

Challenges in Formulation and Implementation of National IP Policies and Strategies

Thailand

February 2, 2012

WIPO & JPO Conference

The Role of IPO in Promoting Innovation, Business
Competitiveness and Economic Growth



Overview of Intellectual Property System



National IP Policy in Thailand



Constitution of the Kingdom of Thailand 2007

Part 9 : Science, Intellectual Property and Energy Policy

“Section 86 : The state shall implement the Science, Intellectual Property and Energy Policy as follows; (2) The state shall promote invention or innovation, preserve and develop folk wisdoms and protect intellectual property.”

National Committee on Intellectual Property Policy

- ▶ Establish on 13 January 2009
- ▶ Chaired by the Prime Minister
- ▶ The Deputy Minister of Commerce is as Vice-Chair
- ▶ The head/high level representatives from relevant agencies such as Ministry of Culture, the Royal Thai Police, Ministry of ICT, Ministry of Education, the Office of Attorney General etc.

Function and Responsibility of DIP

DIP = Department of Intellectual Property, Ministry of Commerce

Protecting IPRs under the IP laws

Developing IPRs Protection & Promoting the creation of IP works

Reforming & Modernizing IP laws

Building up protection mechanisms & Creating trade disciplines

Facilitating IP mediation & dispute settlement

Developing information technology system of IP

DIP Strategic Plan

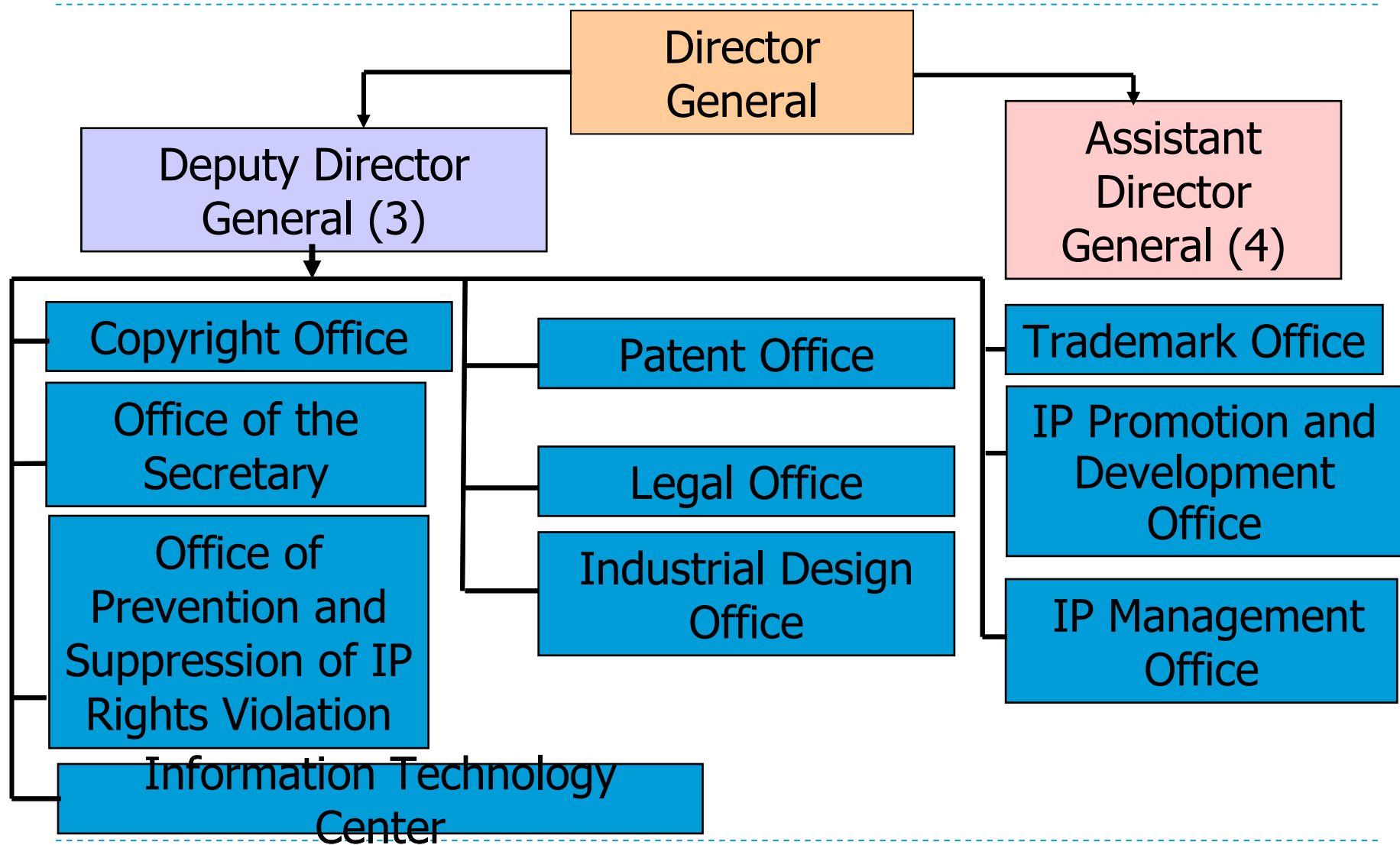
Vision

Achieving Excellency in Intellectual Property Protection

Mission

- Providing protection of intellectual property rights both domestically and in foreign countries
- Promoting knowledge related to intellectual property as well as the creation and commercial exploitation of intellectual property

