

# National ICT Policy in Thailand

By

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*Thank you Mr.Chaiman.*

*Ladies and Gentlemen,*

*I am honored to be here with friends from Africa, Asia and New York today. I would like to thank the UNDP/APDIP Program for inviting me to join this interesting workshop and share with you on the National ICT Policy in Thailand.*

## Presentation Outline

- National Information Technology Committee
- IT2000 – The first National IT Policy
- IT2010 = IT Policy Version 2.0
- Key to Success
- The Way Forward



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I will cover the issue of the National Information Committee of Thailand, our first and second IT Policy. I will then discuss on the Key to success on our new plan, and, finally, on the way forward in implementing the National ICT Plan under the policy.



## The National Information Technology Committee

- Established in 1992
- high-level policy body chaired by the Prime Minister.
- Its members comprise of executives from relevant public and private sector.
- Developing Policies and Plans on ICT:
  - Creating the Digital Opportunity
  - Ensuring the proper modernization (IT Laws)
  - Forging the Knowledge-based Society
  - Infrastructure for e- Government
  - Infrastructure for the national economy
  - IT2000 Policy → IT 2010 Policy



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### Overview

Over the past decade, Information and Communications Technology (ICT) has been recognized as a potential enabler for national economic and social development and for strengthening competitiveness for Thailand. The government, then, started the initiative in 1992 to set up the National IT Committee, or NITC, which is a high-level policy body chaired by the Prime Minister. Its members comprise of executives from relevant public and private sector.

The mandates of NITC are to develop policies and plans to promote ICT development and utilization in the country. The National Electronics and Computer Technology Center (NECTEC) has been assigned to host the secretariat office and to conduct supporting work for the committee.

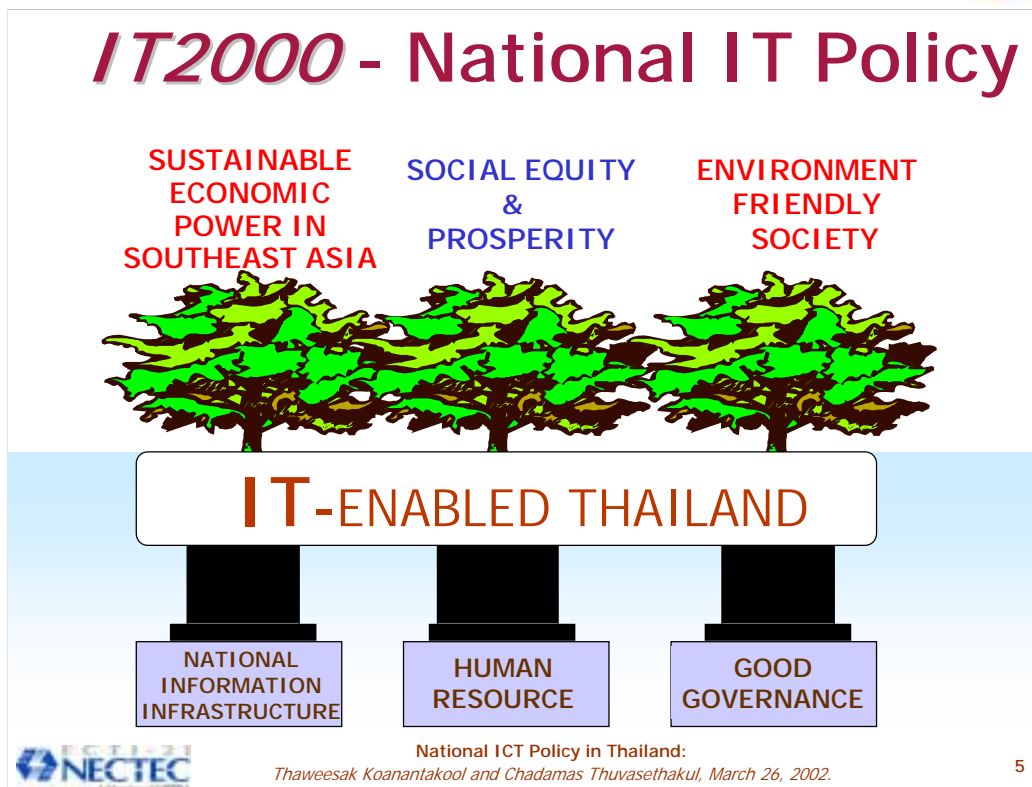
# I. *IT2000* – The first National IT Policy



- Cabinet approval in February, 1996.

