from the operation of supported S&T SMEs and the operation of the Innofund will be fed back and made available for the preparation of a national TBI development strategy	The monitoring and evaluation framework will gather data from the other three results areas and make this available for TBI strategy development.

[30]A comparable Road Map on SME development led to the first national SME development strategy, changes in national SME policy and simplification of the regulatory environment

Linkages Matrix		Result 1: Enhanced legal framework for supporting S&T SMEs and TBIs	Result 2: Incubator policy development enhanced through pilot testing with two one-stop shop TBIs to determine best practices and lessons learnt	Result 3: Incubator policy development enhanced through the pilot operation of a seed fund (Innofund) to support the pre-incubation and incubation of potential S&T SMEs to determine best practices and lessons learnt	Result 4: A monitoring and evaluation framework is established and operated to ensure project results are captured and feedback into the policy development process.
		approach to TBI development	the preparation of a national TBI development strategy		
	A national institutional framework for TBI development	The key parties involved in TBI development (MOST, NATEC, NAFOSTED) will all be members of the Steering Committee for BIPP and their integrated operation should lead to a more effective institutional support infrastructure	The TBIs will be encouraged through BIPP to establish a national networking forum that can interact with the State TBI support institutional infrastructure	The tenants of TBIs will be encouraged through BIPP to establish a national networking forum that can interact with the State TBI support institutional infrastructure	The monitoring and evaluation framework will assess the extent to which the institutional framework is the most appropriate for TBI development and propose amendments where necessary.
Meso-level	TBIs providing essential services to S&T SMEs	The Circular on TBIs should address the provision of support services by TBIs and should address the necessary financial support to TBIs to do so.	The key parties involved in TBI development (MOST, NATEC, NAFOSTED) will all be members of the Steering Committee for BIPP and their integrated operation should lead to a more effective institutional support infrastructure	The key parties involved in TBI development (MOST, NATEC, NAFOSTED) will all be members of the Steering Committee for BIPP and their integrated operation should lead to a more effective institutional support infrastructure	The monitoring and evaluation framework will gather data from Results Areas 2 and 3 to determine whether TBIs are providing essential services to S&T SMEs and will identify gaps in provision where these exist.
	Financial institutions providing appropriate and affordable finance to S&T SMEs	The Road Map should address barriers to banks and State funds (such as NAFOSTED) providing financial support to S&T SMEs. This should include barriers to venture capital funds and business angels. BIPP will work	TBIs will identify barriers to their tenants obtaining essential capital and operating finance and feed this data back to MOST policy makers.	The Innofund can provide support to the S&T SME tenants of TBIs to produce high quality applications for commercial investment funding.	The monitoring and evaluation framework will determine whether the support provided to TBIs and their tenants in identifying appropriate sources of commercial capital and operating finance has been successful – and,

Linkages Matrix		Result 1: Enhanced legal framework for supporting S&T SMEs and TBIs	Result 2: Incubator policy development enhanced through pilot testing with two one-stop shop TBIs to determine best practices and lessons learnt	Result 3: Incubator policy development enhanced through the pilot operation of a seed fund (Innofund) to support the pre-incubation and incubation of potential S&T SMEs to determine best practices and lessons learnt	Result 4: A monitoring and evaluation framework is established and operated to ensure project results are captured and feedback into the policy development process.
		closely with the WB's Inclusive Innovation programme to ensure banks are aware of the special funding needs of S&T SMEs S&T SMEs			if not successful, what the barriers are.
	An effective networking and information exchange mechanism for TBIs	The road map will identify how a more effective networking and information exchange platform for TBIs can be integrated into State support policy	BIPP will provide, through Results Area 2, an information exchange and awareness platform to link TBIs	Innofund will finance actions to improve the networking and information exchange of existing TBIs	The monitoring and evaluation framework will review the level of success of the networking and information exchange platform and feedback into its on-going development
Micro-level	Direct financial support to the S&T SMEs tenants of TBIs	The road map will explore ways in which: 1. Pre-commercial investment finance can be made available on a sustainable basis to S&T SMEs (through, for example, NAFOSED and the National Fund for Technological Innovation) 2. Commercial investment finance can be made available to S&T SMEs through commercial sources	BIPP will provide equipment for pre-commercial actions to the tenants of any TBIs, through financing agreements. TBIs should work closely with banks and other financial institutions to ensure that their tenants present their investment applications in a sound and attractive manner that meets the banks' requirements.	BIPP will provide through the Innofund financing for equipment for pre-commercial actions to the tenants of any TBIs.	The monitoring and evaluation framework will review the level of success of the direct funding of both pre-commercial and commercial investment funding actions and feedback into policy development
	Direct provision of business development services to S&T	The road map will explore how best to create a well-functioning BDS market with a	The 2 pilot TBIs will be supported to provide basic business development	Innofund will support existing TBIs to provide basic business development	The monitoring and evaluation framework will review the level of success of the

Linkages Matrix		**Result 1: Enhanced legal framework for supporting S&T SMEs and TBIs**	**Result 2: Incubator policy development enhanced through pilot testing with two one-stop shop TBIs to determine best practices and lessons learnt**	**Result 3: Incubator policy development enhanced through the pilot operation of a seed fund (Innofund) to support the pre-incubation and incubation of potential S&T SMEs to determine best practices and lessons learnt**	**Result 4: A monitoring and evaluation framework is established and operated to ensure project results are captured and feedback into the policy development process.**
	SMEs	diverse array of high-quality services that meet the needs of a large proportion of S&T SMEs affordably. The road map will encourage MOST staff to develop government interventions that do not create or perpetuate market distortions in the BDS market that disadvantage S&T SMEs, but rather work to ensure that the BDS markets work effectively.	services for their tenants	services for their members Innofund will provide direct support to BDS provision, and finance the provision of more specialist BDS to TBI tenants in a manner conducive to creating a functional market	direct provision of BDS by the TBIs and the funding of direct support by Innofund and feedback into policy development

3 INTERVENTION FRAMEWORK

3.1 General objective

The General Objective of this project aims to contribute to the social-economic development strategy of Vietnam and assist Vietnam to continue its economic growth to become an industrialized nation by the year 2020 through a strong force of S&T enterprises.

3.2 Specific objective

The Specific Objective of the project is to support the MoST in developing an enabling environment for S&T SMEs based on an improved legal framework and a set of coherent mechanisms for starting and operating S&T incubators to enhance the S&T SME sector.

3.3 Expected results

The BIPP has the following expected results:

- Result 1: Enhanced legal framework for supporting S&T SMEs and TBIs
- Result 2: Incubator policy development enhanced through pilot testing with two one-stop shop TBIs to determine best practices and lessons learnt
- Result 3: Incubator policy development enhanced through the pilot operation of a seed fund (Innofund) to support the pre-incubation and incubation of potential S&T SMEs to determine best practices and lessons learnt
- Result 4: A monitoring and evaluation framework is established and operated to ensure project results are captured and feedback into the policy development process.

3.4 Activities

All activities are indicative, and can be adapted by a PSC decision. Budget changes can be adopted by the PSC, as described in chapter 5 (paragraph 5.5).

The project management Team and the Consultancy team will work hand in hand. The Project direction will steer the consultants, will validate the results of the consultants and will take final responsibility. The consultancy team cannot be seen as a separate implementation unit, but are de facto part of the whole project team, on a different contract basis (short term expertise). .

3.4.1 Result 1: Enhanced legal framework for supporting S&T SMEs and TBIs

Activity 1.1: Development of a Road Map for the development of all aspects of pre-incubation[31] and incubation. The Road Map should include a detailed description of the

[31]According to INFODEV, the main objective of the pre-incubation stage is to support entrepreneurs in transforming their ideas into legally constituted companies with marketable finished products.

The pre-incubation stage must be organized so that the three main objectives are addressed:

- a legally constituted company
- a duly approved coherent business plan

current status of technology business incubation in Vietnam[32] and address all aspects of the enabling environment necessary to encourage the establishment of new and the operation of existing incubators (both physical and virtual), including:

- The legal and regulatory framework impacting on technology pre-incubation and incubation
- State support policies for technology pre-incubation and incubation
- Sources of capital investment and/or operational funding for incubators and their tenants.
- Capacity building of the management of incubators
- Raising national awareness of pre-incubation and incubation
- Encouraging national and international networking of incubators and their tenants

The road map should define:

- The existing situation in Vietnam against each of these elements
- International best practice (especially in the region) in each of these elements with a benchmarking against Vietnam's performance
- A vision for the future for each element
- A reform agenda (short-term, medium-term and long-term) which defines the actions that the government should undertake to achieve the vision.

Actions	• Research into the existing situation in Vietnam against each of the elements of pre-incubation and incubation • Research into international best practice (especially in the region) in each of the elements of pre-incubation and incubation with a benchmarking against Vietnam's performance • Meetings with key stakeholders to check the validity of the research • Meetings with the inter-ministerial taskforce (see activity 1.3) to discuss the findings of the research • Drafting of a vision for the future for each element of pre-incubation and incubation • Drafting of a reform agenda (short-term, medium-term and long-term) which defines the actions that the government should undertake to achieve the vision
Output	The output will be the Road Map for the development of all aspects of pre-incubation and incubation.
Anticipated delivery date	End Q1, Year 2 of the BIPP

- a product/service ready to be offered to the market (or at least a prototype).

[32] Including an in depth baseline study of all existing incubators in HCMC and Hanoi to identify lessons learned and factors of success and failure in operating and establishing an incubator in Vietnam.

Responsible	the Road Map will be co-drafted by the Consultancy Support Team and the PMU the PMU will validate the results and take final responsibility

Activity 1.2: Development of a circular on technology business incubation which would address:

- The eligibility criteria for the provision of State support to new and established technology business incubators.
- The nature of State support for new and established technology business incubators.
- The eligibility criteria for the provision of State support to SME tenants of technology business incubators.
- The nature of State support for SME tenants of technology business incubators.

The circular should ensure a simplification of the regulatory environment making the operation of incubators simpler and more user-friendly for both operators of the incubators and their tenants.

This issue could be expected to flow out of the Road map: however, it is an area that has already been identified as critical by MOST and actions should start on it before the finalisation of the Road Map.

Actions	• Research into the existing situation in Vietnam with respect to technology business incubation • Research into international best practice in supporting the establishment and operation of technology business incubators • Meetings with key stakeholders to check the validity of the research • Meetings with the inter-ministerial taskforce (see activity 1.3) to discuss the findings of the research • Drafting of the circular on technology business incubation
Output	The output will be the draft Circular on technology business incubation.
Anticipated delivery date	End Q3, Year 1 of BIPP
Responsible	the circular will be co - drafted by the Consultancy Support Team and the PMU, the PMU will validate the results and take final responsibility

Activity 1.3: Support to essential inter-ministerial and/or inter-agency cooperation with respect to technology business incubation. Effective inter-ministerial and/or inter-agency cooperation is essential to have a positive impact on the development of TBIs and their tenants through a simplified, integrated and coordinated approach.

The Road Map (see activity 1.1) can be expected to identify a wide range of areas where reform is essential and where inter-ministerial and/or inter-agency cooperation is essential to ensure reforms are achieved. This will involve the establishment of an inter-ministerial taskforce involving all key ministries where reform actions are likely to be identified to agree where there is a need for reforms to ensure a coordinated and enterprise-friendly approach and ensure that support policies actually provide real benefits.

The task force should comprise the following key parties (with main areas of interest shown):

For inter-ministerial cooperation:

- Ministry of Science and Technology (MOST) on S&T SMEs development, chairman;.
- Ministry of Planning and Investment (MPI) on SMEs development;
- Ministry of Finance (MOF) on tax exemption and preferential financing;
- Ministry of Natural Resources and Environment (MONRE) on land use right registration fee exemption;
- Ministry of Education and Training (MoET) on applied TVET and higher education;
- People Committee (PC) Ho Chi Minh city on supporting incubation activities in Ho Chi Minh city;
- People Committee (PC) Ha Noi on supporting incubation activities in Ha Noi.

For inter-agency cooperation:

- National Agency for Technology Entrepreneurship and Commercialization Development (NATEC), MOST with respect to S&T enterprises development, chairman;
- Department of Organization and Personnel, MOST with respect to S&T enterprises support policy;
- NAFOSTED and National Fund for Technological Innovation on their financial support policies[33]Agency for Enterprise Development, MPI with respect to SME development
- DOST Hanoi with respect to the on-going operation of TBIs and support to S&T SMEs in Hanoi
- DOST HCMC with respect to the on-going operation of TBIs and support to S&T SMEs in HCMC

The Embassy of the Kingdom of Belgium in Hanoi will be invited as an observer to the meetings of the task force.

There will also be a need for on-going feedback into policy reform over the duration of the project.

Actions	Establishment of the Task Force Quarterly meetings (or ad hoc meetings when required) of the Task Force to consider the research, findings and other submissions underpinning the Road Map especially those related to inter-ministerial cooperation (as submitted by the Consultancy Support Team) Feedback (recommendations, guidance, critical comment, etc.) to the Consultancy Support Team on submissions in the form of minutes of the Task Force meetings

[33] This should include determination of whether and how NAFOSTED and the National Fund for Technological Innovation can be utilised to support technology business incubators and their tenants.

Output	The output will be: (i) the establishment of the Task Force and (ii) the minutes of Task Force Meetings.
Anticipated delivery date	The task force should be established no later than Q3 of Year 1 and its work and its work should be completed by end Year 2 of the BIPP
Responsible	Establishment of the task force will be the responsibility of the PMU
	Submission of recommendations to the Task Force will be made by the Consultancy Team under Activities 1.1 and 1.2.
	Secretarial function for the Task Force will be provided by the PMU

Activity 1.4: Study tour to view international best practice in government policies to encourage technology business incubation: the study tour will be designed and led by the TA team supporting the preparation of the road map - with specific achievement objectives.

Actions	Planning and organisation of the study tour (preliminary agenda/itinerary, identification of host institutions, flight and accommodation arrangements, selection and invitation of participants) Delivery of the study tour Evaluation of the study tour and follow-up with participants
Output	The output will be the Study Tour with a detailed report on its delivery and participant satisfaction sheets completed by each attendee.
Anticipated delivery date	Q1 of Year 2 of the BIPP
Responsible	The design of the study tour will be undertaken by the Consultancy Support Team
	The organisation of the study tour will be undertaken by the PMU
	All financial aspects (payment of flights, payment of per diems to participants, payments to host organisations, payment of interpreter, etc.) will be undertaken by the PMU
	The Consultancy Support team will provide the technical facilitator who will accompany the participants and ensure all technical aspects operate smoothly
	The PMU, with the aid of the Consultancy Support Team, will undertake the evaluation of the utility and effectiveness of the study tour – including ensuring findings feedback into activity 1.1.

Activity 1.5: Networking, awareness raising and information exchange: the networking, awareness and information exchange plan will be designed by the TA team supporting the preparation of the road map

Actions	• research leading to the design of the networking, awareness and information exchange plan • organisation of all elements of the plan (workshops, seminars, website, publications) • delivery of all elements of the plan • payment for all elements of the plan
Output	The outputs will be : • The networking, awareness and information exchange plan (which will detail the activities described tentatively below) • The establishment of a specific website for the Road Map where working papers and other research will be available for interested stakeholders and consultation documents uploaded for comment. • 2 major workshops to present the Road Map (in Hanoi and HCMC) – major events with very wide audience • Seminars for specific interest groups (researchers, government officials, S&T enterprises, financial institutions, donors) to present specific findings: up to 10 seminars between Hanoi and HCMC • Publication of the Road Map (including its translation into Vietnamese)
Anticipated delivery date	The plan will be completed by end Year 1 and main implementation period will be Year 2 of the BIPP.
Responsible	The design of the networking, awareness and information exchange plan task will be undertaken by the Consultancy Support Team
	The technical aspects (technical design of workshops, preparation of all supporting materials, speakers, etc.) of the design and delivery of the components of the networking, awareness and information exchange plan will be undertaken by the Consultancy Support Team
	The practical aspects (organisation of event rooms, interpretation, printing and publication, technical equipment – projects, simultaneous translation equipment, etc.) of the delivery of the components of the networking, awareness and information exchange plan will be undertaken by the Consultancy Support Team
	All financial aspects (room hire, equipment hire, website design and establishment, etc.) will be undertaken by the PMU

3.4.2 Result 2: Incubator policy development enhanced through pilot testing with two one-stop shop TBIs to determine best practices and lessons learnt

The following extract from the overall linkages matrix (table 13) aims to show the key linkages involved in Result 2 and supporting Result 1.

Table 14: Linkages involving Results Area 2

Linkages Matrix		**Result 2: Incubator policy development enhanced through pilot testing with two one-stop shop TBIs to determine best practices and lessons learnt**
Macro-level	A policy and regulatory environment conducive to the establishment and growth of S&T enterprises and TBIs	The capacity of TBIs to lobby effectively for changes in the policy and regulatory environment should be significantly enhanced through BIPP Feedback from the operation of supported TBIs will be fed back into the reform of the policy and regulatory environment: specific barriers to growth will be identified and removed
	A national strategic approach to TBI development	The capacity of TBIs to input meaningfully into the formulation of a national TBI development strategy should be significantly enhanced through BIPP Feedback from the operation of supported TBIs will be fed back and made available for the preparation of a national TBI development strategy
	A national institutional framework for TBI development	The TBIs will be encouraged through BIPP to establish a national networking forum that can interact with the State TBI support institutional infrastructure
Meso-level	TBIs providing essential services to S&T SMEs	The key parties involved in TBI development (MOST, NATEC, NAFOSTED) will all be members of the Steering Committee for BIPP and their integrated operation should lead to a more effective institutional support infrastructure
	Financial institutions providing appropriate and affordable finance to S&T SMEs	TBIs will identify barriers to their tenants obtaining essential capital and operating finance and feed this data back to MOST policy makers.
	An effective networking and information exchange mechanism for TBIs	BIPP will provide, through Results Area 2, an information exchange and awareness platform to link TBIs
Micro-level	Direct financial support to the S&T SMEs tenants of TBIs	BIPP will provide equipment for pre-commercial actions to the tenants of any TBIs through financing agreements. TBIs should work closely with banks and other financial institutions to ensure that their tenants present their investment applications in a sound and attractive manner that meets the banks' requirements.
	Direct provision of business development services to S&T SMEs	The 2 pilot TBIs will be supported to provide basic business development services for their tenants

Under Result 1 BIPP will support MOST and other key ministries to develop a policy framework for encouraging the development of pre-incubation/incubation. Under Result 2 a mechanism will be developed to test the viability of the new policy and draw lessons for further policy

development. The two institutions selected for piloting Technology Business Incubators were proposed by the Vietnamese partner, rather than an open call. However, this is accepted by the formulation for the following reasons:

- They represent two different categories of institutions with different levels of capacity. . The proposed Nacentech TBI is not yet existing, and appears to be struggling to a certain degree with the content and type of services a Technology Incubator should or could provide to its tenants. The HCM University of Technology Business incubator has no permanent staff, and seems to lack a certain degree of professionalism regarding its provided services to its tenants. This is useful for the policy wok in incubator policy development with different examples
- With the modest budget, it would be more value added in terms of timing for the policy work to avoid too much expenses for resources (HR, time) for an administrative procedure.

Activity 2.1: Support to the preparation of a business plan for NACENTECH which demonstrates on-going financial sustainability and which will need to be approved[34] as a precursor to all other support. This would involve:

- A technology audit across all of NACENTECH's priority research departments to identify innovations[35] which might be commercialised through licensing of intellectual property or spin-off.
- Identification of potential cross fertilization of business ideas across research departments in cooperation with industry
- Undertaking of market research to establish the commercial potential of identified innovations.

Actions	• Research (including market research) into the development possibilities of the NACENTECH BIC • A technology audit across all of NACENTECH's priority research departments to identify innovations[36] which might be commercialised through licensing of intellectual property or spin-off. • Identification of potential cross fertilization of business ideas across research departments in cooperation with industry • Undertaking of market research to establish the commercial potential of identified innovations. • Financial modelling of the NACENTECH BIC • Drafting of the business plan for the NACENTECH BIC:

[34] The business plan should be prepared by qualified international consultants and validated by the project steering committee.

[35] In all cases projects should be innovative, of high quality and generate knowledge in a particular industrial or scientific field which is likely to lead to commercial exploitation and the expected outcomes in terms of likely commercial benefits should be clearly proportionate to the cost of the investment

[36] In all cases projects should be innovative, of high quality and generate knowledge in a particular industrial or scientific field which is likely to lead to commercial exploitation and the expected outcomes in terms of likely commercial benefits should be clearly proportionate to the cost of the investment

	the business plan will include performance indicators (both baseline and target)
Output	The output will be the business plan for the NACENTECH BIC.
Anticipated delivery date	Completed by end Q3, Year 1 of the BIPP
Responsible	The business plan for the NACENTECH BIC will be drafted by the Consultancy Support Team, by Nacentech and by the PMU

Activity 2.2[37]: Support to the operational funding of the NACENTECH TBI (support) over a fixed period until the incubator achieves financial viability (in no more than 4 years) in accordance with an approved business plan. This will be formalised through an Execution Agreement between the PMU and the TBI.

Actions	• Assessment of the funding requirement identified in the business plan (up to the defined maximum) • Drafting and signature of the Execution Agreement • Provision of support (operational funding) in accordance with the business plan and the Execution Agreement • Submission of regular progress reports and year reports in accordance with the requirements of the Execution Agreement and the Business Plan: this will include achievement of defined target indicators • Monitoring of performance and control of financial expenditure.
Output	The outputs will be: • The signed Execution Agreement • Regular progress and yearly reports received from NACENTECH BIC • Achievement of defined target indicators (as set out in the business plan) • Regular monitoring reports
Anticipated delivery date	The execution agreement should be signed by end Year 1 of the BIPP: operational funding will commence in Year 2. Progress reporting frequency will be defined in the Execution Agreement.
Responsible	The execution agreement will be drafted by the PMU,

[37] When the business plan of the Nacentech TBI is not approved by the PSC, or when the Nacentech TBI has not been created (i.e. a legal status) within 18 months after the start of the project, all support will go automatically to the HCM UT TBI, unless the PSC decides otherwise.

	approved by the PSC and will contain the business plan as an annex
	Regular progress and yearly reports will be prepared by the NACENTECH BIC (with assistance from the Consultancy Support Team)
	The achievement of defined target indicators (as set out in the business plan) will be the responsibility of the NACENTECH BIC.
	The Consultancy Support Team and the monitoring and management expert for result 2 will prepare regular monitoring reports and report on achievement of target indicators. These will be confirmed by the PMU

Activity 2.3: Procurement of essential office equipment for the NACENTECH TBI, in accordance with the approved business plan, to a maximum of €20,000.

Actions	• Identification – within the business plan – of the office equipment requirements of the NACENTECH BIC to the agreed maximum • Preparation of detailed procurement specifications • Procurement of equipment in accordance with Vietnamese public procurement regulations and the conditions of the TFF • Installation of equipment in NACENTECH BIC
Output	The output will be the office equipment operational within NACENTECH BIC.
Anticipated delivery date	The office equipment will be installed in NACENTECH BIC during Q1 of Year 2 of the BIPP
Responsible	The definition of the office equipment and detailed procurement specification will be undertaken by the Consultancy Support Team
	The procurement of the office equipment will be undertaken by the PMU

Activity 2.4: Provision of advisory services for NACENTECH TBI, in accordance with the approved business plan:

Actions	Consultancy support to: • Improve the management and advisory services offered by the incubator (through consultancy support to the incubator, training of its staff and establishing operational linkages with a Belgium centre of excellence): the twinned centre of excellence would provide support and guidance to both the TBI and its tenants and arrange staff exchanges etc. • Raise awareness of the operations and objectives of the

	incubator amongst key target audiences (particularly researchers and technology enterprises) • Improve the national and international networking of the incubator (and the networking of its tenants) • Form a network of local and international mentors • Develop a virtual incubation system • Develop sector specific knowledge transfer networks[38] (online networks, conferences, seminars, etc.) linking enterprises and researchers/academics working in the sectors of interest of NACENTECH to enhance the flow of people, knowledge and experience between enterprises and the research/academic community. • Develop user-friendly knowledge transfer database defining the expertise, knowledge, skills and facilities that exist within NACENTECH to allow enterprises to see the expertise they can call on.
Output	The output will be: • Improved management and advisory services offered by the incubator • Raised awareness of the operations and objectives of the incubator amongst key target audiences • Improved national and international networking of the incubator (and the networking of its tenants) • Established network of local and international mentors • Established virtual incubation system • Developed sector specific knowledge transfer networks • Developed user-friendly knowledge transfer database All outputs will have SMART indicators defined in the NACENTECH BIC business plan
Anticipated delivery date	All activities should be completed by end Q2 of Year 5 of the BIPP
Responsible	The consultancy support to improve the operation of the NACENTECH BIC will be provided by the Consultancy Support Team
	The PMU will assess the degree of achievement by comparing actual achievement of indicators against target indicators within the business plan

[38] See https://ktn.innovateuk.org/web/guest/home for an example

Activity 2.5: Support to preparation of a business plan for HCM University of Technology – TBI which demonstrates on-going financial sustainability and which needs to be approved[39] as a precursor to all other support. In the first year, the TBI will receive a support[40] with only one condition, being the development and approval of a business plan for the TBI. This will be formalised through an Execution Agreement between the PMU and the TBI.

Actions	• Drafting of an execution agreement, including all conditionalities for financial support over the whole financing period (see also A2.6). • Research (including market research) into the development possibilities of the HCMUT-TBI • A technology audit across all of HCM University of Technology's priority research departments to identify innovations[41]which might be commercialised through licensing of intellectual property or spin-off. • Identification of potential cross fertilization of business ideas across research departments in cooperation with industry • Undertaking of market research to establish the commercial potential of identified innovations. • Financial modelling of the HCMUT-TBI • Drafting of the business plan for the HCMUT-TBI: the business plan will include performance indicators (both baseline and target)
Output	The output will be - A signed execution agreement between the PMU and the HCMUT-TBI - the business plan for the HCMUT-TBI.
Anticipated delivery date	Completed by end Q3, Year 1 of the BIPP
Responsible	The business plan for the HCMUT-TBI will be co-drafted by HCMUT-TBI, the Consultancy Support Team and the national incubation expert of the PMU

Activity 2.6: Support to the operational funding (support)of HCM University of Technology – TBI over a fixed period until the incubator achieves financial viability (in no more than 4 years) in accordance with an approved business plan. This support will be conditional to a number of conditions, that will be integrated in the execution agreement.

[39] The business plan should be prepared by qualified consultants and validated by the project steering committee.
[40] THE support FOR THE NEXT YEARS WILL BE SUBJECT TO A NUMBER OF CONDITIONALITIES AS SPECIFIED IN ACTIVITY 2.6

[41] In all cases projects should be innovative, of high quality and generate knowledge in a particular industrial or scientific field which is likely to lead to commercial exploitation and the expected outcomes in terms of likely commercial benefits should be clearly proportionate to the cost of the investment

Actions	• Assessment of the funding requirement identified in the business plan (up to the defined maximum) • Drafting and signature of the Execution Agreement • Provision of operational funding in accordance with the business plan and the Execution Agreement • Submission of regular progress and financial reports in accordance with the requirements of the Execution Agreement and the Business Plan: this will include achievement of defined target indicators • Monitoring of performance and control of financial expenditure.
Output	The outputs will be: • The signed Execution Agreement • Provision of support (operational funding) in accordance with the business plan and the Execution Agreement • Submission of regular progress reports and year reports in accordance with the requirements of the Execution Agreement and the Business Plan: this will include achievement of defined target indicators • Regular monitoring reports
Anticipated delivery date	The execution agreement should be signed during the first months of the project implementation: operational funding will commence in Year 1. Progress reporting frequency will be defined in the Execution Agreement.
Responsible	The execution agreement will be drafted by the PMU. The business plan will be annexed after year 1.
	Regular progress and year reports will be prepared by the HCMUT-TBI (with assistance from the Consultancy Support Team)
	The achievement of defined target indicators (as set out in the business plan) will be the responsibility of the HCMUT-TBI.
	The Consultancy Support Team will prepare regular monitoring reports and report on achievement of target indicators. These will be confirmed by the PMU

Activity 2.7: Provision of advisory services for HCM University of Technology – TBI, in accordance with the approved business plan:

Actions	Consultancy support to: • Improve the management and advisory services offered by the incubator (through consultancy support to the incubator, training of its staff and establishing operational linkages with a Belgium centre of excellence): the twinned centre of excellence would provide support and guidance to both the TBI and its tenants and arrange staff exchanges etc. • Raise awareness of the operations and objectives of the incubator amongst key target audiences (particularly researchers and technology enterprises) • Improve the national and international networking of the incubator (and the networking of its tenants) • Form a network of local and international mentors • Develop a virtual incubation system • Develop sector specific knowledge transfer networks[42] (online networks, conferences, seminars, etc.) linking enterprises and researchers/academics working in the sectors of interest of HCMUT to enhance the flow of people, knowledge and experience between enterprises and the research/academic community. • Develop user-friendly knowledge transfer database defining the expertise, knowledge, skills and facilities that exist within HCMUT to allow enterprises to see the expertise they can call on.
Output	The output will be: • Improved management and advisory services offered by the incubator • Raised awareness of the operations and objectives of the incubator amongst key target audiences • Improved national and international networking of the incubator (and the networking of its tenants) • Established network of local and international mentors • Established virtual incubation system • Developed sector specific knowledge transfer networks • Developed user-friendly knowledge transfer database

[42] See https://ktn.innovateuk.org/web/guest/home for an example

	All outputs will have SMART indicators defined in the HCMUT-TBI business plan
Anticipated delivery date	All activities should be completed by end Q2 of Year 5 of the BIPP
Responsible	The consultancy support to improve the operation of the HCMUT-TBI will be provided by the Consultancy Support Team
	The PMU will assess the degree of achievement by comparing actual achievement of indicators against target indicators within the business plan

3.4.3 Result 3: Incubator policy development enhanced through the pilot operation of a seed fund (Innofund) to support the pre-incubation and incubation of potential S&T SMEs to determine best practices and lessons learnt

The following extract from the overall linkages matrix (table 13) aims to show the key linkages involved in Result 3 and supporting Result 1.