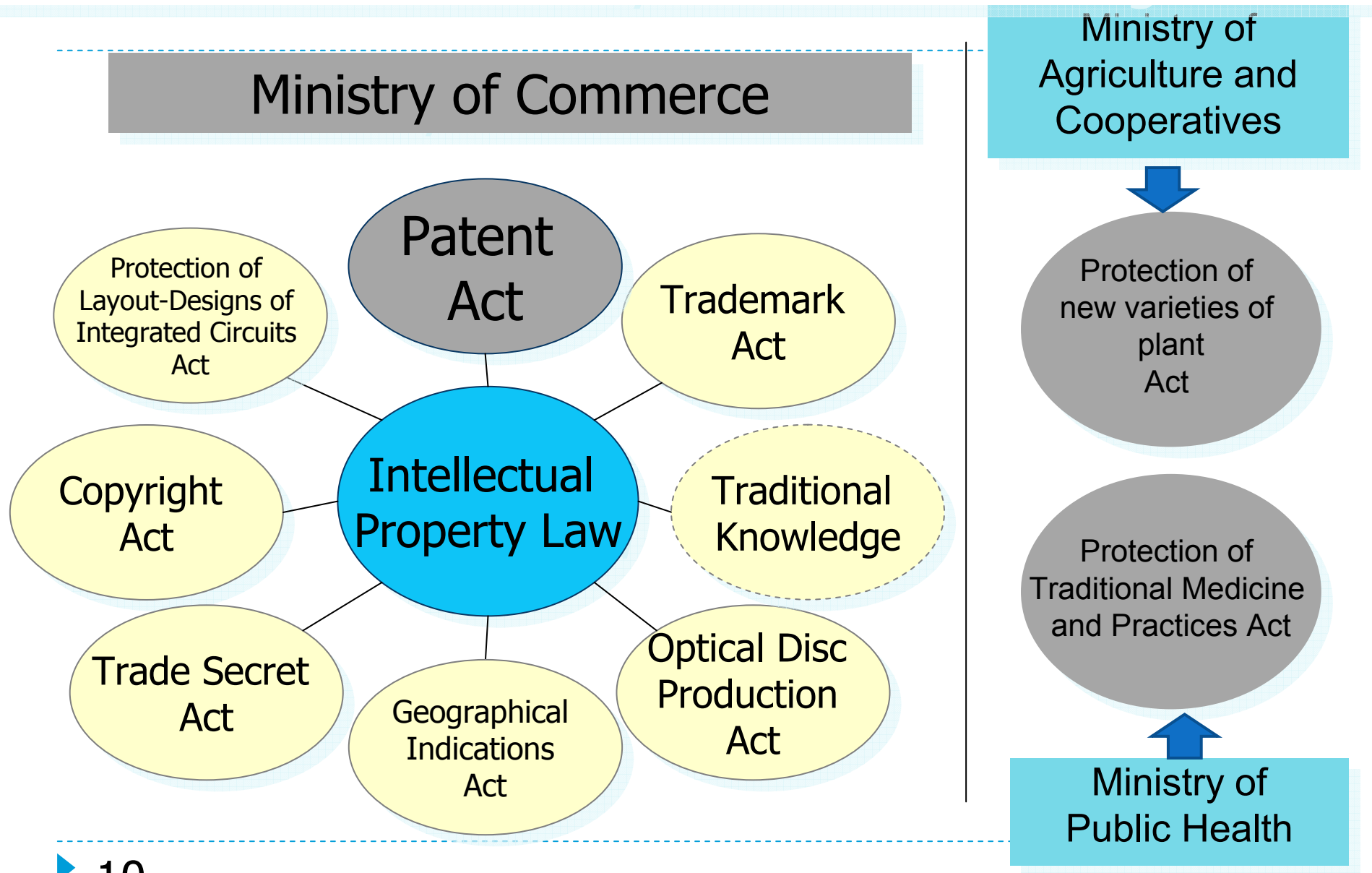
Organization Structure



Number of DIP Staff

ปี / Year	พ.ศ.2547 A.D.2004	พ.ศ.2548 A.D.2005	พ.ศ.2549 A.D.2006	พ.ศ.2550 A.D.2007	พ.ศ.2551 A.D.2008	พ.ศ.2552 A.D.2009	พ.ศ.2553 A.D.2010
ข้าราชการ/ตำแหน่ง : Government Official/position							
ตำแหน่งบริหาร : Administration position *	15	15	15	15	16	15	16
ตำแหน่งวิชาการ : Technical position							
ผู้ตรวจสอบสิทธิบัตร : Patent Examiner	29	29	29	29	29	41	42
ผู้ตรวจสอบเครื่องหมายการค้า : Trademark Examiner	18	18	18	18	20	16	18
นักกฎหมาย : Legal Officer	26	26	26	26	26	32	32
ตำแหน่งสนับสนุน และอื่นๆ : Supporting Staffs & Others	112	111	111	110	107	126	122
รวม / Total	200	199	199	198	198	230	230
ลูกจ้างประจำ : Permanent Employees	43	42	42	39	38	36	36
ลูกจ้างชั่วคราว: Temporary Employees	133	-	-	-	-	-	-
พนักงานราชการ : Government Employees	-	134	134	137	138	139	139
9 รวม / Total	376	375	375	374	374	405	405

IP Law Administered by DIP and Other Agencies



Accession International Treaties

Int'l Treaties	Accession Year
Berne Convention (Copyright)	July 1931
WIPO Convention	December 1989
TRIPS Agreement	January 1995
Paris Convention	January 2008
PCT (Patent Cooperation Treaty)	December 2009
Madrid Protocol (Trademark)	To be member within 2015 under ASEAN Economic Community (AEC) Blueprint
Hague Agreement (Industrial Design)	

Number of Patent Application

Unit :
Number

Year	Patent Application			Design			Invention		
	Total	Thai	Foreigner	Total	Thai	Foreigner	Total	Thai	Foreigner
2010	5,539	3,539	2,000	3,614	2,648	966	1,925	891	1,034
2009	9,730	4,196	5,534	3,873	3,171	702	5,857	1025	4,832
2008	10,561	3,637	6,924	3,820	2,735	1,085	6,741	902	5,839
2007	10,339	3,478	6,861	3,521	2,533	988	6,818	945	5,873
2006	9,821	3,564	6,257	3,560	2,524	1,036	6,261	1,040	5,221
2005	10,885	4,258	6,627	4,545	3,367	1,178	6,340	891	5,449
Total	56,875	22,672	34,203	22,933	16,978	5,955	33,942	5,694	28,248