## Let's start with IT2000 - The First National IT Policy

In February 1996, *IT2000* was announced by the NITC and endorsed by the Cabinet. *IT2000* put forward the vision for the country to properly exploit IT to achieve economic prosperity and social equity.



To this end, the policy emphasized three common development agendas, that is,

- (i) to build an equit-able national information infrastructure (NII),
- (ii) to invest in people to accelerate the supply of IT manpower and to develop an IT-literate work-force, and
- (iii) to achieve good governance through the use of IT in delivering public services and in government administration.

Through the course of IT2000 implementation, it was found that many development programs were achieved as planned, while many others were still far from the target, especially those concerning human resources and government sector. This was mainly due to the economic recession that caused the decline in government investment in ICT.

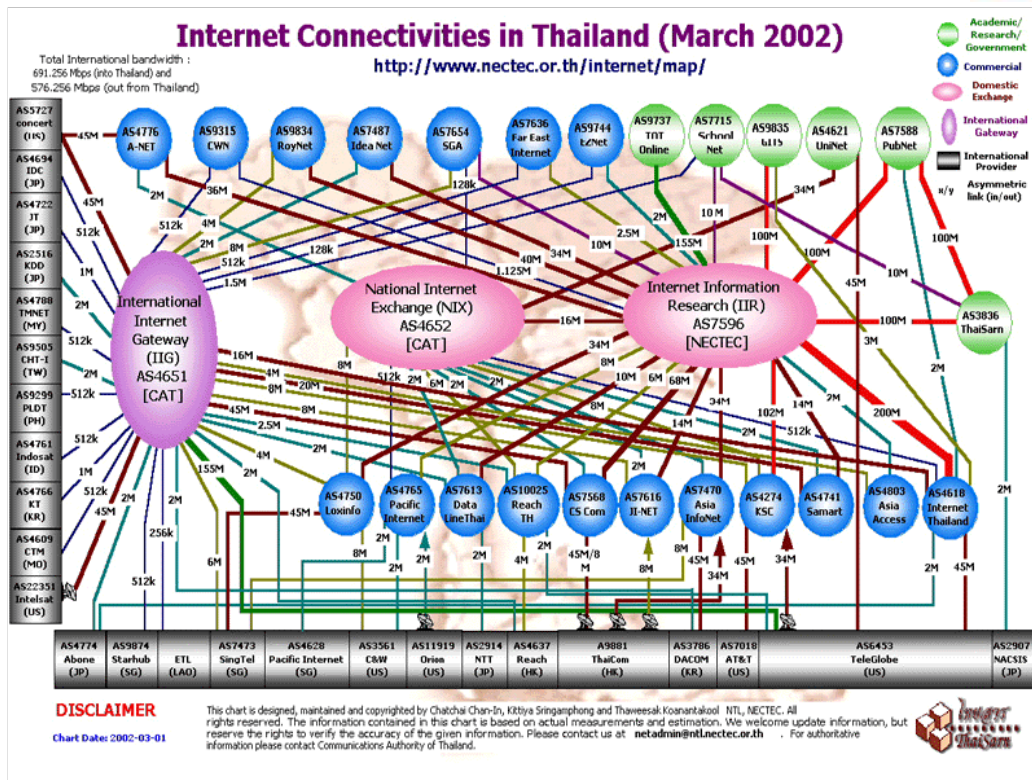
Under the present circumstance where the general economy resumes its positive outlook and with the new administration's leadership in place, it is timely that Thailand starts to take off to the second decade of ICT development.

## *What have been achieved under IT2000?*

Examples:

- National Internet Exchanges
- SchoolNet Thailand
- Government Information Network (GINet)
- Development of Legal Infrastructure

From the basis of framework and recommendations put forward in IT2000, many programs and/or projects has been initiated by various government agencies, including NECTEC, under its capacity as NITC secretariat and as a national R&D center. To name a few of those initiatives, they are: <see slide>



Two National Internet Exchanges have been set up in Thailand. They are the peering points among Internet Service Providers. The domestic interconnection architecture helped boosting network interconnection speed and reliabilities.