Table 15: Linkages involving Results Area 3

Linkages Matrix		**Result 3: Incubator policy development enhanced through the pilot operation of a seed fund (Innofund) to support the pre-incubation and incubation of potential S&T SMEs to determine best practices and lessons learnt**
Macro-level	A policy and regulatory environment conducive to the establishment and growth of S&T enterprises and TBIs	The capacity of the tenants of supported TBIs (S&T SMEs) to lobby effectively for changes in the policy and regulatory environment should be significantly enhanced through BIPP Feedback from the operation of the Innofund will be fed back into the development of State support policy for TBI tenants
	A national strategic approach to TBI development	Feedback from the operation of supported S&T SMEs and the operation of the Innofund will be fed back and made available for the preparation of a national TBI development strategy
	A national institutional framework for TBI development	The tenants of TBIs will be encouraged through BIPP to establish a national networking forum that can interact with the State TBI support institutional infrastructure
Meso-level	TBIs providing essential services to S&T SMEs	The key parties involved in TBI development (MOST, NATEC, NAFOSTED) will all be members of the Steering Committee for BIPP and their integrated operation should lead to a more effective institutional support infrastructure
	Financial institutions providing appropriate and affordable finance to S&T SMEs	The Innofund can provide support to the S&T SME tenants of TBIs to produce high quality pre-commercial applications for commercial investment funding.
	An effective networking and information exchange	Innofund will finance actions to improve the networking and information exchange of existing TBIs

Linkages Matrix		Result 3: Incubator policy development enhanced through the pilot operation of a seed fund (Innofund) to support the pre-incubation and incubation of potential S&T SMEs to determine best practices and lessons learnt
	mechanism for TBIs	
Micro-level	Direct financial support to the S&T SMEs tenants of TBIs	BIPP will provide funding for equipment and consultancies for pre-commercial actions to the tenants of any TBIs.
	Direct provision of business development services to S&T SMEs	Innofund will support existing TBIs to provide basic business development services for their members Innofund will not provide direct support to BDS provision, but will finance the provision of more specialist BDS to TBI tenants in a manner conducive to creating a functional market

Activity 3.1: Design and establish systems for Innofund to act as a support fund for capacity building (consultancy support, training support, hire (or when absolutely essential, purchase) of essential equipment for prototype development, purchase of essential raw materials for prototype development, testing for national standard certification, etc.). The innofund will provide high risk capital to support necessary pre-commercial activities of researchers or recently established S&T enterprises that are tenants in an incubator. For this type of activities, the private sector is reluctant to provide funding (given the low direct return on investment), regardless of its importance for business and technological innovation.

Actions	• Drafting Guidelines for Applicants to the Innofund with all supporting documents and procedures. An outline of the Guidelines for Applicants is contained at Annex 7.5. • Preparing an Innofund operational manual, also defining the financial, procurement and administrative regulations. • Establishing the legal status of the Innofund and systems within the PMU for the management, monitoring and control of Innofund. These must meet in full the requirements of the financial management system defined elsewhere in this TFF. • Designing and delivering an effective national and provincial advertising / awareness raising campaign for the Innofund and for each open call for proposals, including awareness raising workshops in Hanoi and HCMC to raise awareness of the Innofund to relevant business intermediary organisations, research institutions, existing TBIs and other key stakeholders
Output	The outputs will be: • Guidelines for Applicants to the Innofund with all supporting documents and procedures. • Innofund operational manual • Established systems within the PMU for the management, monitoring and control of Innofund.

	• National and provincial advertising / awareness raising campaign for the Innofund and for each open call for proposals
Anticipated delivery date	Completed by end Q3, Year 1 of the BIPP
Responsible	The preparation of all documentation will be undertaken by the project Management team, with support from the Consultancy team.

Activity 3.2: Operate the Innofund,

This includes 2 major elements:

- Call for proposals
- Selection of successful applicants and provision of financial support (through a financing agreement)

Box 1: Innofund

Each approved project under Innofund must have a consultancy support element with the required tasks clearly defined in terms of reference that will be part of the application. The maximum grant per proposal for both windows is 45000€ (with a maximum of 55% for equipment, raw materials etc). Nonetheless, given the rather limited budget of the Innofund**, proposals that are highly feasible and have positive effects to green growth, job creation etc will be prioritized**. This should increase the total number of supported initiatives, and thus increase the basis for policy feedback.

The INNOFUND funding may not be used to finance recurrent expenses (salaries, rent, …) of the beneficiaries.

A database with national (and international) consultants in business development and technology audits will be put in place by the PMU during the preparatory phase of the Innofund.

All support will be provided in accordance with the Guidelines for Applicants for the Innofund (see annex 7.5). The Innofund will operate with two distinct windows with separate objectives:

Objectives

Window 1

Improved transfer of the innovative concepts of Vietnamese researchers and inventors into viable commercial products and enterprises.

Window 2

Strengthened capacity of technology business incubators in Vietnam to offer the full range of services that their clients need and, through providing such services, become financial self-sustainable.

Target Groups

The different target groups of the two windows are:

Window 1

- A researcher within a recognised Vietnamese university or research institute who is a client (pre-incubation or incubation) of a technology business incubator in Vietnam, or
- An enterprise established under the Enterprise Law which is a client (pre-incubation or incubation) of a technology business incubator in Vietnam.

Window 2:

A technology business incubator:

- Established as a legal entity in Vietnam under either the Enterprise Law, Decree 43/2000/ND-CP or Decree 115/2005/ND-CP, and
- Provide pre-incubation and/or incubation services (physical and/or virtual) to at least 5 clients at the date of their application.

Supported Activities

The different activities supported by the two windows are as follows:

Window 1

- Consultancy support to undertake innovation audits across relevant research institutes/university departments to identify innovations which might be commercialised through licensing of intellectual property or spin-off
- Consultancy support, raw material procurement and equipment hire/procurement related to development of prototypes of an instrument or device for potential commercial use (see also activity 3.4)
- Consultancy support (including research, analysis, legal advice, training, conferences, workshops, seminars, networking fora, etc.):
    - for the development and protection of intellectual property (including support with patent registration and "proof of concept" development)
- for the development of an appropriate intellectual property policy for universities and research institutions to clarify ownership prior to commercialisation.
    - on the licensing to non-academic parties of academic intellectual property for commercial use
    - on market research, feasibility studies, business plan preparation, management and advisory support and identification of funding sources for academic "spin offs"
    - relating to specific joint research and joint pre-competitive production projects: research institutions can undertake research that benefits enterprises within a defined technology cluster.
    - to establish knowledge transfer databases
    - to establish knowledge transfer networks
    - for promotional activities and marketing of knowledge transfer networks: to promote networks, and attract new members, attract sponsorships, promote business opportunities and promote joint research actions.
    - relating to the operation of the knowledge transfer network and its organisational/management structures and arrangements, including developing linkages with international knowledge transfer networks

Window 2

- Technical support (Consultancy support, training, research/analysis, conferences, workshops, seminars, networking fora, development of network specific marketing and promotional information, research/analysis etc.) and training
    - to improve the management (including the capacities of managers of TBI) and advisory services offered by an established incubator (through Consultancy support to the incubator, training of its staff and establishing operational linkages with Belgium centres of excellence)
    - to an established incubator to raise awareness of its operations and objectives
    - to an established incubator to improve its national and international networking (and the networking of its tenants)
    - to an established physical incubator to extend its reach through virtual incubation
- supporting essential shared equipment for S&T Business Incubators, in order to help the TBI to operate stably and develop sustainability
-

Reporting by beneficiaries

Innofund beneficiaries will report to the PMU in accordance with the terms of the financing agreement: this will specify that the beneficiary must provide the PMU with all required information on the implementation of the Project. To that end, the beneficiary must draw up quarterly reports and a final report which shall be forwarded no later than three months after the implementation period. These reports shall consist of a narrative section and a financial section and shall conform to a standard model (to be designed by the PMT). The reports shall cover the Project as a whole, regardless of which part of it is financed by the Innofund. Each report must provide a full account of all aspects of the Project's implementation for the period covered. The beneficiary has to provide a list detailing each item of expenditure incurred in the period covered by the report, and indicating for each its title, amount, relevant heading in the Budget of the Project and the reference of the justifying document. A quarterly report or the final report as appropriate must accompany every request for payment.

1. Call for proposals

Actions	• Delivering workshops to provide guidance to potential applicants on the procedural aspects of the completion of the Innofund application. • Launching calls for proposals for the Innofund • Establishing and operating the Innofund selection committee in accordance with the requirements of the TFF (see section 5.3.3). • Issuing financing agreements to all successful beneficiaries to ensure clear understanding by both parties as to their separate tasks and responsibilities under each contract/memorandum of understanding. The memoranda of understanding will specify the activities to be provided through activities 3.3 and 3.4
Output	The outputs will be: • Delivered guidance workshops (at least 1 in Hanoi and 1 in HCMC) for each Open Call. • Open calls for proposals for the Innofund (exact number to be agreed with PSC) • Established and operational Innofund selection committee in accordance with the requirements of the TFF (see section 5.4.3). • Financing agreements issued to all successful beneficiaries
Anticipated delivery date	Commencing in Q2 Year 2 and proceeding until 12 months before the completion of the BIPP
Responsible	The guidance workshops will be delivered by the Consultancy Support Team
	The consultancy support team will prepare all documentation for the open calls for proposals for the Innofund
	The PMU will organise the open call and manage all costs associated with this.
	The PMU, with advice from the Consultancy Support Team,

	will establish and support the operation of the Innofund selection committee in accordance with the requirements of the TFF
	Financing agreements will be issued to all successful beneficiaries by the PMU

2. Selection of applicants and provision of support

Actions	• Approved applications and ToR for consultancies reviewed. All terms of reference must have clear outputs against an agreed timetable • A database with available Vietnamese and international consultants will be elaborated during the whole project (call for interest) (an open call for interest will be launched by the PMU). Successful applicants can thus access this database, to have an easier access to quality services and consultancies • Innofund signs a financing agreement with the successful applicants. • Innofund approves (or requests amendments to) the specification of other essential support • PMU monitor the performance of the supported applicant to determine whether impact has been achieved (see result 4).
Output	The outputs will be: • Project specific terms of reference for consultancy support defined. All terms of reference with clear outputs against an agreed timetable • Project specific specifications for other essential support • Reports to the PMU on the achievement of indicators defined and agreed terms of reference and financing agreements • Monitoring reports (results measurement plan, results chain, indicators – baseline and targets) for each supported project to determine whether impact has been achieved (see result 4).
Anticipated delivery date	Year 3 and Year 4
Responsible	The PMU will check that all ToR have clearly defined outputs against an agreed timetable
	The PMU will monitor the performance of each supported project and prepare full monitoring documentation (results measurement plan, results chain, indicators – baseline and targets) for each supported project to determine whether impact has been achieved (see result 4).

Note: Non-consultancy support such as hire or when absolutely essential, purchase of equipment for prototype development, purchase of essential raw materials for prototype development, testing for national standard certification, etc. to successful applicants in accordance with the agreed Financing Agreement, will only be provided as an essential element of a project as described under activity 3.2 (explication in box 1: Innofund – see supra).

Activity 3.3: Undertake a study to assess the prospects, potential, operational costs and financial sustainability of operating Innofund as a permanent grant and/or loan-based instrument. This will be undertaken following operational testing and subsequent evaluation of the operation of the Innofund as a capacity building grant-based instrument.

Actions	• Terms of reference for the study defined by PMU • ToR approved by the PSC • Consultancy Support Team undertakes the study
Output	The output will be the study on the future of the Innofund.
Anticipated delivery date	Q3 of Year 5 of the BIPP
Responsible	The terms of reference will be drafted by the PMU
	The PSC will review and approve the ToR
	The Consultancy Support Team will undertake the study and submit the report to the PMU for approval

Activity 3.4: Provide support to incubators to assist their tenants with the preparation of applications for investment funding from.

- Commercial banks
- Venture Capital funds such as IDG or Mekong Capital
- Support instruments of the state
- Vietkieu (Vietnamese Diaspora)
- Donor-financed or supported instruments: two clear potential sources of funding are the Green Growth Strategy Facility (for green investment) and the World Bank's Inclusive Innovation Project (USD55 million) which is in course of preparation[43].

[43] The World Bank's Inclusive Innovation Project (USD55 million) will be managed by MPI's Agency for Enterprise Development and overseen by a Steering Committee chaired by a Deputy Prime Minister with membership from a wide range of stakeholders including MOST. The programme, as currently conceived and this may change, will comprise three elements: (i) Element 1 will support research institutions and universities in developing inclusive innovative technologies. The budget will be US$ 10 million and this will be a grant managed by the Agency for Enterprise Development (MPI). Projects will probably be identified through an open call process. There are strong synergies with our planned Component 2 which would need to be discussed and agreed to prevent overlap and competition. (ii) Element 2 (budget US$ 35 million) will provide support to SMEs to upgrade their technologies. The objective is to provide financial support to convert concepts from Element 1 into viable businesses. There is again significant synergy with what we need to do under our component 3. Element 2 will have two sub-elements: a loan fund of US$ 25 million for on-lending to SMEs through selected commercial banks. The commercial banks will be selected by WB/MPI and the terms and conditions of on-lending defined in a subsidiary loan agreement. Projects will be technically assessed by AED and NAFOSTED and commercially assessed by the lending bank. US$10 million will be provided through a grant to NAFOSTED to provide additional support to the process – but the exact purpose and use of this is not clear from the

Actions	The Consultancy Support Team will design and deliver workshops in Hanoi and HCMC for incubator tenants to explain the existing funding opportunities
Output	The output will be at least 4 workshops (2 in Hanoi and 2 in HCMC) on investment funding for incubator tenants.
Anticipated delivery date	2 workshops in Year 3 and 2 in Year 4
Responsible	The design and delivery of the workshops will be undertaken by the Consultancy Support Team
	The PMU will undertake all practical arrangements (room hire, equipment hire, interpretation etc.) and undertake all payments

3.4.4 Result 4: A monitoring and evaluation framework is established and operated to ensure project results are captured and feedback into the policy development process

The following extract from the overall linkages matrix (table 13) aims to show the key linkages involved in Result 4 and supporting Result 1.

Table 16: Linkages involving Results Area 4

Linkages Matrix		**Result 4: A monitoring and evaluation framework is established and operated to ensure project results are captured and feedback into the policy development process.**
Macro-level	A policy and regulatory environment conducive to the establishment and growth of S&T enterprises and TBIs	The monitoring and evaluation framework will gather data from the other three results areas and feed this into further policy formulation.
	A national strategic approach to TBI development	The monitoring and evaluation framework will gather data from the other three results areas and make this available for TBI strategy development.
	A national institutional framework for TBI development	The monitoring and evaluation framework will assess the extent to which the institutional framework is the most appropriate for TBI development and propose amendments where necessary.
Meso-level	TBIs providing essential services to S&T SMEs	The monitoring and evaluation framework will gather data from Results Areas 2 and 3 to determine whether TBIs are providing essential services to S&T SMEs and will identify gaps in provision where these exist.
	Financial institutions	The monitoring and evaluation framework will determine whether

project description. It is probably to soften the terms of commercial finance. (iii) Element 3 (budget US$ 7 million) capacity building and global knowledge transfer: support to upgrading the capacity of research institutions including with equipment. (iv) Element 4 (budget US$ 3 million) project management, monitoring and evaluation.

Linkages Matrix		Result 4: A monitoring and evaluation framework is established and operated to ensure project results are captured and feedback into the policy development process.
	providing appropriate and affordable finance to S&T SMEs	the support provided to TBIs and their tenants in identifying appropriate sources of commercial capital and operating finance has been successful – and, if not successful, what the barriers are.
	An effective networking and information exchange mechanism for TBIs	The monitoring and evaluation framework will review the level of success of the networking and information exchange platform and feedback into its on-going development
Micro-level	Direct financial support to the S&T SMEs tenants of TBIs	The monitoring and evaluation framework will review the level of success of the direct funding of both pre-commercial and commercial investment funding actions and feedback into policy development
	Direct provision of business development services to S&T SMEs	The monitoring and evaluation framework will review the level of success of the direct provision of BDS by the TBIs and the funding of direct support by Innofund and feedback into policy development

In order to feed into policy development (Results Area 1), the PMU's Monitoring Staff will, under Results Area 3, feed the conclusions as to best practice and lessons learned from Results Areas 2 and 3 back into further policy development.

Activity 4.1: Establish a BIPP monitoring system based on the Donor Committee on Enterprise Development's Standard for Results Measurement in private sector development[44]. The system should allow the PMU to:

- Identify incubators which are successful (and the reasons for that success) so as have scope for wider replication throughout Vietnam to achieve real impact at scale.
- Identify areas of support which looked promising, but which did not in practice prove to have significant impact so as to draw conclusions for policy formulation
- Identify innovative approaches to technology business incubation worthy of greater study to determine their relevance to State policy
- Measure the accumulated benefit of the project to demonstrate to the State/donors the cost/benefit value of technology business incubation.

Actions	• Hire consultants • Prepare a Results Chain for each results area of the BIPP • Define indicators (baseline and target) for each key step in each results chain at process, output, outcome and impact level: baselines and targets will be disaggregated by gender, where appropriate, to show male / female participation. • Prepare a Results Measurement Plan (RMP) for each results area of the BIPP (and, in certain instances, below this area into specific activities – for example, for the

[44] http://www.enterprise-development.org/page/measuring-and-reporting-results

	Innofund). • design a simple centralised online monitoring system that allows monitoring data on each element of the BIPP and each Innofund-supported project to be rapidly and simply accessed and allows accumulation of impact data on an overall portfolio level • Establish a Results Measurement Framework for results area
Output	The outputs will be: • Results Chains for each results area of the BIPP • Indicators (baseline and target) for each key step in each results chain at process, output, outcome and impact level: baselines and targets will be disaggregated by gender, where appropriate, to show male / female participation. • Results Measurement Plans (RMP) for each results area of the BIPP (and, in certain instances, below this area into specific activities – for example, for the Innofund). • Established centralised online monitoring system that allows monitoring data on each element of the BIPP and each Innofund-supported project to be rapidly and simply accessed and allows accumulation of impact data on an overall portfolio level • Results Measurement Framework for results area
Anticipated delivery date	By end Q3 of Year 1 (with project data on Innofund supported projects being added after each approval cycle)
Responsible	The results chains will be prepared by the PMU, supported by an international consultancy
	The PMU will be responsible for the definition of indicators, the establishment of baselines and the definition of SMART targets for each key step in each results chain at process, output, outcome and impact level: baselines and targets will be disaggregated by gender, where appropriate, to show male / female participation.
	The PMU will prepare the Results Measurement Plans (RMP) for each results area of the BIPP (and, in certain instances, below this area into specific activities – for example, for the Innofund).
	The PMU will establish the centralised online monitoring system that allows monitoring data on each element of the BIPP and each Innofund-supported project to be rapidly and simply accessed and allows accumulation of impact data on an overall portfolio level
	The PMU will prepare the Results Measurement Framework for results area

Activity 4.2: Operate the BIPP monitoring system and prepare/submit regular monitoring reports to the Joint Steering Committee.

Actions	The PMU will: • Undertake monitoring visits against each Results Measurement Plan and prepare a monitoring reporting comparing actual achievement against targeted achievement • Update the Results Chain (and RMP) where necessary • Upload monitoring data onto the Results Measurement Framework on the online monitoring system
Output	The outputs will be: • Monitoring reports prepared in accordance with the schedule in the RMP updated on the Results Measurement Framework for each results area (on the online monitoring system)
Anticipated delivery date	Duration of the project from Q3 Year 1
Responsible	The monitoring tasks will be undertaken by the PMU

3.5 Basis of implementation of activities

The following table shows the activity modality for the different activities.

Table 17: Basis of implementation

Result area	Activity	Basis of implementation of activities
Result 1: Enhanced legal framework for supporting S&T SMEs and TBIs	Activity 1.1: Development of a circular on technology business incubation	A non-exclusive framework service contract for a consultancy support team to support MOST with activities 1.1, 1.2 and 1.3 (and activities under results 2 and 3 as specified below)
	Activity 1.2: Development of a Road Map for the development of all aspects of pre-incubation and incubation.	
	Activity 1.3: Review of the areas where close inter-ministerial and/or inter-agency cooperation is essential to have a positive impact on the development of TBIs and their tenants	
	Activity 1.4: Study tour to view international best practice in government policies to encourage technology business incubation.	Financial and contractual responsibility will rest with the PMU who will address it through the quarterly work plan and budget: the study tour will be designed and implemented by the consultancy support team supporting the preparation of the road map
	Activity 1.5: Networking, awareness raising and information exchange	Financial and contractual responsibility will rest with the PMU who will address it through the quarterly work plan and budget: the networking, awareness and information exchange plan will be designed by the consultancy support

Result area	Activity	Basis of implementation of activities
		team supporting the PMU in the preparation of the road map
Result 2: Incubator policy development enhanced through pilot testing with two one-stop shop TBIs to determine best practices and lessons learnt	Activity 2.1: Support to the preparation of a business plan for NACENTECH	A non-exclusive framework contract for a consultancy support team to support MOST with activities 2.1, 2.4, 2.5 and 2.6: The international Consultancy support team will be the same as undertaking activities 1.1 to 1.3
	Activity 2.2: Support to the operational funding (support) of the NACENTECH TBI	An execution agreement between the PMU and the NACENTECH TBI[45]: financial and contractual responsibility will rest with the PMU who will address it through the quarterly work plan and budget: funding will be directly linked to the approved business plan and receipt of quarterly income and expenditure statement of the NACENTECH TBI
	Activity 2.3: Procurement of essential office equipment for the NACENTECH TBI	Single supplies contract managed by the PMU in accordance with equipment requirements specified in the approved business plan to a maximum of €20,000
	Activity 2.4: Provision of advisory services for NACENTECH TBI	As for 2.1
	Activity 2.5: Support to preparation of a business plan for HCM University of Technology – TBI	As for 2.1
	Activity 2.6: Support to the operational funding (support) of HCM University of Technology – TBI	An execution agreement between the PMU and the HCMUT-TBI[46]: Financial and contractual responsibility will rest with the PMU who will address it through the quarterly work plan and budget: funding will be directly linked to the approved business plan and receipt of quarterly income and expenditure statement of the HCMUT-TBI
	Activity 2.7: Provision of advisory services for HCM University of Technology – TBI	As for 2.1
Result 3: Incubator policy development enhanced through the	Activity 3.1: Design and establish systems for Innofund to act as a support fund providing capacity building	A non-exclusive framework contract for a consultancy support team to support MOST with activities 3.1, 3.3 and 3.4: The Consultancy support contract will be the same as undertaking activities 1.1 to 1.3

[45]The NACENTECH is not currently a legal person: it is in course of being registered as such by NACENTECH
[46] HCMUT-TBI is a legal entity. HCMUT-TBI operates under Decree 115/2005/ND-CP dated 05/09/2005 and the date of legal formation was 22 June 2012

Result area	Activity	Basis of implementation of activities
pilot operation of a seed fund (Innofund) to support the pre-incubation and incubation of potential S&T SMEs to determine best practices and lessons learnt	Activity 3.2: operate the innofund	A Financing Agreement between the PMU and the successful applicant. For the TA element specific TOR will already be integrated in the proposal For the non-TA elements: the PMU will address this through the quarterly work plan and budget: the provision of support on other essential support will be limited to a maximum spend through the Financing Agreement between the Innofund and the Applicant with a maximum of 55% for equipment, raw materials etc per project.
	Activity 3.3: Undertake a study to assess the prospects, potential, operational costs and financial sustainability of operating Innofund as a permanent grant and/or loan-based instrument.	As for 3.1
	Activity 3.4: Provide support to incubators to assist their tenants with the preparation of applications for investment funding	As for 3.1
Result 4: A monitoring and evaluation framework is established and operated to ensure project results are captured and feedback into the policy development process.	Activity 4.1: Establish a BIPP monitoring system including a baseline study and definition of appropriate indicators – baseline and target, and hire a consultant	Operated directly by members of the PMU
	Activity 4.2: Operate the BIPP monitoring system and oversight of Results Areas 1, 2 and 3	

3.6 Indicators and means of verification

The following indicators will be utilised: the benchmark and some targets for each system (each defined SMART) will be refined by the contracted M&E consultant during the starting up phase.
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Table 18: Indicators

Overall Objective	The Overall Objective of this project aims to contribute to the social-economic development strategy of Vietnam and assist Vietnam to continue its economic growth to become an industrialized nation by the year 2020 through a strong force of S&T enterprises.	Number of incubator tenants in Vietnam increases to 400 by 2020	M&E System
		Number of incubators operating in Vietnam increases to 20 by 2020	M&E System
		Number of Vietnamese incubators achieving financial self-sustainability increases to 50% by 2020	M&E System
		new jobs created by incubator tenants by 2020	M&E System
Specific objective	The Specific Objective of the project is to support the MoST in developing an enabling environment for S&T SMEs based on an improved legal framework and a set of coherent mechanisms for starting and operating S&T incubators to enhance the S&T SME sector.	Circular on technology business incubation issued	Formal publication of circular
		Decree 80 revised in accordance with the recommendations contained within the Road Map (to give improved benefits to S&T enterprises)	Published revisions to Decree 80 and its implementing circular
		A legal document regulating the function of support to science and technology business incubators form state funds	Formal publication of the legal document
Result	Enhanced legal framework for supporting S&T SMEs and TBIs	Draft circular on technology business incubation	Submission of final draft of the circular to MOST and BTC
		Road map on pre-incubation and incubation	Submission of the Road Map to MOST and BTC
		Recommendations (within the Road Map) for improved inter-ministerial and/or inter-agency submitted	Submission of the recommendations (within the Road Map) to MOST and BTC
	Incubator policy development enhanced through pilot testing with two one-stop shop TBIs to determine best practices and lessons learnt	NACENTECH BIC recruits 15 tenants at end of project NACENTECH BIC graduates 5 tenants by end of project	M&E System: annual report of NACENTECH BIC and monitoring reports/visits
		HCMC University of Technology TBI recruits	M&E System:

		15 new tenants by end of project HCMC University of Technology TBI graduates 5 tenants by end of project	annual report of HCMUT TBI and monitoring reports/visits
		Annual reports of lessons learnt/best practice from two TBIs submitted to MOST within 2 months of each year end	M&E System: annual report of HCMUT TBI and monitoring reports/visits
	Incubator policy development enhanced through the pilot operation of a seed fund (Innofund) to support the pre-incubation and incubation of potential S&T SMEs to determine best practices and lessons learnt	100 applications for support are approved and support provided through Innofund	M&E system
		Annual reports of lessons learnt/best practice from Innofund submitted to MOST submitted to MOST within 2 months of each year end	M&E System: annual report of Innofund and monitoring reports/visits
		Sustainability review of Innofund completed	Submission of report to PSC
	A monitoring and evaluation framework is established and operated to ensure project results are captured and feedback into the policy development process	M&E system design approved by Joint Steering Committee by end of year 1	Minutes of PSC meeting
		Quarterly monitoring reports submitted to Joint Steering Committee from end of the Starting Up Phase onward	Reports submitted to PSC

3.7 Description of beneficiaries

The beneficiaries of the BIPP include direct and indirect beneficiaries.

Direct beneficiaries:

- MOST – as the responsible ministry for policies supporting the formation and development of S&T enterprises and TBIs
- TBIs throughout Vietnam
- Pre-incubation and incubation clients of TBIs throughout Vietnam supported by the Innofund

Indirect beneficiaries:

- The business community
- The broader S&T community, which consists of 1,500 S&T organizations (R&D institutes, universities, S&T centres, etc.) with a total S&T staff of 60,000 people
- University students
- The general public

3.8 Risk Analysis

3.8.1 Implementation and management risks

	Risks	Risk Level	Alleviation measure
Result 1	Government will not adopt necessary policy reforms	Medium	The production of a guiding Road Map (linked to actions to increase awareness in policy makers) should allow policy makers to understand need for reform and move at a realistic pace of reform
	Poor coordination between key Government stakeholders limits the effectiveness of reforms	High	A review of areas where improved coordination is essential will be undertaken as such issues are identified through the Road Map on incubation and pre-incubation and the special Task Force established for this purpose will seek to resolve coordination issues
Result 2	Two pilot TBIs are not operated in accordance with recommendations as to best practice and with their approved business plans	Medium	TBIs must have their business plans prepared with support from qualified consultants and the business plans must be approved by the PSC
Result 3	Selection of projects for support from Innofund is not undertaken on basis of technical need and to broaden knowledge for policy formulation	Medium	Establishment of an Innofund selection committee operating against agreed selection criteria
Result 4	None	None	None

3.8.2 Effectiveness risks

	Risks	Risk Level	Alleviation measure
Result 1	Adequate knowledge and experience of technology business incubation does not exist in Vietnam to achieve result	Medium	The project is designed to make use of international experience and best practice

	Risks	Risk Level	Alleviation measure
Result 2	Adequate knowledge and experience of technology business incubation does not exist in Vietnam to achieve result	Medium	The project is designed to make use of international experience and best practice
Result 3	Adequate knowledge and experience of technology business incubation does not exist in Vietnam to achieve result	Medium	The project is designed to make use of international experience and best practice
Result 4	Adequate knowledge and experience of modern M&E techniques for private sector development does not exist in Vietnam to achieve result	Medium	The project is designed to make use of international experience and best practice
	M&E is not viewed as an essential element of the project and the resultant findings are not adequately independent and meaningful	Medium	M&E will be undertaken by the PMU: this should ensure the required degree of independence and professionalism
Coordination of results	Poor coordination of activities between results areas 1, 2 and 3 is not undertaken: all three results areas are operated in a "silo" manner that limits essential exchange of experience and data between the three results areas	Medium	The implementation of Consultancy support for results areas 1, 2 and 3 will be contracted as a single service contract to ensure that the essential linkage is maintained

3.8.3 Sustainability risks

	Risks	Risk Level	Alleviation measure
Result 1	None	None	None
Result 2	Supported TBI are not financial sustainable	Medium	International support team to draft the business plans. The approval of the business plan is a precursor for future support.
Result 3	Innofund ceases to operate at the end of the project	Medium	BIPP will encourage the Government to adapt its existing funding instruments (NAFOSTED etc.) or established a new State funding instrument to provide on-going Innofund-type support

	Risks	Risk Level	Alleviation measure
Result 4	No on-going M&E feeding into policy formulation after the end of the project	Low	The PMU will develop systems and capacity within MOST to undertake further M&E work

3.8.4 Fiduciary risks

	Risks	Risk Level	Alleviation measure
Result 1	None	None	None
Result 2	Operational funding is not used for the right purposes	Medium	- Approved Business plans before signature of execution agreement - management and monitoring expert per result (verification of justification for operational funding) - reporting by TBI
Result 3	Misuse of Innofund	medium	- Innofund funding will only be based on approved proposals. The Innofund will mainly support the soft component (expertise). - strict guidelines for the Innofund will be put in place - reporting obligations of beneficiaries of the Innofund (progress reports, financial reports and final reports), - monitoring expert of result 3 will monitor the correct use of the Innofund grants.
Result 4	None	None	None

4 RESOURCES

4.1 Financial resources

The Belgian contribution amounts to €4,000,000. The detailed budget is shown at Table 18.