Number of Granted Patent

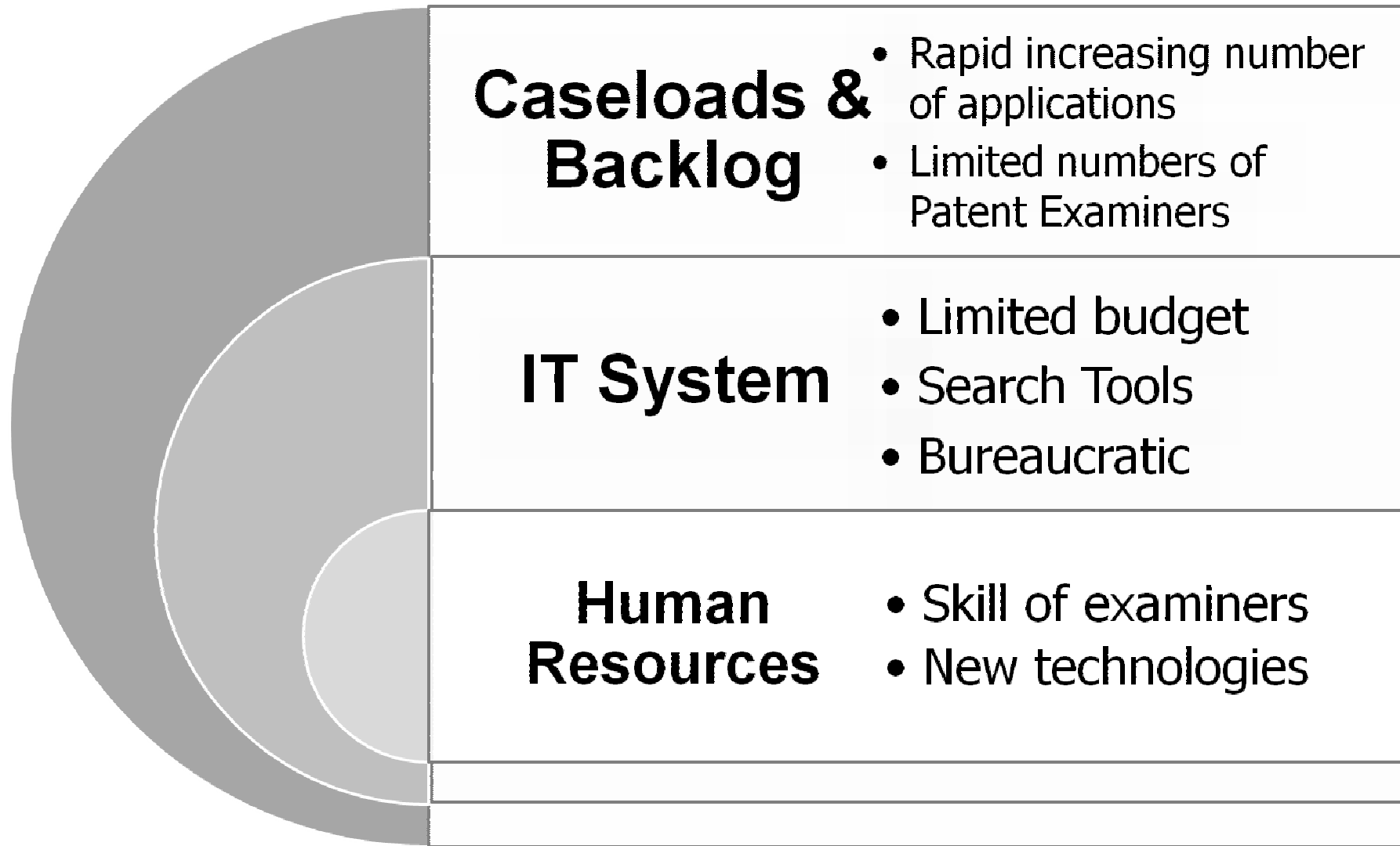
Unit :
Number

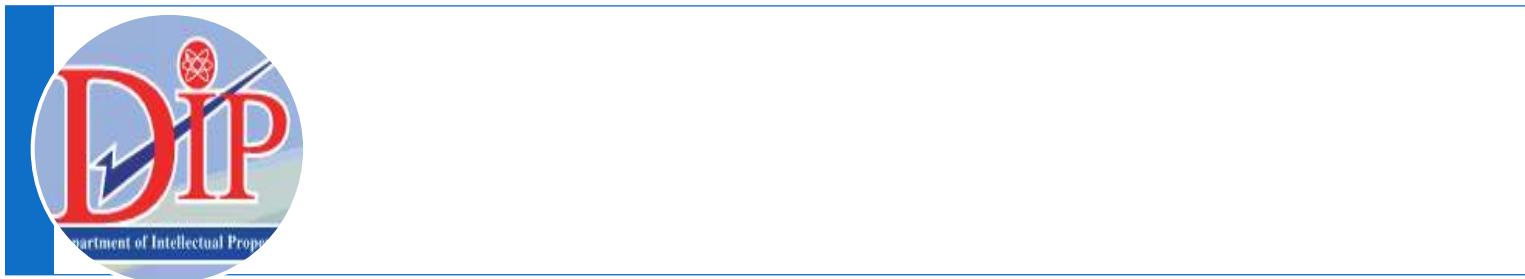
Year	Granted Patent			Design			Invention		
	Total	Thai	Foreigner	Total	Thai	Foreigner	Total	Thai	Foreigner
2010	2,104	889	1,215	1,332	841	491	772	48	724
2009	2,010	768	1,242	1,164	709	455	846	59	787
2008	2,185	781	1,404	1,219	719	500	966	62	904
2007	1,824	662	1,162	876	544	332	948	118	830
2006	1,878	568	1,310	757	450	307	1,121	118	1,003
2005	1,322	505	817	769	443	326	553	62	491
Total	11,323	4,173	7,150	6,117	3,706	2,411	5,206	467	4,739

Comparison of IP Offices

	USPTO	JPO	KIPO	DIP (Thailand)
Patent app./year	410,000 [2010]	348,596 [2009]	163,523 [2009]	5,857 [2009]
Granted/year	190,000	193,349	56,732	2,010
Patent substantive examiners	6,225	1,692	728	23
Workload of examiners	65:1	206:1	224:1	255:1
Backlog	700,000 [till 2010]	755,000 [till 2005]	160,000 [till 2004]	20,000 [till 2010]

