Annual Report 2005

Ministry of Information and Communication Technology


กระทรวงเทคโนโลยีสารสนเทศและการสื่อสาร
Ministry of Information and Communication Technology

His Majesty the King's Address

Given on the Occasion of the Civil Servants'Day

Friday, April 1, 2005

Those government officials who are practitioners of national administration must be fully committed to renouncement in two important areas: renouncing self interest for the greater common good on the one hand and renouncing all manners of vile thoughts and abject mentality on the other. Only then can you earn confidence and trust of the public that will enable you to maintain your position and execute your duties with honour, dignity and lasting prosperity.

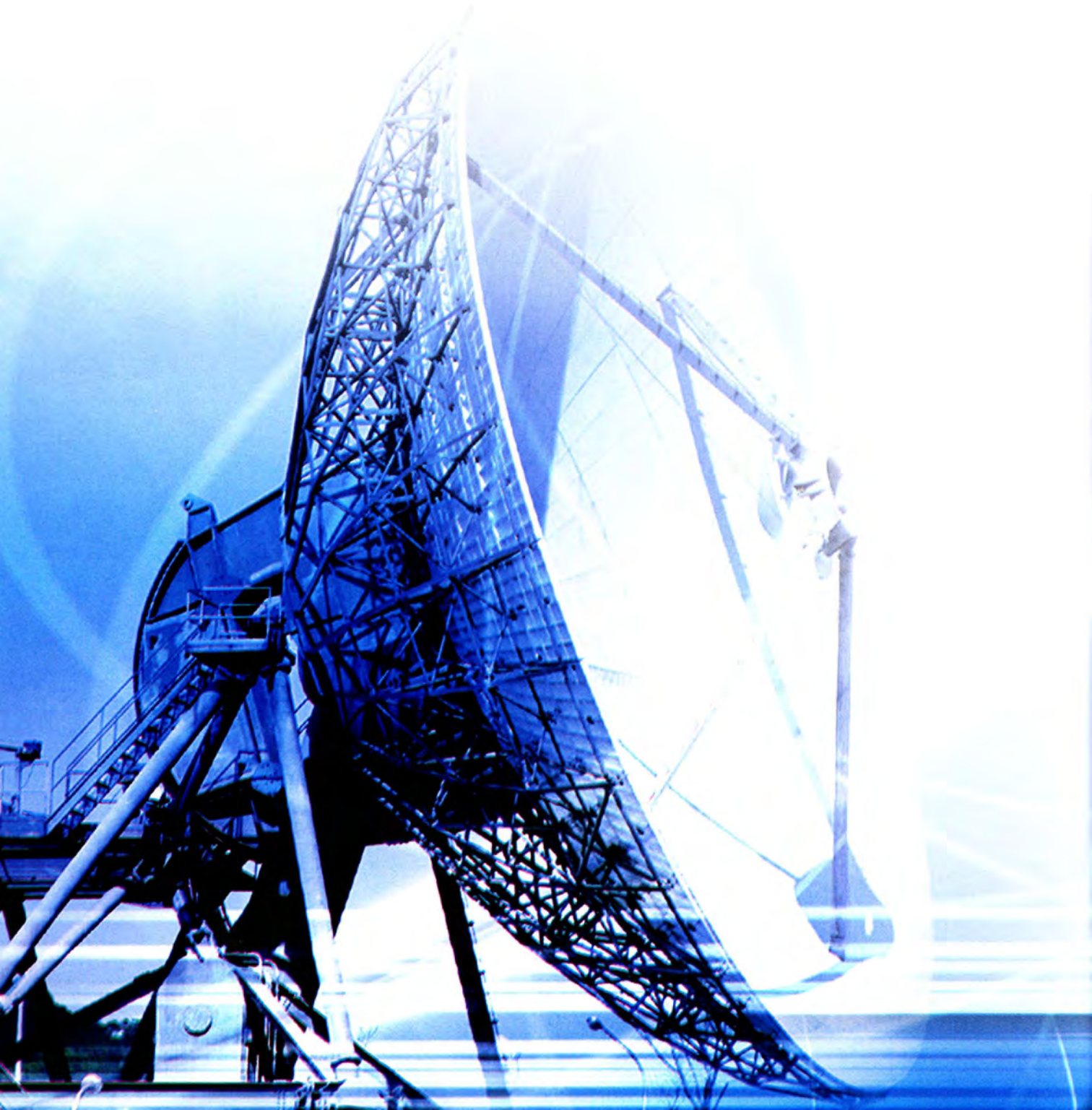
Prime Minister's Statement

The role of the Ministry of Information and Communication Technology is to contribute towards the revival and consolidation of our country by harnessing all state-of-the art technologies to create for Thai people opportunities and access to sources of capital, in terms of finance and knowledge. Thai people must be encouraged to leap frog in their acquisition of knowledge by adapting advanced technologies to local wisdom, thus bridging the divide between rural and urban communities and that between Thai society and the international community.

Police Lieutenant-Colonel Thaksin Shinawatra,
Prime Minister

Ministry of Information and Communication Technology

Annual Report 2005



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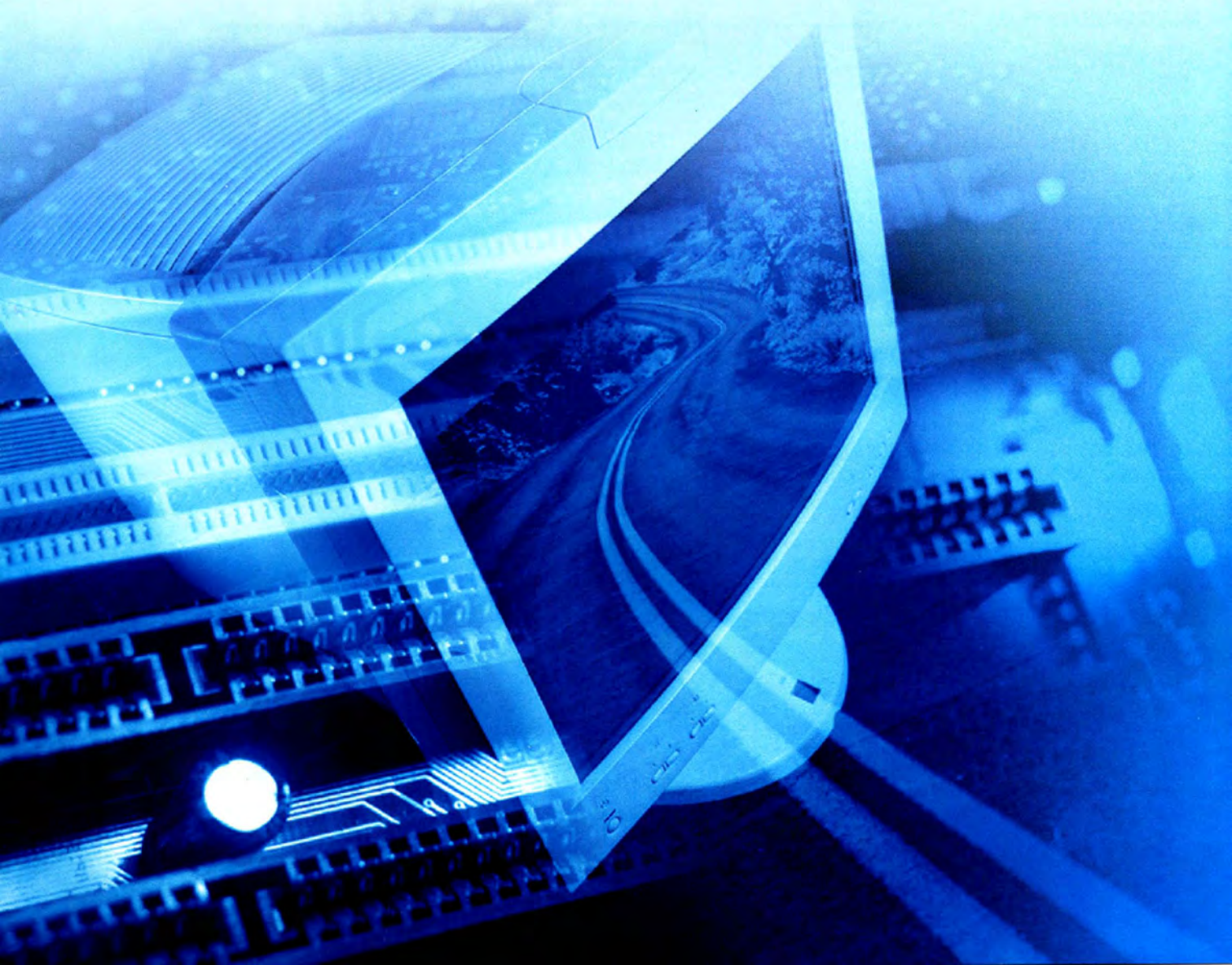


Deputy Minister and

Acting Minister of Information and Communication Technology

(March - September 2006)

H.E. Professor Suchai Chareonratanakul

Acting Minister

Mr Mahidol Chantrangkurn

Vice Minister

Mr Kanawat Wasinsungworn

Vice Minister

Minister of Information and Communication Technology

(August 2005-February 2006)

H.E. Mr Sora-at Klinpratoom
Minister

Mr Mahidol Chantrangkurn
Vice Minister

Mr Kanawat Wasinsungworn
Vice Minister

Mr Boonsong Teriyapirom
Adviser to the Minister

Mr Thani Yisarn
Secretary to the Minister

Minister of Information and Communication Technology

(April -August 2005)

H.E. Mr Suwit Khunkitti
Minister

Mr Kanawat Wasinsungworn
Vice Minister

Mr Surasak Anakkhaphan
Adviser to the Minister

Mr Boonsong Teriyapirom
Secretary to the Minister

Minister of Information and Communication Technology

(October 2004-April 2005)