In order to facilitate the start-up of the project, commitments of the Belgian contribution will be contracted and expenses will be made prior to the signature of the CMO. These concern logistics and personnel. It regards the following expenses and estimated amounts:

Logistics = 17.000 EUR

Personnel = 20.000 EUR

TOTAL = 37.000 EUR

The Vietnamese contribution amounts to €400,000 and will consist of human resources of the PMU together with office accommodation and office equipment for the PMU.

Table 19a: Overall budget for BIPP from Belgian contribution [47]

TOTAL BUDGET				Exec modality	TOTAL BUDGET	%
A			**Specific objective - The enabling environment for S&T is developed based on an improved legal framework and a set of coherent mechanisms for starting and operating S&T incubators to enhance the S&T SME sector, which have been pilot tested and evaluated**		**3,226,500.00**	**81%**
A	*01*		*Result 1 - Enhanced legal framework for supporting S&T SMEs and TBIs*		*564,000.00*	*14%*
A	01	01	Development of a circular on technology business incubation	Co management	16,000.00	
A	01	02	Development of a Road Map for the development of all aspects of pre-incubation and incubation	Co management	6,000.00	
A	01	03	Review of the areas where close inter-ministerial and/or inter-agency cooperation is essential to have a positive impact on the development of TBIs and their tenants	Co management	15,000.00	
A	01	04	Study tour to view international best practice in government policies to encourage technology business incubation	Co management	30,000.00	
A	01	05	Networking, awareness raising and information exchange	Co management	35,000.00	
A	01	06	HR Result 1 - Permanent staff	Co management	120,000.00	
A	01	07	consultancy contract	co management	342,000.00	

[47] Any change, reallocation, transfer,ect in the budget lines will be done according to the budget management regulation in article 5.5.5

TOTAL BUDGET				Exec modality	TOTAL BUDGET	%
A	*02*		*Result 2 - Incubator policy development enhanced through pilot testing with 2 one-stop shop TBIs to determine best practices and lessons learnt*		*819,000.00*	*20%*
A	02	01	Support to the preparation of a business plan for NACENTECH	Co management	5,000.00	
A	02	02	Support to the operational funding of the NACENTECH TBI	Co management	255,000.00	
A	02	03	Procurement of essential office equipment for the NACENTECH TBI	Co management	20,000.00	
A	02	04	Provision of advisory services for NACENTECH TBI	Co management	2,500.00	
A	02	05	Support to the preparation of a business plan for HCM University Technology TBI	Co management	5,000.00	
A	02	06	Support to the operational funding of HCM University Technology TBI	Co management	205,000.00	
A	02	07	Provision of advisory services for HCM University Technology TBI	Co management	2,500.00	
A	02	08	HR Result 2 -Permanent staff	Co management	144,000.00	
A	02	09	consultancy contract	Co management	180,000.00	
A	*03*		*Result 3 - Incubator policy development enhanced through the pilot operation of a seed fund (Innofund) to support the pre-incubation and incubation of potential S&T SMEs to determine best practices and lessons learnt*		*1,424,500.00*	*36%*
A	03	01	Design and establish systems for Innofund to act as a support fund providing capacity building	Co management	13,500.00	
A	03	02	Operate the Innofund	Co management	1,082,000.00	
A	03	03	Undertake a study to assess the prospects, potential, operational costs and financial sustainability of operating Innofund as a permanent grand and/or loan based	Co management	35,000.00	
A	03	04	Provide support to incubators to assist their tenants with the preparation of applications for investment funding	Co management	18,000.00	
A	03	05	HR Result 3 - Permanent staff	Co management	96,000.00	
A	03	06	Consultancy for R3 - within the service contract	Co management	180,000.00	

TOTAL BUDGET				Exec modality	TOTAL BUDGET	%
A	*04*		*Result 4 - A monitoring and evaluation framework is established and operated to ensure project results are captured and feedback into the policy development process*		*419,000.00*	*10%*
A	04	01	Establish a BIPP monitoring system	Co management	5,000.00	
A	04	02	Operate the BIPP monitoring system / HR Result 4 - Permanent staff	Co management	360,000.00	
A	04	03	HR - Consultancy	comanagement	54,000.00	
X			**Réserve budgétaire (max 5% * total activités)**		**75,000.00**	**2%**
X	*01*		*Réserve budgétaire*		*75,000.00*	*2%*
X	01	01	Réserve budgétaire COGESTION	Co management	25,000.00	
X	01	02	Réserve budgétaire REGIE	Own management	50,000.00	
Z			**General means**		**698,500.00**	**17%**
Z	*01*		*HR costs*	*Own management*	*408,000.00*	*10%*
Z	01	01	Coordinators	Own management	180,000.00	
Z	01	02	Finance and administration team	Own management	228,000.00	
Z	*02*		*Investissements*	*Own management*	*17,000.00*	*0%*
Z	02	01	Office equipment	Own management	5,000.00	
Z	02	02	IT equipment	Own management	12,000.00	
Z	*03*		*Running costs*	*Own management*	*106,000.00*	*3%*
Z	03	04	Communication	Own management	18,000.00	
Z	03	05	Office consumables	Own management	30,000.00	
Z	03	06	Missions / Transport	Own management	22,500.00	
Z	03	07	External communication and representation costs	Own management	10,000.00	
Z	03	08	Training		0.00	
Z	03	10	Financial costs	Own management	1,500.00	
Z	03	11	VAT costs		0.00	
Z	03	12	Other running costs	Own management	24,000.00	

TOTAL BUDGET				Exec modality	TOTAL BUDGET	%
Z	*04*		*Audit et Suivi et Evaluation*	*Own management*	*167,500.00*	*4%*
Z	04	01	Monitoring and evaluation	Own management	70,000.00	
Z	04	02	Audit	Own management	60,000.00	
Z	04	03	Backstopping	Own management	37,500.00	
TOTAL					**4,000,000.00**	

Own management	**748,500**	
COGESTION	**3,251,500**	

Table 2019b: Overall budget for BIPP from Vietnamese contribution

No	Items	Exec modality	Amount (EUR)	%
1	Office accommodation	Project management	120,000	
2	Office equipments and furniture for PMU	Project management	57,000	
3	Human resources of PMU (for staffs recruited by MoST)	Project management	110,000	
4	Transportation fees (for staffs recruited by MoST)	Project management	70,000	
5	Per diem for staffs recruited by MoST	Project management	12,000	
6	Financial costs for Vietnamese budget	Project management	6,000	
7	Monitoring and evaluation (MoST)	Project management	5,000	
8	Contingency (5%)		20,000	
	Total	Project management	400,000	10%

Table 21: Indicative budget for the Innofund

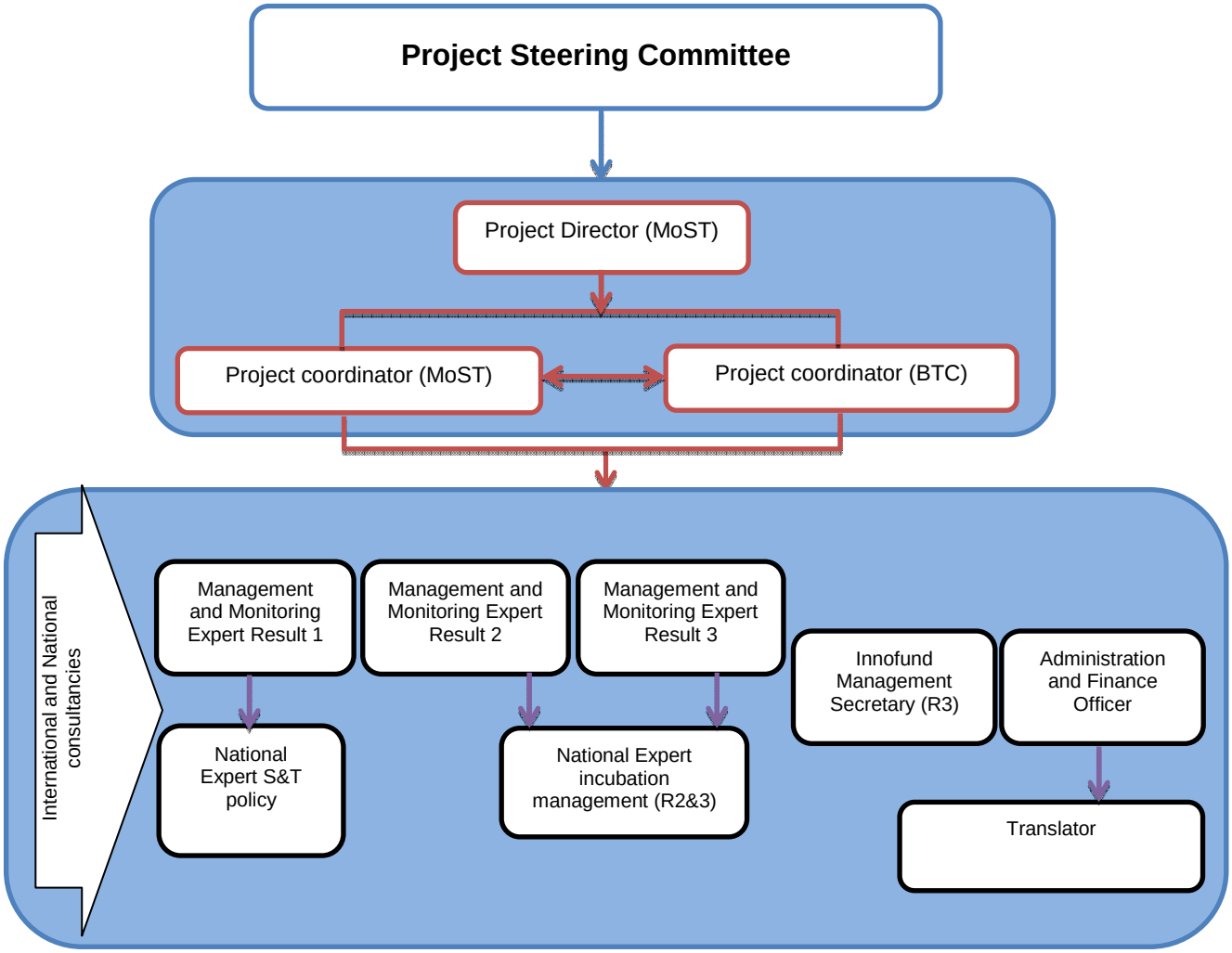
	Belgium	Vietnam	Budget	Indicative Maximum daily Rate – euro
Short-term expertise (I)	250,000		250,000	1000€/day[48]
Short-term expertise (L)	250,000		250,000	250€/day
Prototype material purchase/equipment hire or purchase	550,000		550,000	/
Total	1,050,000	0	1,050,000	

The minimum grant size is specified as €15,000 and the maximum as €45,000 per project. Assuming an average of €25,000 per project we arrive at approximately 40 projects financed from the Innofund for the duration of the BIPP.

[48] This rate must include all costs and expenses, such as international and national transport, accommodation, per diem, insurance etc.

4.2 Human resources

4.2.1 Project Management Unit



An overview of the human resources of the PMU is shown in the following table.

Table 22: Human resource of the PMU

Function	Full/ Part-time	Duration (months)
Project Director	Part-time	60
Project Coordinator (MOST)	Part-time	60
Project Coordinator (BTC)	Full-time	60
National expert in S&T policy	Full time	48
National expert in incubation management	Full Time	48
Project Management and Monitoring Expert (National) – Results Area 1	Full-time (from Month 12)	48
Project Management and Monitoring Expert (National) – Results Area 2	Full-time (from Month 12)	48
Project Management and Monitoring Expert (National) – Results Area 3	Full-time (from Month 12)	48
Innofund Management Secretary (operation executive secretary)	Full time	48
Administration and finance officer	Full-time	60
Secretary/translator	Full-time	60

The Belgian contribution will also be used to procure the services of the consultancy support team and details of the team are shown in annex 7.4).

4.2.2 Consultancy for the design and oversight of the M&E system

An international consultant will be contracted at the start of the intervention for a period of 3 months to support the PMU in the design of the M&E system as described in activity 4.1.

4.2.3 Consultancy Support Team

The Consultancy Support Team will support the PMU, provide the necessary additional and specialized expertise and deliver key-documents (drafts of circulars, …) for the implementation of all activities under results areas 1, 2 and 3. Terms of Reference are shown at annex 7.4.

The Consultancy Support Team will be jointly selected using standard Vietnamese public procurement systems (using a non-exclusive framework contract).

The Consultancy Support Team will be led by a Team Leader who will ensure coherence between the different expertise and experts, and who will communicate with the PM-direction on the status of implementation and coordination of the team's work in Results Areas 1, 2 and 3.

The Team Leader will be responsible to the PMU for the overall quality of the support to the PMU and its stakeholders and for the submission of all progress reports and deliverables to the PMU.

The PMU will be responsible for quality controlling all deliverables and for monitoring the performance of the consultancy support team against the requirements of the terms of reference.

The responsibilities of both parties will be defined within the non-exclusive service contract and terms of reference.

The Team Leader will be responsible for regular liaison with key parties to ensure that the project is being implemented smoothly and that any problems are addressed rapidly. The key parties are:

- The PMU Director
- The PMU co-ordinators
- The PMU management and monitoring experts for each Results Area
- The PMU experts in S&T policy and in Business Incubation.

4.3 Material resources

The equipment to be purchased is:

- Office equipment for NACENTECH TBI – in accordance with an approved business plan and to a maximum of €20,000
- Equipment for prototype development for successful applicants of Innofund – to a maximum of 55% of the granted support per project /successful applicant: this budget total also includes equipment hire and raw materials for prototype development.

Ownership of the equipment will be transferred to the users on completion of the project subject to prior approval by the MOST.

5 IMPLEMENTATION MODALITIES

5.1 Contractual framework

The General Agreement between the Belgian Government and the Socialist Republic of Vietnam was signed 11th October 1977.

The Indicative Cooperation Programme (2011-2015) between the Government of the Kingdom of Belgium and the Socialist Republic of Vietnam was signed 24th June 2011.

The present Technical and Financial File (TFF) is part of the Specific Agreement signed between the Socialist Republic of Vietnam and the Government of the Kingdom of Belgium, determining the legal framework of the intervention.

5.2 Institutional framework

For the Vietnamese Party:

The Ministry of Science and Technology (MOST) is the Vietnamese administrative entity responsible for the implementation of the project and for the Vietnamese contribution to the project. The MOST is the **Authorizing Officer** of the project.

It is also responsible for the daily management of the project activities by means of a Project Management Unit (PMU).

For the Belgian Party:

The Directorate-General for Development (DGD), under the "Federal Public Service Foreign Affairs, Foreign Trade and Development Cooperation" of the Government of Belgium is the Belgian administrative entity responsible for the Belgian financial contribution to the project.

The Belgian Technical Cooperation (BTC), represented by its Resident Representative in Hanoi, is responsible for the follow up and implementation of the project. BTC Resident representative is the **Co-Authorizing Officer** of the project.

5.3 Project Life Cycle

The Specific Agreement has a total duration of 72 months.

The project period of the BIPP will be 60 months

5.3.1 Preparatory Phase

Before the actual start (before CMO) of the project a series of tasks can already be done:

- Establishment of the PMU
- Recruitment process of staff,…

Except for those linked to recruitment, no project expense will be made during that period.

5.3.2 Implementation Phase

The project implementation phase will last for 60 months.

Starting Phase: 6 months

At the beginning of the project's implementation phase a starting phase of maximum 6 months will start during which starting activities will be carried out.

- 1st Project Steering committee
- Finalise the recruitment of staff
- First project planification (Year 1)
- Tender for the international consultancy team
- Baseline and monitoring system, …

Operational implementation phase: 48 months

Closing phase: 6 months

Six months before the end of the project a closing phase will start during which the he PMU Director will prepare a financial report and submit this to the Project Steering Committee: BTC will launch the project closure review of the project at that time.

The project will be closed at the latest at the end of the validity period of the Specific Agreement.

Beyond the validity of the Specific Agreement, no expenditure will be accepted unless it relates to commitments entered into force before the expiry date of the Specific Agreement and has been approved by the last Project Steering Committee.

5.4 Implementation and follow-up structures

5.4.1 Project Steering Committee

The Project Steering Committee (PSC) represents the highest management level of the project. It is responsible for providing the necessary strategic guidance to the Project Management Unit and assures that project objectives are timely achieved.

The PSC is created at project start-up. It meets at the onset of the project to approve the indicative action plan. Within the limitations imposed by the Specific Agreement, the PSC shall lay down its own internal rules and take it decisions by consensus of the members.

The PSC will consist of the following members from the national and provincial levels:

- Deputy Minister of Science and Technology (Chairman);
- BTC Resident Representative for Vietnam (Co-chair) or an authorized person;
- Project director (MoST);
- Representative of the Ministry of Planning and Investment;
- Representative of the Ministry of Finance;
- Representative of People's Committee of Ho Chi Minh City
- Representative of People's Committee of Hanoi

The MOST and BTC project coordinators will participate in the PSC as observers and assume the secretariat of the meeting. A representative of the National Agency for Technology Entrepreneurship and Commercialization Development (NATEC), a representative of Vietnam Chamber of Commerce and Industry, and a representative of the National Foundation for Science and Technology Development (NAFOSTED) will participate in the PSC as observers. If and when necessary, any additional expert, observer, informer can be invited by the Chairman

and the Co-Chairman to participate as observer in the PSC

The PSC decides by consensus. The PSC members may designate a delegate to the PSC in case they are not able to attend the meeting. The delegate must be fully mandated to take decisions.

The Project Steering Committee will meet on a six-monthly basis until the closure of the project, but any member may request an extraordinary meeting provided they give the chairman at least 5 working days' notice.

The steering committee is mandated to (See also chapter 3):

- Ensure that the roles and responsibilities of the different agencies and entities involved in the project are clearly defined
- Provide implementation and policy guidance to all project stakeholders
- Approve the work plan of the project, including the financial planning,
- Approve the six-monthly progress and financial reports,
- Approve the six-monthly action and financial plans,
- Approve the implementation manual at the start of the intervention which include;
    - Project Operational Procedures Manual
    - Project Financial Manual
    - Innofund Operation Manual
- Approve the business plans of the two pilot incubators on the recommendation of the PMU
- Approve the selection of projects to be supported by the Innofund on the basis of the recommendations of the Innofund Selection Committee, or by the two chairmen of the Steering committee
- Approve the terms of reference of the mid-term and final evaluation missions and endorse their recommendations (including ensuring the implementation of approved changes recommended by the mid-term evaluation report)
- Ensure that annual external audits are carried out by an accredited accounting firm, appraise any findings and recommendations and follow up their implementation.
- Recommend any essential modification of the objectives, the total budget and/or the duration of the project to the Vietnamese and Belgian Government;
- Approve modifications to the TFF, except for modifications of the objectives, the total budget and the duration of the project and for budget modifications of less than 10% compared to the budget line of the TFF;
- Approve the final report and the final closure of the project.
- Approve the action plan related to the closing process (planning, last operational and financial commitments), the final report and the final closure of the project, following the

procedure mentioned in the guideline “Closing procedures” provided by BTC.

- Approve the changes of the composition and responsibilities of the PSC.

5.4.2 The Project Management Unit (PMU)

The PMU will be headed by a Director (appointed by MOST). The director will be assisted by the two Co-Coordinators (one appointed by MOST and one by BTC) in the daily management of the project.

The PMU will also be composed of:

- a full-time national administrator/finance officer
- a full-time secretary/translator
- a full time national expert in SME en TBI Policy (Results Area 1) (48 months)
- a national expert in Business Incubation (Results Area 2) (48 months)
- a national expert for the management of the Innofund (Results Area 3) (48 months)
- a national expert in project management and monitoring (Results Area 1) (48 months)
- a national expert in project management and monitoring (Results Area 2) (48 months)
- a national expert in project management and monitoring (Results Area 3) (48 months)

The PMU will be based in Hanoi but the Coordinators and the project national monitoring experts will be expected to travel to HCMC as needed throughout the duration of the project.

In addition to the activities described in chapter 3 the Co-Coordinators will be jointly responsible for:

- Ensure the implementation of project activities in accordance with the TFF and the approved project work plans
- Ensure that all activities outputs are linked to the results and specific objective through a close monitoring based on pre-defined indicators
- Provide high level technical guidance on project methodology and strategy
- Establishing the project work plan and budget that will be presented to the Project Steering Committee (PSC) during the first 3 months of the project starting phase,
- Design the BIPP monitoring system
- Prepare the quarterly progress and planning (action & finance) reports (action & finance);
- Prepare and submit to the PSC the six-monthly progress and planning reports (action & finance);
- Compile the projects annual reports and final report at the end of the project,
- Ensure the good management of the project resources, treasury and budget management,
- Contribute to the preparation and submission of the project manual - at the start of the intervention - to the PSC the implementation which includes:
    - Project Operational Procedures Manual
    - Project Financial Manual

    - Innofund Manual

- Undertake regular monitoring and report on monitoring findings
- Contribute to and submit to the PSC the terms of reference of the mid-term and final evaluation missions
- Submit the business plans of the two pilot incubators to the PSC with recommendations as to whether they should be approved
- Submit the list to the project steering committee or the two chairmen of the PSC of projects to be supported by the Innofund on the basis of the recommendations of the Innofund selection committee
- Act as the secretariat of the Steering Committee, ensuring timely and accurate dissemination of reports, proposal of agenda, drafting of minutes of Steering Committee meetings etc.
- Propose to the PSC any essential modifications of the objectives, the total budget and/or the duration of the project to the Vietnamese and Belgian Government;
- Tender (where envisaged as an action for the PMU) for the procurement of works, goods and services in conformity with applicable regulations
- Provide administrative support to the PSC (secretariat, agenda, documents, minutes; dissemination of minutes);
- Preparing an end-of- project consolidated report to be presented to the PSC no later than one month before the end of the project. The report includes the minutes of this PSC meeting and provides a full account of the expenditures of both the Vietnamese and Belgian contributions. It also includes a list of the equipment to be handed over to Vietnam and the destination of the remaining budgets.

The procedures of the PMU functioning will be described in detail the Project Operation Procedures Manual.

5.4.3 Innofund Project Selection Committee

An Innofund Project Selection Committee will be established to evaluate the applications for support from Innofund and select the applications to be supported.

The preparation of a detailed Innofund Operations Manual will be supported by a consultancy. Once approved by the Project Steering Committee, it will be the basis for the operations of the Innofund Project Selection Committee (Eligibility, selection criteria, functioning, guidelines for applicants …).

All members of the Innofund Project Selection Committee and any observers must sign a *Declaration of Impartiality and Confidentiality*. Any Project Selection Committee member or observer who has a potential conflict of interest with any applicant must declare it and immediately withdraw from the Innofund Project Selection Committee. He/she will be excluded from participating further in any capacity in the selection meetings.

The proceedings of the Project Selection Committee are conducted in camera and are confidential.

The membership of the Innofund Project Selection Committee will comprise:

Non-voting members:

- a chairman designated by MoST (non-voting)

- the PMU MOST Coordinator, MOST (Co-Chair – non-voting)
- the BTC Coordinator (Co-chair – non-voting)
- the Innofund secretary (non-voting)

Voting members:

- A representative of the National Agency for Technology Entrepreneurship and Commercialization Development (NATEC)
- A representative of the National Foundation for Science and Technology Development (NAFOSTED)
- A representative of MPI-Agency for Enterprise Development
- A representative of Vietnam Chamber of Commerce and Industry
- A representative of the Vietnam Association of Small and Medium Enterprises

Observers:

- International Expert to the Innofund (observer)
- Secretary to the Innofund Project Selection Committee (non-voting)

The Chairman is responsible for co-ordinating the selection process and for ensuring its impartiality and transparency. The voting members of the Innofund Project Selection Committee have collective responsibility for decisions taken by the Committee.

All voting members of the Innofund Project Selection Committee have equal voting rights.

The Secretary is responsible for carrying out all administrative tasks connected with the selection procedure.

The Innofund Project Selection Committee recommends to the Director of the PMU and the BTC resident representative for Vietnam the selection of the projects to be supported by the Innofund. The final decision is that of the Project Steering committee or can be delegated by the Project Steering Committee to the Director of the PMU and the BTC resident representative for Vietnam (the two chairmen of the PSC).

5.5 Operational Management

5.5.1 Underlying Principles

The project will adopt a combination of co-management by MOST and BTC (co-management), of Belgian managed funds (own-management). Most project activities will be co-managed.

Co-management modality will follow the guidelines on management and utilisation of ODA, defined in the Vietnamese Decree 38 of April 23, 2013, or its future revisions; , except for specifically defined budget lines on BTC own management.

The PMU will ensure adherence to the UN-EU (2012) guidelines, or its future revisions, for financing local costs in development cooperation in Vietnam. Deviations should be motivated and obtain approval of the steering committee.

The Director of the PMU (appointed by MOST) will be the authorising officer and the Resident

Representative of BTC in Hanoi will be the co-authorising officer and give necessary “no-objections”.

A POM (project operation manual) will be written during the starting phase of the project, describing into details all the procedures related to the execution modalities.

5.5.2 Human Resources

MOST will appoint the Director and the MOST Project Coordinator.

BTC Representation in Vietnam will select and contract the BTC Project Coordinator and Administration and finance officer with the consent of MOST and manage their contract.

The rest of the PMU staff will be selected by a joint BTC/MOST committee and contracted by the MoST.

Function	**Selected by**	**Funded by**	**Contracted by**
Project Director	MOST	VN	VN
Project Coordinator (MOST)	MOST	VN	VN
Project Coordinator (BTC)	BTC	BTC	BTC
National expert in S&T policy	Jointly	BTC	VN
National expert in incubation management	Jointly	BTC	VN
Project Management and Monitoring Expert (National) – Results Area 1	Jointly	BTC	VN
Project Management and Monitoring Expert (National) – Results Area 2	Jointly	BTC	VN
Project Management and Monitoring Expert (National) – Results Area 3	Jointly	BTC	VN
Innofund Management Secretary	Jointly	BTC	VN
Administration and finance officer and assistant	BTC	BTC	BTC
Secretary/translator	Jointly	BTC	VN

5.5.3 Technical Responsibility matrix

The following matrix gives an overview of the responsibilities of the different actors for the main activities (excluding the reporting duties that are described in table 24).

Budget Code	Results/activities	responsability	production	validation
A_01				
A_01_01	Activity 1.1: Development of a circular on technology business incubation	joint	Consultancy contract & policy expert	PMU direction
A_01_02	Activity 1.2: Development of a Road Map for the development of all aspects of pre-incubation and incubation	joint	Consultancy contract & policy expert	PMU direction
A_01_03	Activity 1.3: Review of the areas where close inter-ministerial and/or inter-agency cooperation is essential to have a positive impact on the development of TBIs and their tenants	joint	Consultancy contract & policy expert	PMU direction
A_01_04	Activity 1.4: Study tour to view international best practice in government policies to encourage technology business incubation	joint	Consultancy contract & policy expert	PMU direction
A_01_05	Activity 1.5: Networking, awareness raising and information exchange	joint	Consultancy contract & policy expert	PMU direction
A_02				
A_02_01	Activity 2.1: Support to the preparation of a business plan for NACENTECH TBI	joint	consultancy contract & incubation expert	PSC
A_02_02	Activity 2.2: Support to the operational funding (subsidy) of the NACENTECH TBI	joint	execution agreement	PSC
A_02_03	Activity 2.3: Procurement of essential office equipment for the NACENTECH TBI	joint	consultancy contract & incubation expert	PMU direction
A_02_04	Activity 2.4: Provision of advisory services for NACENTECH TBI	joint	consultancy contract & incubation expert	PMU direction
A_02_05	Activity 2.5: Support to preparation of a business plan for HCM University of Technology – TBI	joint	consultancy contract & incubation expert	PSC
A_02_06	Activity 2.6: Support to the operational funding (subsidy) of HCM University of Technology – TBI	joint	execution agreement	PSC
A_02_07	Activity 2.7: Provision of advisory services for HCM University of Technology – TBI	joint	consultancy contract & incubation expert	PMU direction
A_03				
A_03_01	Activity 3.1: Design and establish systems for Innofund to act as a support fund providing capacity building	joint	consultancy contract & monitoring expert R3	PMU direction
A_03_02	Activity 3.2: operate the Innofund	MoST	INNofund selection committee, innofund operation executive	PSC
A_03_03	Activity 3.5: Undertake a study to assess the prospects, potential, operational costs and financial sustainability of operating Innofund as a permanent grant and/or loan-based instrument	joint	consultancy contract & monitoring expert R3	PMU direction
A_03_04	Activity 3.6: Provide support to incubators to assist their tenants with the preparation of applications for investment funding	joint	consultancy contract & monitoring expert R3	PMU direction
A_04				
A_04_01	Activity 4.1: Establish a BIPP monitoring system	joint	consultantcy expert in m&e	PSC
A_04_02	Activity 4.2: Operate the BIPP monitoring system	joint	m&e experts	PMU direction

5.5.4 Financial management

The financial management of the project will be assured by the direction of the PMU, based upon action and financial plans previously approved by the steering committee.