**SCHOOLNET THAILAND @1509**

**Narrowing the Digital Divide**

SchoolNet Access is available free of charge to schools nationwide. Phone call is USD 0.08 per call everywhere

2 Mbps

4,300 Schools are now online

5.6 Mbps

Internet

5,000 Schools online By the end of 2002

NECTEC  
A Member of NSTDA

CAT

TOT

**Schoolnet Thailand** is a national school informatization program to empower all schools to access a large pool of information resources using the Internet;

Presently, SchoolNet connects over 4,300 schools to the Internet. The network has been designed to serve the goal of universal access for every school nationwide. More specifically, a school only pays the telephone charge at the local-call rate per connection (at 8 US cents per call), and no Internet access charge regardless of where they are located.



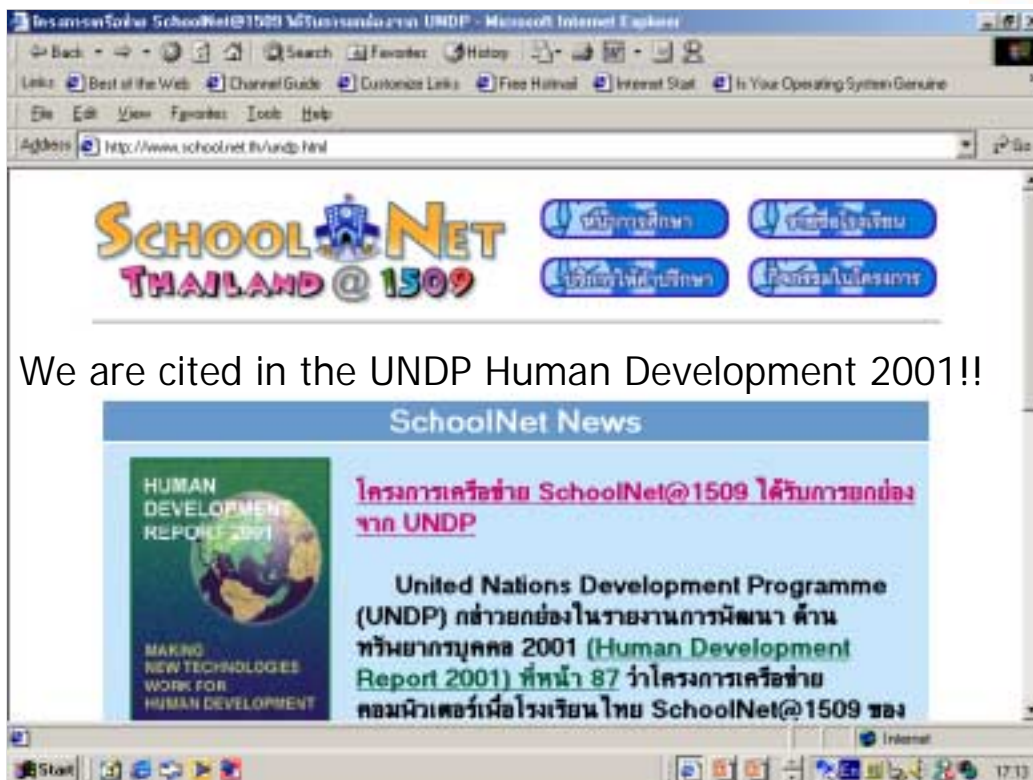


Furthermore, content creation programs and activities have been initiated to promote the use of Internet in teaching and learning, for example, digital library and digital archive, which contains digitized materials in various forms with proper indexing and search engine for ease of use.