H.E. Dr Surapong Suebwonglee
Minister

Colonel Nalikatibhag Sangsnit
Vice Minister

Mr Sompong Hirikul
Adviser to the Miinister

Mr Tanusak Lekuthai
Secretary to the Minister

OFFICE OF THE PERMANENT SECRETARY

Mr Kraisorn Pornsutee
Permanent Secretary

Mrs Thananoot Treetipbut
Deputy Permanent Secretary

Mrs Maneerat Plipat
Deputy Permanent Secretary

Mr Thaneerat Siriphachana
Inspector-General

Mr Terdsak Pattayanun
Inspector-General

Ms Chirapa Chitraswang
Principal Adviser for
Communications

Mrs Anchalaporn Siriwan
Acting Principal Adviser for
Foreign Affairs

THE METEOROLOGICAL DEPARTMENT

Mr Suparerk Tansriratanawong
Director-General

Mr Kriengkrai Khovadhana
Deputy Director-General

Mr Thosakdi Vanichkajorn
Deputy Director-General

Mr Theeranun Raktabutr
Deputy Director-General

NATIONAL STATISTICAL OFFICE

Mr Sue Lo-Uthai

Secretary-General

Mr Angsumal Sunalai

Deputy Secretary-General

TOT PUBLIC COMPANY LTD

Mr Chamras Tantreesukhon
Acting President

Mr Chaichaweng Kittayakhom
Senior Executive Vice President

Mrs Tipawan Wuttisarn
Senior Executive Vice

Mr Sinthunong Angsupanich
Senior Executive Vice

Mr Vichien Naksinual
Senior Executive Vice President

Mr Sayan Tinsamran
Senior Executive Vice

Mr Somkuan Bruminhent
Senior Executive Vice President

Mr Peerapan Soonthornsaratoon
Senior Executive Vice President

Mr Ongarj Pukittayakamee
Senior Executive Vice President

Mr Vasukree Klapairee
Senior Executive Vice President

Mr Suvit Satayarakvit
Senior Executive Vice President

Mr Chartri Sahavejjabhand
Senior Executive Vice President

Mrs Dolrudee Pornpipat
Senior Executive Vice President

Mr Kittipong Tameyapradit
Senior Executive Vice President

Mr Varut Suvakorn
Senior Executive Vice President

CAT TELECOM PUBLIC COMPANY LTD

Mr Phisal Jorphochaudom
Acting President

Mr Jirachai Srijohn
Senior Executive Vice President

Mr Sompol Chanprasert
Senior Executive Vice President

Mr Marut Buranasetkul
Senior Executive Vice President

Mr Kitisak Sriprasert
Senior Executive Vice President

Mr Jirayut Rungsrithong
Senior Executive Vice President

THAILAND POST COMPANY LTD

Mr Dhiraphonngs Suddhinond

President and CEO

Mr Ormsin Chivapruk

Senior Executive Vice President

Miss Sunan Chokdara

Senior Executive Vice President

Mrs Wongchan Nopakhao

Senior Executive Vice President

Mr Woodtipong Moleechad

Senior Executive Vice President

SOFTWARE INDUSTRY PROMOTION AGENCY

(SIPA)

(PUBLIC AGENCY)

Dr Avudh Ploysongsang
President

Dr Niracharapa Tongdhamachart
Vice President Technology Transfer

Mr Pipat Thongpadungrojana
Vice President Administration

Miss Patsamon Koopumchaisakul
Vice President Finance
and Accounting

An Overview of the Performance

An Overview of the Performance Of The Ministry of Information and Communication Technology

This annual report of 2005 filed by the Ministry of Information and Communication Technology(MICT) is being produced under a new format according to a cabinet resolution of November 22, 2005, detailing the structures of each government agency's annual report and a national annual report that conform to the same standards with the view to making use of agency annual reports in the monitoring and evaluation of national performance. This annual report is composed of three parts: Part I: Background Information on MICT; Part II :Ministerial Performance as Determined by Its Fiscal 2005 Annual Performance Pledge; and Part III: Performance Outcome.

Part I : Information on MICT

MICT was established on October 3, 2002 by the Bureaucratic Restructuring Act of B.E. 2545 (2002.) The Ministry had under its aegis the following agencies and state enterprises: Office of the Minister; Office of the Permanent Secretary; Department of Post and Telegraph; Meteorological Department; National Statistical Office; Software Industry Promotion Agency (Public Agency), TOT Public Company Limited, CAT Telecom Public Company Limited and Thailand Post Company Limited.

At its inception, MICT laid down its vision, mission, goals, and strategies in accordance with national administration plan and the government's policy framework as stated to parliament with the view to an efficient implementation of government policies under clear-cut operational directions, that results in concrete outputs and desired outcomes. There are nine strategies as follows:

Strategy 1: Allow opportunities for communities and disadvantaged groups to access information and knowledge and encourage life-long learning;

Strategy 2: Promote the development of equal access and use of information and communication technology (ICT);

Strategy 3: Support the development of communication networks so that Thailand becomes a major cyber centre in the Southeast Asian region;

Strategy 4: Promote, and support the development and use of ICTs on the basis of Thai technologies.

Strategy 5: Revise laws, regulations, privileges and measures to facilitate the development and use of ICTs;

Strategy 6: Promote the development of human resources in ICT to an international level in order to enhance Thailand's competitiveness;

Strategy 7: Promote the research and development of ICTs with the view to engendering Thai technologies that enhance the economy and society;

Strategy 8: Set up MICT as a model showcasing the use of ICT in public administration and services;

Strategy 9: Accelerate the interoperability of data bases in support of the development and use of ICT in public services and administration.

Part II : Ministerial Performance as Determined by Its Fiscal Year 2005 Annual Performance Pledge

During fiscal year 2005 (Oct.04-Sept 05), MICT had operated in accordance with its annual pledge under the framework of four dimensions:

1st Dimension: Strategic Effectiveness;
2nd Dimension: Quality of Service;
3rd Dimension: Operational Efficiency;
4th Dimension: Organizational Development

It has determined indicators, targets and criteria for a full score of 5, and has achieved 4.4736 points for its overall performance.

Part III : Performance Outcome in 2005

MICT has translated policies, master plans, strategies, into actual implementation, resulting in a number of outstanding projects that could be presented under three strategic groups:

Strategic Group 1:

Enhance the people's quality of life and transform Thai society into a knowledge-based society.

- Ministry of Education Network on the Internet (MoE Net Project);
- Tambon Net Project;
- Thais Advance Forward with Heart in the Net Project;
- TOT IT Schools Project;
- Budget PCs Promotion Project;
- Project to Promote Knowledge on Space Affairs;
- Project on the Development of Thai Students'Networks in the Age of ICT;
- ICT Cities Project;
- One Temple One Learning Centre (OTEC) Project;
- Thailand Knowledge Centre (TKC) Project :Phase2;
- Project on the Cooperation in Preventing and Suppressing Internet-related Harm.

Strategic Group 2:

Increase Thailand's competitiveness through the use of ICTs.

- Project on the Reduction in International Calls Rates;
- Promotion of Broadband Internet: ADSL;
- Project on the Expansion of CDMA Network;
- Project on the Expansion of Fixed Line Telephony (by 565,500 numbers)
- Development of Thai software industry;
- Bangkok International ICT Expo 2004-2005
- Project on the Amendment of the Tapes and Television Materials Control Act B.E.2530 (1987)to define hard disk as a tape or TV material;
- Project on the 1900 MHz Mobile Telephones;
- Project on Legal Development;
- Project on the Mapping of ICT Industry Promotion Plan;
- ICT Alliance Project (e-Commerce);

Strategic Group 3:

Promote ICT in government administration and services.

- Smart Card Project;
- Government Call Centre (GCC:1111) Project;
- Project on Meteorology in Support of Suvarnabhumi Airport;
- Project on an ICT Handbook for CEO Provincial Governors;
- Survey on public opinion on government policies;
- Project on e-Government;
- Project on e-Citizen (phase 2);
- Project on the Development of Government Data and Service Integration;
- Project on the Promotion and Strengthening of Government Chief Information Officers'(CIOs')Network;
- Project on Seismic Measurement System, Data Bases and Networking;
- Project on Hydrometeorological Forecasting through Telemetry System for Disaster Mitigation Phase 3;
- Project on the Setting Up of a Meteorological Station for the Purpose of Tourism and Flood Prevention in Khao Kheao area in Nakhon Nayok Province;
- Project on the Improvement of Facilities at Rayong Meteorological Station;
- Project on the Establishment of a National Information Centre.

Besides, MICT has carried out the following projects in response to government urgent priorities:

- Regulating the use of pre-paid SIM cards in mobile cellular telephones;
- Tsunami Early Warning Project.

Chart Showing Relations between Strategic Groups and Major Programmes and Projects of the Ministry of Information and Communication Technology

Strategic Group 1: Enhance the people's quality of life and transform Thai society into a Knowledge-based Society

Strategy 1: Allow opportunities for communities and disadvantaged groups to access information and knowledge and encourage life-long learning;
Strategy 2: Promote the development of equal access and use of ICT

Tactic

Develop and promote the use of ICT In Thai society

Through

- MoE Net Project
- Tambon Net Project
- Thais Advance Forward With Heart in the Net Project
- TOT IT Schools Project
- Project to Promote Knowledge on Space Affairs
- Project on the Development of Thai Students' Networks in the Age of ICT
- ICT Cities Project
- One Temple One Leaning Centre (OTEC)
- Thailand Knowledge Center (TKC : Phase 2)
- Project on the Cooperation in Preventing and Suppressing Internet-related Harm

Strategic Group 2: Increase Thailand's Ccompetiveness through the use of ICTs

Strategy 3: Support the development of communication networks so that Thailand becomes a major cyber centre in the Southeast Asian region;
Strategy 4 Promote and support the development and use of ICTs on the basis of Thai technologies;
Strategy 5 : Revise laws,regulations,privileges and measures to facilitate the development and use of ICTs;
Strategy 6: Promote the development of human resources in ICT to an international level in order to enhance Thailand's competitiveness;
Strategy 7: Promote the research and development of ICT with the view to engendering Thai technologies that enhance the economy and society.