5.5.4.1 Bank accounts

Main and operational accounts under co- management

Two bank accounts called "Belgian contribution BIPP" shall be opened for the Belgian contribution at a commercial bank in Vietnam approved by both MOST and the BTC Representation: a main account in EUR and a second one in VND). The main account will be replenished by BTC in quarterly instalments based on the provisions made in the approved action plans. The VND account will be replenished from the main account. They will be operating by double signature, according to the modalities defined in the following table:

Table 23: Basis for operating the Bank Accounts

Signature 1	Signature 2	Limit
PMU Director	BTC Co-Coordinator	25,000 EUR
Authorising officer	Co-authorising officer: BTC Resident representative	>25,000 EUR The limit depends on MOST rules and the regulations of the BTC representation

Main and operational accounts under own management

For local expenses under BTC own management, an account shall be opened in Hanoi and managed according to BTC procedures.

5.5.4.2 Funds transfer

The PMU Co-Coordinators will submit requests for fund transfers to the BTC Resident Representative.

Following notification of the Implementation Agreement between the Belgian state and BTC, a cash call can be sent to the BTC Representation. This first instalment must correspond to the needs for the three first months.

Subsequent requests for transfers must be based on action and financial plans approved by the PSC committee.

Each transfer should equate to the estimated funding requirements of the PMU for the succeeding three months plus a small margin for contingency. The transfer of funds by BTC to the "Belgian contribution BIPP" bank account will be made at the beginning of each quarter provided that:

- The financial accounts for the project are up to date and have been submitted to the BTC Representative;
- The financial plan for the quarter to be financed has been submitted to the BTC Representative;
- The amount of the transfer request does not exceed the remaining budget balance;
- Any recommendations proposed by external audits have been followed up or implemented and reported to the BTC Representation

In addition, intermittent urgent cash calls may be requested but only as an extraordinary event which is fully justified.

The final payment of the project will follow the same conditions as described above.

5.5.4.3 Financial planning

Every quarter, the PMU Co-Coordinators must elaborate a financial planning for the current quarter and for the following quarters and following years based upon the six-monthly action plans approved by the steering committee. This plan is submitted to the BTC Representation. This planning will be undertaken in accordance with BTC procedures.

5.5.4.4 Accounting

The accounting of the project will use BTC and VIE approved accounting software and guidelines while respecting the regulations on management and utilization of ODA, defined in the Decree 38/2013/ND-CP of 23 April 2013, or its future revisions.

The accounting documents are compiled and approved on a monthly basis following BTC procedures. The accounting documents must be signed for approval by the project officers (the manager and joint manager). The accounting documents that must be forwarded to the BTC Representation include an electronic file, the supporting documents as well as the bank statements and petty cash statements.

5.5.5 Budget management

Budget constraints: The total budget and the budget per execution mode may not be exceeded. The budget of the project sets out the budgetary limits within which the project must be executed.

Budget increase: In case a budget increase is needed a written request for the increase must be submitted by the national party to the Belgian state after agreement of the steering committee. If **Belgium accepts the request an exchange of letters is signed by both parties.**

Budget change: Both parties can revise the allocation by budgetary lines through SC meetings. In every case, PMU must document the budget modifications. The possible budgetary changes are:

- Change of the budget structure;
- Reallocation of means between financing mode;
- Transfer of resources between existing budget lines for more than 10% of each budget line;
- The contingencies budget can only be used for project activities and after approval of the SC. Its use must always be accompanied by a change of the budget.

5.5.6 Public Procurement in co-management

Procurement of goods, works and services executed in co-management will follow the Vietnamese regulations for public tendering.

The legislation also defines standard bidding documents for all forms of procurement and the format of the evaluation report on submitted bids.

The PMU management must endorse the allocation, invoices and payments of contracts in writing.

No objection from BTC representation is needed in the following steps:

- Tender plan
- Terms of reference
- Selection of tenderers

Upon request, all members of the steering committee will have access to all administrative, financial and technical documentation regarding project procurement.

Table 4: Procurement procedure to apply and publication requirement

Procedure	Publication	Works	Supplies	Services
Direct purchase Detailed ToR Minimum 3 pro-forma	Not mandatory	Below 5.000 EUR	Below 5.000 EUR	Below 5.000 EUR
Competitive negotiated procedure Detailed specifications Minimum 3 invitations	Invitation to national and/or international bidders subject to the technical complexity of the assignment and the availability of the needed expertise in the country	Between 5.000 and 67.000 EUR	Between 5.000 and 67.000 EUR	Between 5.000 and 67.000 EUR
Open procedure Detailed specifications	Mandatory: Invitation to national and/or international bidders subject to the technical complexity of the assignment and the availability of the needed expertise in the country	Above 67.000 EUR	Above 67.000 EUR	Above 67.000 EUR

5.5.7 Innofund (co-management)

The Innofund will provide capital grants to selected proposals (after a competitive call through a call for proposals) for capital investments earmarked for the production of prototypes (raw materials) and for consultancy and expertise services.

The procedure manual of the Innofund will be elaborated during the beginning of the intervention, and approved by the Project Steering Committee. A draft is annexed in chapter 7.

.

5.5.8 Execution in own management and co- management

For the BTC own-management budget lines (see chapter 4), procurement will be done according to the Belgian law on public tendering. The basic principle is that any contract must always been awarded following a competition call through a public tendering procedure as prescribed by the Belgian law of the 15 th of June 2006, .

In addition contracts will be signed with Nacentech and the HCM University of Technology. Both are public entities depending directly from MOST and have a monopoly when it comes to business incubation in science and technology. They are best placed to act as pilot TBIs to

directly feed in the work on enhancing the legal framework for supporting S&T SMEs and TBIs. They both receive public funding from MoSt and/or DoST to increase the number of successful technology – based companies and spin-offs of research institutes. As such, Nacentech and HCMUT TBI are confined with the operationalization of part of the mission of the Department of Personnel and Organisation of the MoST as described in decision No 1999/QD-BKHCN of the MOST. (law of 15th of June 2006, art. 26, §1, 1°, f)

The different yearly instalments of the support for the two TBI are subject to several conditions that will be specified and detailed in the execution agreement.

- The provision of the support must be in accordance with the approved business plans of the two TBI
- Submission of regular (each semester) progress reports and year reports in accordance with the requirements of the Contract and the Business Plan: this will include achievement of defined target indicators and a financial report.

The contracts will be drafted by the project and following the BTC procedure for their approval. This process will only start after the formal approval of the POM.

5.5.9 Monitoring & Evaluation

5.5.9.1 Monitoring

Project monitoring

A **Baseline Study** will be carried out in the beginning of the project. The baseline study shall provide user friendly qualified and quantifiable indicators to allow adequate monitoring and evaluation exercises.

Result Area 4 Monitoring will be undertaken by the specially recruited members of the PMU who will be responsible for results area 4. The expert members of the PMU will:

- Prepare a Results Chain for each results area of the BIPP
- Define indicators (baseline and target) for each key step in each results chain at process, output, outcome and impact level: baselines and targets will be disaggregated by gender, where appropriate, to show male / female participation.
- Prepare a Results Measurement Plan (RMP) for each results area of the BIPP (and, in certain instances, below this area into specific activities – for example, for the Innofund).
- Design a simple centralised online monitoring system that allows monitoring data on each element of the BIPP and each Innofund-supported project to be rapidly and simply accessed and allows accumulation of impact data on an overall portfolio level
- Establish a Results Measurement Framework for results area

5.5.9.2 Evaluation

An external Mid-Term Review (MTR) shall be carried out after 36 months of project implementation. The MTR will focus of the performance of the project and verify its realizations and may propose adaptations. The MTR report will be submitted to the steering committee for endorsement of the proposed recommendations. Consequently the PMU will define an implementation plan of the recommendations in line with the decisions of the steering committee. The follow-up of this plan will be included in each progress report.

An external End Term Review (ETR) shall be carried at the latest 6 months before the end of the intervention. The ETR will focus on the intervention's achievements as well as on its lessons learned. This mission will perform a check of compliance with results listed in this TFF and will capitalize lessons learned.

These exercises will be conducted under the final responsibility of BTC as part of its M&E policy. To strengthen mutual accountability, coordination with similar Vietnamese procedures will be seeked if possible. This will be assessed during the set up phase.

5.5.9.3 Backstopping

Follow-up missions from BTC (internal or external personnel) will be performed during the course of the project. The PMU direction will facilitate and support of the missions. Backstopping is a continuous process carried out throughout the cycle of an intervention. Apart from on-going 'distance' support and the initial briefing of the International Sector Experts, backstopping also includes regular field missions. The backstopper will always keep the overall perspective of the whole sector in mind (Backstopping Sector Support Program), even when he/she might concentrate more on particular interventions or topics. It is important to plan during the backstopping mission sufficient time for joint reflection with the complete intervention team directly involved in the sector support program.

5.5.10 Financial and procurement audit

Financial and procurement audit

Financial and procurement project audits. This will be done

- For the project itself
- For the Innofund management

BTC will deploy an independent qualified audit firm (International Accounting Standards) to audit the dedicated project accounts annually. BTC will write the terms of references of the audits. Theses audits will be financed out of the own-management lines and carried out by the auditors according to the BTC framework contract in force.

The audit reports will be submitted to the PSC who will decide on the measures to be taken, if any. This annual external audit will:

Check the compliance, ex-post, between payments from the specific bank account and the work realised on field and locally, with the supporting documents, kept by the project;

Check the respect of the management procedures of the project including management of all project assets and procedures mentioned in the POM;

Check the respect of the public procurement Vietnamese or Belgian rules and internal regulations.

The auditing reports shall be discussed in the PSC.

The PCU shall set-up an action plan based on the audit recommendations to allow it to remedy the noticed weaknesses. The action plan and its follow up must be presented at each PSC meeting, which will approve its implementation. The cash call will be conditioned by the follow up or settlement of possible reserves/issues revealed by the audit mission. Both parties should consult each other to settle those reserves/issues.

Annual audit could take place at any time, initiated by one or the other party.

If the audit is negative, or if the evaluation of experiments using similar modalities appears to be negative, BTC is entitled to submit to the PSC a modification of the execution modalities in order to limit the related fiduciary risks.

If the auditing report shows that the funds are not managed in a transparent and appropriate way, BTC Resident Representative can suspend the next instalment and request the reimbursement of the funds already transferred.

Audits by Belgian external bodies

In accordance with the legal status of BTC, each year an Audit Committee reviews the accounts of BTC. Within this framework, the Audit Committee may also carry out audits of programmes in Vietnam. The Audit Committee of BTC may also request that BTC's internal auditor audit a specific programme. Those audits are independent of BTC management.

5.5.11 Taxes and Duties

The Belgian contribution shall not be used to pay taxes, customs or duties for procurement of supplies, labour and services. Whatever taxes or duties are expected to be paid by the project and claimed under the Vietnamese laws and regulations must be financed by the Vietnamese contribution

5.5.12 Closure of the project

The project commits itself to close the specific accounts at the end of the execution agreement of the project. The PSC will be responsible to implement the closing process according the guideline "Closing procedures" of BTC.

One year before the end of the project the PSC will validate a closing action plan. Six months before the end of the project, an updated closing action plan and a financial balance (see guideline closing procedure) will be set up by the PMU and submitted and approved by PSC. The last will, among other issues, list the last commitments, the potential guarantee, advances or any liabilities towards external parties.

The PSC will agree upon the re-allocation of the funds remaining on the projects accounts. The final financial report must be submitted in the next three (3) months after the end of project activities and at the latest six (6) months before the end of the Specific Agreement.

Drafting the Final Report is the responsibility of the PMU that could decide to hire and external consultant for this purpose. The Final Report shall be submitted to the PSC members at the final Steering Committee meeting for approval. The report will comprise an overview of the realized activities and include a survey of the status and opinion of a representative sample of beneficiaries related to the impact of the Project. The final financial report of the project is also the responsibility of the PMU.

The PSC is responsible for recommendation and approval of the final closure of the accounts. The last Project Steering Committee shall decide on the destination of all program equipment, and the remaining financial resources, if any. The project will be closed at the latest at the end of the validity period of the Specific Agreement (duration of the intervention + 1 year).

Beyond the validity of the Specific Agreement, no expenditure will be accepted unless it relates to commitments entered into force before the expiry date of the Specific Agreement and has been approved by the PSC.

5.5.13 Reporting

The quality (reliability, timeliness, completeness) of the reporting will determine the future disbursements for the project.

All reports must be issued in both Vietnamese and English. In case of differences of interpretation, the English version will always prevail.

BTC may ask for additional information on the report content and/or additional documents.

Progress reports

The frequency and format of the progress reports shall comply with the harmonized reporting system agreed between the Government of Vietnam and the donors, in accordance with Decision 803/2007/QD-BKH on ODA Reporting Mechanism and Formats (issued by the Minister of MPI) and use its prescriptions and templates.

During the starting up phase, on the basis of the PMU and BTC proposals, the first PSC will decide on the reporting structure and all necessary templates. If necessary, the Vietnamese system will be amended to guarantee that the reports will include the following requirements:

- Overview of activities executed and results achieved: *this part will identify the difference between what has been planned (on an operational and financial ground) with what has been implemented:*
    - follow-up of the implementation of the planning with a list of the activities implemented;
    - follow-up of the procurement plan;
    - if useful, narrative of the activities;
    - list of incomes and expenses of the previous quarter;
    - budget follow up;
    - cash flow reports (bank account statements and cash reconciliation).
- Analysis of the implementation: *this part will identify the reasons for not respecting the planning, clear action plan with corrective measures, responsible and deadlines.*
    - identification and description of successes;
    - identification and description of problems;
    - a narrative highlighting the discrepancies with the previous periods;
    - identification and description of risks.
- Activity and financial planning update:
    - update of the planning taking into account the analysis of successes, problems and risks;
    - update of the procurement planning;
    - The three-monthly budgeted Action Plans and list of main engagements;
    - The related cash forecast.

Specific information for the SC meetings

The following documents will be presented to the SC:

(i) The progress reports of the implementation period since the former SC

(ii) action plans for the following 6 months (compiling information regarding operations, procurement and financial planning)

(iii) strategic recommendations and / or decisions to be endorsed by the SC

Annual report

The PMU Director will present annually a result-oriented consolidated report on progress towards results (output and outcome) and concisely assess progress, suggest recommendations to the PSC and highlight lessons learned, to be sent no later than end of February every calendar year for submission to DGD

The standards set in the BTC M&E Policy must be respected. The timing will respect the Belgian and the Vietnamese requirements.

Reporting is to be undertaken regularly in accordance with the following table.

Table 24: Reporting Summary

Reports	Responsible	Content	Destination
Quarterly progress report and operational planning	PMU Director	Progress reporting and planning (activities, finance, tenders, …)	MOST BTC Representation
6-monthly progress report and action plan Prior to a Steering Committee meeting	PMU Director	Progress reporting and activity and financial planning	PSC
Annual Report	PMU Director	Annual progress report (results, activities, budget)	PSC BTC representation DGCD Hanoi
External audit reports	Auditing firm	Financial audit + value for money	PSC BTC representation DGCD Hanoi
MTR Report	External consultant	External Midterm review	PSC BTC representation DGCD Hanoi
Final Evaluation Report	External consultant	Final Evaluation	PSC BTC reprsentation DGCD Hanoi
Final Report	PMU Director	Provisional acceptance of program activities	PSC BTC representation DGCD Hanoi

5.6 Modification of the TFF

The Joint Steering Committee may approve any proposed modifications to the TFF, except for modifications of the objectives, the total budget, the duration of the project, the execution modalities and the exclusion of subsidies and for budget modifications of more than 10% compared to the budget line of the TFF.

6 CROSS CUTTING THEMES

6.1 Environment

The BIPP project will take place in a context where environment is an important issue both for Vietnam and for Belgian authorities. A series of five projects related to environment and climate change have been formulated in 2012 and should be implemented as of the end of 2013. A first set of 3 projects at province level dealing with water management and urbanisation in the context of climate change have been formulated in the provinces of Ha Tinh, Ninh Thuanh and Binh Thuanh. In addition to these 3 projects, a Technical Support Unit will be in charge of providing expertise and know how throughout the projects implementation phase, The Support Unit could also be an asset and a reference for the BIPP project. The fifth project is a support to the implementation of the Green Economy Strategy of Vietnam which will take the shape of a 5 million euros Facility dedicated to finance pilot projects, show cases, case studies, capacity building and communication activities related to the green economy of Vietnam. The links between the Green Economy Facility and the BIPP projects may be expected to be high since they both relate to the necessity for Vietnam to invest in new (greener) ways of doing business, in new approaches in the use of raw material, water, or energy and in new market opportunities being more sustainable economically and ecologically. It is expected that both projects may benefit from each other's experiences and successes.

More specifically, the BIPP project will develop the following principles for all its activities:

- Applicants for the Innofund operating in areas of "green technology" will receive special consideration. Details and specific criteria will be provided in application documents and guidelines, and the jury in charge of selected projects proposals will pay due attention to the ecological qualities of applications with a view of promoting innovative concepts, designs, approaches and business paradigms
- All applications for the Innofund will be expected to adhere to specific environmental standards and regulations which will be specified in the tender documents.
- The Road Map on pre-incubation and incubation will seek to mainstream environmental protection throughout the document.
- Capacity building in the field of environment will be strongly supported, for both public bodies and private partners.

In order to verify and document the fact that the project is following these principles regarding environmental issues, specific criteria will be defined in the future monitoring framework designed within the project.

Expertise in the field of environment will be provided for through the project according to the specific needs identified to promote, select or support projects.

Exchanges and contacts with other incubators related to green issues will be encouraged in order to facilitate the creation of networks and draw synergies.

6.2 Gender

Applicants from women for support from the Innofund will receive special consideration.

The Road Map on pre-incubation and incubation will seek to mainstream gender equality throughout the document.

6.3 Social economy

The social economy can be broken down into three sub-sectors; the community sector, the voluntary sector and the social enterprise sector with the latter comprising businesses with primarily social objectives whose surpluses are principally reinvested for that purpose in the

business or in the community, rather than being driven by the need to maximise profit for shareholders and owners.

BIPP will have no impact – positive or negative – on the community or voluntary sectors.

However, BIPP will support the operation of TBIs – which can operate as either standard commercial enterprises or social enterprises.

6.4 Children's rights

BIPP will have no impact – positive or negative – on children's rights. In the call for proposals of the INNOFUND, the selection criteria will have to specify how children's rights regarding more general labour rights (both Vietnamese and international) such as decent work will be monitored or taken into account.

The Innofund selection committee will have to safeguard this theme.

6.5 HIV / AIDS

BIPP will have no impact – positive or negative – on HIV/AIDS. It is without saying that no selection criteria within the Innofund may discriminate vulnerable groups. The PMU will have to organize a reflection during the drafting of the Innofund call for proposals and of the Innofund Manual (Procedure Guide) regarding the integration of all transversal themes.

7 ANNEXES

7.1 Logical framework

	Logical of the intervention	Indicators	Sources of verification	Hypotheses
GO	The Overall Objective of this project aims to contribute to the social-economic development strategy of Vietnam and assist Vietnam to continue its economic growth to become an industrialized nation by the year 2020 through a strong force of S&T enterprises.	400 incubator tenants in Vietnam by 2020	M&E System	
		Number of TB incubators operating in Vietnam increases to 20 by 2020	M&E System	
		Number of Vietnamese incubators achieving financial self-sustainability increases to 50%	M&E System	
		Number of jobs created by incubator tenants	M&E System	
SO	The Specific Objective of the project is to support the MoST in developing an enabling environment for S&T SMEs based on an improved legal framework and a set of coherent mechanisms for starting and operating S&T incubators to enhance the S&T SME sector.	Circular on technology business incubation issued	Formal publication of circular	<u>Specific objective to Overall objective</u> 1. No major economic downturn in the Vietnamese economy.
		Decree 80 revised in accordance with the recommendations contained within the Road Map (to give improved benefits to S&T enterprises)	Published revisions to Decree 80 and its implementing circular	
		Legal document regulating the function to support science and technology business incubators form state funds	Formal publication of circular	
R 1	An enhanced legal framework for incubation	Draft circular on technology business incubation	Submission of final draft of the circular to MOST and BTC	<u>Result to Specific objective</u> R1. Policy/legislative reforms proposed by BIPP are adopted by the Government of Vietnam
		Road map on pre-incubation	Submission of the Road Map to MOST and BTC	

		Recommendations (within the Road Map) for improved inter-ministerial and/or inter-agency submitted	Submission of the recommendations (within the Road Map) to MOST and BTC	R2. Incubators are operated in accordance with recommendations as to best practice and with their approved business plans R3. Government adapts existing funding instruments (NAFOSTED etc.) or established a new State funding instrument to provide on-going Innofund-type support R4 Feedback from monitoring is utilised to improve policy
R 2	2. Two one-stops shop TBIs supported to pilot best practice in TBI operation and feedback into policy development	15tenants recruited by NACENTECH BIC 5 graduated tenants of NACENTECH BIC	M&E System: annual report of NACENTECH BIC and monitoring reports/visits	
		15 recruited bu HCMC University of Technology TBI 5 graduated tenants of HCMC University of Technology TBI	M&E System: annual report of HCMUT TBI and monitoring reports/visits	
R 3	3. Potential S&T SMEs are incubated and supported through a seed fund (Innofund)	Number of applications for support approved and support provided through Innofund	M&E system	
		Sustainability review of Innofund completed	Submission of report to MOST and BTC	
R 4	4: A monitoring and evaluation framework is established and operated to ensure project results are captured and feedback into the policy development process	Results chains exist for each key results area/sub-area and each has a set of clearly defined indicators - benchmark and target	Submission of results chains to PSC for approval	
		A result monitoring plan exists for BIPP and its results areas	Submission of results monitoring plan to PSC for approval	
		Monitoring reports are submitted to the PSC in accordance with the results monitoring plan	Submission of monitoring reports to PSC for approval	
		Annual BIPP portfolio report submitted to PSC within two months of end of each year	Submission of annual BIPP portfolio report to PSC for approval	

	Activities to reach Result 1	Means
R 1	Result 1 An enhanced legal framework for incubation	
A 1.1	Activity 1.1: Development of a Road Map for the development of all aspects of pre-incubation and incubation	Consultancy support
A 1.2	Activity 1.2: Development of a circular on technology business incubation	Consultancy support
A 1.3	Activity 1.3: Support to essential inter-ministerial and/or inter-agency cooperation with respect to technology business incubation	Consultancy support
A 1.4	Activity 1.4: Study tour to view international best practice in government policies to encourage technology business incubation	Consultancy support, funding for flights, subsistence etc.
A 1.5	Activity 1.5: Networking, awareness raising and information exchange	Funding for publications, media etc.

	Activities to reach Result 2	Means
R 2	Result 2 Two one-stops shop TBIs supported to pilot best practice in TBI operation and feedback into policy development	
A 2.1	Activity 2.1: Support to the preparation of a business plan for NACENTECH TBI	Consultancy support

A 2.2	Activity 2.2: Support to the operational funding (support) of the NACENTECH TBI	Operational funding to an agreed maximum level
A 2.3	Activity 2.3: Procurement of essential office equipment for the NACENTECH TBI	Procurement of equipment
A 2.4	Activity 2.4: Provision of advisory services for NACENTECH TBI	Consultancy support
A 2.5	Activity 2.5: Support to preparation of a business plan for HCM University of Technology – TBI	Consultancy support
A2.6	Activity 2.6: Support to the operational funding (support) of HCM University of Technology – TBI	Operational funding to an agreed maximum level
A 2.7	Activity 2.7: Provision of advisory services for HCM University of Technology – TBI	Consultancy support

	Activities to reach Result 3	**Means**
R 3	Result 3 Potential S&T SMEs are incubated and supported through a seed fund (Innofund)	
A 3.1	Activity 3.1: Design and establish systems for Innofund to act as a support fund providing capacity building	Consultancy support

A 3.2	Activity 3.2: Operate the Innofund (call for proposals, selection and funding)	Financing agreements, Consultancy support and funding for publicity
A 3.3	Activity 3.3: Undertake a study to assess the prospects, potential, operational costs and financial sustainability of operating Innofund as a permanent grant and/or loan-based instrument	Consultancy support
A 3.4	Activity 3.4: Provide support to incubators to assist their tenants with the preparation of applications for investment funding	Consultancy support

	Activities to reach Result 4	**Means**	**Belgian Contribution**
R 4	Result 4 A monitoring and evaluation framework is established and operated to ensure project results are captured and feedback into the policy development process		Costs in Euros €102.000
A 4.1	Activity 4.1: Establish a BIPP monitoring system	Consultancy support	26,400
A 4.2	Activity 4.2: Operate the BIPP monitoring system	Consultancy support	75,600

7.2 Chronogram

Navision Code : VIE 12 047 01

Support to the innovation and development of business incubators policy project (BIPP)

Budget Code	Results/activities	Year 1				Year 2	Year 3	Year 4	Year 5
		Q1	Q2	Q3	Q4				
A_01									
A_01_01	Activity 1.1: Development of a circular on technology business incubation								
A_01_02	Activity 1.2: Development of a Road Map for the development of all aspects of pre-incubation and incubation								
A_01_03	Activity 1.3: Review of the areas where close inter-ministerial and/or inter-agency cooperation is essential to have a positive impact on the development of TBIs and their tenants								
A_01_04	Activity 1.4: Study tour to view international best practice in government policies to encourage technology business incubation								
A_01_05	Activity 1.5: Networking, awareness raising and information exchange								
A_02									
A_02_01	Activity 2.1: Support to the preparation of a business plan for NACENTECH TBI								
A_02_02	Activity 2.2: Support to the operational funding (deficit funding) of the NACENTECH TBI								
A_02_03	Activity 2.3: Procurement of essential office equipment for the NACENTECH TBI								
A_02_04	Activity 2.4: Provision of advisory services for NACENTECH TBI								

A_02_05	Activity 2.5: Support to preparation of a business plan for HCM University of Technology – TBI								
A_02_06	Activity 2.6: Support to the operational funding (deficit funding) of HCM University of Technology – TBI								
A_02_07	Activity 2.7: Provision of advisory services for HCM University of Technology – TBI								
A_03									
A_03_01	Activity 3.1: Design and establish systems for Innofund to act as a support fund providing capacity building								
A_03_02	Activity 3.2: operate the Innofund								
A_03_03	Activity 3.3: Undertake a study to assess the prospects, potential, operational costs and financial sustainability of operating Innofund as a permanent grant and/or loan-based instrument								
A_03_04	Activity 3.4: Provide support to incubators to assist their tenants with the preparation of applications for investment funding								
A_04									
A_04_01	Activity 4.1: Establish a BIPP monitoring system								
A_04_02	Activity 4.2: Operate the BIPP monitoring system								

7.3 ToR long-term personnel

7.3.1 MOST Co-Coordinator

Duty station: Hanoi city with frequent travels to HCMC

Duration of the assignment: 60 months

Recruited by MOST

Tasks

The MOST Co-coordinator will function on a part-time basis as the daily co-leader of the PMU during the life of the Project. S/he will ensure, in conjunction with the BTC Co-coordinator and under the responsibility of the Project Director, that the BIPP is implemented as described in the TF in a smooth and timely manner.

In particular the MOST Co-coordinator will work in close coordination with the BTC Co-coordinator, under the supervision of the Project Director, to ensure that the members of the Joint Steering Committee are well informed of project progress and are adequately supplied with sufficient information to carry out their decision-making responsibilities.

The MOST Co-coordinator (in conjunction with the BTC Co-coordinator) will feed back to the PMU any changes in policy or direction that the Joint Steering Committee may wish to carry out within the Project framework.

Reporting to the Project Director the MOST Co-coordinator shall, in close cooperation with the BTC Co-coordinator:

- Provide overall co-leadership of the PMU and coordinate the operations of the project activities with all key stakeholders so as to ensure the coherence of the project;
- Prepare and submit to the PSC the quarterly progress and financial reports;
- Prepare and submit to the PSC the six-monthly action and financial plans;
- Prepare and submit the operations manual - at the start of the intervention - to the PSC the implementation which includes:
  - Project Operational Procedures Manual
  - Project Financial Manual
- Prepare and submit to the PSC the terms of reference of the mid-term and final evaluation missions
- Submit the business plans of the two pilot incubators to the PSC with recommendations as to whether they should be approved
- Submit the list of projects to be supported by the Innofund on the basis of the recommendations of the Innofund selection committee
- Propose to the PSC any essential modifications of the objectives, the total budget and/or the duration of the project to the Vietnamese and Belgian Government;
- Prepare the final report and oversee the final closure of the project.
- Tender (where envisaged as an action for the PMU) for the procurement of works, goods and services in conformity with applicable regulations
- Provide administrative support to the PSC (secretariat, agenda, documents, minutes; dissemination of minutes);
- Guarantee the project focus on the cross cutting issues;
- Implement such other duties of a reasonable nature as are assigned by the Joint Steering Committee

Reporting

The MOST Co-coordinator shall discuss and agree with the Project Director, the BTC Co-coordinator and the Chairperson of the Steering Committee on the form and frequency of reporting. Besides periodic progress and financial reports the MOST Co-coordinator shall provide the following reports:

- A Starting Up Report six months after commencement of the Project including assessments on the effectiveness of the PMU operations and, if needed, proposing options for improving the structures, systems and procedures;
- Consolidated and coordinated quarterly and annual progress reports including recommendations with justification for improving the effectiveness of the project activities;
- Financial reports in accordance with the requirements of BTC and the Vietnamese authorities;
- Final report summarising the results of the Project including lessons learnt, conclusions and recommendation on how the achievements of the program can be sustained;
- Any other reports as requested by the Chairperson of the Steering Committee and/or BTC.