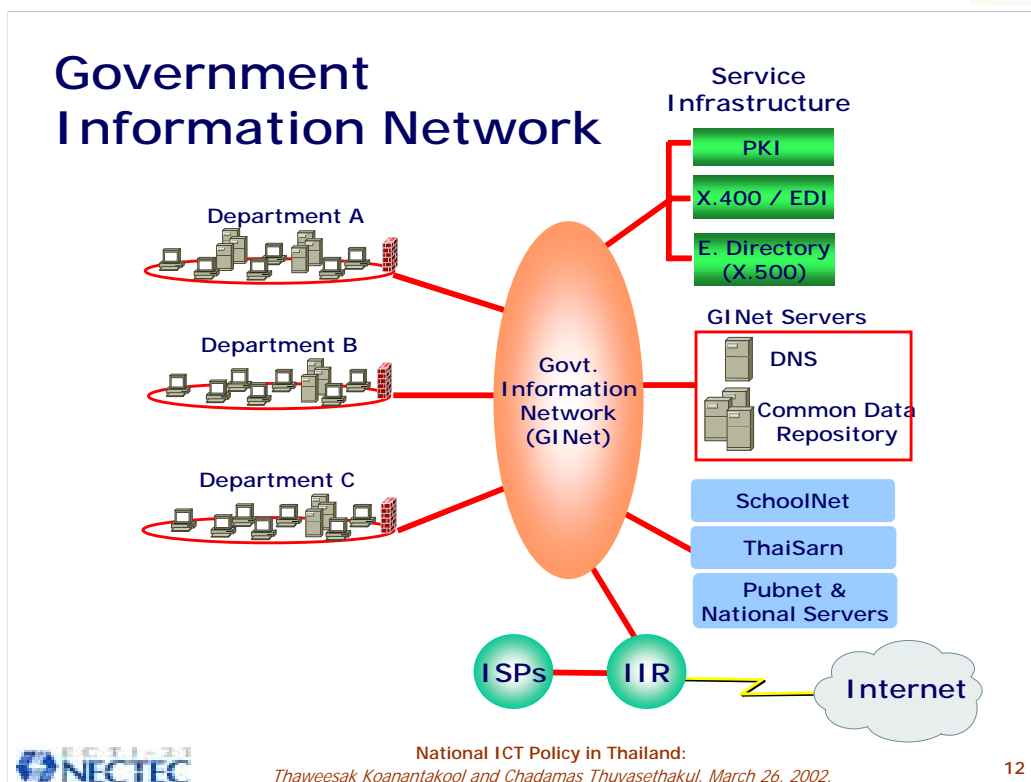
An easy-to-use tool was also developed for teachers to create their own content or teaching materials to add to the digital library.

(See the web site <http://school.net.th> for more information.)



We are cited in the UNDP Human Development 2001!!

The SchoolNet Project achieved a “universal access” status since 1997. The project was cited in UNDP’s **Human Development Report** of 2001.



**The Government Information Network (or GINet)**, is a government backbone network to facilitate intra- and inter- agencies communication and information exchanges.

Government IT Services (GITS), the unit that runs GINet, presently provides a nation-wide, high-speed virtual private network (VPN) service to government agencies.

In addition to network connection services, GITS provides many other value-added services for its clients such as electronic daily news clipping, news exchange service, government directory service, e-Government Portal and secure electronic mail using digital ID and public-key infrastructure (PKI). GITS has provided a pilot CA service to support digital signature applications to its users since 2000.

(See <http://thaigov.net/> for more information.)

## ICT Legal Infrastructure Development

- Electronic Transactions Act (with electronic signature)
- National Information Infrastructure Law
- Computer Crime Law
- Data Protection Law
- Electronic Funds Transfer Law



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With regard to the **legal infrastructure**, NITC introduces five laws to support the application of ICT in the country.

**The Electronic Transactions Bill**, drafted by NITC, was approved by the Parliament and enacted on December 4, 2001. The Act will become effective on April 3, 2002, 120 days after the enactment. The Act also incorporate Eletronic Signature Provisions.

Four other laws are still in the pipeline, i.e.,

- data protection law (presently awaiting approval from the Cabinet),
- national information infrastructure law (presently awaiting to be submitted to the parliament),
- computer crime law (presently awaiting approval from NITC), and
- electronic funds transfer law (presently in the drafting process).

It is believed that these laws should lay down sufficient legal framework for Thailand to enter the new economy with more confidence.

## From IT2000 to IT2010

- NECTEC + Policy Innovation Center at KMUTT joint research
- Issues considered:
  - analysis of impacts and lessons learned during IT 2000 implementation,
  - current situation in both IT production (IT industry) and IT consumption in various sectors in the country, policy development in other countries to understand the global trend, and
  - issues which are relevant to future development of the country, as specified in the Ninth National Economic and Social Development Plan and the recent development of the 'e-Thailand' initiative.