Challenges Ahead for DIP

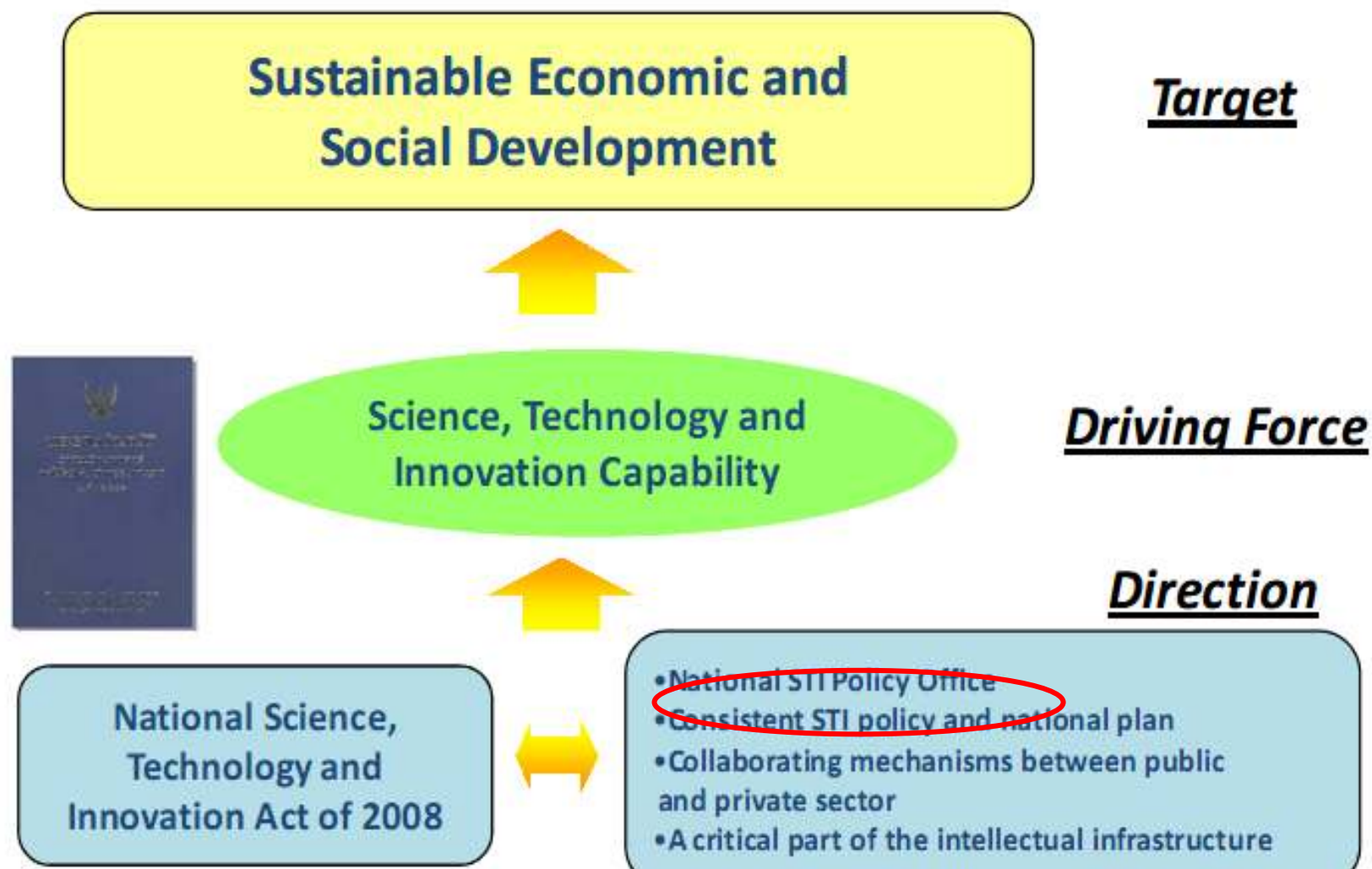




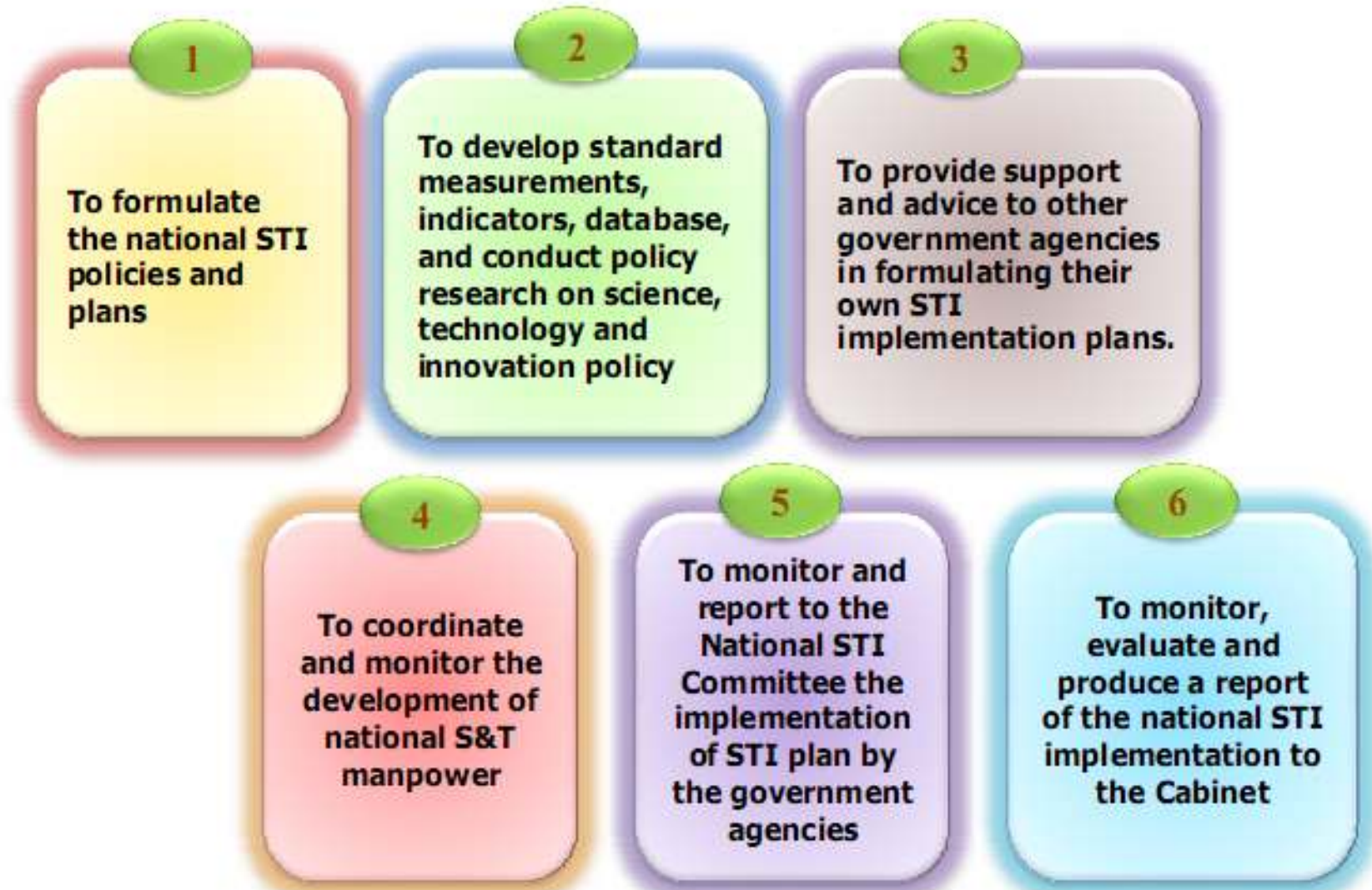
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Ministry of Commerce, Nonthaburi
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Tel: 662 547 4303

Challenges in the Formulation of IP Policy and Strategies

National Science, Technology and Innovation Act of 2008



STI's Major Responsibilities



R&D Investment Target 2016-2021

(2021) 2%
(2016) 1%

(2021) 25:10,000
(2016) 15:10,000

(2021) 70:30
(2016) 70:30



At Present		
R&D /GDP = 0.24 %	R&D Personnel (FTE) 9.01 : 10,000	R&D expenditure (Private : Government) 38 : 62