Tactic

Develop and promote the use of ICT in enhancing Thailand's competitiveness to be a regional ICT hub.

Through

- Reduction in International call rates
- Promotion of Broadband Internet: ADSL
- Expansion of CDMA Network
- Expansion of Fixed Line Telephony (565,500 nos)
- Project on the 1900 MHz Mobile Phones
- Development of Thai Software Industry
- Bangkok International ICT Expo
- Project on Legal Development
- Project on Mapping ICT Industrial Promotion Plan
- ICT Alliance Project (e-Commerce)

Strategic Group 3: Promote ICT in government administration and services

Strategy 8: Set up the MICT as a model showcasing the use of ICT in public administration and services;
Strategy 9: Accelerate the interoperability of data bases in support of the development and use of ICT in public services and administration

Tactic

Develop and use ICT in government administration and management

Through

- Smart Card Project
- Government Call Centre (GCC 1111)
- Project on Meteorology in Support of Suvarnabhumi Airport
- Project on an ICT Handbook for CEO Provincial Governors
- Regulating the Use of Pre-paid SIM Cards in Mobile Cellular Telephones
- Tsunami Early Warning Project
- Project on e-Government
- Project on e-Citizen
- Project on the Development of Government Data and Service Integration

Ministers take hands-on approach to regulate
the pre-paid SIM cards in mobile phones.

Brain-storming seminar on the topic

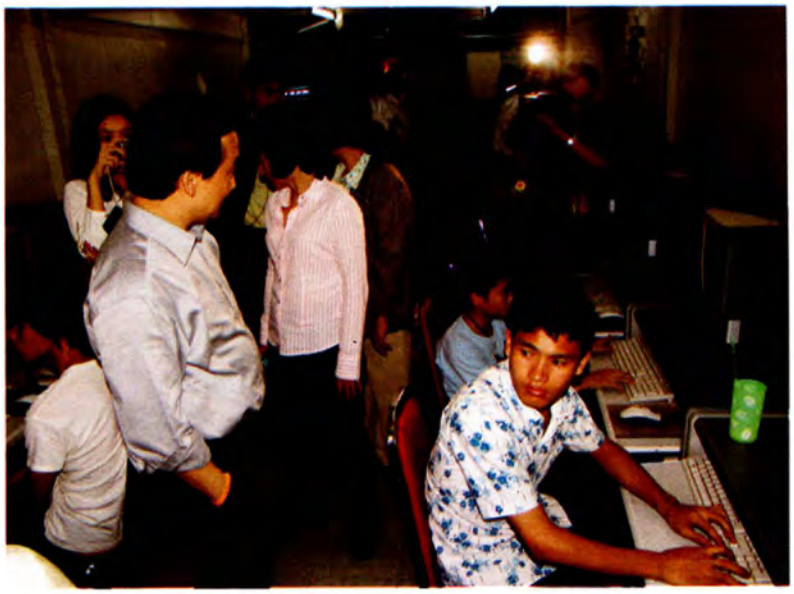
A warning tower

A view of Suvarnabhumi Airport

New equipment for the Project on Meteorology in Support of Suvarnabhumi Airport

One Temple One Learning Project (OTEC)

Promote ICT use among young people



Cooperation is needed to preventand suppress Internet-related harm.

Bangkok International ICT Expo 2005

Launching the ICT Alliance (e -Commerce)

The Opening of Thailand Animation & Multimedia (TAM)

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PART 1

BACKGROUND INFORMATION ON MICT

BACKGROUND INFORMATION ON MICT

Vision

To support, promote and drive Thailand to realize her potential and reach the position of an ICT leader in Southeast Asia by 2008.

Mission

1. Determine the realization and management of ICT strategies in line with the National IT Policy Framework B.E.2544-2553 (2001-2010) also known as IT 2010 and Thailand ICT Strategic Master Plan B.E.2545-2549 (2002-2006).

2. Analyse guidelines, plan, and coordinate ICT operations in its capacity as the focus of planning integration in conjunction with agencies from both the private and public sectors, domestically as well as internationally.

3. Conduct studies, research and development in ICT to enhance Thailand's competitiveness in the world arena.

4. Develop ICTs and use them to generate incomes, improve quality of life and transform society into a Knowledge-based Society in an equitable and comprehensive manner.

5. Respond to government policy in harnessing ICTs as an important mechanism to develop e-Government, e-Industry, e-Commerce, e-Education and e-Society.

Service Delivery Targets

MICT has taken into account its mandate as laid down in the National Administration Plan B.E. 2548-2551 (2005-2008) when the following service delivery targets are set:

- Promote and develop ICT capacity that will drive Thailand to become a regional ICT hub;
- Use ICT throughout government for administration and services in an efficient manner;
- Develop and promote the use of ICT in enhancing Thailand's competitiveness;

- Provide early warning on natural disasters through an advanced and efficient ICT system;
- Provide updated and timely information as a data base for decision-makers.

MICT Strategies

With the view to ensure efficient operations under well-defined directions that respond to government policies and produce concrete outcomes, MICT has formulated three strategic groups, comprising nine strategies as follows:

Strategic Group 1 Enhance the people's quality of life and transform Thai society into a knowledge-based society.

Strategy 1 : Allow opportunities for communities and disadvantaged groups to access information and knowledge and encourage life-long learning;

Strategy 2 : Promote the development of equal access and use of ICT;

Strategic Group 2 Increase Thailand's competitiveness through the use of ICTs.

Strategy 3 : Support the development of communication networks so that Thailand becomes a major cyber centre in the Southeast Asian region;

Strategy 4 : Promote and support the development and use of ICTs on the basis of Thai technologies;

Strategy 5 : Revise laws, regulations, privileges and measures to facilitate the development and use of ICTs;

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Strategic Group 3 Promote ICT in government administration and services.

Strategy 8 : Set up MICT as a model showcasing the use of ICT in public administration and services;

Strategy 9 : Accelerate the interoperability of data bases in support of the development and use of ICT in public services and administration.

Tactics

To achieve its vision, mission, service targets and strategies, MICT has formulated its developmental tactics in the following five dimensions:

Dimension 1 : e-Government

To use ICT throughout government to develop internal operations and management in order to maximize efficiency.

Dimension 2 : e-Commerce

To increase the competitiveness of local businesses as well as allow access to the lucrative world of manufacturing of ICT equipment, leading to a radical change in the way business is conducted.

Dimension 3 : e-Industry

To promote ICT use in industries that will significantly allow the industrial sector to access knowledge and use it to the maximum benefit.

Dimension 4 : e-Education

To promote ICT use in upgrading educational attainment, producing quality human resources as knowledge workers for the industrial sector as well as creating an equitable knowledge-based society.

Dimension 5 : e-Society

To bridge the digital divide, closing gaps in terms of access to ICT and data bases, thereby increasing quality and potential for all, leading eventually to an understanding of the knowledge-based society where individual learning is held in high esteem.

Organization of MICT

It is stipulated in Chapter10, Section 24 of the Bureaucratic Restructuring Act B.E. 2545 (2002) that the Ministry of Information and Communication Technology is mandated to plan, promote, develop and carry out activities relating to information and communication technology, meteorology, statistics and other public functions as provisioned by law to be those of MICT or relevant agencies under the purview of the Ministry.

According to Section 25, MICT comprises the following agencies:

1. Office of the Minister
2. Office of the Permanent Secretary
3. The Meteorological Department
4. National Statistical Office
5. Post and Telegraph Department (currently Office of the National Telecommunications Commission)

Moreover, MICT has four other agencies under its aegis:

1. The Software Industry Promotion Agency (Public Agency)
2. TOT Public Company Limited.
3. CAT Telecom Public Company Limited
4. Thailand Post Company Limited

Address:

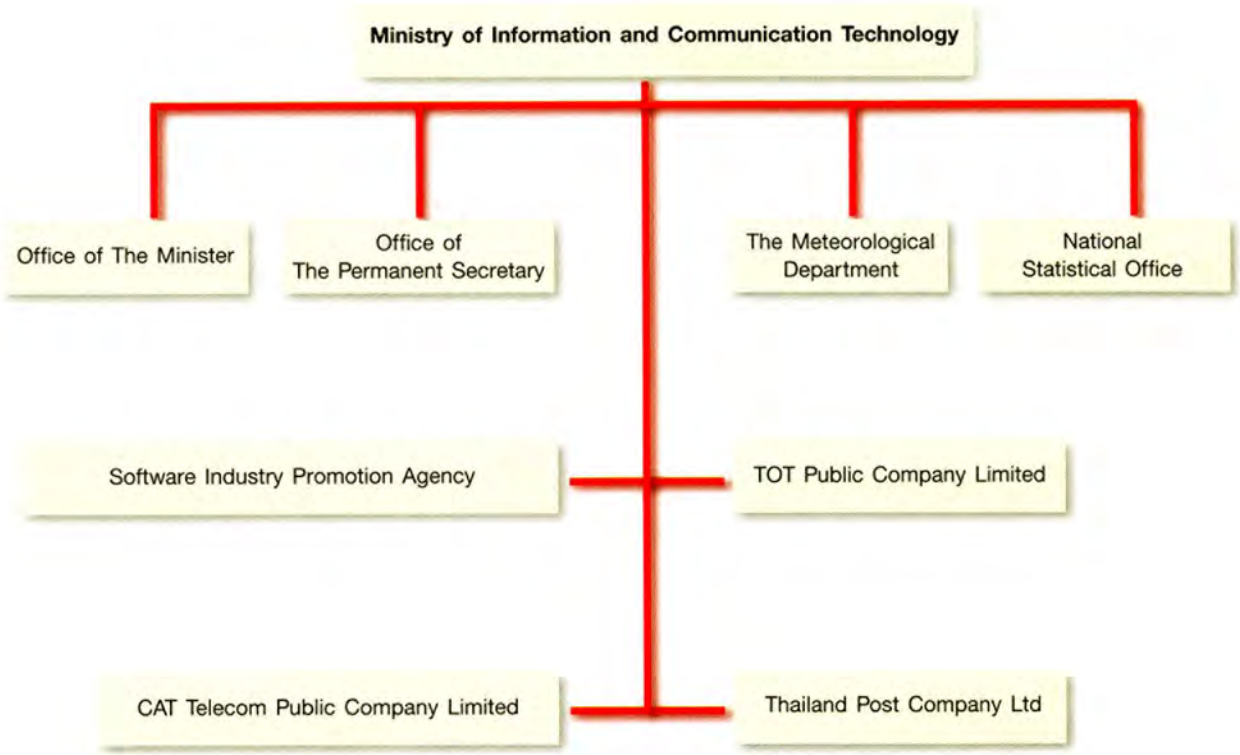
Ministry of Information and Communication Technology

89/2 Moo 3 TOT Pcl, Building 9, Chaeng Wattana Road, Lak Si,Bangkok 10210

Tel : 0 2568 2515 Fax : 0 2568 2518

Website : www.mict.go.th

Organization Chart



Office of the Minister

1. Collect and compile information, analyse and screen issues for submission to the minister as well as proposing opinion in support of the minister's decision-making and ordering;
2. Support the work of the Minister in political operation vis-?-vis the cabinet, the parliament and the public;
3. Coordinate the responses to questions, explication of motions, draft bills and other political activities;
4. Process and consider complaints, petitions or requests for assistance that have been addressed to the minister;
5. Carry out other actions stipulated by law to be within the purview of the Office of the Minister or as assigned by the cabinet.

Office of the Permanent Secretary

1. Study, analyse, compile data and information as the basis for determining ministerial policies, targets and achievements;
2. Develop administrative strategies of the ministry;
3. Translate policies into guidelines and action plans;
4. Allocate and manage ministerial resources for maximum efficiency and effectiveness;
5. Supervise, accelerate, monitor and evaluate as well as coordinate the operations of government agencies within the purview of the ministry;
6. Coordinate, monitor and evaluate operations of other agencies within the purview of the ministry;
7. Supervise public relations and foreign relations as well as develop and update related laws;
8. Coordinate information networks at the national level, serve as the information centre at the ministerial level as well as develop the use of ICTs in administration and services of agencies within the purview of the ministry;
9. Propose guidelines, and development plans on e-government as well as coordinate and carry out the development of e-government;
10. Propose guidelines on and develop space affairs as well as coordinate and carry out operations related to space affairs;
11. Propose guidelines and development plans on the promotion of ICT industry as well as coordinate and carry out other operations related to the promotion of ICT industry;
12. Promote the application of ICT, e-commerce and e-transaction to businesses and industries as well as educate every sector of society in those issues;
13. Carry out operations in conjunction with or in support of other agencies concerned or as assigned by the cabinet.

National Statistical Office

1. Map out national statistical plans and composite charts;
2. Formulate and encourage the use of international statistical standards;
3. Produce and analyse basic socio-economic statistical data at the macro level by conducting censuses or surveys while at the same time provide statistical services in every branch of the nation;
4. Produce and analyse statistical data that support government urgent policies and that are significant but not produced by any statistical offices;
5. Advise other domestic statistical offices on the production of statistical data.
6. Coordinate with international organizations in technical matters on statistics;
7. Carry out other actions stipulated by law to be within the purview of the Office or as assigned by the minister.

Meteorological Department

1. Watch over, monitor and report on weather conditions and natural phenomena;
2. Provide weather forecast and early warning of natural disasters in a universal manner;
3. Use state-of-the-art technology to provide meteorological services to other agencies;
4. Carry out research and development on meteorological geoinformation and meteorological geophysics and other related technical engineering.
5. Cooperate and coordinate with the public, organizations and other relevant agencies in meteorological matters both domestically and internationally;
6. Carry out other official duties as stipulated by law to be the function of the Department or as assigned by the minister or the cabinet.

Software Industry Promotion Agency (SIPA)

1. Serve as the principal agency in mapping out and determining national software industry promotion policies and plans;
2. Promote software industry by emphasizing the support to the development of national software industry, personnel, marketing, investment, production processes, world-standard services, as well as the creation of incentives to invest in the software industry by proposing taxation measures and other privileges to the cabinet;
3. Support research and development, technology transfer, and the provision of regulations and measures necessary to the promotion of software industry;
4. Promote intellectual property rights protection for software in its capacity as the principal agency for coordination and trouble-shooting of the software industry in a comprehensive manner.

TOT Public Company Limited

1. Provide telecommunications and other related services either on its own or in joint ventures with other entities and invest in other companies as a shareholder;
2. Carry out its commitment as a leading telecom operator by providing maximum customers' satisfaction and creating quality products through innovation;
3. Build modern networks that can provide all forms of services and access to every community, connecting them to the borderless world.
4. Add value to long-term shareholders, conduct proactive marketing, and as a focal point for multimedia, content and application services, undergo a transformation into a smart agency.

CAT Telecom Public Company Limited

1. Operate domestic, external and international telecommunications services and other related and downstream businesses that could contribute to telecommunication as a whole either by itself or in conjunction with companies in the private sector or with other agencies in the form of concessions, or joint ventures, or contracting;
2. Make use of modern technology to provide quality services of high standards at competitive prices;
3. Develop capacity building of its workforce in order to fully respond to customers' needs.

Thailand Post Company Limited

1. Provide postal and financial services of world standards with a nationwide coverage and serve as an efficient communication and business intermediary both domestically and internationally;
2. Expand customers' base to lay a foundation for continuing future operations under increasingly intense competition on a secure basis through maximum utilization of postal networks;
3. Search for opportunities for post-related businesses in order to expand service coverage to include novel services that answer the needs of users and realize its potential to reach sustainable viability;
4. Develop its service and information systems for administrative purposes by making use of ICTs to increase efficiency and reduce operational costs and as a tool to bring about a level playing field vis-?-vis its competitors.

ANNUAL BUDGET EXPENDITURES

In fiscal year 2005, the Ministry of Information and Communication Technology was allocated expenditure budget for FY 2005 and budget from the Central Fund under the category "Compensation and Contingency Fund" as follows:

(in baht)

Agency	Annual Budget	Budget from Central Fund
1. Office of the Permanent Secretary	869,640,300 baht	17,061,992 baht
2. Meteorological Department	860,501,800 baht	148,505,900 baht
3. National Statistical Office	622,637,800 baht	-
4. Post and Telegraph Department *	197,571,200 baht	-
5. Software Industry Promotion Agency (public agency)	470,870,700 baht	-
Total	**5,021,221,800 baht**	**165,567,892 baht**

***Currently Office of the National Telecommunications Commission.**

FY 2005 Budget Breakdown by Type of Expenses

FY	Agency	Type of Expenses					
		Budget	Personnel	Operations	Investments	Subsidies	Miscellaneous
2005	Office of the Permanent Secretary	2,869.640	44.885	2,378.481	44.563	127.841	273.871
	Meteorology Department	860.502	201.200	193.111	457.6112	8.5796	-
	National Statistical Office	622.6378	348.5833	187.5152	77.9021	0.8162	7.821
	Post and Telegraph Department	197.571	-	-	-	-	-
	SIPA	470.871	-	-	-	470.871	-
	Total	5,021.22	594.67	2,759.11	580.08	608.11	281.69