### *From IT2000 to IT2010*

IT2000 has provided the framework and guideline for subsequent IT policies and initiatives for the past five years. Since then, ICT has changed tremendously, both in terms of technological advancement, as well as its widespread application in virtually all sectors of the economy. Meanwhile, the Thai economy and society have evolved enormously, particularly as the result of our financial crisis, which started in 1997.

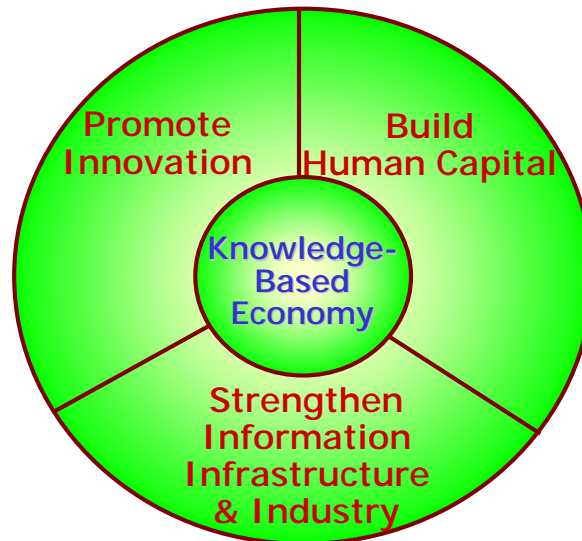
As a result, the NITC secretariat has teamed up with the *Policy Innovation Center* to conduct a research and develop a ten-year National IT Policy for the period 2001-2010, or **IT2010**. In the development of IT2010 and policy recommendations, important inputs that were considered were:

- an analysis of impacts and lessons learned during IT 2000 implementation,
- current situation in both IT production (IT industry) and IT consumption in various sectors in the country,
- policy development in other countries to understand the global trend, and
- issues which are relevant to future development of the country, as specified in the Ninth National Economic and Social Development Plan and the recent development of the 'e-Thailand' initiative.

In order to ensure public participation during the policy development process, NITC Secretariat/NECTEC had organized many public seminars in Bangkok and other regions in the north, north-east, and south. All opinions and comments were gathered, analyzed and used as inputs for subsequent revisions.

The study was completed in September 2001 and the result was synthesized and compiled for submission to NITC (in October 2001) and subsequently to the Cabinet for approval. On March 19, 2002, the Cabinet approved and endorsed IT2010 as a policy framework for Thailand ICT development in the first decade of the twenty-first century.

## II. IT2010 = IT Policy 2.0



Towards the Knowledge-Based Economy and Society



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### *IT2010: Towards the Knowledge-Based Economy*

It was recognized that to build a strong and sustainable economy, the nation must try harder to stand firmly on her feet before entering the international competition. His Majesty the King's "Sufficiency Economy" calls for a new focus of development: to emphasize on improvement the quality of life of its population through knowledge and more self-reliance, and to reduce social differences to a minimum.

IT2010 has set the key development objectives to exploit the benefits of information and communications technology to move Thailand to the "Knowledge-Based Society and Economy". The development is not modernizing by buying "technology", but rather, on the good use of ICT that would drive overall national economic and social development. To this end, IT2010 identifies **three cross-cutting principles** to support the "ICT for KBE/KBS" framework as follows:

1. To build human capital,
2. To promote innovation, and
3. To strengthen information infrastructure and the information industry.