Qualifications

The MOST Co-coordinator shall be a senior officer of the Ministry of Science and Technology in function, preferably with a project management experience, and science and technology administration or human resources development background, including good communication and coordination skills, English language knowledge, computer use being considered essential. Knowledge and experience of incubation management, ODA donor procurement, safeguards and project accounting mechanisms is preferred.

7.3.2 BTC Co-Coordinator (Vietnamese)

Duty station: Hanoi city with frequent travels to HCMC

Duration of the assignment: 60 months

Recruited by BTC

Tasks

The BTC Co-coordinator will function on a full-time basis as the daily co-leader of the PMU during the life of the Project. S/he will ensure, in conjunction with the MOST Co-coordinator and under the responsibility of the Project Director, that the BIPP is implemented as described in the TF in a smooth and timely manner.

In particular the BTC Co-coordinator will work in close coordination with the MOST Co-coordinator, under the supervision of the Project Director, to ensure that the members of the Joint Steering Committee are well informed of project progress and are adequately supplied with sufficient information to carry out their decision-making responsibilities.

The BTC Co-coordinator (in conjunction with the MOST Co-coordinator)will feed back to the PMU any changes in policy or direction that the Joint Steering Committee may wish to carry out within the Project framework.

Reporting to the Project Director, the BTC Co-coordinator shall, in close cooperation with the MOST Co-coordinator:

- Provide overall co-leadership of the PMU and coordinate the operations of the project activities with all key stakeholders so as to ensure the coherence of the project;
- Prepare and submit to the PSC the quarterly progress and financial reports;
- Prepare and submit to the PSC the six-monthly action and financial plans;
- Prepare and submit the operations manual - at the start of the intervention - to the PSC the implementation which includes:
  - Project Operational Procedures Manual
  - Project Financial Manual
- Prepare and submit to the PSC the terms of reference of the mid-term and final evaluation missions
- Submit the business plans of the two pilot incubators to the PSC with recommendations as to whether they should be approved

- Submit the list of projects to be supported by the Innofund on the basis of the recommendations of the Innofund selection committee
- Propose to the PSC any essential modifications of the objectives, the total budget and/or the duration of the project to the Vietnamese and Belgian Government;
- Prepare the final report and oversee the final closure of the project.
- Tender (where envisaged as an action for the PMU) for the procurement of works, goods and services in conformity with applicable regulations
- Provide administrative support to the PSC (secretariat, agenda, documents, minutes; dissemination of minutes);
- Guarantee the project focus on the cross cutting issues;
- Manage the "own management" elements of the BIPP budget in accordance with BTC regulations and report to the BTC representation as required by those regulations on their commitment and expenditure
- Implement such other duties of a reasonable nature as are assigned by the Joint Steering Committee

Reporting

The BTC Co-coordinator shall discuss and agree with the Project Director, the MOST Co-coordinator and the Chairperson of the Steering Committee on the form and frequency of reporting. Besides periodic progress and financial reports the BTC Co-coordinator shall provide the following reports:

- A Starting Up Report six months after commencement of the Project including assessments on the effectiveness of the PMU operations and, if needed, proposing options for improving the structures, systems and procedures;
- Consolidated and coordinated quarterly and annual progress reports including recommendations with justification for improving the effectiveness of the project activities;
- Financial reports in accordance with the requirements of BTC and the Vietnamese authorities;
- Final report summarising the results of the Project including lessons learnt, conclusions and recommendation on how the achievements of the program can be sustained;
- Any other reports as requested by the Chairperson of the Steering Committee and/or BTC.
- Reports on the use of the "own management" resources as required by BTC regulations.

Qualifications

- University degree in business administration, business economics or a comparable discipline
- Relevant experience in business developments services and support
- Minimum 5 years' experience in the management of complex programs;
- Knowledge of Vietnamese procurement regulations would be extremely advantageous
- Management experience with an international organization or NGO;
- Very good hands-on knowledge of excel and word is essential. Other programs (Database, accounting programs) a strong advantage;
- Proficient in English and Vietnamese;
- Mature, good communicator and team-player;
- Able to work under stressful conditions and not objecting to overtime and field missions.

7.3.3 Consultancy: International Expert: Design of the Monitoring System

Duty station: Hanoi city

Duration of the assignment: 3 months over 1 year

Recruited by PMU (consultancy basis)

Tasks

The expert's main task is to design and establish a BIPP monitoring system based on the Donor Committee on Enterprise Development's Standard for Results Measurement in private sector development[49].

The system should be based on a 'results chain approach'[50] as a method to explain the sequence of events and causal linkages leading to achieving project objectives, and to support the measurement of the performance and impacts of the different elements of the BIPP. The BIPP results chain should link the various inputs, activities [processes], outputs and outcomes leading to achievement of impact relevant to the BIPP and support the examination of causal links and together with further evidence should examine attribution of key links within the project.

The results chains should capture the element of additionality at activity and output level if the project has an element of continuation of existing activity (for example, the HCMUT-TBI).

Any assumptions made in linking elements must be clearly defined as notes to the results chain.

These expected changes must then be translated into relevant (quantitative and/or qualitative) indicators of change; the Contractor must establish systems to track these indicators over time to determine if, and to what extent, expected changes are occurring.

The expert therefore needs, for each step in the results chain, to define at least one indicator to provide the basis for tracing changes in the various levels of the model through to the overall goals of increasing the competitiveness of Vietnam's S&T SMEs. Quantified baselines and targets need to be set for each indicator for the project – at process, output, outcome and impact level: baselines and targets will be disaggregated by gender, where appropriate, to show male / female participation.

At the impact level core indicators these will be:

- Net additional turnover of supported incubators and incubator tenants as a result of the project per year and cumulatively
- Net additional, full time and part-time jobs created directly by supported incubators and incubator tenants as a result of the advisory scheme, per year and cumulatively
- Number of new pre-incubator/incubator initiatives established as a result of the project per year and cumulatively

Indicator definition below these impact targets will be project specific and will thus vary from results chain to results chain. Depending upon the results area and its complexity the contractor may either designate all changes described by the results chain as "key changes" or highlight the most important "key changes" and focus on these. If the second approach is chosen, the expert must explain why the chosen changes are considered "key".

The expert must prepare a Results Measurement Plan (RMP) for each results area of the BIPP (and, in certain instances, below this area into specific activities – for example, for the Innofund). The RMP guides the process of collecting information at all levels of the result chain (from

[49] http://www.enterprise-development.org/page/measuring-and-reporting-results

[50] This is a tool to outline the explicit logic of the project at each stage of intervention from activities to outputs to outcomes to impacts.

activities, to the outputs, outcome and impact). The RMP is likely to include the following information:

- Change level (Impact, outcome, output, activity).
- A reference to the boxes in the BIPP results chains. This is simply the text used in the relevant box in the result chain.
- Indicators corresponding to each box in the result chain with the reference period for the measure specified.
- Baseline data for the indicators.
- Target by end of the project for the indicators.
- A description of how the data on indicators will be collected (data collection tools).
- Identification of the source of data.
- A timeline for when it will be collected.
- An outline is shown in the following table.

Table 24 : Outline of a Results Measurement Plan

Change level	Box # in the results chain	Indicator	Baseline data	Target for the end of the project	Data collection tools	Source of data	When and Frequency

Prior to undertaking site visits the Contractor should prepare a monitoring reporting system based on data collection for each indicator using a table (prepared in MS Excel) (see an example in the following table).

Table 25 : Example of a project level monitoring report

Level in the Result chain	Indicator	Baseline data	Performance data collected	Date	Responsible person	Source/ data collection method

The Expert should design a simple centralised online monitoring system that allows monitoring data on each element of the BIPP and each Innofund-supported project to be rapidly and simply

accessed and allows accumulation of impact data on an overall portfolio level. The online system (which should be available on the MOST website through passworded access should provide for the BIPP. We would propose that this data be available online through a passworded system, which allowed users to access either data on a single specific project or the whole portfolio depending upon their password level. The exact nature of this process will depend upon the allocation of responsibilities.

Each component of the BIP, the two TBIs and each Innofund supported project would have a Monitoring Framework – using Excel - which would comprise (on different Excel spreadsheets):

- Basic project information
- Result chain (with supporting notes)
- Results Measurement Plan
- Project Monitoring Report Data cumulated onto a single spreadsheet to demonstrate progress
- Impact data (employment, income, etc.) would be cumulated on a single Excel spreadsheet with input linked to each project's recoding system spreadsheet.

Reporting

The International expert in the design of the monitoring system will report to the Co-coordinators.

The International expert in the design of the monitoring system will provide the following reports:

- The results chains for all results areas
- The indicators for monitoring each step of the different results chains (both baseline and SMART targets)
- The RMPs for each results area
- The monitoring framework for each results area
- A highly practical and user-friendly monitoring manual for use by local project monitors in undertaking on-going project monitoring and producing monitoring reports. The manual will define in a structured manner all aspects of design, validation and quality control as described in these terms of reference and include sections on updating the manual itself. The manual must contain as annexes all standard letters, report templates, etc. necessary to operate the monitoring system, including instructions as to the operation of the Excel Monitoring Framework. Upon completion of the manual, the expert will organise an introductory training course for local project monitors.

Qualifications

- University degree in business administration, business economics or a comparable discipline
- Minimum 10 years' experience in the design and establishment of monitoring systems for aid programmes
- Knowledge of DCED Standard for Results Management in Private Sector Development
- Excellent hands-on knowledge of excel is essential.
- Fluent in written and spoken English
- Mature, good communicator and team-player;
- Able to work under stressful conditions and not objecting to overtime and field missions.

7.3.4 Vietnamese Project Management and Monitoring Expert: Results Area 1

Duty station: Hanoi city

Duration of the assignment: 48 months over 5 years

Recruited by PMU

Tasks

The Project management and monitoring expert is within the PMU responsible for managing all activities under result 1. He will be (under the direction of the project directors/coordinators) the PMU liaison officer with the national and international consultants for result 1, coordinate and supervise the quality of all activities and actions and co-steer (together with the international consultant and the project coordinators) the implementation of all activities under R1.

The main task of the Project Management and Monitoring Expert (Results Area 1) is to maintain oversight of all activities under Results Areas 1, to operate the BIPP monitoring system with respect to Results Area 1 and to prepare/submit regular monitoring reports on all Result Areas to the Joint Steering Committee[51].

The Project Management and Monitoring Expert (Results Area 1) will prepare annually for the duration of the project a BIPP annual monitoring plan based on the individual RMPs. The will specify in detail the monitoring visits to be undertaken by all three Project Management and Monitoring Experts with a timetable.

The tasks to be timetabled include:

1. The undertaking of regular monitoring in accordance with each Results Area's results measurement plan and reporting accordingly.
2. The reviewing of the results chains at least once per year and the preparation of evidence to justify changes or lack of changes made to results chains.
3. The analysis of monitoring data at both a results area 1 and a portfolio level.

The Project Management and Monitoring Expert (Results Area 1)will ensure that data from each of the Project Management and Monitoring Experts is collected on each BIPP elements' computerised Monitoring Framework and to cumulate this into impact data for the BIPP as a whole and prepare a regular annual portfolio report on the impact of BIPP.

Reporting

The Project Management and Monitoring Expert (Results Area 1)will report to the Co-coordinators.

The Project Management and Monitoring Expert (Results Area 1) will provide the following reports:

- Be responsible for oversight of all aspects of Results Area 1, including managing the performance of the Consultancy Support Team in this results area.
- Be responsible for quality controlling the deliverables of the Consultancy Support Team against Results Area 1.
- Be responsible for monitoring the performance of the Consultancy Support Team against Results Area 1 and ensuring that the Consultancy Support Team meets the requirements of the ToR in full.
- A BIPP annual monitoring plan based on the individual RMPs. The will specify in detail the monitoring visits to be undertaken by all three Project Management and Monitoring Experts with a timetable.
- Regular monitoring reports for Results Area 1 in accordance with the annual monitoring plan

[51]The Project Management and Monitoring Expert (Results Area 1) will act as senior national project monitor and oversee the tasks of the other two project monitors and coordinate their monitoring reports and his/her own monitoring reports into a unified monitoring report

- Regular cumulated monitoring reports for Results Areas 1, 2 and in accordance with the annual monitoring plan
- Reviews of the results chains (1, 2 and 3 on a cumulated basis) at least once per year and the preparation of evidence to justify changes or lack of changes made to results chains.
- Report on the analysis of monitoring data at both Results Area 1 level and a portfolio level.
- Report on the cumulated impact data for the BIPP as a whole
- Regular annual portfolio report on the impact of BIPP.

Qualification

- University degree in finance, business administration or business economics;
- Minimum 5 years' experience in project monitoring of aid programme;
- Sound knowledge of private sector development
- Management experience, and experience with an international organization or NGO;
- Very good hands-on knowledge of excel and word is essential.
- Proficient in English and Vietnamese
- Mature, good communicator and team-player;
- Able to work under stressful conditions and not objecting to overtime and field missions.

7.3.5 Vietnamese Project Management and Monitoring Expert: Results Area 2

Duty station: Hanoi city

Duration of the assignment: 48 months over 5 years

Recruited by PMU

Tasks

The Project management and monitoring expert is within the PMU responsible for managing all activities under result 2. He will be (under the direction of the project directors/coordinators) the PMU liaison officer with the national and international consultants for result 2, coordinate and supervise the quality all activities and actions and co-steer (together with the international consultant and the project coordinators) the implementation of all activities under R2.

The main task of the Project Management and Monitoring Expert (Results Area 2) is to maintain oversight of all activities under Results Area 2, to operate the BIPP monitoring system with respect to Results Area 2 and to prepare/submit regular monitoring reports on that Result Areas to the Project Management and Monitoring Expert (Results Area 1).

The Project Management and Monitoring Expert (Results Area 2) will prepare annually for the duration of the project a BIPP annual monitoring plan for Results Area 2 based on the individual RMPs. The will specify in detail the monitoring visits to be undertaken with respect to Results Area 2 with a timetable.

The tasks to be timetabled include:

4. The undertaking of regular monitoring in accordance with the Results Area's results measurement plan and reporting accordingly.
5. The reviewing of the results chains for Results Area 2 at least once per year and the preparation of evidence to justify changes or lack of changes made to results chains.
6. The analysis of monitoring data at Results Area 2 level.

The Project Management and Monitoring Expert (Results Area 2) will collect data on Results Area 2 using the computerised Monitoring Framework.

Reporting

The Project Management and Monitoring Expert (Results Area 2) will report to the Co-coordinators and the Project Management and Monitoring Expert (Results Area 1).

The Project Management and Monitoring Expert (Results Area 2) will provide the following reports:

- Be responsible for oversight of all aspects of Results Area 2, including managing the performance of the Consultancy Support Team in this results area.
- Be responsible for quality controlling the deliverables of the Consultancy Support Team against Results Area 2.
- Be responsible for monitoring the performance of the Consultancy Support Team against Results Area 2 and ensuring that the Consultancy Support Team meets the requirements of the ToR in full.
- A Results Area 2 annual monitoring plan based on the individual RMPs. The will specify in detail the monitoring visits to be undertaken for Results Area 2 with a timetable.
- Regular monitoring reports for Results Area 2 in accordance with the annual monitoring plan
- Reviews of the results chains (for Results Area 2) at least once per year and the preparation of evidence to justify changes or lack of changes made to results chains.
- Report on the analysis of monitoring data at Results Area 2 level.

Qualification

- University degree in finance, business administration or business economics;
- Minimum 5 years' experience in project monitoring of aid programme;
- Experience in private sector development
- Very good hands-on knowledge of excel and word is essential.
- Proficient in English and Vietnamese
- Mature, good communicator and team-player;
- Able to work under stressful conditions and not objecting to overtime and field missions.

7.3.6 Vietnamese Project Management and Monitoring Expert: Results Area 3

Duty station: Hanoi city

Duration of the assignment: 48 months over 5 years

Recruited by PMU

Tasks

The Project management and monitoring expert is within the PMU responsible for managing all activities under result 3. He will be (under the direction of the project directors/coordinators) the PMU / project liaison officer with the national and international consultants for result 3, coordinate all activities and actions and co-steer (together with the international consultant and the project coordinators) the implementation of all activities under R3.

The main task of the Project Management and Monitoring Expert (Results Area 3) is to maintain oversight of all activities under Results Area 3, to operate the BIPP monitoring system with respect to Results Area 3 and to prepare/submit regular monitoring reports on that Result Areas to the Project Management and Monitoring Expert (Results Area 1).

The Project Management and Monitoring Expert (Results Area 3) will prepare annually for the duration of the project a BIPP annual monitoring plan for Results Area 3 based on the individual RMPs. The will specify in detail the monitoring visits to be undertaken with respect to Results Area 3 with a timetable.

The tasks to be timetabled include:

7. The undertaking of regular monitoring in accordance with the Results Area's results measurement plan and reporting accordingly.
8. The reviewing of the results chains for Results Area 3 at least once per year and the preparation of evidence to justify changes or lack of changes made to results chains.
9. The analysis of monitoring data at Results Area 3 level.

The Project Management and Monitoring Expert (Results Area 3) will collect data on Results Area 3 using the computerised Monitoring Framework.

Reporting

The Project Management and Monitoring Expert (Results Area 3) will report to the Co-coordinators and the Project Management and Monitoring Expert (Results Area 1).

The Project Management and Monitoring Expert (Results Area 3) will provide the following reports:

- Be responsible for oversight of all aspects of Results Area 3, including managing the performance of the Consultancy Support Team in this results area.
- Be responsible for quality controlling the deliverables of the Consultancy Support Team against Results Area 3.
- Be responsible for monitoring the performance of the Consultancy Support Team against Results Area 3 and ensuring that the Consultancy Support Team meets the requirements of the ToR in full.
- A Results Area 3 annual monitoring plan based on the individual RMPs. The will specify in detail the monitoring visits to be undertaken for Results Area 3 with a timetable.
- Regular monitoring reports for Results Area 2 in accordance with the annual monitoring plan
- Reviews of the results chains (for Results Area 3) at least once per year and the preparation of evidence to justify changes or lack of changes made to results chains.
- Report on the analysis of monitoring data at Results Area 3 level.

Qualification

- University degree in finance, business administration or business economics;
- Minimum 5 years' experience in project monitoring of aid programme;
- Experience in private sector development
- Very good hands-on knowledge of excel and word is essential.
- Proficient in English and Vietnamese
- Mature, good communicator and team-player;
- Able to work under stressful conditions and not objecting to overtime and field missions.

7.3.7 Vietnamese Administration and Finance Officer

Duty station: Hanoi

Duration of the assignment: 60 months

Recruited by BTC

Tasks

The accountant is responsible for a variety of finance-related tasks including the ones listed below (this list is not exhaustive). He/she works under direct supervision of the BTC Co-coordinator for all own-management-related expenses and of both the BTC and MOST Co-Coordinators for all co-management-related expenses.

He/she will be one of the members of the PMU, and will work on a full-time basis.

- Responsible for financial administration and procedures;

  - Control all financial administration issues: solves problems, helps improve financial administration by developing tools, points out and corrects errors and problems, reports any major problem to the co-directors and seeks advice from the BTC representation when necessary;
  - Supervise compliance with legal and administrative procedures and guidelines; this implies he/she studies, checks and reinforces financial guidelines and procedures of the Belgian Technical Co-operation (for Regie) in addition to the Vietnamese regulations (for co-management), including the Specific Agreement, the TFF and any guidelines provided from Brussels or the Representation in Hanoi;
  - Ensure all instructions received from the representation or BTC headquarters are correctly applied and followed and that the requests are met within the deadline;
  - Update guidelines and system of all types of payments in project, especially allowances;
- Banking & cheque and cash management
- Prepare, register and keep cheques;
- Ensures all invoices from external parties (contractors, suppliers…) are paid in due time, by bank transfer, cheque or cash and arrange those documents by date: her/his task of preparing bank transfer and cheque documents and manage pipeline payment to external parties;
- Attend and record all bank transactions, maintain bank accounts, ensure monthly bank statements and account overviews;
- Final responsibility for the cash management;
- Ensure liquidation of any internal advances and update advance outstanding by the end of each month and report to the Coordinator;
- Responsible for sound cash planning & cash withdrawals, so as to avoid cash shortages or large amounts cash in safe (security issue);
- Updates fixed asset register, follow up consultancies, contractor contract and stock of stationary.
- Financial activity reporting
- Record all project expenses properly in the accounting software, following guidelines and within the deadlines the latest 15th of the following month;
- Produce financial statements for control by PMU director and coordinator, make all necessary corrections and make all preparations for the monthly closing of the accounting;
- Supervise daily entry of expenses in the cashbook;
- Check and control to ensure quality and completeness of justification and supporting accounting documents of all expenses following guidelines;
- Ensure accounting coding and budgeting lines are corrects: this includes verification of financial reports, expenses and supporting documents;
- Ensure monthly balance of Cashbooks/Cashboxes and bank statements are the same, and responsible for completion and approval of reconciliation statements if any;
- Responsible for transparent and consistent filing of all accounting, banking and cash management documents.
- Produce financial reports whenever requested following format laid out (e.g. for steering committees), or develops customized formats for ad hoc reports (in excel);
- Make electronic back-up of final versions of financial reports.
- Budgeting and financial planning
  - Follow up and update of budget; Compare budget and planning with actual expenses; Provide monthly overview of budget balance to co-management and technical teams;
  - Financial short-and long term planning: overall, yearly and quarterly (in co-operation with co-management and technical teams); monthly and weekly
  - Overall management of bank and cash accounts, making cash calls on basis of the financial planning.
- Auditing and monitoring

- Audit and analyse project expenses monthly, report any inconsistencies or irregularities;
- Control supporting accounting documents on quality and completeness, and follow up on corrections by the accountant;
- Consult and monitor financial issues related to technical project results areas
- Preparing and assisting internal and/or external financial audit missions;
- Any other tasks reasonably requested.

Qualification

- University degree in finance, business administration or business economics;
- Minimum 5years' experience in financial management and project administration;
- Management experience, and experience with an international organization or NGO;
- Very good hands-on knowledge of excel and word is essential. Other programs (Database, accounting programs) a strong advantage;
- Proficient in English and Vietnamese with good translation skills;
- Mature, good communicator and team-player;
- Able to work under stressful conditions and not objecting to overtime and field missions.

7.3.8 Vietnamese S&T policy expert

Full Time position in Hanoi with travel around Vietnam

The National S&T policy expert will provide technical guidance and prepare all activities under R1, in close collaboration with the International and National consultants, and report directly under the Management and Monitoring expert for R1 within the PMU.

Qualifications and skills

- University level education ideally related to public sector management, technology, economics or a comparable field
- Fluent in written and spoken English and Vietnamese
- Excellent written and spoken communication skills
- Diplomatic with good mediation and facilitation skills

General Professional Skills

- Good knowledge of existing Vietnamese government policies, strategies and legislation relating to the development of science and technology, technology transfer and business incubation.
- Some knowledge of best practice in technology transfer, incubation and innovation
- Competent in all aspects of project cycle management.

Specific Professional Experience

- At least 5 years' experience in the management and operation of a state or parastatal organisation responsible for the development of science and technology enterprises, and/or the management and operation of a business incubator and/or the management and operation of a business membership organisation
- Previous working experience on donor-funded projects in Vietnam would be an advantage.

7.3.9 Vietnamese Expert in Incubation Management

This expert will provide the daily support to the two 'project' TBI': Nacentech and HCM UT TBI.

He will support both TBIs in developing the business plan, in close collaboration with the international consultants.

After the approval of the business plans, he will provide the two TBI with continuous support to improve the services of the TBI, to reinforce the operations of the TBIs and to support the management of the TBIs.

The expert will also provide support to the TBIs that were selected under window 2 of the Innofund. For specific expertise under this window 2 of the Innofund, he will draft specific ToR for additional support under the service contract.

He reports directly to the Management and Monitoring expert for Result 3.

Full -time position (48 months) in Hanoi with travel around Vietnam

Qualifications and skills

- University level education ideally related to business or public sector management, technology management, economics or a comparable field
- Fluent in written and spoken English and Vietnamese
- Excellent written and spoken communication skills
- Diplomatic with good mediation and facilitation skills

General Professional Skills

- Good understanding of the processes involved in the management of pre-incubation and incubation, especially technology incubation.
- Good knowledge of best practice in technology incubation

Specific Professional Experience

- At least 5 years' experience in the management of an enterprise support organisation in Vietnam: experience in incubator management would be a great advantage
- Experience in the implementation of SME development projects financed by a donor/government.

7.3.10 Vietnamese Innofund Management Secretary (48 months as from year 2)

The Innofund management advisor will administratively manage on a daily basis all activities deployed under the Innofund. He/she will work in close collaboration with the national and international consultants, and with the Management and Monitoring expert for Result 3. He / she will directly report to the BIPP coordinators.

Tasks

- Manage administratively the Innofund
- Prepare all documents and reports for the Innofund selection Committee
- Manage all contracts or MoU with the beneficiaries of the Innofund
- Assure timely reporting by the beneficiaries of the Innofund
- Report on a quarterly basis to the project coordinators
- Report on a monthly basis to the Management and Monitoring expert of Result 3

Qualifications and skills

- University level education ideally related to business or public sector management, technology management, economics or a comparable field
- Fluent in written and spoken English and Vietnamese
- Excellent written and spoken communication skills
- Diplomatic with good mediation and facilitation skills

General Professional Skills

- Sound knowledge of the operation of open call support schemes to encourage enterprise development.
- Excellent knowledge of best practice in grant scheme management

Specific Professional Experience

- At least 5 years' working experience on a donor-funded open call competitive support scheme in Vietnam would be an advantage.

7.3.11 Vietnamese Secretary/translator

Duty station: Hanoi

Duration of the assignment: 60 months

Recruited by PMU

Tasks

The secretary/translator is responsible for all secretarial and translation tasks of the PMU, including the ones listed below (this list is not exhaustive). He/she works under direct supervision of the Co-coordinators.

He/she will be one of the members of the PMU, and will work on a full-time basis.

- Undertaking all secretarial and administrative tasks of the PMU as called upon by the Co-Coordinators
- Undertaking all translation tasks of the PMU as called upon by the Co-Coordinators

Qualification

- Qualified secretary

- Minimum 5 years' experience in senior secretarial position gained with an organisation in which English was the normal language of work
- Secretarial experience with an international organization or NGO
- Very good hands-on knowledge of excel and word is essential.
- Fluency in written and spoken English and Vietnamese
- Mature, good communicator and team-player;
- Able to work under stressful conditions and not objecting to overtime and field missions.

7.4 ToR for the Consultancy Support Team

1 BACKGROUND INFORMATION

1.1 Beneficiary Country

The Socialist Republic of Vietnam

1.2 Contracting Authority

The Ministry of Science and Technology of the Socialist Republic of Vietnam

1.3 Relevant Country Background

Economic and social situation

Vietnam is a development success story. Political and economic reforms (Doi Moi) launched in 1986 have transformed Vietnam from one of the poorest countries in the world, with per capita income below $100, to a lower middle income country within a quarter of a century with per capita income of $1,130 by the end of 2010.

The passage of the 1999 Enterprise Law which allowed the rapid growth of the Private Sector was probably the single most important factor in Vietnam's economic development.

The ratio of population in poverty has fallen from 58 percent in 1993 to 14.5 percent in 2008, and most indicators of welfare have improved. Vietnam has already attained five of its ten original Millennium Development Goal targets and is well on the way to attaining two more by 2015.

Table 26: Key Indicators

Population (millions).	86.9
Population Growth (Average annual growth rate) % p.a.	1.1
Life expectancy (years)	75
Urban population %	28.8
HDI	0.593
HDI rank (out of 187)	128
UN Education Index	0.503
Gender inequality Index	0.305
GDP p.c.	US$ 3205
Gini Index	37.6
Poverty (Percentage of population living on less than $2 per day)	38.5
Aid per capita	US$ 42.9

Sources: The World Bank, World Development Indicators 2011 | UNDP, Human Development Report 2011.

Vietnam has been applauded for the equity of its development, which has been better than most other countries in similar situations. The country is playing a more visible role on the regional and global stage having carried out the Chairmanship of the Association of South East Asian Nations (ASEAN) in 2010.

The Eleventh Congress of the Communist Party of Vietnam in January 2011 called for a more comprehensive approach to the country's renovation, decided to promote greater citizens' participation and unity within Vietnam, and to engage proactively in international integration. The Congress re-affirmed Vietnam's approach to state-led development, but also revised key policy documents to place greater emphasis on market processes and non-state ownership of economic assets.

The Socio-Economic Development Strategy (SEDS) 2011-2020 gives attention to structural reforms, environmental sustainability, social equity, and emerging issues of macroeconomic stability. It defines three "breakthrough areas": (i) promoting human resources/skills development (particularly skills for modern industry and innovation), (ii) improving market institutions, and (iii) infrastructure development. The overall goal is for Vietnam to lay the foundations for a modern, industrialized society by 2020.

Vietnam's Human Development Index value for 2011 was 0.593 — in the medium human development category—positioning the country at 128 out of 187 countries and territories. Between 1990 and 2011, Viet Nam's Human Development Index value increased from 0.435 to 0.593, an increase of 37.0 per cent or average annual increase of about 1.5 per cent. Between 1980 and 2011, Vietnam's life expectancy at birth increased by 19.5 years, mean years of schooling increased by 1.2 years and expected years of schooling increased by 1.8 years. Vietnam's Gross National Income per capita increased by about 228.0 per cent between 1990 and 2011.