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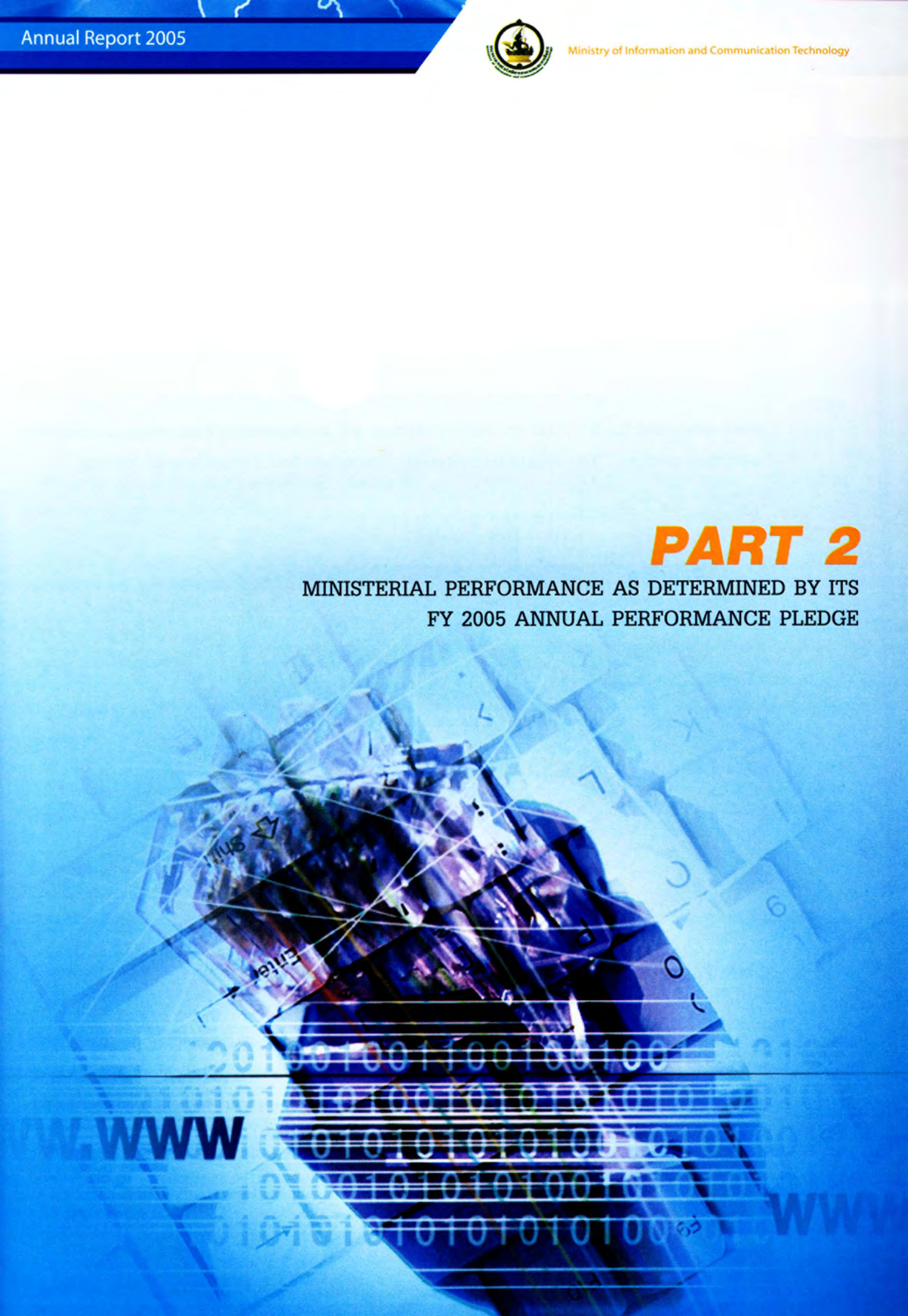
PART 2

MINISTERIAL PERFORMANCE AS DETERMINED BY ITS FY 2005 ANNUAL PERFORMANCE PLEDGE



MINISTERIAL PERFORMANCE AS DETERMINED BY ITS FISCAL 2005 ANNUAL PERFORMANCE PLEDGE

The performance of the Ministry of Information and Communication Technology has been evaluated for FY 2005 so that its officials will be eligible for bonuses in accordance with their pledges. The evaluation framework comprises four dimensions as follows:

Chart: Framework for the Evaluation of Ministerial Performance

Every agency under the aegis of the MICT participated in developing its operations in response to ministerial strategies, and plan of action. Accordingly, indicators, targets and scoring criteria had been set up to ensure that the strategies and targets were achieved as follows:-

Performance Indicator	Unit	Weight (in %)	Performance		
			Results	Achieved Score	Weighted Score
1st Dimension : Strategic Effectiveness (weight : 60%) * Evaluation of MICT's strategies (weight: 25%)					
1. Number of fixed line telephone subscribers and fixed line telephony capacity per 100 inhabitants.					
1.1 Number of subscribed fixed telephone lines in Bangkok Metropolitan area per 100 inhabitants.	line (number)	0.75	39.39 (Aug 05)	5.0000	0.0312
1.2 Number of subscribed fixed telephone lines in the provincial area per 100 inhabitants.	line (number)	1.25	6.31 (Aug 05)	1.6300	0.0169
1.3 Fixed line telephony capacity in Bangkok Metropolitan Area per 100 inhabitants.	line (number)	0.75	50.65 (Aug 05)	5.0000	0.0312
1.4 Fixed line telephony capacity in the provincial area per 100 inhabitants.	line (number)	1.25	7.60 (Aug 05)	1.6700	0.0173
2. Number of schools with fixed telephone line in percentage.	%	2.25	94.57 (Aug 05)	4.2800	0.0802
3. Number of measures, rules and regulations which are conducive to ICT development.	measure	3.75	3	5.0000	0.1562
4. Percentage of immoral or illegal Web sites that were blocked in relation to the number of reported immoral or illegal Web sites.	%	2.5	100	5.0000	0.1041
5. Level of achievement in establishing a data base on ICT personnel.	level	4.5	3	3.0000	0.1125
6. Number of ICT indices developed to international standards.	number	3.75	75	5.0000	0.1562
7. Level of achievement in driving forward the implementation of the Government Central Back Office Project.	level	1.75	2	2.0000	0.0291
8. Level of success of e-service for the public	level	2.5	2	2.0000	0.0416

Performance Indicator	Unit	Weight (in %)	Performance		
			Results	Achieved Score	Weighted Score
* Evaluation of the strategies of the Office of the Permanent Secretary (weight: 20%)					
9. Number of information items stored at the Space Resource Centre.	item	4.2	5	5.0000	0.1750
10. Number of countries participating in the Bangkok International ICT Expo 2005 as official guests of the government.	country	3.0	12	5.0000	0.1250
11. Number of companies participating in the Bangkok International ICT Expo 2005 that were matched in business negotiation.	match	2.0	10	5.0000	0.0833
12. Level of success of the implementation of it's action plan under MICT's strategic plan in weighted average percentage.	%	5.8	100	5.0000	0.2416
13. Number of news and information items on ICT that were disseminated to the public.	item	5	120	5.0000	0.2083
* Compulsory Indicators (weight: 15%)					
14. Percentage of achievement according to the agency's output targets (as stipulated in the budget expenditures document)	%	5	99.5	4.9000	0.2041
15. Level of achievement in administrative improvement in support of the operations of provincial and local government authorities.	level	10	5	5.0000	0.4166
2nd Dimension : Quality of Service (weight: 10%)					
16. Percentage of level of customers' satisfaction	%	5	n/a	1.0000	0.0416
17. Level of achievement in the implementation of measures to prevent and suppress corruption.	level	5	5	5.0000	0.2083
3rd Dimension : Operational Efficiency (weight: 10%)					
18. Percentage of budget fund that was saved	%	4	9.31	5.0000	0.1667

Performance Indicator	Unit	Weight (in %)	Performance		
			Results	Achieved Score	Weighted Score
19. Level of achievement in determining and implementing energy-saving measures.	%	1	5	5.0000	0.0416
20. Level of achievement in weighted average percentage in the reduction of time spent in each of the agency's operational cycle.	level	5	5	5.0000	0.2083
4th Dimension : Organizational Development (weight: 40%)					
21. Percentage of the achievement in implementing the action plan on the development of an in-house knowledge management system in FY 2005.	%	5	100	5.0000	0.2083
22. Level of management quality of the agency's information.	level	5	4	4.0000	0.1666
23. Level of achievement and quality of the agency's proposal for changes					
Phase 1 Evaluation on March 31, 2005					
1) Lead time for the proposal submission;	level	1.25	3	3.0000	0.0312
2) Completeness of the proposal.	level	1.25	97.5	4.5800	0.0477
Phase 2 Evaluation on September 30, 2005					
1) Lead time for the proposal submission;	level	1.25	5	5.0000	0.0520
2) Completeness of the proposal;	level	1.25	100	5.0000	0.0520
3) Quality of the proposed changes.	level	5	5	5.0000	0.2083
24. Level of achievement in mapping out the agency's legal development plan.	level	7	5	5.0000	0.2916
25. Level of achievement in weighted average percentage in the agency's implementation of its legal development plan.	level	13	4	4.7913	0.5190
	Total				4.4736

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PART 3

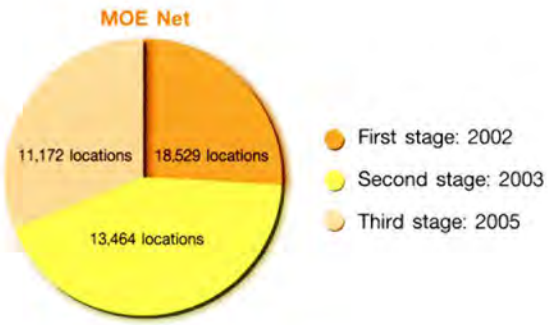
PERFORMANCE OUTCOME 2005

Performance Outcome

Strategic Group 1 Enhance the people's quality of life and transform Thai society into a knowledge-based society

1. Ministry of Education Network on the Internet (MOE Net Project)

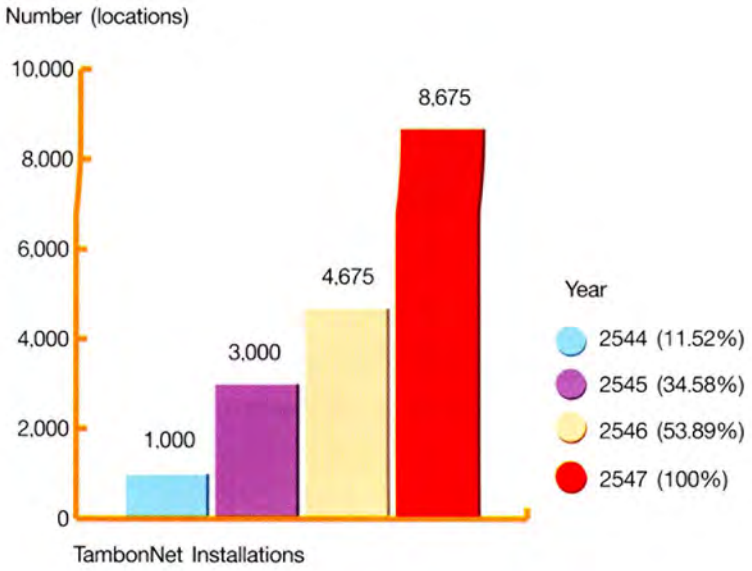
MICT supported the installation of Internet networks in schools, educational institutions and agencies under the Ministry of Education. The objective was to have the Internet available in these institutions and agencies, so that the students could have access to and make use of the information, in accord with the government policy to upgrade, develop, promote, and support the quality of life of Thai youths. At the time of this reporting, this project had been implemented in 33, 165 locations nationwide in three stages as shown below.