## ICT Development Program: Flagships and Infrastructures in IT2010

### Flagship Programs

Promote Innovation

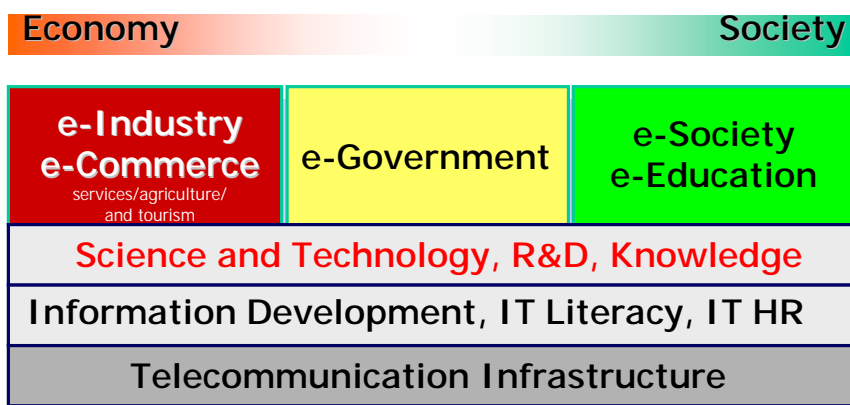
Building Human Capital

Invest in Information Infrastructure/Industry

Under this framework, three specific development goals based on “technological and social indicators” were identified. These are:

- 1.To raise the technological capability of the country, as classified by the UNDP *Technological Achievement Index* from being in the “Dynamic Adopters” group”, to the “Potential Leaders” group”, by 2010.
- 2.To increase proportion of “Knowledge Workers” in the country from 12% (in 2001) to 30%, by 2010,
- 3.To increase the share of “Knowledge-Based Industries” within the overall economy to 50% by 2010.

## ICT Development Program: Flagships and Infrastructures in IT2010



To achieve the goals, IT 2010 identified five main flagships that have to be developed as follows:

1. *e-Society*, covering issues such as digital divide, quality-of-life, culture, health, public participation;
2. *e-Education*, includes issues of life-long learning, computer literacy, human resource development, virtual education, etc.
3. *e-Government*, including public service via electronic service delivery, employment, legal infrastructure;
4. *e-Commerce*, with special focus on 'e-services' including not only finance, tourism and IT services, but also other industries;
5. *e-Industry*, focusing on e-manufacturing and IT-related industries, plus issue such as standardization; and

## Linkage between Flagships and KBE

	eGOV	eEDU	eSOC	eCOM	eIND
<b>HRD</b>	Govt. officials literacy training; IT professionals in govt.	IT-fluent students; Knowledge workers	Life long learning	Knowledge workers	Knowledge workers
<b>INV</b>	Govt. reform; Innovative public service provision	Creativity in students; Innovative workforce	Local wisdom; Tacit knowledge transfer	New economy; Global business strategies	R&D in private sector; Technology development
<b>III</b>	Government information network; MIS in public sector	Education network; Thai HW/SW industry as suppliers	Rural knowledge network; IT industry	Sectoral portals; Software & Advertise. Industry	Thailand Exchange; Electronic industry

Development of each of the above mentioned sector must be synchronized and harmonized with all the other sectors. Furthermore, the development schemes in each sector must be hinged to strategies that are essential to know-ledge-based economy and society. In other words, the schemes must comply with the three cross-cutting principles: enhancing human capital, create innovation, and strengthening the information infrastructure.

### III. Key to Success

1. Giving priority to the creation of useful information, contents and knowledge;
2. Developing human capacity on a continual basis;
3. Closing the Digital Divide;
4. Creating a clear-cut leadership mechanism in National ICT Development; and
5. Linking the policy with the operations of the National IT Committee, NTC, and NBC.



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In order to successfully implement development programs under IT2010, there are many crucial conditions, factors and variables that must be taken into account.

Through our experiences, we recognize that there are many impediments and obstacles that can hinder ICT development, and create difficulties (at times insurmountable) for implementation of many development programs.

Therefore, the National ICT Development Policy 'Version 2.0' has imposed five necessary conditions for development as shown in this slide.

## *1. Giving priority to information, contents and knowledge*

*Information, contents and knowledge must receive priority over, or at least not less than, investment in basic infrastructure, tools, equipment and materials.*



First condition:

<as in slide>

All future infrastructure development projects must guarantee cost-effectiveness of investments on hardware. Specifically, investments on information and content must be substantial. Furthermore, there should be a policy to encourage the establishment of "Knowledge Centers" at various levels of society, starting with the Local Administrative Organizations, schools, communities and state agencies, including small and medium-sized enterprises.