Table 27: Vietnam's HDI Indicators for 2011 relative to Selected Countries and Groups

	HDI value	HDI rank	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (PPP US$)
Vietnam	0.593	128	75.2	10.4	5.5	2,805
Thailand	0.682	103	74.1	12.3	6.6	7,694
Philippines	0.644	112	68.7	11.9	8.9	3,478
East Asia and the Pacific	0.671	—	72.4	11.7	7.2	6,466
Median HDI	0.630	—	69.7	11.2	6.3	5,276

Source: Human Development Report 2011, UNDP

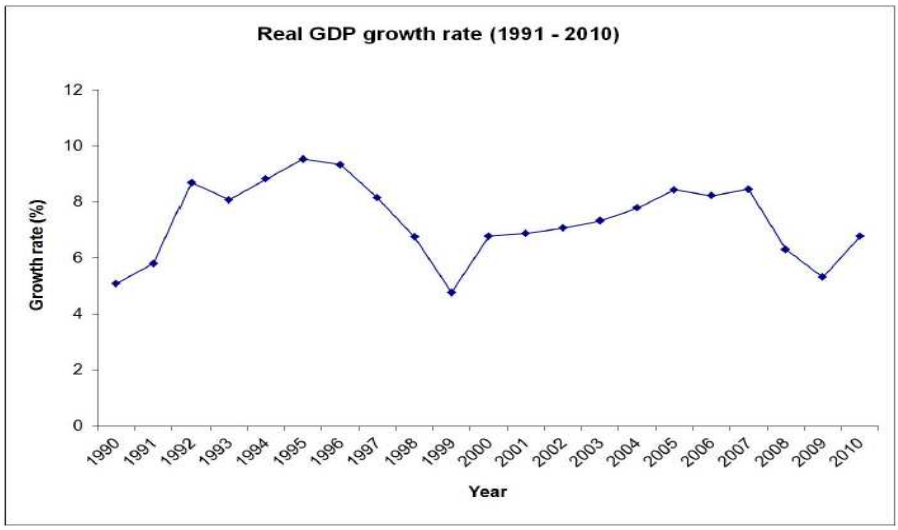
Sector Context

The competitiveness of Vietnamese enterprise

Continuous growth has raised Vietnam's income per capita to over US$1,000 since 2008 and improved other measures of living standards.[52]

[52] Vietnam Competitiveness Report 2010 http://www.isc.hbs.edu/pdf/Vietnam_Competitiveness_Report_2010_Eng.pdf

Figure 4: Real GDP growth rate



Source: Presentation on Vietnam's Science and Technology Strategy 2011 – 2020, NIPASS

However, despite these achievements, the growth process has encountered three serious problems that threaten national competitiveness:

Opting for capital intensive production processes has seen a steady rise in labour productivity – but at the expense of capital productivity – and labour productivity is still low by international standards.

The income gap between the richer and the poorer has widened. Environmental quality is degrading.

According to the World Economic Forum's 2012-2013 Global Competitiveness Report Vietnam ranks 75th out of 144 economies with respect to global competitiveness. The report states "over the last two editions, Vietnam has lost ten places and is now the second-lowest ranked among eight members of the Association of South-East Nations (ASEAN) covered by the report. The country loses ground in 9 of the 12 pillars of the Global Competitiveness Index[53]. It ranks below 50th in all of the pillars. And dangerously close to the 100th position on a majority of them."

Vietnam ranks 104th out of 145 economies in the World Bank's Knowledge Economy Index – an assessment of a country's preparedness to compete in the knowledge economy: a fall of two places since 2010. On INSEAD/WIPO's 2012 Global Innovation Index Vietnam ranks 76th out of 141 economies – a fall from 71st out of 132 economies in 2009.

This reflects that the rapid growth of the Vietnamese economy resulting from the 'easy wins'[54] achieved by the dynamism and flexibility of the emerging private sector enterprises may no longer exist. Factor- and investment-led growth must give way to innovation-led growth to a greater extent than in the past if growth is to continue and if that growth is to be sustainable in the long run.

Technology and innovation

The nature of the globalised economy means that technology is an essential element of enterprise competitiveness. However, the annual investment on science and technology activities accounts for

[53] http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2012-13.pdf

[54] Notably the high labour mobilization rate resulting from its "golden" population structure and the structural shifts from agriculture to manufacturing and services. However labour productivity remains low and sectoral productivity growth remains a major concern.

around 0.8% of GDP[55] and only 2% of total state budget spending[56]: discussions with researchers during the formulation mission at the Vietnamese Academy of Science and Technology revealed that the budget of the Academy was split mostly (an estimated 99%) for research and 1% for the application of that research. The research infrastructure in Vietnam comprises around 600 research institutes and 150 universities. The Vietnam Competitiveness Report 2010 states that "although the number of science and technology institutes increased [from 1995 to 2007], their quality remains low and ... there were only few practical results".

The extent to which an economy is able to adopt existing technologies to enhance the productivity of its enterprises, make use of modern information and communications technologies and innovate to increase its competitive advantage are quantified as its level of technological readiness. With respect to the technological readiness Vietnam's position is poor: ranking only one place higher than Burkina Faso on the availability of latest technology and one place higher than Lesotho on firm-level technological absorption[57].

Table 28: Technological Readiness

Factor	Ranking (out of 144 economies)
Availability of latest technology	137
Firm-level technological absorption	126
FDI and technology transfer	94
Individuals using internet %	80
Broadband internet subscriptions/100 pop	79
International internet bandwidth kb/s per user	85
Mobile broadband subscriptions/100 population	52
Overall technological readiness	98

Source: World Economic Forum Global Competitiveness Report 2012-2013

This limited technological readiness is a significant factor for the growth of competitive enterprises in Vietnam. This is not only in terms of the use, adoption and adaptation of technology, but also for innovation and research and development initiatives, which are critical for sustainable and competitive economic development[58]. Enterprises can benefit from new production, process or organizational technologies in several ways:

The application of new technologies allows enterprises to upgrade their capacities and products. Moreover

New technology often constitutes a major determinant in the development of new products and in improvements to the quality of existing products.

New technology can lead to enhanced efficiency and thus a reduction in production costs.

[55] Of which 0.5-0.6% is spent by the State and the balance by the private sector
[56] Vietnam Competitiveness Index 2010
[57] World Economic Forum Global Competitiveness Report 2012-2013

[58] Fagerberg, J., Srholec, M., Verspangen, B. (2010). "Innovation and Economic Development," in, Handbook of the Economics of Innovation. North Holland: Elsevier, 2010, pp. 833-872.

However, labour intensive production practices remain the main element in Vietnamese manufacturing with 80% of enterprises using human-operated machines and only eight percent using only computer-operated machines[59]. The same survey found that only 12% of enterprises in Vietnam actively engage in research and development and that these were primarily large enterprises. Vietnam demonstrates a low level of innovation which is reflected in the low level of registered patents by Vietnamese inventors. In a recent survey[60] of business leaders in 25 economies Vietnam scored lowest as to concerns about protection of its intellectual property rights (with Germany and Singapore scoring the highest concern) reflecting the low valuation of Vietnam's intellectual property rights.

Table 29: Patents Granted From 1981 To 2008

	Patent granted for		
	Vietnamese	**Foreigners**	**Total**
1981-1989	74	7	81
1990	11	3	14
1991	14	13	27
1992	19	16	35
1993	3	13	16
1994	5	14	19
1995	3	53	56
1996	4	58	62
1997	0	111	111
1998	5	343	348
1999	13	322	335
2000	10	620	630
2001	7	776	783
2002	9	734	743
2003	17	757	774
2004	22	676	698
2005	27	641	668
2006	44	625	669
2007	34	691	725
2008	39	627	666
Total	360[61]	7,100	7,460

Source: National Office of Intellectual Property website

Enforcement of intellectual property rights remains a significant problem in Vietnam: there have been many cases where IPR violations are either inadequately sanctioned or not sanctioned at all. This has discouraged enterprises from renovating their technology. According to the National Intellectual Property Office there were 2,766 cases of intellectual property infringement in 2008 – up by 300 cases in comparison with 2007. The European Commission's 2009 IPR Enforcement Report

[59] Firm-level Competitiveness and Technology in Vietnam: Evidence from a Survey in 2010, Business Sector Programme Support (BSPS), Royal Embassy of Denmark in Vietnam
[60] GE Global Innovation Barometer 2013
[61] 450 Vietnamese applicants were granted protection titles for Utility Solutions during the same period.

classified Vietnam as one of the countries where IPR infringement is a serious problem – citing deficient enforcement of domestic IPR regulations, poorly trained enforcement officials and long and complex procedures to try to uphold one's IPR.

Innovation refers to the creation of better or more effective products, processes, technologies, or ideas. This can occur at many different levels, for example by creating products that are new just to the innovating firm, to the market, to the country, or completely new at the international level. Most of the innovation taking place among Vietnamese enterprises can best be described as relatively modest in nature, leading to new products or processes at the level of the firm (47% of firms undertaking R&D) and local market (39 percent), and rarely resulting in anything new internationally (under 2 percent).[62] These results show that very few firms in Vietnam innovate, and they are thus likely to use technology developed outside of the firm. For those that do innovate, they are in general not creating entirely new products or processes: most firms chose to copy each other rather than innovate. Vietnam was ranked 24th out of 25 countries in a survey of the quality of the policy environment for innovation – with Nigeria coming last – both by self-evaluation and by evaluation by businessmen from the other 24 countries[63].

Over the last decade there has been increasing acceptance among policy makers globally of the idea that technology diffusion [technology transfer] produces most of the economic benefits of new technology. It is "not the creation of technological leadership in itself that affords a nation its competitive advantage, but the rate and level of diffusion of the technology into economic use"[64]. Technology adaption (a key element of diffusion), which involves the modification and refinement of already existing technologies rather than original research and development, is undertaken by 23% of Vietnamese enterprises with the majority being small in size: the adaptation activities cannot be defined as research-based or new-to-world, but they are innovative and directed at the development of appropriate technologies for the enterprises in question. The main motivation for enterprises to undertake technology adaption is to improve product quality and to increase productivity and capacities and the main reason for adaptation is not that an appropriate technology is not available in the market – but that it is considered too expensive.[65]Quality remains a significant problem: the World Bank's 2005 Enterprise Survey indicates that only 11.4% of enterprises having internationally recognised quality certifications compared to 22.4% for the region.

According to the 2008 Enterprise Survey of the 205.529 surveyed enterprises, 1,340 were in the field of science and technology – 0.65% of the total. Of these 26.3% were in the State sector, 63.3% in the domestic private sector and 10.4% in the foreign invested sector. The average technological and scientific research and development investment amongst these enterprises is equivalent to 1.15% of their pre-tax profit; of which 0.4% for R&D and 0.69% for technology absorption.

The true extent of innovative activities taking place in Vietnamese firms is therefore not as limited as the extent of research and development might suggest: this indicates a clear need for policy support to encourage technology adaptation by SMEs to improve quality and competitiveness.

Business incubation

11 incubators have been established nationally – but very few appear to have achieved commercial or financial viability to date and at least one has ceased operation.

A survey undertaken as part of the formulation of the BIPP identified that:

- There is a perceived need for the services of an upgraded S&T TBI in both Hanoi and HCMC.

[62] Firm-level Competitiveness and Technology in Vietnam: Evidence from a Survey in 2010, Business Sector Programme Support (BSPS), Royal Embassy of Denmark in Vietnam
[63] GE Global Innovation Barometer 2013

[64] Rothwell, R. and Zegfeld, W. (1985), Re-industrialisation and Technology, Essex: Longman

[65] Firm-level Competitiveness and Technology in Vietnam: Evidence from a Survey in 2010, Business Sector Programme Support (BSPS), Royal Embassy of Denmark in Vietnam

- Advance research and development equipment, including prototyping is seen as core requirement crucial to the success of spin offs and should be supported as it is scarce at present

- Prototyping, scaling up, certification, standardization, market research and product commercialization are all viewed as of critical importance.

- Potential spin offs in both city needs support in obtaining accessing to financial resources for investment. This includes support in networking with venture capitalists and other investors and improved information on possible financing sources.

- There is a strong demand (and need) for capacity development in management disciplines including marketing, accounting, human resource management, negotiation skills and project management).

- Potential start-ups in Hanoi stressed more than their counterparts in HCMC the need for support with human resource development and in networking with potential customers. There is a need for support from mentors.

- HCMC potential start-ups stressed the need for individual business counselling, accounting services and expressed need for office space and production facilities.

- Potential spin offs would be, in general, willing to pay a reasonable price for the incubator space

- The potential technology fields of the spin-offs included applications in the fields of environment, renewable energy, ICT, and applications in agriculture, food and health.

Government support policies

Vietnam's Science and Technology Strategy for Social and Economic Development 2011 – 2020 sets challenging objectives:

- Total expenditure on R&D rising to 0.2% of GDP by 2020 with the private sector contribution rising from the current 0.25% to around 1.4% of GDP

- 9-10 researchers/10000 people by 2015 and 11-12 researchers/10000 people by 2020.

- Contribution of high-tech to GDP is 45% by 2020;

- The technological innovation rate achieve 10 -15% (2011 – 2015) and > 20% (2016 – 2020)

- International publications increase by 15-20% per annual.

Prime Minister's Decision No. 1244/QD-TTg of 25 July 2011 "approving major scientific and technological orientations, objectives and tasks during 2011-20" sets the objectives of:

- "To improve mechanisms and policies to support the development of science and technology businesses.

- To seek and detect young potential and strong research groups from universities and research institutes to support technology incubation and science and technology business incubation, commercialization and transfer of scientific research and technological development outcomes".

According to Prime Minister's Decision 49/QD-TTg on the list of prioritized technologies, the main tasks of the Science and Technology Development Strategy 2011 – 2020 are: (i) Reforming the R&D system and management mechanisms {Restructuring the research organization system in Vietnam;

Changing the financing mechanism for R&D, Encouraging PPP in R&D]; (ii) Developing national science and technology capacity [R&D excellence centres; High-tech parks; Human resources; Technology transfer systems]; and (iii) Setting priorities [Information technologies; Biotechnologies; New material technologies; Mechanic – automation technologies].

The Law on Technology Transfer (80/2006) provides a legal basis for technology transfer.

Decree 80/2007/ND-CP on science and technology enterprises provides the basis for defining and certifying science and technology enterprises. It also provides a wide range of support policies for those S&T enterprises which register with their provincial DOST. Additional detail on the implementation of Decree 80 is given in Joint Circular 06/2008/TTLT-BKHCN-BTC-BNV.

Decree 115/2005/ND-CP provides the mechanism for public scientific and technological organizations to achieve autonomy and self-management, which is specified as an essential requirement so as to reduce the demands on the State budget.

Article 14 of Decree No: 56/2009/ND-CP prescribing the policies and management support state assistance for development of small and medium enterprises states that the State "encourages the establishment of business incubators" and gives responsibility to the Ministry of Science and Technology to coordinate with concerned agencies in "formulating policies which give priority to small and medium enterprises to participate in such incubators.

Article 3 of Decree No: 122/2003/ND-CP on the establishment of the National Foundation for Science and Technology Development states that NAFOSTED can finance or lend capital to:

- "Trial production projects; scientific and technological tasks in line with the State's priority scientific and technological directions, which are performed by enterprises;

- Projects on the application or transfer of scientific and technological research results in order to raise the competitiveness of products and the efficiency of socio-economic activities".

Article 5 states that "the Foundation shall finance or lend capital for the performance of scientific and technological tasks not belonging to the scientific and technological programs, schemes or projects included in the State's plans, which are of national, multi-branch or regional significance and proposed by organizations and individuals of all economic sectors. This indicates that funding of S&T enterprises and S&T incubators is legally possible, NAFOSTED provided grants equating to approximately VND 150 billion and advises that around 20% of the funding went to approximately 30 enterprises. No funding has been provided to incubators to date. There is no legal reason why NAFOSTED could not fund either S&T incubators or the tenants of S&T incubatees. However, in order that it actually did so it would probably need a specific instruction from the Minister of Science and Technology. There is probably a need to demonstrate the importance of the concept and the planned Innofund could ask as an appropriate demonstration model.

Additionally, on 5th August 2011, the Prime Minister approved the establishment of the National Innovation Fund (No.1342/QĐ-TTg). This is a state non-profit financial institution. It can provide preferential loans, loan interest support, credit guarantees for organisation, individuals and enterprises to undertake research, technological transfer or innovation. The registered capital for this Fund is intended to be VND 1,000 billion VND (US$50 million), financed by the state budget for science and technology. The fund is expected to be replenished every year to maintain the registered capital level. The fund is not yet functional according to MOST.

There are no specific strategies, policies or legislation for supporting the development of technology business incubators.

The results of the policies have not been entirely successful and this has been exacerbated in gaps in policy relating to technology business incubation:

- There is “insignificant technology transfer from research institutes to enterprises and universities[66] focus on pure basic research”.[67]

- Expenditure on state R&D is still focused on research rather than the application of that research.

- Of the approximate 1,300 S&T enterprises in the country only 10 in HCMC and 11 in Hanoi have registered under Decree 80: despite its apparent significant benefits.[68]

- As of 2009, according to MOST[69], only 45% of scientific and technological institutes had changed their organisation and operating mechanism towards becoming self-financing.

Lessons learnt

The German Government and the EC have piloted TBI development in Vietnam (see section 1.3.3). The key lessons learnt are:

- Financial sustainability of TBIs is a critical factor: financial self-sustainability is achievable but is likely to take at least 4 years to achieve and TBIs should not be supported if they are unable to forecast - on a reasonable and realistic basis - that they can become financially self-sustainable within this period.

- TBIs must be integrated into an overall Government policy on incubation that actively coordinates the roles of the key Government agencies and ministries who are stakeholders in the process.

- Success of a TBI depends upon the leadership given by its director: successful incubators all have a “champion”.

- TBIs need to provide a close link between research and innovation activities and not be located far from potential tenants.
- Transfer of international best practice is an essential element of the TBI development process: the necessary best practice knowledge to be transferred to both incubator management teams and their incubatee clients is often not available in Vietnam.

- There needs to be a consistent and predictable level of support over several years

Conclusions

These factors have led to the BIPP having the following expected results:

- Result 1: Enhanced legal framework for supporting S&T SMEs and TBIs

- Result 2: Incubator policy development enhanced through pilot testing with two one-stop shop TBIs to determine best practices and lessons learnt

[66] “University faculties: little research, overload of teaching. Only a limited number of university faculties have adequate resources for significant R&D: about 4% of total investment” Dr. Tran Ngoc Ca, Chief of Secretariat, National Council for Science and Technology Policy (NCSTP) – presentation to the Conference on Global Innovation Ecosystem
[67] Presentation on Vietnam’s Science and Technology Strategy for Social and Economic Development during the period 2011 – 2020. Dr. Ta Doan Trinh and Dr. Nguyen Quang Tuan, NISTPASS
[68] Source – verbal communication with DOST HCMC and Hanoi
[69] **Deputy Minister of Science and Technology Nguyen Quan, Vietnam News, 2009**

- Result 3: Incubator policy development enhanced through the pilot operation of a seed fund (Innofund) to support the pre-incubation and incubation of potential S&T SMEs to determine best practices and lessons learnt

- Result 4: A monitoring and evaluation framework is established and operated to ensure project results are captured and feedback into the policy development process.

The consultancy support covered by these terms of reference relate to Results 1, 2 and 3 only. Result 4 will be handled by the BIPP PMU.

1.5 Related programmes and other donor activities:

The following projects have been identified as being both current or planned and relevant to the implementation of the BIPP.

Table 30: Key Donor Supported Projects

Project	Donor commitment	Donor and partner	Description
Green Growth Strategy Facility	€5 million	Belgium/ MPI	Increase exchange of know-how between Belgium and Vietnam in the area of climate change mitigation, low carbon development and sustainable urban planning
Inclusive Innovation Project (Project managed by MPI-EDA and supported by IDA borrowing from WB)	US$55 million	MPI-EDA, WB	Lending Project to help strengthen Vietnam' capacity to encourage innovation for improving the lives of the poor and underserved. This will be achieved by: (i) Adopting, upgrading and developing inclusive innovation technologies (primarily through SMEs); and (ii) Strengthening SMEs' technological and innovation capabilities thereby enhancing their competitiveness.
Fostering Innovation through Research, Science and Technology project (FIRST)	US$100 million	WB/MOST	The project will support the development of Science and Technology by (i) knowledge and policy development and (ii) supporting governmental research institutes reform and enterprise innovation.
Green Credit Trust Fund	US$ 5 million	SECO Joint Stock Banks (ACB, Techcombank and VIB) Vietnam Clean Production Centre (VNCPC)	Incentivise SMEs to invest in cleaner production technologies Support SMEs to access to finance

Project	**Donor commitment**	**Donor and partner**	**Description**
Innovation Partnership Programme I and II (IPP I is expected to be completed in 2013 and be followed immediately by IPP II)	€ 5.618.000 (IPP I) IPP II budget is unknown	Finland/MOST	Policy, strategy and regulatory support to MOST Capacity development to central and local government as well as the private sector on managing innovation processes Strengthening innovation partnerships between business, universities and government Supporting innovation partnerships between Vietnamese and Finnish businesses and institutions
Infodev (World Bank)	US$ 38,000		Support to a Mobile Lab project in the Saigon Hi-tech Business Park's incubator to promote mobile application business for the period 2012-2014..

The following projects have been identified as having been completed but are relevant to the implementation of the BIPP.

Project	Donor and partner	Description
Technology management and innovation in South east Asia/Vietnam	Germany/ MOST	The project was formally implemented for the period 2005-2006, aimed at promoting technology business incubators in seven provinces of Vietnam (Hanoi, Ha Tay, Hai Phong, Da Nang, Ho Chi Minh City, Binh Duong, and Dong Nai). The main activities were capacity building through training and coaching programs with three pilot incubators in Hanoi (CRC incubator, Hanoi University of Technology), Hoa Lac hi-tech incubator (Hoa Lac hi-tech Park in the former Ha Tay province), and HCMC University of Technology (Phu Tho incubator). These three incubators were set up with their starting and operational budgets from sources other than MoST.

Project	Donor and partner	Description
EC Private Sector Development Programme	EC/MPI-EDA	Several results areas in the programme: one aimed to foster SME development through the establishment of two replicable business technology incubators in selected sectors of industry, namely the food processing incubator in Hanoi and ICT in Quang Trung software park in HCMC
Mekong Capital	BIO	Capital investment (€2.5 million) by the Belgian Investment Company for Developing Countries SA/NV in Mekong Capital: an investment capital vehicle targeting private sector SMEs in Vietnam, Laos and Cambodia

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2 RATIONALE AND OBJECTIVES

2.1 Overall objectives

The General Objective of this project aims to contribute to the social-economic development strategy of Vietnam and assist Vietnam to continue its economic growth to become an industrialized nation by the year 2020 through a strong force of S&T enterprises.

2.2 Specific objective

The Specific Objective of the project is to support the MoST in developing an enabling environment for S&T SMEs based on an improved legal framework and a set of coherent mechanisms for starting and operating S&T incubators to enhance the S&T SME sector.

2.3 Results to be achieved by the Contractor

The contractor is expected to support the achievement of the following results:

- Result 1: Enhanced legal framework for supporting S&T SMEs and TBIs
- Result 2: Incubator policy development enhanced through pilot testing with two one-stop shop TBIs to determine best practices and lessons learnt
- Result 3: Incubator policy development enhanced through the pilot operation of a seed fund (Innofund) to support the pre-incubation and incubation of potential S&T SMEs to determine best practices and lessons learnt

3 ASSUMPTIONS AND RISKS

3.1 Assumptions

The following assumptions are made.

- Business plans for NACENTECH and HCMUT TBIs demonstrating financial viability within 4 years can be prepared using a realistic basis.
- Adequate number of quality applications submitted to the Innofund.

3.2 Risks

The following risks have been identified with respect to BIPP implementation:

	Risks	**Risk Level**	**Alleviation measure**
Result 1	Government will not adopt necessary policy reforms	Medium	The production of a guiding Road Map (linked to actions to increase awareness in policy makers) should allow policy makers to understand need for reform and move at a realistic pace of reform

	Risks	Risk Level	Alleviation measure
	Poor coordination between key Government stakeholders limits the effectiveness of reforms	Medium	A review of areas where improved coordination is essential will be undertaken and work will be undertaken with an inter-ministerial committee
Result 2	Two pilot TBIs are not operated in accordance with recommendations as to best practice and with their approved business plans	Medium	TBIs must have their business plans prepared with support from qualified consultants and the business plans must be approved by the JSC
Result 3	Selection of projects for support from Innofund is not undertaken on basis of technical need and to broaden knowledge for policy formulation	Medium	Establishment of an Innofund selection committee operating against agreed selection criteria

The contractor is expected to comment on the assumptions and risks in their technical proposal and provide a risk mitigation strategy.

4 SCOPE OF THE WORK

4.1 General

Project strategy

The BIPP project strategy reflects the importance of increasing awareness and understanding of the principles of business incubation as a precursor to meaningful policy change and the development of an effective state support policy for technology incubation.

The project will prepare a Road Map for the development of all aspects of pre-incubation and incubation. This will significantly increase understanding amongst policy makers and practitioners. It will also set a reform agenda and allow policy makers to benchmark Vietnam against its regional economic competitors.

The reform agenda in the road map should lead to policy reform, the development of support policies and programmes and regulatory simplification necessary for the growth of S&T incubators and their S&T clients.

The establishment of two pilot incubators provides a practical field test of pilot policy reforms to assess their cost effectiveness, utility, and efficiency. A feedback loop into further policy reform will be achieved by establishing highly effective monitoring and evaluation systems.

The Innofund will provide funding (through capital grants) for a range of essential capacity building support to potential and existing tenants of S&T incubators: again allowing field testing to determine what forms of support have most impact, are most cost effective and have the greatest impact. The results will again be fed back into policy. Additionally, options for a longer term, sustainable Innofund will be explored to determine their viability. This will include attempting to ensure that either NAFOSTED or the National Fund for Technological Innovation take on the responsibilities and tasks inherent in the Innofund.

Finally, options for access to investment finance will be considered and the results will be fed back into state policy in areas such as encouragement of S&T venture capital funds and business angels.

Underlying principles

The underlying principles that form the basis of the implementation of the strategy are:

- The project is policy-driven and all results areas/activities of the project should be viewed as supporting policy development through pilot testing of policy and therefore should not be supported beyond that purpose.

- TBIs should only receive support if it can be forecast on a reasonable and realistic basis that they can become financially self-sustainable during the duration of the BIPP: the BIPP should not encourage the establishment or expansion of activities that are likely to become a permanent demand on the Vietnamese State budget.

- TBIs should be developed to build on regional resources and competencies in such a manner as to address different but complementary technology fields which allow the clustering of research and business activities.

- TBIs should ensure a close link between research and innovation activities: this linkage is best guaranteed by geographical proximity to universities and research institutes/technology intermediaries.

- Investments by commercial enterprises should not be supported by BIPP but should seek commercial or state/donor funding established for that specific purpose. BIPP should support MOST to develop a network of public, private and donor investors so as to increase the resources available for a wide range of projects or start-ups.

- Transfer of knowledge is an essential element of the BIPP (to MOST, to TBIs and to other key stakeholders) and therefore consultancy support – particularly international consultancy support – is vital to the success of the project. Such an approach should ensure that both TBIs and the clients of the TBIs have access to specialized support through an international and preferably global network of experts.

- An integrated and coordinated approach to the implementation of the three results areas of the BIPP is essential and consultancy support should be designed to encourage such an approach and avoid fragmentation.

- BIPP activities should always strive to improve inter-ministerial, inter-agency, central-provincial level and public-private cooperation and coordination as this is vital to the development of incubation in Vietnam. There is a need for an innovation platform based on a joint effort of the State administration (provincial and local), enterprises, and knowledge institutions (the so-called Triple Helix).

- Policy development should ensure a consistent and predictable level of support over several years (rather than *ad hoc support*): this is why it is important to embed the support activities in national/provincial development policies.

Geographical area to be covered

Based in Hanoi but with actions possibly throughout Vietnam (Results area 3)

Target groups

The beneficiaries of the BIPP include direct and indirect beneficiaries.

Direct beneficiaries:

- MOST – as the responsible ministry for policies supporting the formation and development of S&T enterprises and TBIs
- TBIs throughout Vietnam
- Pre-incubation and incubation clients of TBIs throughout Vietnam supported by the Innofund

Indirect beneficiaries:

- The business community
- The broader S&T community, which consists of 1,500 S&T organizations (R&D institutes, universities, S&T centres, etc.) with a total S&T staff of 60,000 people
- University students
- The general public

Specific Activities

The contractor will undertake the following activities:

Start-up Phase

The start-up phase will last three month. During this phase, the contractor shall carry out the following activities:

- Establishment of the project office at the office space designated by the Contracting Authority.
- Mobilisation of the project team (only key experts and project support staff should be mobilised at this stage).
- Assisting the Contracting Authority in conducting an information and awareness raising campaign about the project.
- Meetings with key partners (MOST, two pilot TBIs – Hanoi and HCMC, NATEC, NAFOSTED, BTC Representation in Hanoi, Ministry of Planning and Investment – AED and FERD, Vietnam Chamber of Commerce and Industry, etc.) to ensure their awareness of the project and to confirm their support for and participation in the project.
- Familiarisation with the key outputs of other BTC projects and other relevant donor-funded projects and government policy and strategy documents and the establishment of a database of all such key documentation.
- Establish contact with the Consultancy support teams of all on-going relevant donor projects and agree a coordination mechanism.

It is clear that the situation on the ground may well have changed in the period between the preparation of the terms of reference and the commencement of operations of the consultancy support team in Hanoi. There will need to be a process of consideration based upon the familiarisation of the team with the current documents and the preliminary meetings and discussions with all project counterparts.