2. Tambon Net Project

This was a project to prepare networks and system connections at the tambon (sub-district) level. The objective was to enable the Tambon Administration Organizations (TAOs) to have access to the Internet to enhance the efficiency of their administration. This project allowed the staff of the TAOs to conduct research, look up technical information and news, and make use of information from public and private agencies in the planning and development of their infrastructure. They could also use the system for communication among the TAOs and with district and provincial offices, for public relations activities to promote the community's products and goods, and for the generation of more income for local people. At the time of this reporting, this project had been implemented in 8,675 locations as planned. Improvement was in process to increase the capacity of the telecommunication network to accommodate various supplementary services.

Graph showing completed installations



3. Thais Advance Forward...With Heart in the Net Project

This was a project to train communities and youths to use the Internet. The objective was to promote the ICT capacity of community leaders and youths throughout the kingdom as well as to expand the scope of their ICT knowledge. To facilitate the training, one computer was provided for each trainee. A total of 3,000 persons participated in the training.

COURSE	TARGET	
- Internet Usage - Writing Web site programs	- 2,400 youths and other participants from Internet communities - 600 community leaders and youths	- 12 times - 12 provinces with servers - 3 times - 3 southern border provinces

4. TOT IT Schools Project

Initiated in support of the government policy, this project aimed at developing a good quality of life for students and community members. The emphasis was on providing ICT equipment in the construction of prototype IT schools. This was done through support and assistance in the construction of IT classrooms, provision of the LAN system and access to the Internet, donations of IT equipment and computer and Internet related books, as well as training courses for homepage writing.

Pilot Schools in 2004	Pilot Schools	in 2005	
1. 7 schools in the northern regio 2. 7 schools in the northeastern region	Completely implemented	1. 7 schools in the central region 2. 7 schools in the eastern region 3. 7 schools in the southern region	Implementation in process

5. Project to Promote Knowledge on Space Affairs

The project was initiated to organize demonstrative seminars to disseminate knowledge and information on space affairs to pupils and the general public in different regions of Thailand. The goals and the outcome of the project are listed below.

TAGET	OUTCOME
- To prepare a Web site to disseminate knowledge of space science and technology - To prepare newsletters that compile modern academic articles and reports on current trends in space affairs - To produce books and articles in Thai for the general public - To produce videograms to disseminate knowledge of introductory space science and technology - To establish a space resource centre - To develop introductory space technology appropriate for Thailand and put it in practice to promote citizen's knowledge of space - To demonstrate introductory space technology to students and other interested people	- Prepared a Web site with information on space to be disseminated publicly on the internet http://space.mict.go.th - Published newsletters to promote knowledge of space - Organized 5 seminars and demonstrations f or students, teachers, instructors and the general public to promote knowledge of space technology - Compiled information in the form of 200 CD-ROMs to disseminate knowledge of space technology for application to everyday life - Established small specialized libraries and amateur radio satellite stations

6. Project on the Development of Thai Students' Networks in the Age of ICT

This project was implemented to create a knowledge-based society and to propagate ICT knowledge to students so that it can be passed on to the next classes in every region of Thailand. The students' networks were expanded through the Internet (www.teenict.com). The emphasis was on the development of a centre for exchange of knowledge, views, and articles among pupils, students and the general public. This was accomplished by organizing competitions

TAGET	OUTCOME
- To organize 2 training courses for no fewer than 150 students in Bangkok and Greater Bangkok area.	- Organized 2 training courses for 150 students in Bangkok Metropolitan area
- To organize training courses for no fewer than 500 students in 10 provinces in every region	- Organized training courses for a total of 717 students in the provinces with details as follows: **Southern Region:** - Nakhon Si Thammarat 64 - Songkhla 44 **Central Region:** - Nakhon Pathom 67 - Nakhon Nayok 77 **Eastern Region:** - Chon Buri 71 - Chanthaburi 69 **Northeastern Region:** - Roi Et 81 - Khon Kaen 80 **Northern Region:** - Phitsanulok 75 - Chiang Mai 89

7. ICT Cities Project

This was MICT's project with the objective to promote learning of data and information in the form of ICT cities. Initially, Phuket, Chiang Mai and Khon Kaen were designated as pilot provinces. Support was given to the telecommunication infrastructure and services to accommodate the growth of telecommunication services of government and private agencies and the general public.

TARGET	OUTCOME
Stage 1 3 provinces	Supported the telecommunication infrastructure and services in Phuket, Chiang Mai, and Khon Kaen provinces.
Stage 2 11 provinces	Expanded the project coverage to include Phra Nakhon Si Ayutthaya, Nakhon Pathom, Prachuab Khirikhan (Hua Hin District), Nakhon Ratchasima, Ubon Ratchathani, Phitsanulok, Nakhon Sawan, Songkhla, Suphan Buri, Ratchaburi and Rayong provinces

8. One Tambon One Learning Centre (OTEC) Project

Public Internet access centres were established in temples under the One Tambon One Learning Centre Project. The objective was to encourage a religious institution (Buddhist temple) to serve as an ICT learning centre for the people in the community and as a centre for individuals and organizations involved with ICT promotion for the development of e-communities. The project was initially implemented in 2004 and about 50% of the work was accomplished at the time of this reporting.

Unit : temple

TARGET	OUTCOME
- To procure and install computers in temples as learning centres, for a total of 9 centres, each receiving 20 units	1. Wat Phra That Hariphunchai, Lamphun province 2. Wat Nong Khong, Chiang Mai province 3. Wat Phailom, Trat province 4. Wat Phetsamutworamahawihan, Samut Songkhram province

9. Thailand Knowledge Centre (TKC) Project

The TKC serves as the national knowledge centre and a knowledge management network in Thailand. One objective was to develop digital content relating to Thai local wisdom and indigenous knowledge and to integrate widespread information in Thailand into one system that is accessible online. Other objectives were to disseminate Thai local wisdom through the Internet to be far-reaching and accessible to all and to promote knowledge sharing and learning among the people to turn Thailand into a knowledge-based society. The activities accomplished included the development of the content in multimedia form and the establishment of a Community of Practice (CoP) as a forum for learning and sharing of information which is also disseminated via it's portal **www.tkc.go.th.**

10. Project on the Cooperation in Preventing and Suppressing Internet-related Harm

10.1 Stipulating measures for prevention and suppression of harm from using the Internet and playing games online with the objective of resolving problems caused by the use of technology unlawfully, immorally, and in a manner that threatens national security.

TARGET	OUTCOME	COVERAGE AREAS
To make parents and guardians feel confident that their children will gain knowledge from surfing the Web sites and to block access to inappropriate Web sites	Established high-speed Internet service centres in the form of "Clean Internet and Knowledge Centres"	- **Nakhon Ratchasima - Khon Kaen** - **Ubon Ratchathani - Hat Yai (Songkhla Province) - Phuket - Nakhon Pathom** - **Bangkok:** - Ploenchit - Queen Sirikit National Convention Centre - Banrai Cafe' (Ekamai) - Ratchadamnoen Post Office - Thanalongkorn Service Centre, Ministry of Culture Building - IT Square, Lak Si

10.2 Coordinating efforts to block access to certain Web sites with Internet Service Providers(ISPs) under contracts with CAT Telecom Public Company Limited and other ISPs. At the time of this reporting 3,100 Web sites had been blocked. The Cyber Clean Project was also implemented with web site creators to make the Internet creative media. At the time of this reporting, 40 Web sites had joined this project. Reports of inappropriate Web sites can be made to the Web site http://ict.cyberclean.org, which will disseminate the information. At the time of this reporting, there were reports on 3,200 Web sites and the average number of such reports was 15,000 per day.

10.3 Blocking immoral and illegal Web sites to keep Thai youths away from inappropriate information. To this end, the Gatekeeper Project was launched to block Web sites at the gateway of CAT Telecom Public Company Limited. The Web sites were blocked by Cyber Inspectors and at the time of this reporting 7,100 Web sites had been blocked.

Strategic Group 2: Increase Thailand's competitiveness through the use of ICTs.

1. Reduction in International Call Rates

The direct international call rates to 100 countries were reduced by 7 to 70 % so that the rates would be the same as that of Singapore. The objective was to stimulate more use of international call service. The rates of international calls via the Voice over Internet Protocol (VoIP) to 30 countries were also reduced to encourage the use of legitimate services.