## *2. Develop Human Capacity on a Continual Basis*

*Development of human resources  
and personnel must be carried out  
on a consistent/continual basis, at  
all levels of education: formal, non-  
formal, and voluntary education  
system.*



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Second condition:

<as in slide>

The human resource development program shall also encompass development and upgrading of the national labor force to increase knowledge and skills aimed at achieving sustainable development of indigenous human resources, as well as developing "Knowledge Workers".

### *3. Closing the Digital Divide*

*Reduction of social disparity and lack of opportunity deriving from development of information technology, known as the “Digital Divide” by creating “Digital Opportunity” for the Thai population.*



Third condition:

<as in slide>

Nevertheless, in focusing on such disparity, not only should one consider disparity from infrastructure or equipment (Infrastructure Divide), but also from unequal illiteracy (Literacy Divide), differences of culture (Cultural Divide), and lack of management expertise (Management Divide).



## *4. Creating a clear-cut leadership mechanism in National ICT*

- PM to lead NITC by himself
- NITC supported by ICT Policy Office



*Fourth condition: <as in slide>*

*Establish a permanent and clear-cut system for creating "Leadership" to be an integral part of the National ICT Development Policy, and incorporated into the Principles & Procedures for Policy Implementation*

The country's top administrator must necessarily give such leadership and guidance. This shall also include the structuring of an efficient management structure and adherence to good governance.

That is: **the Prime Minister must be the Chairman of the National Informational Technology Committee himself** (and not to delegate this role to anyone). The NITC shall be equipped with a policy support unit, or the **"ICT Policy Office,"** to be responsible for information management and preparation of technical papers to facilitate continuance of policy implementation.

This office should also be tasked with monitoring, appraisal, and evaluation of results. The competent officer, in the capacity as Committee Secretary or ICT Policy Office manager, shall submit development & progress reports to the National IT Committee on a monthly basis.

The ICT Policy Office shall be an independent entity, and shall not operate under the umbrella of any state agency or comply with cumbersome official regulations due to the rapidity of change of technology and foreign policy. It is deemed expedient that the ICT Policy Office must recruit the highest quality and caliber personnel to run the office.

## *4. Creating a clear-cut leadership mechanism in National ICT*

- PM to lead NITC by himself
- NITC supported by ICT Policy Office
- ICT Operations Support Office
- Coordination among ICT Policy Office and ICT Operation Support Office



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**The ICT Operations Support Office:** The main duties and functions of this office is to render support as required by the implementation of policies, which shall cover both provision of technology and project supervision/ management, function as a Consultant Office for the NITC, support Research & Development programs, project management and carry out assignments, and support State Agencies which are in the process of restructuring under the e-Government Development Program. However, the Office should allow private sector and industrial sector participation in most operations/-assignments, by establishing a fair, transparent, and efficient outsourcing system.

**Both the "ICT Policy Office" and the "ICT Operations Support Office" must closely coordinate** in implementing the policies set by the National IT Committee. When the duties and responsibilities of both offices grow beyond a critical level, or under a critical pressure to act more dynamically, the next appropriate step would be the establishment of the Ministry of Information and Communications Technology. The establishment of the said organization to be executed within the schedule of this policy.

## *4. Creating a clear-cut leadership mechanism in National ICT*

- PM to lead NITC by himself
- NITC supported by ICT Policy Office
- ICT Operations Support Office
- Coordination among ICT Policy Office and ICT Operation Support Office
- Participation from all government agencies



The Ministry and its Departments shall **render their participation in the capacity of the authority responsible for certain parts of the development projects that are related to their own organization and services**, which the IT Committee has made into policy, or has reached a resolution for implementation. In this case, a master plan should be developed and the budget bureau should allocate sufficient budget for implementation.

If this operational stage cannot be under-taken due to limitations or inadequacies, i.e., lack of personnel and/or expertise, then the allotted budget can be used for **hiring private sector to carry out the work**, in order to create jobs and increase employment within the economy, whereby the contractors shall be dependent on the IT Operations Support Office as the Project Consultant, or the said budget could be used to request the Office to undertake the assignments as deemed suit-able and appropriate.