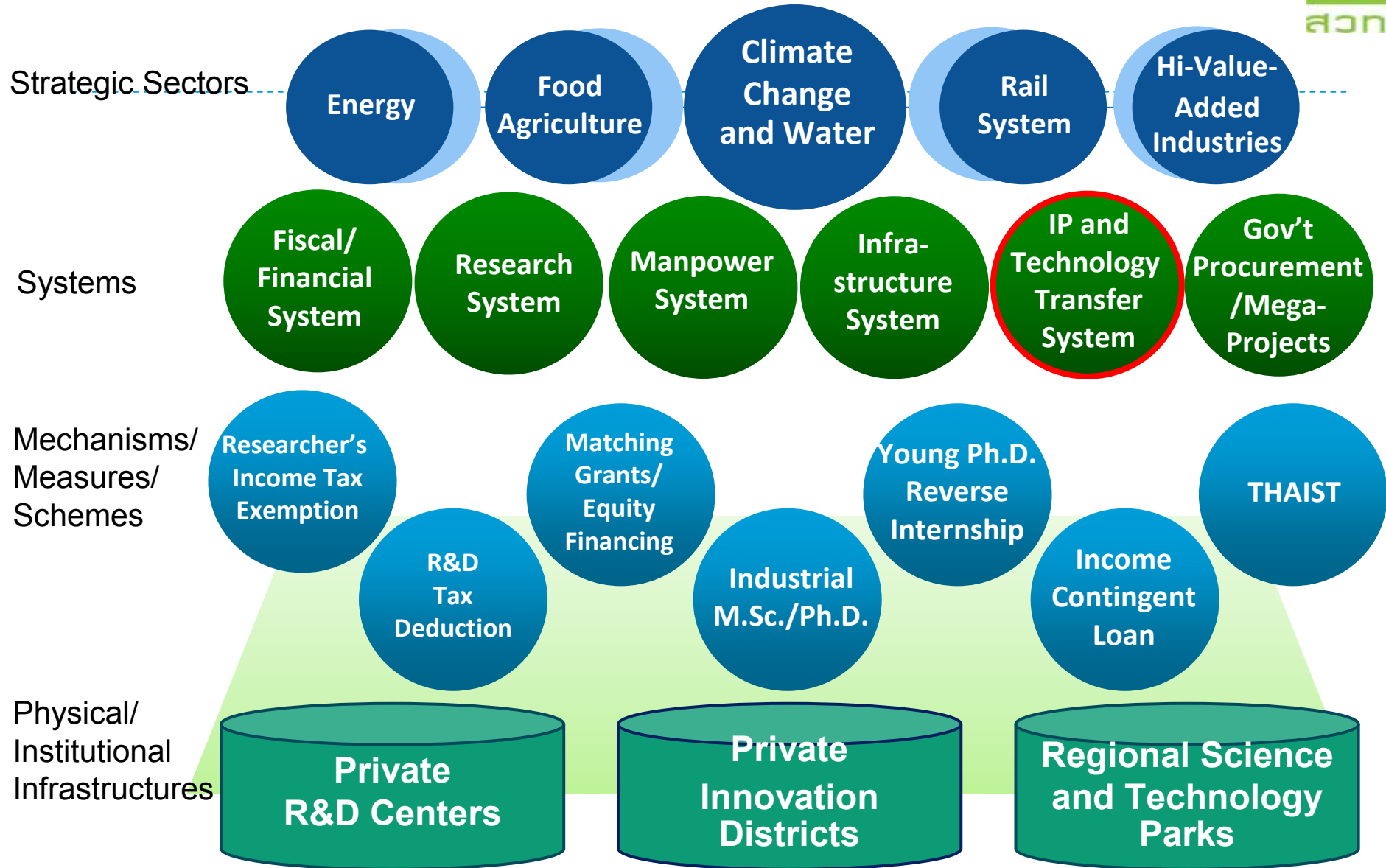
IMD 2010

- R&D Exp = 21,493 MB
- R&D Exp : Gov : Private = 13,318:8,175 MB
- R&D Personnel = 57,220 (man-year)

Source: National Science Technology and Innovation Policy Office (January 2011)



Policy to Increase Competitiveness



Source: National Science Technology and Innovation Policy Office (2010)

National Science Technology and Innovation Policy and Plan 2012-2021 and its 5 Strategies



Geopolitical
Change

Climate
Change

Green Innovation
for Quality Society and Sustainable
Economic Growth

Strategic Issue 1
Empowering society
and local communities
with STI

Strategic Issue 2
Enhancing economic
competitiveness and
flexibility with STI

Strategic Issue 3
Ensuring energy,
resource and
environmental security
with STI

Green Society
Inclusive Innovation
Innovative Community

Green Economy
Low Carbon Economy
Bio-Based Industry

Green Environment
Renewable
Technology
Technology for
Climate Change

Basic/ Integrated/ Convergent Technologies
(Earth Science, Neuro Science, ICT, New Materials, Biotech, Nanotech)



National Science Technology and Innovation Policy and Plan 2012-2021 and its 5 Strategies



Strategic Issue 4 : Developing and enhancing STI human capital

Enquiry based Sci-Education

Sci-based tech school

Work integrated learning

THAIST

Mobility program

Research system integration

Strategic Issue 5: Promoting and supporting the development of infrastructure and enabling factors for STI development

Regional Science Park

Technology Transfer

Research Assistance & consultancy

R&D Tax Incentive

IP Policy for Competitiveness

Financial Support

Intellectual Property Cycle

Government Fund

TAX Revenue

Funding Agency

Market

Conventional funding for basic and applied research

University

Research Institute

Private Company

IP Creation, Registration and Licensing

TTO

in university or research institute

Private Firm (old and new)

New products, New services, New jobs, New companies

Royalty income



Proof of concept

Proto type

Pilot Production

Mass production

Research Technology Organization(RTO)

Specific Hurdles in the IP Cycle (1)

- ▶ Ineffectiveness of Commercialization of IP
 - ▶ No clear government policy on ownership of IP made under government funding.
 - ▶ At present, government funding agencies either solely own the research results or jointly own with the grantees.
 - ▶ Transfer of technologies from funding agencies to commercial sectors has been relatively limited or virtually not existed.

Specific Hurdles in the IP Cycle (2)

Registration Bottleneck

Huge backlogs of patent applications due to the shortage of patent examiners.

Investment on IT system is also limited.

“Death Valley”

Lack of capital and absence of VC, etc.

Missing link of government funding, support and incentives for private sectors to license early staged technologies from university.