Table showing service rates

SERVICE	YEAR		
	2003	2004	2005
1. Domestic Calls			
1.1 Normal Rates			
- Local	3 Baht/call and 1 Baht/minute	3 Baht/call and 1 Baht/minute	3 Baht/call and 1 Baht/minute
- Long Distance	3-18 Baht /minute	3-18 Baht /minute	3-18 Baht /minute
1.2 Promotional Rates			
- Local	3 Baht/call and 1 Baht/minute	3 Baht/call and 1 Baht/minute	3 Baht/call and 1 Baht/minute
- Long Distance	3-12 Baht /minute	2-12 Baht /minute	2-12 Baht /minute
2. International Calls			
2.1 TOT 007	6-30 Baht /minute	9-45 Baht /minute	9-45 Baht /minute
2.2 TOT 008	N/A	6-32 Baht /minute	6-32 Baht /minute
2.3 CAT 001	22 Baht /minute	22 Baht /minute	9 Baht /minute
2.4 CAT 009	N/A	N/A	6-7 Baht /minute

* Normal rate not including promotion

2. Promotion of Broadband Internet: ADSL

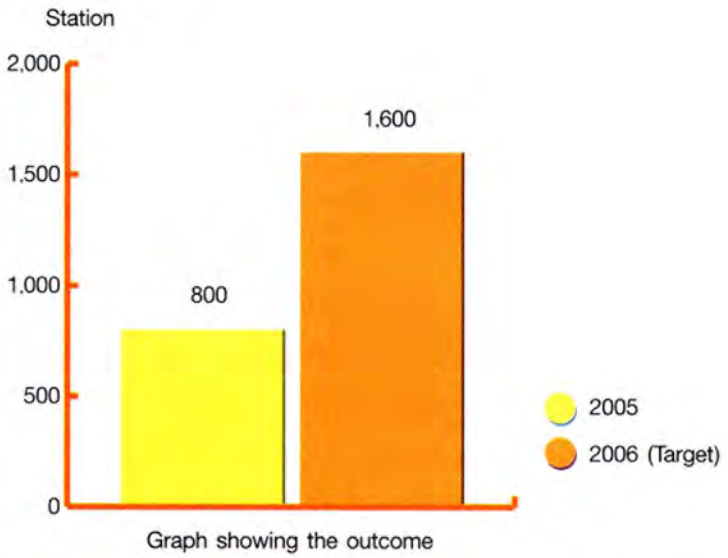
This was the service to increase data transmission capacity by using regular telephone lines at 30 times the normal speed. The objectives were to provide integrated Internet centre service for clients who require total solutions; to develop the wireless broadband service to accommodate wider usage; to increase the capacity of Internet exchanges, that connect to international networks through a large bandwidth circuit that serves as redundancy; to provide service to major clients such as ISPs and government agencies, and to cater to the communication network requirements of users that are large business enterprises or industrial estates. The outcome is shown below..

Broadband Internet	**YEAR**		
	2003	**2004**	**2005**
1. Number of ports provided	N/A	N/A	216,487 Ports
2. Tariffs (Home Users)			
- 256 kb/s	1,400	500	500-590
- 512 kb/s	2,300	700	700-750
- 1 Mb/s	- (excluding Internet)	1,000 (Internet included)	1,000 (Internet included)

3. Project on the Expansion of CDMA Network

The latest mobile phone technology, CDMA 2000 1X EV-DO, the perfect third generation or 3G mobile system was introduced in provincial areas. The objective was to maintain the service quality and increase its efficiency as well as to expand the service coverage, which in turn would minimize the digital divide. This was seen as the preparation of a modern telecommunication system so that there would be a cellular telecommunication radio service of high quality in Thailand and an increase in mobile cellular telephony penetration rate. Network radio stations were set up in 51 provinces with the capacity to indicate positions/directions. The service provided included entertainment, education, payment for goods and services. In 2005, the system could support 2.3 million numbers.

Graph showing the outcome



Graph showing the outcome

4. Project on the Expansion of Fixed Line Telephony (by 565,500 numbers)

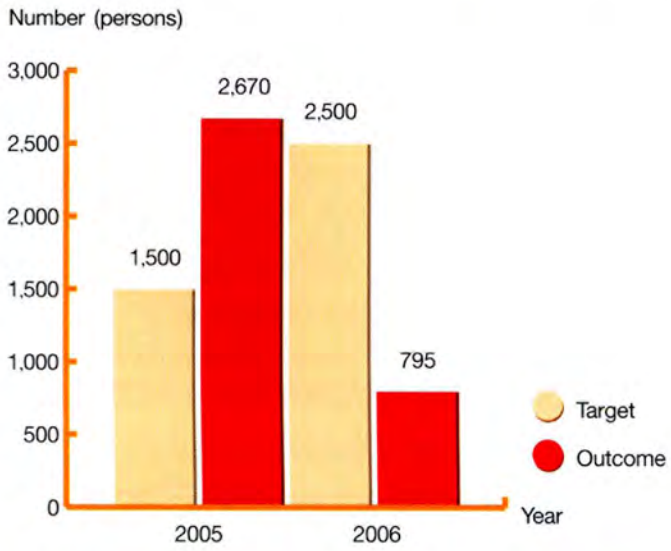
This was a project to upgrade the quality of the existing networks to meet the requirements of users nationwide. One objective was to be prepared to undertake important government projects and alleviate the problem of fixed line shortages in the capital city and the provinces. Another objective was to support the government policy to use ICT for national socio-economic development, especially in raising the quality of life of the Thai people and turning Thai society into knowledge-based society. The third objective was to support the use of ICT in the administration and services of the public sector.

COVERAGE AREA	TARGET IN 2005	OUTCOME
Bangkok and the provinces	565,500 (100 %)	351,967 (62.24%)

5. Development of Thai Software Industry

The objective was to increase Thailand's ICT capacity to compete in the global arena. Short specialized training courses were organized with subsidized tuition fees for those interested in Animation & Multimedia. An effort was made to encourage educational institutions to organize special short training courses for non-software vocational graduates to develop the skills of workers in terms of the knowledge and the work process relating to Animation & Multimedia, so that they would be world-class professionals. The goal was to increase the number of workers in the Thai software industry and to have Thai software developers who could create excellence by using new technology in software production. This in turn would reduce its cost and upgrade its quality to the international level. The outcome is shown below.

Graph showing personnel that underwent software skill development training



6. Thailand Animation & Multimedia (TAM 2005)

The objectives were to exchange technologies, to create a trade forum, and to develop the skills and capacity of Thai workers in the software industry. These objectives were achieved by organizing industrial software exhibitions focusing on Animation & Multimedia under the theme: 'Hollywood of Asia'.

ACTIVITY/TARGET GROUP	OUTCOME
- Group of software companies	155 companies
- Visitors	132,524 persons
- Academic seminars by local and international experts	- 74
experts	- 2,112 participants
- Activities of business forums, including business matching appointments	128 appointments
- Countries participating in business negotiations	11 countries
- Estimated income from negotiated business	> 400 million Baht

7. Bangkok International ICT Expo 2005

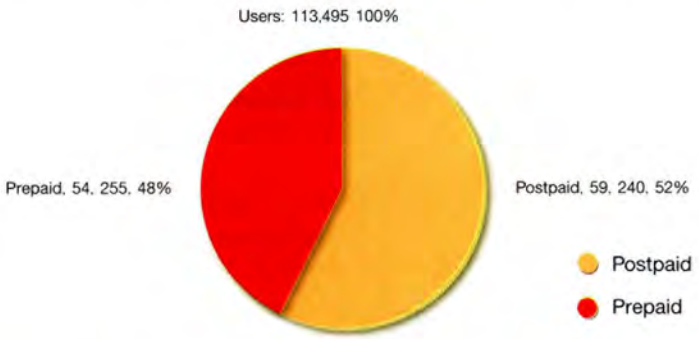
The objective was to enhance the progress in modern technology in the region and to showcase Thailand's ICT competitive potential toward becoming a leader in industry and technology in the region. During the event ICT data, information, trends and innovations were displayed to stimulate interest and develop a positive attitude that recognized creative application of ICT. The Expo also offered ICT entrepreneurs a venue to create local and international business networks as there were booths from 14 countries in this event.

Table showing the outcome of the Bangkok International ICT Expos 2004-2005

ACTIVITY/TARGET GROUP	2004	2005
● Number of participating companies	200	250
● Number of visitors	150,000	> 300,000
● Business matching (pairs)	-	30
● Exhibition area (square meters)	30,000	47,000
● Budget (million baht)	35	20

8. Project on the 1900 MHZ Mobile Telephones

This project was a result of the Memorandum of Agreement between TOT Public Company Limited and CAT Telecom Public Company Limited to enter into a joint-venture implementation and management of the 1900 MHz mobile telephone service. The objective was to prepare for the development towards provision of the 3rd generation or 3G mobile telephone services covering the Bangkok and Greater Bangkok areas, which would lead to competition in the mobile telephone business and at the same time offer another service option to the public. The project capacity could support multimedia service and connections with other forms of communication equipment.



Graph showing the number of the 1900 MHz mobile telephone users as of December 2005

9. Project on the Development of Relevant Laws in 2005

MICT amended six laws under the Legal Development Plan in 2005.

1. Electronic Transaction Bill (No...), B.E. ...

MICT amended the law governing electronic transactions to be in line with the Public Sector Restructure under the Bureaucratic Restructuring Act B.E. 2545 (2002) Act, which stipulated that MICT would be an agency having the authority over the planning, promoting, developing and implementing ICT related affairs. In addition, there was a need to establish a specialized agency to regulate electronic transaction laws.

2. Draft Royal Decree Prescribing Civil and Commercial Transactions to Be Exempted from the Enforcement of the Electronic Transactions Act B.E. 2544 (2001)

MICT supported the drafting of a Royal Decree Prescribing Civil and Commercial Transactions to Be Exempted from the Enforcement of the Electronic Transactions Act B.E.2544 (2001) because certain categories of transactions were deemed inappropriate to be carried out by electronic means.

3. Draft Royal Decree Defining the Rules and Procedures for Electronic Transactions by the Public Sector B.E. ...

MICT supported the drafting of a royal decree defining rules and procedures for government agencies performing any act relating to electronic documents to do so in accordance with the Electronic Transactions Acts B.E.2544 (2001).

4. Computer-related Offence Bill B.E...

MICT prepared the draft of the law governing computer-related offences for the purpose of crime prevention and suppression because at the time of this reporting there were a large number of offences against data and computer systems.