## *5. Linking the policy with the operations of the NITC, NTC, and NBC.*

*Establish the link between the policies and operations of the National IT Committee with the National Telecommunications Committee and National Broadcasting Committee in order to make the most of ICT convergence.*



The Fifth condition:

<as in slide>

The NITC is entrusted the duties and responsibilities as provisioned in Section 78 of the Constitution of the Kingdom of Thailand 1997. This Section defines the state's obligation to facilitate Thai society with the means for efficient, indiscriminate and equal accessibility and usage of the IT Basic Infrastructure. The policies of NITC should be linked with the policies and operations of the National Telecommunications Committee, the National Broadcasting Committee, which are tasked with duties/responsibilities provisioned in Section 40 of the Constitution: to regulate and manage radio frequencies to gain the highest possible benefits for the general public.

## IV. The Way Forward

- Prime Minister actively involved in ICT Development Plan
- National ICT Plan will be completed in April 2002.
- Ministry of ICT is emerging

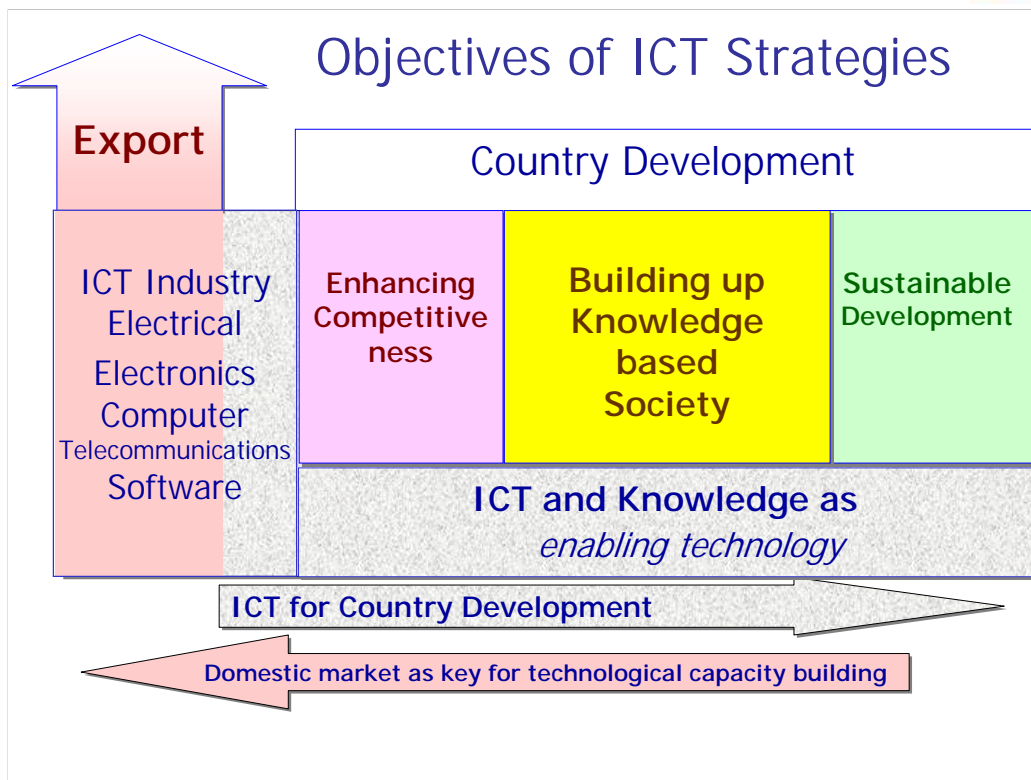


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IT2010 Policy Framework was well accepted by the people and the government. Some of the crucial "conditions" stated explicitly in IT2010 have already been met. For example, the Prime Minister, for the first time since 1992, chaired the NITC by himself since he took office. In addition, a National ICT Plan for the year 2002-2006 has been drafted through a series of close consultation between NITC Secretariat office and the stakeholders. Moreover, the cabinet has decided in early March 2002 to go ahead with the establishment of the Ministry of ICT within October 2002.



*Ladies and Gentlemen,*

The National ICT Plan is expected to be released in April, 2002 and the new ICT Ministry will take charge of the missions set out in the National ICT Plan for the country.

Several strategic actions are expected to drive Thailand into Knowledge-based Economy/Society very positively.



*Thank you  
for your  
attention.*

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*Thank you for your kind attention.*