University

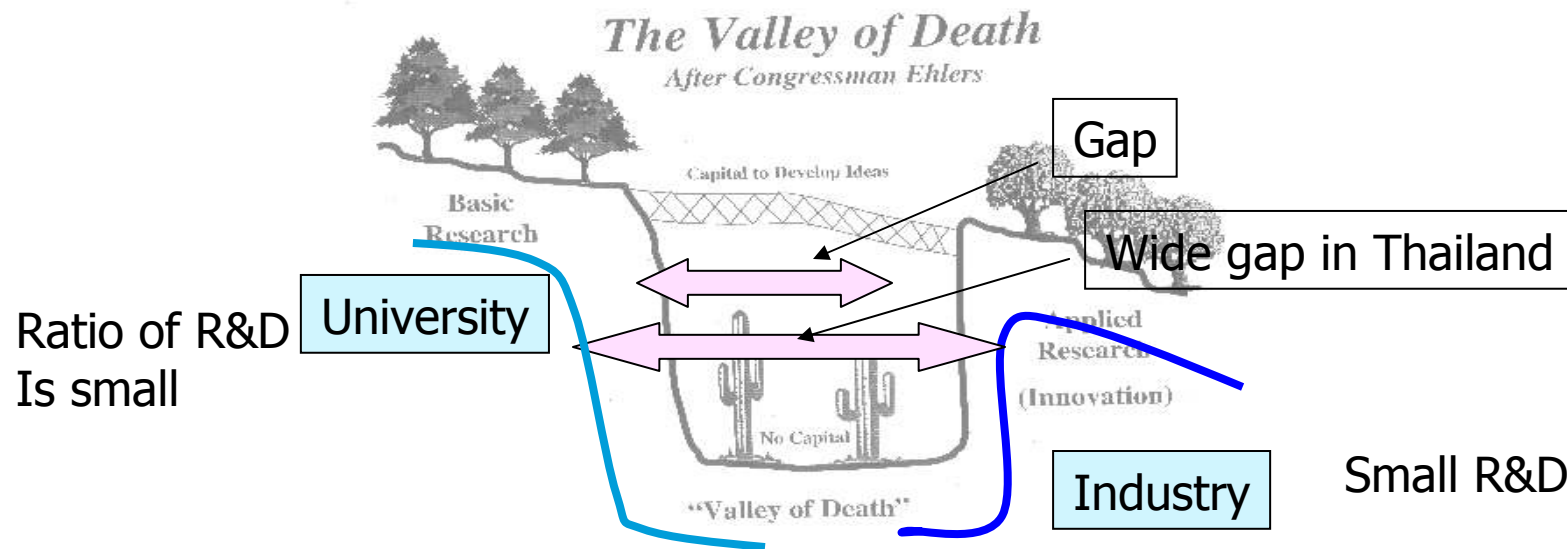
Sufficient funding from industry to university

What are their purpose?

Technology advices for technology improvement?

Development of new products or new process?

For Innovation (new product or process)



出典: "Public/Private Partnerships for Innovation." Presentation by Dr. Charles Wessner, U.S. National Academy of Sciences, OECD Work-Shop, Dec. 2001.

Specific Hurdles in the IP Cycle (3)

- ▶ **Less Capacity on Technology Transfer/Licensing**
 - ▶ University/research center technology transfer/licensing offices are in early stage of development.
 - ▶ Technology transfer personnel still have limited experiences.
 - ▶ No specific policy to support them systematically.

Proposed IP Policy for Competitiveness



1. Clear policy on government funded IP ownership

2. Reform of IP registration system

3.1 Financial support and
3.2 Tax incentive to promote IP commercialization

4. Strengthening IT organizations and professionals

Specific Measures for Proposed IP Policy



Policy	Measure
1. Clear Policy on Gov. funded IP Ownership	<ul style="list-style-type: none"> Funding recipient, who proves to have TT capability, is entitled to retain IP ownership of the government sponsored research results .
2. Reform of IP Registration System	<ul style="list-style-type: none"> Department of Intellectual Property (DIP) is entitled to retain IP registration fees as well as to have greater management flexibilities to overcome its backlogs and improve the overall registration system
3. Financial and tax incentive to promote IP Commercialization	<p>3.1 Financial support for SMEs in the form of grant or matching funds for scaling up of R&D commercialization (From Lab → market)</p> <p>3.2 Tax benefit for the company's expense on royalty fees paid for University's IP licenses.</p>
4. Strengthening TT organizations and professionals	<ul style="list-style-type: none"> Setting up a TTO Consortium and giving them enough resources to build technology transfer capabilities for TTO personnel

Policy Goals



Policy	Expected Goals
1. Clear Policy on Gov. funded IP Ownership	<ul style="list-style-type: none">• A clear and uniform IP ownership policy across funding agencies• Both universities and private sectors better engage in government sponsored research
2. Reform of IP Registration System	<ul style="list-style-type: none">• Increased numbers of patent granted and trademark registered
3. Financial and tax incentive to promote IP Commercialization	<ul style="list-style-type: none">• More commercialization of technologies that would otherwise not be developed into new products or services due to lack of incentives
4. Strengthening TT professionals	<ul style="list-style-type: none">• Capable TTO• TTO personnel have better skills and experiences• Increased amount of IP commercialization



Thank You

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Deputy Secretary-General

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