The contractor will then need to:

- Review and assess with the PMU the terms of reference in the light of the actual situation they are facing at the time of their commencement.

- Assess where changes in the terms of reference are needed in the light of the changed realities.

- Recommend to the Contracting Authority and the BTC Representation any necessary changes in the terms of reference accordingly.

- Prepare, in close conjunction with the team's counterparts, detailed action plans reflecting, if necessary, any changes in the terms of reference agreed with the Contracting Authority and the BTC Representation. The action plan will include: (i) a timetable for each of the project activities following on from the inception phase; (ii) a schedule for the achievement of outputs and results; (iii) an input schedule and (iv) a revision, if necessary, of the Logical Framework. The Action Plan will form part of the project Inception Report.

- Present to the Joint Steering Committee the Inception Report (including the proposed Action Plan) for approval.

- Submit the actions plans to the Contracting Authority and BTC Representation for formal approval.

- Prepare – in conjunction with the other core team members and in full consultation with the Contracting Authority:

    i) Detailed terms of reference for the actions of each core team member (including the Team Leader) covering their roles, responsibilities and inputs over the next six months in accordance with the approved Action Plan. This will include definition of required deliverables and other outputs;

- Prepare a visibility strategy for the project observing the Belgian Development Cooperation visibility guidelines and obtaining approval of this from the Contracting Authority and the BTC Representation.

The Start-Up Phase report must be submitted within twelve weeks of the commencement of the project and presented to the joint steering committee within fourteen weeks of commencement.

Implementation Phase

The implementation phase will 54 months.

Result 1: Enhanced legal framework for supporting S&T SMEs and TBIs

The contractor will, in close collaboration, back to back with the MoSt and the PMU and under the steering of the PMU direction:

- **Activity 1.1: Develop a Road Map for the development of all aspects of pre-incubation and incubation**. The Road Map should include a detailed description of the current status of technology business incubation in Vietnam[70] and address all aspects of the enabling environment necessary to encourage the establishment of new and the operation of existing incubators (both physical and virtual), including:

  - The legal and regulatory framework impacting on technology pre-incubation and incubation
  - State support policies for technology pre-incubation and incubation
  - Sources of capital investment and/or operational funding for incubators and their tenants.
  - Capacity building of the management of incubators
  - Raising national awareness of pre-incubation and incubation
  - Encouraging national and international networking of incubators and their tenants

  The road map should define:

  - The existing situation in Vietnam against each element of these elements
  - International best practice (especially in the region) in each of these elements with a benchmarking against Vietnam's performance
  - A vision for the future for each element
  - A reform agenda (short-term, medium-term and long-term) which defines the actions that the government should undertake to achieve the vision.

- **Activity 1.2: Develop a draft MOST circular on technology business incubation** which would address:

  - The eligibility criteria for the provision of State support to new and established technology business incubators.
  - The nature of State support for new and established technology business incubators.
  - The eligibility criteria for the provision of State support to SME tenants of technology business incubators.
  - The nature of State support for SME tenants of technology business incubators.

[70] Including an in depth baseline study of all existing incubators in HCMC and Hanoi to identify lessons learned and factors of success and failure in operating and establishing an incubator in Vietnam.

- The circular should ensure a simplification of the regulatory environment making the operation of incubators simpler and more user-friendly for both operators of the incubators and their tenants.

- **Activity 1.3: Support to essential inter-ministerial and/or inter-agency cooperation with respect to technology business incubation.** Effective inter-ministerial and/or inter-agency cooperation is essential to have a positive impact on the development of TBIs and their tenants through a simplified, integrated and coordinated approach.

  The Road Map (see activity 1.1) can be expected to identify a wide range of areas where reform is essential and where inter-ministerial and/or inter-agency cooperation is essential to ensure reforms are achieved. This will involve the establishment of an inter-ministerial taskforce involving all key ministries where reform actions are likely to be identified to agree where there is a need for reforms to ensure a coordinated and enterprise-friendly approach and ensure that support policies actually provide real benefits.

  The task force should comprise the following key parties (with main areas of interest shown):

  - MOST (including representation from relevant agencies of MOST): with respect to TBIs and support to S&T SMEs, IPR protection, innovation, etc.
  - DOST Hanoi with respect to the on-going operation of TBIs and support to S&T SMEs in Hanoi
  - DOST HCMC with respect to the on-going operation of TBIs and support to S&T SMEs in HCMC
  - MPI – Agency for Enterprise Development with respect to SME development
  - NAFOSTED and National Fund for Technological Innovation on their financial support policies[71]
  - MONRE on land use right registration fee exemption
  - MOF/SBV on tax exemption and preferential financing
  - Vietnam Development Bank on development investment credits
  - MoET on applied TVET and higher education

  There will also be a need for on-going feedback into policy reform over the duration of the project.

- **Activity 1.4: Design and lead a study tour of key stakeholders to view international best practice in government policies to encourage technology business**

[71] This should include determination of whether and how NAFOSTED and the National Fund for Technological Innovation can be utilised to support technology business incubators and their tenants.

incubation: the costs of the study tour will be financed by BIPP to an agreed maximum budget and need not be budgeted by this consultancy support contract.

- **Activity 1.5: Develop a networking, awareness raising and information exchange for all elements of the BIPP and support its implementation:** the implementation costs of the networking, awareness and information exchange plan will be financed by the BIPP to an agreed maximum budget and need not be budgeted by this consultancy support contract.

Result 2: Incubator policy development enhanced through pilot testing with two one-stop shop TBIs to determine best practices and lessons learnt

Under Result 1 the Contractor will support MOST and other key ministries to develop a policy framework for encouraging the development of pre-incubation/incubation. Under Result 2 the contractor will support the PMU and MOST to assist two incubators (one in Hanoi and one in HCMC) with a view to understanding best practice from field testing and to use this data to test the viability of the new policy and draw lessons for further policy development. Specifically the Contractor will:

- **Activity 2.1: Support to the preparation of a business plan for NACENTECH which demonstrates on-going financial sustainability and which will need to be approved[72]as a precursor to all other support.** This would involve:

  - A technology audit across all of NACENTECH's priority research departments to identify innovations[73] which might be commercialised through licensing of intellectual property or spin-off.

  - Identification of potential cross fertilization of business ideas across research departments in cooperation with industry

  - Undertaking of market research to establish the commercial potential of identified innovations.

  The contractor should prepare a business plan, which in their view, is both detailed and realistic as to income, expenditure and cash flow. The maximum deficit that can be financed by BIPP is €250,000 over the duration of the project. The business plan should draw clear conclusions as to whether, with consultancy support from the current contract and this level of deficit funding, the NACENTECH TBI can achieve financial self-sustainability within a period of 4 years. If financial self-sustainability is not achievable within this time frame, then the reasons why it cannot be achieved must be clearly explained in the business plan.

- **Activity 2.2: Support the Contracting Authority with the administration and control of the operational funding (support) to be provided by BIPP to the NACENTECH TBI over a fixed period until the incubator achieves financial viability (in no more**

[72] The business plan should be prepared by qualified international consultants and validated by the project steering committee.

[73] In all cases projects should be innovative, of high quality and generate knowledge in a particular industrial or scientific field which is likely to lead to commercial exploitation and the expected outcomes in terms of likely commercial benefits should be clearly proportionate to the cost of the investment

than 4 years) in accordance with an approved business plan. This will be formalised through an Execution Agreement between the Contracting Authority and the TBI and the Contractor is to provide support to MOST with the finalisation of the Execution Agreement and in monitoring its performance.

- **Activity 2.3: Support MOST with the procurement of essential office equipment for the NACENTECH TBI**. The business plan must specify the equipment requirements in sufficient detail to allow a formal supplies procurement in accordance with Vietnamese procurement regulations to a maximum of €20,000. The contractor will also support the Contracting Authority with the procurement of the equipment.

- **Activity 2.4: Provision of advisory services to NACENTECH TBI, in accordance with the approved business plan.** Actions may include some or all of the following:

  - Improve the management and advisory services offered by the incubator (through consultancy support to the incubator, training of its staff and establishing operational linkages with a Belgium centre of excellence): the twinned centre of excellence would provide support and guidance to both the TBI and its tenants and arrange staff exchanges etc.

  - Raise awareness of the operations and objectives of the incubator amongst key target audiences (particularly researchers and technology enterprises)

  - Improve the national and international networking of the incubator (and the networking of its tenants)

  - Form a network of local and international mentors

  - Develop a virtual incubation system

  - Develop sector specific knowledge transfer networks74 (online networks, conferences, seminars, etc.) linking enterprises and researchers/academics working in the sectors of interest of NACENTECH to enhance the flow of people, knowledge and experience between enterprises and the research/academic community.

  - Develop user-friendly knowledge transfer database defining the expertise, knowledge, skills and facilities that exist within NACENTECH to allow enterprises to see the expertise they can call on.

- **Activity 2.5: Support to preparation of a business plan for HCM University of Technology – TBI which demonstrates on-going financial sustainability and which needs to be approved**[75] **as a <u>precursor to all other support</u>.** This would involve:

[74] See https://ktn.innovateuk.org/web/guest/home for an example
[75] The business plan should be prepared by qualified consultants and validated by the project steering committee

- o A technology audit across all of **for** HCM University of Technology's priority research departments to identify innovations[76] which might be commercialised through licensing of intellectual property or spin-off.

- o Identification of potential cross fertilization of business ideas across research departments in cooperation with industry

- o Undertaking of market research to establish the commercial potential of identified innovations.

The contractor should prepare a business plan, which in their view, is both detailed and realistic as to income, expenditure and cash flow. The maximum deficit that can be financed by BIPP is €250,000 over the duration of the project. The business plan should draw clear conclusions as to whether, with consultancy support from the current contract and this level of deficit funding, the HCMCUT TBI can achieve financial self-sustainability within a period of 4 years. If financial self-sustainability is not achievable within this time frame, then the reasons why it cannot be achieved

- **Activity 2.6: Support the Contracting Authority with the administration and control of the operational funding to be provided by BIPP to the HCM University of Technology TBI over a fixed period until the incubator achieves financial viability (in no more than 4 years) in accordance with an approved business plan.** This will be formalised through an Execution Agreement between the Contracting Authority and the TBI and the Contractor is to provide support to MOST with the finalisation of the Execution Agreement and in monitoring its performance.

- **Activity 2.7: Provision of advisory services to HCM University of Technology – TBI**, in accordance with the approved business plan. Actions may include some or all of the following:

  - o Improve the management and advisory services offered by the incubator (through consultancy support to the incubator, training of its staff and establishing operational linkages with a Belgium centre of excellence): the twinned centre of excellence would provide support and guidance to both the TBI and its tenants and arrange staff exchanges etc.

  - o Raise awareness of the operations and objectives of the incubator amongst key target audiences (particularly researchers and technology enterprises)

  - o Improve the national and international networking of the incubator (and the networking of its tenants)

  - o Form a network of local and international mentors

  - o Develop a virtual incubation system

[76] In all cases projects should be innovative, of high quality and generate knowledge in a particular industrial or scientific field which is likely to lead to commercial exploitation and the expected outcomes in terms of likely commercial benefits should be clearly proportionate to the cost of the investment

- Develop a user-friendly knowledge transfer database defining the expertise, knowledge, skills and facilities that exist within HCM University of Technology to allow enterprises to see the expertise they can call on.

- Develop sector specific knowledge transfer networks[77] (online networks, conferences, seminars, etc.) linking enterprises and researchers/academics working in the sectors of interest of HCM University of Technology to enhance the flow of people, knowledge and experience between enterprises and the research/academic community.

Result 3: Incubator policy development enhanced through the pilot operation of a seed fund (Innofund) to support the pre-incubation and incubation of potential S&T SMEs to determine best practices and lessons learnt

The Contractor will:

- **Activity 3.1: Design and establish systems for Innofund to act as a support fund (consultancy support, training support, hire (or when absolutely essential, purchase) of essential equipment for prototype development, purchase of essential raw materials for prototype development, testing for national standard certification, etc.).** The activities will include:

  - Drafting Guidelines for Applicants to the Innofund with all supporting documents and procedures. An outline of the Guidelines for Applicants is contained at Annex ...

  - Preparing an Innofund operational manual

  - Establishing systems within the PMU for the management, monitoring and control of Innofund. These must meet in full the requirements of the financial management system defined elsewhere in this TFF.

  - Designing and delivering an effective national and provincial advertising / awareness raising campaign for the Innofund and for each open call for proposals, including awareness raising workshops in Hanoi and HCMC to raise awareness of the Innofund to relevant business intermediary organisations, research institutions, existing TBIs and other key stakeholders

- **Activity 3.2: Operate the innofund.** This will include:

  - Delivering workshops to provide guidance to potential applicants on the procedural aspects of the completion of the Innofund application.

  - Launching calls for proposals for the Innofund

  - Establishing and operating the Innofund selection committee in accordance with the requirements of the TFF.

[77] See https://ktn.innovateuk.org/web/guest/home for an example

- Issuing execution agreements to all successful beneficiaries to ensure clear understanding by both parties as to their separate tasks and responsibilities under each contract/memorandum of understanding. The execution agreement will specify the support activities to be provided to successful applicants to the Innofund

- **Activity 3.3: Undertake a study to assess the prospects, potential, operational costs and financial sustainability of operating Innofund as a permanent grant and/or loan-based instrument.** This will be undertaken following operational testing and subsequent evaluation of the operation of the Innofund as a capacity building grant-based instrument – that is, towards the end of the life of the project. The contractor will prepare draft terms of reference for the study and submit these to the Joint Steering Committee for approval prior to implementing the task.

- **Activity 3.4: Provide support to incubators to assist their tenants with the preparation of applications for investment funding.** The contractor will, when requested through an Innofund application, provide advice and support on identifying investment finance sources.

Other activities

The contractor will also:

- Maintain effective coordination with all other relevant projects throughout the duration of the contract.

- Ensure together with the PMU the implementation of the visibility strategy prepared under the start-up phase.

- In addition to the reporting requirements under 7.1, prepare a brief (maximum 2 pages) monthly report which compares planned versus actual actions and reports on any variances and actions that will be taken to overcome delays resulting. The report should also update the activity schedule (where necessary) for the month ahead.

- Ensure careful documentation of all project activities (minutes of important meetings, workshop documentation, training materials, etc. All such project documentation should be annexed to the interim and final reports.

- Translate professionally when so requested by the Contracting Authority project outputs into Vietnamese.

Closing Phase

The closing phase shall last 3 months. During this phase, the contractor shall provide support to the PMU for the following activities:

- Prepare a detailed 3-month action plan for the phase-out or closing phase.

- Prepare and implement a strategy for ensuring the sustainability of the achievements under the project and appropriate exit strategy for BTC support.

- Organize a national workshop to close the programme with all the stakeholders involved.

- Undertake other administrative, preparatory and ancillary tasks relating to final audit, monitoring, reporting on programme execution, achievements, and impact.
- Ensure careful transfer of documentation of all project activities (minutes of important meetings, workshop documentation, training materials, etc. to the corresponding authorities.
- Elaborate final reports.
- Close all financial and management activities and documentations.

4.3 Project Management

Responsible body

The Consultancy Support Team reports to the PMU direction within the Ministry of Science and Technology.

Management Structure

The contractor will establish an effective team led by a Team Leader to manage the implementation of this contract.

The Team Leader will be responsible to the PMU for the overall quality of work of the consultants and for the submission of all progress reports and deliverables to the PMU.

The PMU will be responsible for quality controlling all deliverables and for monitoring the performance of the consultancy support team.

The Team Leader will be responsible for regular liaison with key parties to ensure that the project is being implemented smoothly and that any problems are addressed rapidly. The key parties are:

- The PMU Director
- The PMU co-ordinators
- The PMU management and monitoring experts for each Results Area

5 LOGISTICS AND TIMING

5.1 Location

The operational base for the project is Hanoi, but the project may involve actions throughout Vietnam.

5.2 Commencement date and period of execution

The intended commencement date is XXXXXXXX and the period of execution is 48 months from this date.

6 REQUIREMENTS

The overall estimated budget for this non-exclusive framework contract is maximum of 702000€. This budget is to cover fee rates for all experts). The fee rates of experts must include all the administrative costs of employing the relevant experts, such as relocation and repatriation expenses [including flights to and from the beneficiary country upon mobilisation and demobilisation], accommodation, expatriation allowances, leave, medical insurance and other employment benefits accorded to the experts by the Contractor.

6.1 Personnel

Key experts

All experts who have a critical role in implementing the contract are defined as key experts. The profiles for the key experts for this contract are as follows.

Key Expert No.1: Team Leader/Incubation Policy Expert (international)

Part-time position in Hanoi with travel around Vietnam

Minimum required input in Vietnam of 10 person-months over a four year period

Key expert No. 1 will operate as team leader for the first three years' duration of the project and then transfer responsibility to Key Expert No. 6 for the final one year of the project.

Qualifications and skills

- University level education ideally related to public sector management, technology, economics or a comparable field
- Fluent in written and spoken English
- Excellent written and spoken communication skills
- Diplomatic with good mediation and facilitation skills

General Professional Skills

- Deep understanding of state support policies for pre-incubation and incubation, especially technology incubation.
- Excellent knowledge of best practice in technology transfer, incubation and innovation
- Highly competent in all aspects of project cycle management.

Specific Professional Experience

- At least 10 years' experience in incubation policy development of which at least 5 years gained in a state or parastatal organisation responsible for encouraging incubation.
- Experience in the team leadership of at least two comparable (in terms of scale, sector and size) incubation development projects financed by a donor/government.
- Previous working experience in South-East Asia would be an advantage.

Full Time position in Hanoi with travel around Vietnam

Qualifications and skills

- University level education ideally related to public sector management, technology, economics or a comparable field
- Fluent in written and spoken English and Vietnamese
- Excellent written and spoken communication skills
- Diplomatic with good mediation and facilitation skills

General Professional Skills

- Good knowledge of existing Vietnamese government policies, strategies and legislation relating to the development of science and technology, technology transfer and business incubation.
- Some knowledge of best practice in technology transfer, incubation and innovation
- Competent in all aspects of project cycle management.

Specific Professional Experience

- At least 5 years' experience in the management and operation of a state or parastatal organisation responsible for the development of science and technology enterprises, and/or the management and operation of a business incubator and/or the management and operation of a business membership organisation.
- Previous working experience on donor-funded projects in Vietnam would be an advantage.

Key Expert No. 2 Lawyer (Vietnamese)

Part-time position in Hanoi with travel around Vietnam

Minimum required input in Vietnam of 9 person-months over a four year period

Qualifications and skills

- University level education in Vietnamese law
- Fluent in written and spoken English and Vietnamese
- Excellent written and spoken communication skills
- Diplomatic with good mediation and facilitation skills

General Professional Skills

- Good knowledge of existing Vietnamese legislation relating to the development of science and technology, technology transfer and business incubation.

Specific Professional Experience

- At least 5 years' experience in the drafting of state regulations gained working with a Ministry of comparable body in Vietnam.
- Previous working experience on donor-funded projects would be an advantage.

Key Expert No. 3 Information and awareness expert (Vietnamese)

Part-time position in Hanoi with travel around Vietnam

Minimum required input in Vietnam of 9 person-months over a four year period

Qualifications and skills

- University level education in public relations, marketing or a comparable discipline
- Fluent in written and spoken English and Vietnamese
- Excellent written and spoken communication skills
- Diplomatic with good mediation and facilitation skills

General Professional Skills

- Good knowledge of all forms of communications media (written, electronic, audio and visual)
- Good knowledge of the design and implementation of public awareness campaigns.

Specific Professional Experience

- At least 5 years' experience in the a public relations, marketing or mass communication organisation – all at senior level.
- Involvement in at least one mass communications campaign with responsibility for its design and delivery.

Key Expert No.4: Incubation Management Expert/Deputy Team Leader (international)

Part-time position in Hanoi with travel around Vietnam

Minimum required input in Vietnam of 10 person-months over a four year period

Key expert No. 6 will operate as team leader for the final year's duration of the project.

Qualifications and skills

- University level education ideally related to business or public sector management, technology management, economics or a comparable field
- Fluent in written and spoken English
- Excellent written and spoken communication skills
- Diplomatic with good mediation and facilitation skills

General Professional Skills

- Deep understanding of the processes involved in the management of pre-incubation and incubation, especially technology incubation.
- Excellent knowledge of best practice in technology incubation
- Highly competent in all aspects of project cycle management.

Specific Professional Experience

- At least 10 years' experience in the management of an incubator – preferably a technology incubator
- Experience in the team leadership of at least two incubation development projects financed by a donor/government.
- Experience in the implementation of incubation development projects financed by a donor/government.
- Previous working experience in South-East Asia would be an advantage.

Key Expert No.5: Innofund Management Expert (international)

Part-time position in Hanoi with travel around Vietnam

Minimum required input in Vietnam of 10 person-months over a four year period

Qualifications and skills

- University level education ideally related to business or public sector management, technology management, economics or a comparable field
- Fluent in written and spoken English
- Excellent written and spoken communication skills
- Diplomatic with good mediation and facilitation skills

General Professional Skills

- Deep understanding of the operation of open call support schemes to encourage pre-incubation and incubation, especially technology incubation.
- Excellent knowledge of best practice in grant scheme management
- Highly competent in all aspects of project cycle management.

Specific Professional Experience

- At least 10 years' experience in the management of open call, competitive support schemes to encourage technology transfer, technology incubation and innovation.

- Experience in the design and implementation of at least two open call, competitive support schemes financed by a donor/government.
- Previous working experience in South-East Asia would be an advantage.

Category	Nationality	Description	Minimum years of professional experience
1	International	Highly qualified expert, having assumed important responsibilities within the profession, recruited for his/her capacities of management, perception and judgement.	15
2	International	Qualified expert with very good experience in the relevant sector.	10
3	International	Qualified expert with good experience in the relevant sector.	5
4	Vietnamese	Highly qualified expert, having assumed important responsibilities within the profession, recruited for his/her capacities of management, perception and judgement.	15
5	Vietnamese	Qualified expert with very good experience in the relevant sector.	10
6	Vietnamese	Qualified expert with good experience in the relevant sector.	5

All experts must be free from conflicts of interest in the responsibilities accorded to them.

Note that civil servants and other staff of the public administration of the beneficiary country cannot be recruited as experts.

Support to Results areas 1, 2 and the management of Results area 3

The contractor must allow for an additional 4 person-months of international expertise and 22 person-months of Vietnamese expertise from the non-core expert pool for support to Results areas 1, 2 and the management of results area 3.

Pool expertise is considered likely to cover the following areas:

- Technology business incubation
- Policy and legislation formulation
- Study tour organisation and delivery
- Human resource development

- Networking and public awareness
- Information and communications technology

Support staff and backstopping

The costs of support staff must be included in the fee rates of the experts.

Backstopping costs are also considered to be included in the fee rates of experts.

6.2 Office Accommodation

Office accommodation of a reasonable standard and of approximately 10 square metres for each key expert working on the project is to be provided by the contracting authority.

The running costs of the office accommodation are to be covered by the BIPP and need not be allowed in the contractor's budget.

6.3 Facilities to be provided by the Contractor

The contractor shall ensure that all experts are adequately supported and equipped. In particular it shall ensure that there is sufficient administrative, secretarial and interpreting provision to enable the experts to concentrate on their primary responsibilities. It must also transfer funds as necessary to support its activities under the contract and to ensure that its employees are paid regularly and in a timely fashion.

If the contractor is a consortium, the consortium arrangements should allow for the maximum flexibility in project implementation. Arrangements whereby each consortium member is offered a fixed percentage of the work to be undertaken should be avoided.

6.4 Equipment

No equipment is to be purchased on behalf of the contracting authority/beneficiary country as part of this service contract or transferred to the Contracting Authority/beneficiary country at the end of this contract.

6.5 Incidental expenses

All incidental costs (study tour, awareness campaign, travel costs and subsistence allowances for missions to be undertaken as part of this contract within Vietnam country. etc.) will be financed by the BIPP and need not be allowed for in the budget of the contractor.

7 REPORTS

7.1 Reporting requirements

Interim Reports must be prepared every six month during the period of execution of the contract. They must be provided along with the corresponding invoice and the financial report. There must be a final report and a final invoice at the end of the period of execution. The draft final report must be submitted at least one month before the end of the period of execution of the contract. Note that these interim and final reports are additional to any reports specifically specified as being required in these terms of reference.

Each report must consist of a narrative section and a financial section. The financial section must contain details of the time inputs of the experts. The final report must be accompanied by the final invoice and the financial report.

7.2 Submission and approval of progress reports

The contractor must provide two copies of each report described under 7.1 to the Project manager identified in the contract.

Additionally, a copy of each report must be provided to the BTC Representation in Hanoi.

8 MONITORING AND EVALUATION

8.1 Definition of indicators

The key indicators of success will be the delivery of the defined outputs within the duration of the execution of the project.

The contractor is expected to prepare a detailed timetable of the delivery of the specified outputs within the organisation and methodology section of their technical proposal.

During the start-up phase the contractor will propose for approval by the Contracting Authority and the BTC Representation suitable quantified and time-tabled objectively verifiable indicators for measuring the impact of the project over its duration.

8.2 Special requirements

There are no special requirements.

7.5 Guidelines for Applicants: Innofund

Innofund

Support to science and technology pre-incubation and incubation activities

Open Call for Applications for Support

Guidelines
for grant applicants

Reference: <Call for Applications number>
Deadline for submission of Applications: <date>

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1. Innofund

1.1 Background

The government recognizes that, whilst continuous growth has raised Vietnam's income per capita to over US$1,000 since 2008 and improved other measures of living standards, the growth process has encountered three serious problems that threaten national competitiveness:

- Opting for capital intensive production processes has seen a steady rise in labour productivity – but at the expense of capital productivity – and labour productivity is still low by international standards.
- The income gap between the richer and the poorer has widened.
- Environmental quality is degrading.

According to the World Economic Forum's 2012-2013 Global Competitiveness Report Vietnam ranks 75th out of 144 economies with respect to global competitiveness. The report states "over the last two editions, Vietnam has lost ten places and is now the second-lowest ranked among eight members of the Association of South-East Nations (ASEAN) covered by the report. The country loses ground in 9 of the 12 pillars of the Global Competitiveness Index[78]. It ranks below 50th in all of the pillars. And dangerously close to the 100th position on a majority of them."

Vietnam ranks 104th out of 145 economies in the World Bank's Knowledge Economy Index – an assessment of a country's preparedness to compete in the knowledge economy: a fall of two places since 2010. On INSEAD/WIPO's 2012 Global Innovation Index Vietnam ranks 76th out of 141 economies – a fall from 71st out of 132 economies in 2009.

This reflects that the rapid growth of the Vietnamese economy resulting from the 'easy wins'[79] achieved by the dynamism and flexibility of the emerging private sector enterprises may no longer exist. Factor- and investment-led growth must give way to innovation-led growth to a greater extent than in the past if growth is to continue and if that growth is to be sustainable in the long run.

The nature of the globalised economy means that technology is an essential element of enterprise competitiveness. However, the annual investment on science and technology activities accounts for around 0.8% of GDP[80] and only 2% of total state budget spending[81]: at the Vietnamese Academy of Science and Technology revealed that the budget of the Academy was split mostly (an estimated 99%) for research and 1% for the application of that research. The research infrastructure in Vietnam comprises around 600 research institutes and 150 universities. The Vietnam Competitiveness Report 2010 states that "although the number of science and

[78] http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2012-13.pdf

[79] Notably the high labour mobilization rate resulting from its "golden" population structure and the structural shifts from agriculture to manufacturing and services. However labour productivity remains low and sectoral productivity growth remains a major concern.

[80] Of which 0.5-0.6% is spent by the State and the balance by the private sector

[81] Vietnam Competitiveness Index 2010

technology institutes increased [from 1995 to 2007], their quality remains low and ... there were only few practical results".

The extent to which an economy is able to adopt existing technologies to enhance the productivity of its enterprises, make use of modern information and communications technologies and innovate to increase its competitive advantage are quantified as its level of technological readiness. With respect to the technological readiness Vietnam's position is poor: ranking only one place higher than Burkina Faso on the availability of latest technology and one place higher than Lesotho on firm-level technological absorption[82].

This limited technological readiness is a significant factor for the growth of competitive enterprises in Vietnam. This is not only in terms of the use, adoption and adaptation of technology, but also for innovation and research and development initiatives, which are critical for sustainable and competitive economic development[83]. Enterprises can benefit from new production, process or organizational technologies in several ways:

- The application of new technologies allows enterprises to upgrade their capacities and products. Moreover
- New technology often constitutes a major determinant in the development of new products and in improvements to the quality of existing products.
- New technology can lead to enhanced efficiency and thus a reduction in production costs.

However, labour intensive production practices remain the main element in Vietnamese manufacturing with 80% of enterprises using human-operated machines and only eight percent using only computer-operated machines[84]. The same survey found that only 12% of enterprises in Vietnam actively engage in research and development and that these were primarily large enterprises. Vietnam demonstrates a low level of innovation which is reflected in the low level of registered patents by Vietnamese inventors. In a recent survey[85] of business leaders in 25 economies Vietnam scored lowest as to concerns about protection of its intellectual property rights (with Germany and Singapore scoring the highest concern) reflecting the low valuation of Vietnam's intellectual property rights.

Innovation refers to the creation of better or more effective products, processes, technologies, or ideas. This can occur at many different levels, for example by creating products that are new just to the innovating firm, to the market, to the country, or completely new at the international level. Most of the innovation taking place among Vietnamese enterprises can best be described as relatively modest in nature, leading to new products or processes at the level of the firm (47% of firms undertaking R&D) and local market (39 percent), and rarely resulting in anything new internationally (under 2 percent).[86] These results show that very few firms in Vietnam innovate, and they are thus likely to use technology developed outside of the firm. For those that do innovate, they are in general not creating entirely new products or processes: most firms chose to

[82] World Economic Forum Global Competitiveness Report 2012-2013

[83] Fagerberg, J., Srholec, M., Verspangen, B. (2010). "Innovation and Economic Development," in, Handbook of the Economics of Innovation. North Holland: Elsevier, 2010, pp. 833-872.

[84] Firm-level Competitiveness and Technology in Vietnam: Evidence from a Survey in 2010, Business Sector Programme Support (BSPS), Royal Embassy of Denmark in Vietnam

[85] GE Global Innovation Barometer 2013

[86] Firm-level Competitiveness and Technology in Vietnam: Evidence from a Survey in 2010, Business Sector Programme Support (BSPS), Royal Embassy of Denmark in Vietnam

copy each other rather than innovate. Vietnam was ranked 24th out of 25 countries in a survey of the quality of the policy environment for innovation – with Nigeria coming last – both by self-evaluation and by evaluation by businessmen from the other 24 countries[87].

Over the last decade there has been increasing acceptance among policy makers globally of the idea that technology diffusion [technology transfer] produces most of the economic benefits of new technology. It is "not the creation of technological leadership in itself that affords a nation its competitive advantage, but the rate and level of diffusion of the technology into economic use"[88]. Technology adaption (a key element of diffusion), which involves the modification and refinement of already existing technologies rather than original research and development, is undertaken by 23% of Vietnamese enterprises with the majority being small in size: the adaptation activities cannot be defined as research-based or new-to-world, but they are innovative and directed at the development of appropriate technologies for the enterprises in question. The main motivation for enterprises to undertake technology adaption is to improve product quality and to increase productivity and capacities and the main reason for adaptation is not that an appropriate technology is not available in the market – but that it is considered too expensive.[89]Quality remains a significant problem: the World Bank's 2005 Enterprise Survey indicates that only 11.4% of enterprises having internationally recognised quality certifications compared to 22.4% for the region.

According to the 2008 Enterprise Survey of the 205.529 surveyed enterprises, 1,340 were in the field of science and technology – 0.65% of the total. Of these 26.3% were in the State sector, 63.3% in the domestic private sector and 10.4% in the foreign invested sector. The average technological and scientific research and development investment amongst these enterprises is equivalent to 1.15% of their pre-tax profit; of which 0.4% for R&D and 0.69% for technology absorption.

The true extent of innovative activities taking place in Vietnamese firms is therefore not as limited as the extent of research and development might suggest: this indicates a clear need for policy support to encourage technology adaptation by SMEs to improve quality and competitiveness.

These factors have been exacerbated in gaps in policy relating to technology transfer:

- There is "insignificant technology transfer from research institutes to enterprises and universities[90] focus on pure basic research".[91]
- Expenditure on state R&D is still focused on research rather than the application of that research.
- Of the approximate 1,300 S&T enterprises in the country only 10 in HCMC and 11 in Hanoi have registered under Decree 80: despite its apparent significant benefits.[92]

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[87] GE Global Innovation Barometer 2013

[88] Rothwell, R. and Zegfeld, W. (1985), Re-industrialisation and Technology, Essex: Longman

[89] Firm-level Competitiveness and Technology in Vietnam: Evidence from a Survey in 2010, Business Sector Programme Support (BSPS), Royal Embassy of Denmark in Vietnam

[90] "University faculties: little research, overload of teaching. Only a limited number of university faculties have adequate resources for significant R&D: about 4% of total investment" Dr. Tran Ngoc Ca, Chief of Secretariat, National Council for Science and Technology Policy (NCSTP) – presentation to the Conference on Global Innovation Ecosystem

[91] Presentation on Vietnam's Science and Technology Strategy for Social and Economic Development during the period 2011 – 2020. Dr. Ta Doan Trinh and Dr. Nguyen Quang Tuan, NISTPASS

[92] Source – verbal communication with DOST HCMC and Hanoi

- As of 2009, according to MOST[93], only 45% of scientific and technological institutes had changed their organisation and operating mechanism towards becoming self-financing.

The key findings of this analysis are that there is a need for a support scheme to assist researchers, S&T enterprises and established technology business incubators to develop and commercialise new technologies which will lead to increased competitiveness – and therefore job and wealth creation.

With the support of the Belgian Development Cooperation, Innofund will provide capacity building support in incubation and pre-incubation to:

- Researchers, other individuals and enterprises which are the clients (pre-incubation, virtual incubation, incubation) of new or existing technology business incubators (Window 1)

- Established technology business incubators (Window 2).

Innofund will be initiated as a pilot programme: if the pilot scheme is successful then the Government will consider how it can be established on a more permanent basis.

Innofund is operated on a competitive basis and only the projects that best satisfy the selection criteria will be awarded support.

Information sessions for interested parties will be held at:

- < location in Hanoi> on < date> at <time>; and
- < location in HCMCI> on < date> at <time>; and

The information session will explain in more detail Innofund, the types of project that are eligible for support and how to complete the application form.

Any presentation/documentation delivered in the information sessions will also be uploaded on the MOST website and can be downloaded at this address <web address>.

1.2 Objectives of the Innofund

The global objective of this Call for Project Outlines is to help increase the competitiveness of the Vietnamese economy through improved commercialisation of national research and development

The specific objectives of this Call for Project Outlines are:

Window 1

- Improved transfer of the innovative concepts of Vietnamese researchers and inventors into viable commercial products and enterprises.

Window 2

[93] **Deputy Minister of Science and Technology Nguyen Quan, Vietnam News, 2009**

- Strengthened capacity of technology business incubators in Vietnam to offer the full range of services that their clients need and, through providing such services, become financial self-sustainable.

1.3 Nature of support

The Support will take the form of a financial grant, limited to fund consultancy support (national and/or international expertise) to provide specific support requested in an application. All supported projects must have a consultancy support element.

Other support may be requested with the costs of items essential for the pre-commercial development of products – such as raw materials for prototype development, hire or, in extraordinary circumstances, purchase of essential equipment for prototype development, costs of testing prototypes by national and/or international standards bodies, etc. The non-consultancy support element of support will be limited to a maximum of the VND equivalent of €25,000 per project.

All support will be provided in the form of a cash gran.

Investment in commercial production equipment and for recurrent costs (as opposed to that needed for prototype development) will not be eligible for support.

In order to have a high prospect of selection a project must:

- Be innovative, high quality and generate knowledge in a particular industrial or scientific field which is likely to have commercial value
- Demonstrate expected outcomes in which the likely commercial benefits are clearly demonstrated to be proportionate to the cost of the support requested
- Demonstrate that its planning has involved and its implementation will involve private sector representation to ensure relevance to the needs of enterprises.

2. Rules for this Call for Applications

These guidelines set out the rules for the submission, selection and implementation of actions supported under this Call.

2.1 Financial maxima and minima

Any grant awarded under this programme must fall between the following minimum and maximum amounts:

- The minimum grant size under the Innofund is the VND equivalent of € 15,000.
- The maximum grant size under the Innofund is the VND equivalent of € 45,000.

Proposals that are highly feasible and have positive impact to green growth or employment will be prioritized

2.2 Eligibility criteria

There are three sets of eligibility criteria, relating to:

- applicant(s) which may request support (2.1.1), and their partners (2.1.2);
- types of project for which support may be awarded (2.1.3);
- types of non-consultancy support elements which are eligible for support (2.1.4).

2.2.1 Eligibility of applicants: who may apply?

1) In order to be eligible for support from Innofund, applicants **must**:
   - Be legal persons under the Laws of the Socialist Republic of Vietnam **and**
   - Be directly responsible for the preparation and management of the action with their partners, not acting as an intermediary **and**
   - Under Window 1: Be:
     - a researcher within a recognised Vietnamese university or research institute who is a client (pre-incubation or incubation) of a technology business incubator in Vietnam, or
     - An enterprise established under the Enterprise Law which is a client (pre-incubation or incubation) of a technology business incubator in Vietnam.
   - Under Window 2: Be a technology business incubator:
     - Established as a legal entity in Vietnam under either the Enterprise Law, Decree 43/2000/ND-CP or Decree 115/2005/ND-CP, **and**
     - Provide pre-incubation and/or incubation services (physical and/or virtual) to at least 5 clients at the date of their application.
2) Potential applicants may not participate in calls for applications or be awarded support if:

   - they are bankrupt or being wound up, are having their affairs administered by the courts, have entered into an arrangement with creditors, have suspended business activities, are the subject of proceedings concerning those matters, or are in any analogous situation arising from a similar procedure provided for in national legislation or regulations;
   - they have been convicted of an offence concerning their professional conduct by a judgment which has the force of res judicata; (i.e. against which no appeal is possible);
   - they have been guilty of grave professional misconduct proven by any means which the Contracting Authority can justify;
   - they have not fulfilled obligations relating to the payment of social security contributions or the payment of taxes in accordance with the legal provisions of Socialist Republic of Vietnam;
   - they have been the subject of a judgment which has the force of res judicata for fraud, corruption, involvement in a criminal organisation or any other illegal activity;

Applicant must sign a declaration in which they declare that they do not fall into any of these situations.

2.2.2 Partnerships and eligibility of partners

Applicants may act individually or with partner organisations. Applicants' partners participate in designing and implementing the action, and they are eligible for support in the same way as those incurred by the main beneficiary. They must therefore satisfy the eligibility criteria as applicable on the beneficiary himself.

2.2.3 Eligible activities: actions for which an application may be made

Definition

A project is composed of a set of activities.

Duration

The planned duration of a project may not exceed 12 months.

Sectors or themes

There are no limitations[94] as to specific sectors or themes for this call, but all applications must lead to the commercialisation of the results of scientific research actions. Priority, however, will be given to applications supporting developments in green or environmentally sound technology, which according to the United Nations Conference on Environment and Development Agenda 21 includes technologies which are geared to "protect the environment, are less polluting, use all resources in a more sustainable manner, recycle more of their wastes and products, and handle residual wastes in a more acceptable manner than the technologies for which they were substituted." These include:

Technology Landscape	**Technology Break down**
Bio Fuels, bio mass	Distributed biomass power
	Bio Fuels
	Biogas Generation
Energy Efficiency	Lighting
	Appliances
	HVAC
	Energy efficient manufacturing
	Transmission and distribution
Off grid technologies	Off grid distributed
	Solar pV
	Biogases
	Off-grid Distributed CPV
Solar power	Solar PV
	Concentrated Solar PV
	Solar Thermal
Transportation technologies	Public transport
	Urban Planning
	Electric Vehicles
Water management and purification	Waste water treatment
	Water use efficiency
	Waste water recycling
	Desalination
	Rain water harvesting
	Efficient irrigation
	Potable Water
Wind power generation	Distributed Wind
	Wind farms
Hydro	Micro Hydro
	Hydro
Sustainable agribusiness	New resilient Crops/Seed
	Energy efficiency agri-machine equipment
Climate friendly	Energy efficiency irrigation equipment & system
	Energy efficient food processing

[94] Except for exclusion of prototypes intended for a military or paramilitary purpose or environmentally hazardous production

	Alternative technologies to pesticide / fertilizer labor
Technologies for adaptation (flood / drought control)	Green house
	Waste harvesting and storage technology
	Afforestation technology
Building and advance materials	Materials
	Windows
	Roofing
Mini Grids	Electricity access through mini grids

Location

The project may take place in any location within the Socialist Republic of Vietnam.

Types of activity

Window 1

- Consultancy support to undertake innovation audits across relevant research institutes/university departments to identify innovations which might be commercialised through licensing of intellectual property or spin-off
- Consultancy support, raw material procurement and equipment hire/procurement related to development of prototypes of an instrument or device for potential commercial use (see also activity 3.4)
- Consultancy support (including research, analysis, legal advice, training, conferences, workshops, seminars, networking fora, etc.):
    - for the development and protection of intellectual property (including support with patent registration and "proof of concept" development)
    - for the development of an appropriate intellectual property policy for universities and research institutions to clarify ownership prior to commercialisation.
    - on the licensing to non-academic parties of academic intellectual property for commercial use
    - on market research, feasibility studies, business plan preparation, management and advisory support and identification of funding sources for academic "spin offs"
    - relating to specific joint research and joint pre-competitive production projects: research institutions can undertake research that benefits enterprises within a defined technology cluster.
    - to establish knowledge transfer databases
    - to establish knowledge transfer networks
    - for promotional activities and marketing of knowledge transfer networks: to promote networks, and attract new members, attract sponsorships, promote business opportunities and promote joint research actions.
    - relating to the operation of the knowledge transfer network and its organisational/management structures and arrangements, including developing linkages with international knowledge transfer networks

Window 2

- Technical support (Consultancy support, training, research/analysis, conferences, workshops, seminars, networking fora, development of network specific marketing and promotional information, research/analysis etc.) and training
    - to improve the management (including the capacities of managers of TBI) and advisory services offered by an established incubator (through Consultancy support to the incubator, training of its staff and establishing operational linkages with Belgium centres of excellence)
    - to an established incubator to raise awareness of its operations and objectives
    - to an established incubator to improve its national and international networking (and the networking of its tenants)

    - to an established physical incubator to extend its reach through virtual incubation
- supporting essential shared equipment for S&T Business Incubators, in order to help the TBI to operate stably and develop sustainability

Number of project outlines

An applicant may not submit more than 1 project application under this Call.

An applicant may not at the same time be partner in another application.

Partners may not take part in more than one application.

2.2.4 Eligibility of non-consultancy support items

The following non-consultancy support items are eligible for support:

- The costs of testing prototypes by national and/or international standards bodies hire or, in extraordinary circumstances, purchase of essential equipment for prototype development;
- The purchase or rental costs for equipment (new or used) specifically for the purposes of prototype development provided they correspond to market rates;
- The costs of consumables such as raw materials for prototype development;

The non-consultancy support element of support will be limited to a maximum of the VND equivalent of €25,000 per project.

2.3 How to apply and the procedures to follow

The Innofund is operated on a competitive basis and only the projects that best satisfy the selection criteria will be awarded support.

All applications must be submitted online through the Innofund web portal (web address).

When you downloaded these “Guidelines for Applicants” from the web portal, you registered yourself as a user.

You should have received an e-mail registration confirmation and have been allocated a unique Applicant Identity Number together with a user name and password for logging into the Innofund online application portal.

All further steps of the application process will be undertaken online other than the information session already referred to.

Only applicants registering on the portal and submitting applications electronically using the standard form (see Annex A to these Guidelines for Applicants) using the Innofund online application portal will be considered. Only standard applications completed and submitted according to these guidelines before the defined deadline date will be accepted (which language – English, Vietnamese or both??).

Applicants will receive an automated e-mail acknowledgement of receipt upon the submission of their application to the Matching Grant Scheme online application portal. This acknowledgement will also contain an indicative timetable as to when a formal decision on the application will be taken.

Any error or major discrepancy related to the points listed in the application form may lead to the rejection of the application.

The applicant may revise any of the previously uploaded documents prior to the submission deadline. This can be done by uploading new versions and re-submitting the application to update the data. It is the applicant's responsibility to ensure that all the relevant documents are uploaded to the appropriate section of the Innofund online application portal within the deadline period for submission.

The online portal is designed so that when submitting and uploading documentation, the Innofund online application portal will automatically validate applications and provide warning messages ("missing data", "missing documents" etc.) and automatically block submission of the full application until the problems are corrected.

The deadline for the submission of a Full Application is <date and time>: after the deadline period the online portal will not accept further submissions and will not allow changes to be made to the application.

Clarifications may be requested by the Contracting Authority when information provided by the applicant is unclear, thus preventing the Contracting Authority from conducting an objective assessment.

Applicants will be able to submit online questions through the Innofund portal to help them fill in the form and complete their application. Applicants may submit questions in writing up to 21 days before the deadline for the submission of applications. The Contracting Authority must reply to all such questions at least 11 days before the deadline for submission of applications. In the interest of equal treatment of applicants, the questions and responses of the Contracting Authority will be publicly viewable on the Innofund portal. The Contracting Authority has no obligation to provide further clarifications after this date.

2.4 Evaluation and selection of project outlines

Project outlines will be examined and evaluated by the Innofund Selection Committee appointed by the Minister of Science and Technology. All applications submitted by applicants will be assessed according to the following steps and criteria.

If the examination of the applications reveals that the eligibility criteria are not clearly met (paragraph 2.1), then the project outline will be rejected on this sole basis.

All applications will then be appraised by the Innofund Selection Committee. Each application will be given an overall score out of a maximum of 100 points in accordance with the breakdown provided in the Evaluation Grid (see Annex B to these Guidelines for Applicants).

The Innofund Selection Committee will draw up a list is made up of the proposals obtaining the best scores, ranked by order, within the limits of the resources available under the call for proposals[95]. This list is known as the “preferred list”.

The Innofund Selection Committee also draws up, in the same conditions, a reserve list comprising a limited number of proposals having obtained the best scores after those selected for support. This reserve list is valid during the period mentioned in the evaluation report. The proposals included in that list are to be considered to receive support should selected applicants withdrawing from the process for some reason. The next five projects in the list, ranked by order, are known as the “reserve list”.

If an applicant withdraws or the application is found to be incorrect and the applicant thus barred from support then applications from the reserved list will be considered in due order and undergo due diligence.

Following appropriate due diligence checks the Innofund Selection Committee selects those projects which will be offered Innofund support (Consultancy support and non-consultancy support).

Following approval of the recommendations of the Innofund Selection Committee by the Joint Steering Committee, a support contract will be entered into by the Contracting Authority with the successful applicants.

[95] However, the Innofund Selection Committee may choose not to allocate all the available funds if it finds that there are too few proposals of the quality required to receive support.

Annex A: Full Application Form

Innofund

Application Form

For

Window 1

Reference: <Open Call number>

1. KEY DATA

Title of the Project:				
Window (tick as appropriate)	Window 1		Window 2	
Location of the Project: (tick as appropriate)	Province:			
	Town:			
Name of the lead applicant				
Applicant Identity Number[96]				
Postal address:				
Telephone number: (fixed and mobile)				
Fax number:				
Contact person for this project:				
Contact person's email:				
Address:				
Website of the Organisation:				
Legal status[97]				

[96] This number was issued to you by email when you registered on the website to download the "Guidelines for Applicants".

[97] Legal status under Vietnamese law

Partner(s)[98]	Name, date of establishment and legal status

Any change in the addresses, phone numbers, fax numbers and in particular e-mail, must be notified in writing to the Contracting Authority. The Contracting Authority will not be held responsible in case it cannot contact an applicant.

2. PROJECT DESCRIPTION

• Brief outline of pr oposed project (Max 500 words) • • • •	•
• What is the commercial importance of this project? (Max 200 words) • •	•
• Have you undertaken any market research? • If yes, then please append to your application on submission	•
• Please spell out any innovative features contained in your project	•
• Does you own the IPR relating to this project? • If yes then please	•

[98] Add as many rows as partners.

append to your application on submission. If not then explain the situation		
• Will the project lead to increased employment? •	• Estimated number of new jobs	•
	• Of which, females	•
• What other specific indicators would you propose to measure if the project has achieved its goal? •	•	
• Please define your requirement for consultancy support with the project? Please note every application must have a consultancy support element	•	
• Do you have any non-consultancy support requirements? If so, then please describe. If you require equipment please define whether this is to be hired or purchased. If to be purchased then provide justification of why purchase is necessary	•	
• If a consortium, what is the role of the lead applicant and what are the roles of the other	•	

partners?	
• Would the project proceed without Innofund support?	•
• How do you plan to ensure the continuation of benefits from this project once the project has finished?	•

3 KEY STAFF

• Provide a summary of the project management teams' skills, strengths and experience (Max 500 words) • Please additionally upload up to 5 CVs of key staff completed providing using the provided template to the online application portal	• • • • • •

4. DECLARATION BY THE APPLICANT

The applicant, represented by the undersigned, being the authorised signatory of the applicant, and in the context of the present application, representing any partners in the proposed project, hereby declares that

- The applicant is registered as a (type of institution to be specified) in accordance with (state relevant legislation) since (specify date of incorporation)
- The applicant understands and accepts the conditions of this open call process
- The information given in this application is factual and complete and the applicant understands then any falsification of data may result in the application being rejected.
- The applicant's staff has the professional competence and qualifications specified in Section 3 of this application.
- the applicant is directly responsible for the preparation, management and implementation of the project with its partners, if any, and is not acting as an intermediary;
- the applicant and each partner (if any) are eligible in accordance with the criteria set out under Sections 2.1.1 and 2.1.2 of the Guidelines for Applicants.

Signed on behalf of the applicant

Name	
Signature[99]	
Position	
Date	

[99] signature in accordance with Law No.51/2005/QH11 on eTransactions

Innofund

Application Form

For

Window 2

Reference: <Open Call number>

1. KEY DATA

Title of the Project:				
Window (tick as appropriate)	Window 1		Window 2	
Location of the Project: (tick as appropriate)	Province:			
	Town:			
Name of the lead applicant				
Applicant Identity Number[100]				
Postal address:				
Telephone number: (fixed and mobile)				
Fax number:				
Contact person for this project:				
Contact person's email:				
Address:				
Website of the Organisation:				
Legal status[101]				

[100] This number was issued to you by email when you registered on the website to download the "Guidelines for Applicants".

[101] Legal status under Vietnamese law

Partner(s)[102]	Name, date of establishment and legal status

Any change in the addresses, phone numbers, fax numbers and in particular e-mail, must be notified in writing to the Contracting Authority. The Contracting Authority will not be held responsible in case it cannot contact an applicant.

2. INCUBATOR DETAILS

Description of incubator (including sectoral specialisation if any) Please append audited financial accounts of the incubator for the last three years of operation	
Legal status of incubator	
Ownership:	
Physical space of incubator	
Physical or Virtual incubator (or both)	
Years of operation:	
Number of employees:	
Number of tenants (both current and cumulatively over last five years of operation)	
Main services provided to tenants	
Describe your current level of national and/or international networking	
Describe your current	

[102] Add as many rows as partners.

systems for raising awareness of your incubator	
Do you have any current twinning or other links with incubators in the EU?	

3. PROJECT DESCRIPTION

Brief outline of proposed project (Max 500 words)		
Please spell out any innovative features contained in your project		
Please spell out whether this project has the potential to be replicated by other incubators to achieve nationwide impact		
What is the commercial importance of this project to your incubator? (Max 200 words)		
Will the project lead to increased employment?	Estimated number of new jobs (split/incubator tenants)	
	Of which, females	
What other specific indicators would you propose to measure if the project has achieved its goal?		
Please define your requirement for consultancy support with the project? Please note every application must have a consultancy support element		
If a consortium, what is the role of the lead applicant and what are the roles of the other partners?		
Would the project		

proceed without Innofund support?	
How do you plan to ensure the continuation of benefits from this project once the project has finished?	

4 KEY STAFF

Provide a summary of the project management teams' skills, strengths and experience (Max 500 words) Please additionally upload up to 5 CVs of key staff completed providing using the provided template to the online application portal	

5. DECLARATION BY THE APPLICANT

The applicant, represented by the undersigned, being the authorised signatory of the applicant, and in the context of the present application, representing any partners in the proposed project, hereby declares that

The applicant, represented by the undersigned, being the authorised signatory of the applicant, and in the context of the present application, representing any partners in the proposed project, hereby declares that

- The applicant is registered as a (type of institution to be specified) in accordance with (state relevant legislation) since (specify date of incorporation)
- The applicant understands and accepts the conditions of this open call process
- The information given in this application is factual and complete and the applicant understands then any falsification of data may result in the application being rejected.
- The applicant's staff has the professional competence and qualifications specified in Section 3 of this application.
- the applicant is directly responsible for the preparation, management and implementation of the project with its partners, if any, and is not acting as an intermediary;
- the applicant and each partner (if any) are eligible in accordance with the criteria set out under Sections 2.1.1 and 2.1.2 of the Guidelines for Applicants.

Signed on behalf of the applicant

Name	

Signature[103]	
Position	
Date	

Please also complete the attached checklist to ensure you have uploaded all required additional documentation

Annex B Application Evaluation Grid – Window 1

Grid completed by	
Applicant Unique ID No.	
Name of the Applicant	
Title of the project	

Scoring guidelines

This evaluation grid is divided into **sections** and **subsections**. Each question must be given a score up to the maximum shown using the following percentages as a guide:

• Score (percentage of maximum)	• Meaning
• Up to 20%	• Very Poor
• 21% to 40%	• Poor
• 41% to 60%	• Adequate
• 61% to 80%	• Good
• 81% to 100%	• Very Good

The resultant scores are added to give the total score for the section concerned. The totals for each section are then listed added together to give the total score for the application.

	Maximum score	**Actual Score**

[103] eSignature in accordance with Law No.51/2005/QH11on eTransactions

1. Relevance of the project	**45**	
1.1 How relevant is the proposal to the objectives and priorities of the Innofund?	10	
1.3 Is the project likely to lead to a commercially viable development?	25	
1.4 Is it likely to lead to significant employment creation?	10	
2. Design and management of the project	**55**	
2.1 How coherent is the overall design of the application?	10	
2.2 Is the application feasible and consistent in relation to the objectives and expected results?	10	
2.3 Does the application propose an innovative and potentially replicable commercial development?	20	
2,4 Do the project management team appear to have the right mix of skills, strengths and experience?	15	
3. Effectiveness and feasibility of the action	**55**	
3.1 Are the activities proposed appropriate, practical, and consistent with the objectives and expected results?	15	
3.2 Is the action plan clear and feasible?	15	
3.3 Does the proposal contain objectively verifiable indicators for the outcome of the action?	15	
3.4 Is the partners' level of involvement and participation in the action satisfactory?	10	
4. Sustainability of the Project	**45**	
4.1 Is the action likely to have a tangible impact on improving the competitiveness of S&T enterprises?	15	

4.2 Is the proposal likely to have multiplier effects? (Including scope for replication and extension of the outcome of the action and dissemination of information.)	15	
4.3 Are the expected results of the proposed action sustainable: - financially *(how will the activities be financed after the funding ends?)* - institutionally *(will structures allowing the activities to continue be in place at the end of the action?)*	15	
Maximum total score (A)	**200**	
Actual score out of 100 (A÷2)	**100**	

Application Evaluation Grid – Window 2

Grid completed by	
Applicant Unique ID No.	
Name of the Applicant	
Title of the project	

Scoring guidelines

This evaluation grid is divided into **sections** and **subsections**. Each question must be given a score up to the maximum shown using the following percentages as a guide:

Score (percentage of maximum)	Meaning
Up to 20%	Very Poor
21% to 40%	Poor
41% to 60%	Adequate
61% to 80%	Good
81% to 100%	Very Good

The resultant scores are added to give the total score for the section concerned. The totals for each section are then listed added together to give the total score for the application.

	Maximum score	**Actual Score**

1. Relevance of the project	**45**	
1.1 How relevant is the proposal to the objectives and priorities of the Innofund?	10	
1.3 Is the project likely to lead to a financial sustainable incubator?	25	
1.4 Is it likely to lead to significant employment creation?	10	
2. Design and management of the project	**55**	
2.1 How coherent is the overall design of the application?	10	
2.2 Is the application feasible and consistent in relation to the objectives and expected results?	10	
2.3 Does the application propose an innovative and potentially replicable approach to improved incubator operation?	20	
2,4 Do the project management team appear to have the right mix of skills, strengths and experience?	15	
3. Effectiveness and feasibility of the action	**55**	
3.1 Are the activities proposed appropriate, practical, and consistent with the objectives and expected results?	15	
3.2 Is the action plan clear and feasible?	15	
3.3 Does the proposal contain objectively verifiable indicators for the outcome of the action?	15	
3.4 Is the partners' level of involvement and participation in the action satisfactory?	10	
4. Sustainability of the Project	**45**	
4.1 Is the action likely to have a tangible impact on improving the sustainability of the incubator?	15	

4.2 Is the proposal likely to have multiplier effects? (Including scope for replication and extension of the outcome of the action and dissemination of information to other incubators)	15	
4.3 Are the expected results of the proposed action sustainable: - financially *(how will the activities be financed after the funding ends?)* - institutionally *(will structures allowing the activities to continue be in place at the end of the action?)*	15	
Maximum total score (A)	**200**	
Actual score out of 100 (A÷2)	**100**	

7.6 Indicative Time Input for BIPP

Input in person-months		Year 1				Year 2	Year 3	Year 4	Year 5	Total
		Q1	Q2	Q3	Q4					
Result 1	Team leader/Incubation Policy expert (I) (Con)	0	0	3	3	3	3	0	0	12
	Short-term expertise (I) (Con)	0	0	0	2	3	0	0	0	5
	Short-term expertise (L) (Con)	0	0	6	6	6	6	0	0	24
	Information & awareness (L) (Con)	0	0	0	0	0	9	0	0	9
	Lawyer (L) Con	0	0	3	3	3	0	0	0	9
	Expert in Vietnamese S&T policy (L) PMU	0	0	6	6	6	24	3	0	45
Result 2										
	International expert - incubation management Con	0	0	2	1	0	3	3	3	12
	Local expert - incubation management PMU	0	0	4	4	4	12	12	12	48
Result 3									0	0
	Innofund Operation expert: expert in design of the scheme and assessment of applications for support (I) Con	0	0	0	2	1	3	3	3	12

Input in person-months		Year 1				Year 2	Year 3	Year 4	Year 5	Total
		Q1	Q2	Q3	Q4					
	Innofund Operation executive/secretary to the selection committee and responsible for administration (L) PMU	0	0	3	3	12	12	12	6	48
Result 4										
	Expert: Design and oversight of monitoring system (I) – member of the PMU Con	0	0	1	0.5	0	0.5	0.5	0.5	3
	3 No. Project Management and Monitoring Experts – members of the PMU (L) PMU			9	9	36	36	36	18	144
Programme management										
	Coordinator (BTC) PMU	3	3	3	3	12	12	12	12	60
	Other local staff (accountant, secretarial, translator) PMU	6	6	6	6	24	24	24	24	120