5. Postal Business Regulation and Operation Bill B.E....

MICT took steps to annul the Postal Act B.E. 2477 (1934) and put the law governing regulation and operation of postal service into effect in its place, aiming to promote competition in local postal business.

6. Amending the Tapes and Television Materials Control Act B.E. 2530 (1987), to define a hard disk as a tape or television material.

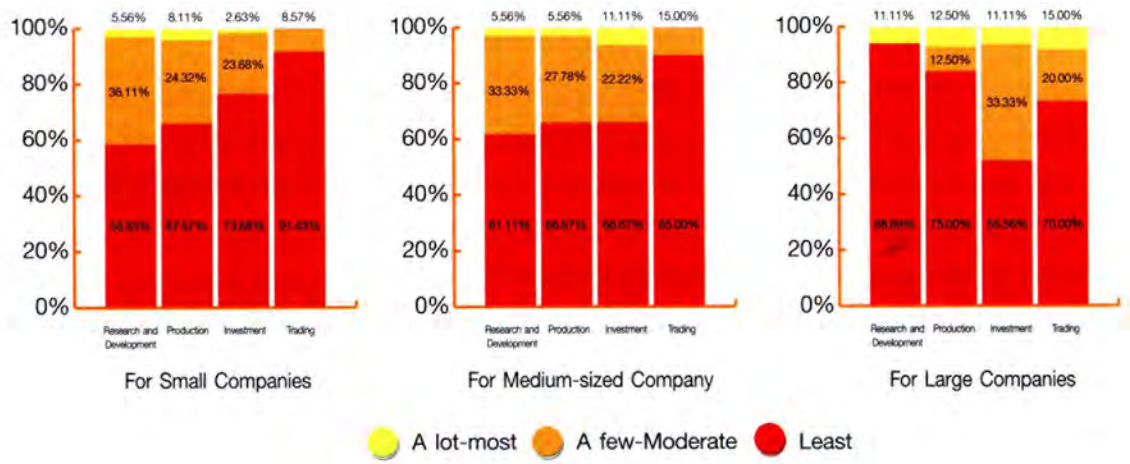
MICT supported, promoted, and pushed forward the country's potential to become the ASEAN's ICT leader by the year 2008. The objective was to review the position, potential and capacity of the ICT industry in Thailand and increase its competitiveness in the global market. This was achieved through data compilation and analyses to reflect facts relating to local entrepreneurs in the industrial sector. A brainstorming approach was used to outline the ICT Industry Promotion Plan for Thailand. Businesses were divided into four groups: ICT Production, ICT Trading (including both retail and wholesale trading), Telecommunications, and Computer Services. A preliminary portal was set up to display executive information on the state of the ICT industry and to serve as a medium for data compilation.

10. Project on the Mapping of ICT Industry Promotion Plan

The objective was to drive ICT development forward to lead Thailand towards becoming a knowledge-based society. The project was implemented following a series of seminars and served as a key mechanism to encourage e-commerce development, which required close cooperation of all parties involved in the form of an "alliance". The idea was to create a positive environment for investment, to solve problems together, to share knowledge and to exchange technologies. A forum was set up to brainstorm ideas concretely and continuously, serving as a communication and public relations centre for

e-commerce entrepreneurs in Thailand. Partners jointly defined the approaches and standards in conducting e-commerce in a growth-oriented fashion.. The public and private sectors as well as the general public could participate and become partners, with MICT serving as the focal point. .The outcomes are listed below.

Graph showing requirements for various forms of support, classified by the size of the company



Source: ICT Industry Promotion Bureau

11. ICT Alliance (E-Commerce) Project

The objective was to drive ICT development forward to lead Thailand towards becoming a knowledge-based society. The project was implemented following a series of seminars and served as a key mechanism to encourage e-commerce development, which required close cooperation of all parties involved in the form of an "alliance". The idea was to create a positive environment for investment, to solve problems together, to share knowledge and to exchange technologies. A forum was set up to brainstorm ideas concretely and continuously, serving as a communication and public relations centre for e-commerce entrepreneurs in Thailand. Partners jointly defined the approaches and standards in conducting e-commerce in a growth-oriented fashion.. The public and private sectors as well as the general public could participate and become partners, with MICT serving as the focal point. .The outcomes are listed below.

1. Organized 2 seminars with no fewer than 200 participants attending each time.
2. Organized 10 seminars with no fewer than 50 participants attending each time.

Strategic Group 3: Promote ICT in government administration and services

1. Smart Card Project

The project was in response to the government policy to issue all-purpose ID cards or 'Smart Cards' with the objective of streamlining public administration and service for greater efficiency and effectiveness.

TARGET	OUTCOME IN 2005
● To issue smart cards for citizens nationwide by 2008.	● Procured 12 million smart cards and delivered them to the Ministry of Interior

2. Government Call Centre (GCC:1111) Project

A government call centre for the public was established and equipped with modern technology. The objective was to increase the public service efficiency and to provide a channel for the public to have access to information and services, as well as to file complaints, conveniently and speedily, by using one-number through a call centre. Providing fully integrated services via telephone, fax and email plus an automatic answering system, the centre could provide 24-hour, non-stop services. In addition, it served as a channel whereby complaints against public agencies could be filed and enquiries made. Forms, requests for service, brochures, etc. could be obtained by calling 1111. The same service fee of 3 Baht per call applies nationwide.

YEAR	2004	2005
Number of calls	2,397,639	3,531,196

The monthly average number of calls was 294,267. The most popular service in 2005 was the Question & Answer (Q & A) Service, accounting for 56.92% of all the calls. This was followed by the Contact Information Service, whereby people could ask for information for contacts with public and private agencies, at 42.01%.

3. Project on Meteorology in Support of Suvarnabhumi Airport.

The Project on Meteorology in Support of Suvarnabhumi Airport was implemented with the objective to support the air transport activities at the Suvarnabhumi Airport. Meteorological data were provided for the purposes of inspecting and reporting aviation weather conditions, monitoring weather conditions to issue warnings in cases that could cause flight hazards, and providing weather information for royal, VIP, and local and international commercial flights. The project also included weather forecast at airports and along flight paths for pilots taking off and landing at the Suvarnabhumi Airport to ensure compliance with the standards, rules and regulations of the International Civil Aviation Organization (ICAO) and the World Meteorological Organization (WMO). Commencing on 20 September 2002, at the time of this reporting, 95% of the work had been accomplished.

4. Project on an ICT Handbook for CEO Provincial Governors.

The objective of this project was to allow CEO governors to have a CEO handbook for CEO-style administration that focuses on utilizing ICT for integrated administration. In 2005, 100 copies of the ICT Handbook for CEO Governors were produced and delivered to the Ministry of Interior to be distributed to governors in all provinces. The responses from these governors were positive.

5. Surveys on Public Opinion on Government Policies

Surveys were conducted and fundamental economic and social data were produced for the country's policy planning and formulation. Questionnaires were also distributed to gather public opinions on key government policies to ensure public participation in the implementation of public policies. During the fiscal years 2003 to the time of this reporting, about 20 survey projects on public opinion towards government policies were carried out each year.

Programme/Project	Fiscal Year		
	2003	2004	2005
● Survey projects to gather public opinions on key government policies	22	20	23
● Public opinion survey projects as required by other agencies	4	2	4

During the tsunami-induced disaster in the six southern provinces of Krabi, Pang-nga, Ranong, Trang, Phuket and Satun, surveys on the damage caused to households and business enterprises were conducted in those provinces.

6. Project on E-Government

In line with the e-government policy, MICT, in its capacity as the key ministry in charge, took steps to embark upon the e-Government development project. The objective was to have a tangible public sector information network of high quality, capable of providing all forms of commercial services to the public and business community in a timely manner. The e-Government Agency (EGA) was therefore established to provide quick and convenient service for people in making contacts with government agencies through several channels. By using the Internet service, they could log on to www.egov.go.th, which was the first stop service web portal of G2C and G2B communications, and then link to government agencies through a hi-speed interagency network that is safe, reliable and multi-media enabled. At the time of this reporting, the E-Government Agency had already been established. As the government had a policy to implement electronic government nationwide, this was considered a mega project pending approval.

7. Project on e-Citizen (Phase 2)

The objective of this project was to promote and support government agencies' efforts to revise their public administration and service processes by using an electronic system based on integration and interagency cooperation whereby resources could be shared and work repetition minimized. This was done through the concept of citizen-centric, one-stop service. The project also involved the development of the public service system through electronic media and the development of the e-Citizen.go.th Web site to be a complete public service centre. It would serve as a model for public service to those citizens who do not otherwise enjoy Internet access.

The project was first launched at the Lak Si Post Office on 9 January 2004. In the fiscal year 2005, this service was initiated at 10 locations:

- Bang Rak General Post Office
- Lak Si Post Office
- Raminthra Post Office
- Samsen Nai Post Office
- Bang Sue Post Office

- Nonthaburi Post Office
- Bangkok Noi Post Office
- Bang Phli Post Office
- Rong Muang Post Office
- Samut Prakan Post Office

8. Project on the Development of Government Data and Service Integration

MICT implemented the project to integrate government data by using the XML-based standards and by using the Web Services Technology for data exchange. This flexible and highly efficient technology enabled interoperability among agencies without having to rely on any software/hardware producer. For example the AssetXML standards were set for the Asset Capitalization Project and the Single Point Service was developed. This technology was also applied to other projects of the public sector. The outcome is summarized below.

1. The standards and guidelines for Electronic Data Interchange for government agencies, which resulted in efficient integration of government data, as seen in the case of the Asset Capitalization Project.
2. A network for exchange of government data and services consisting of agencies using the same approach that facilitated efficient exchange of data.
3. E-Service, which allowed citizens to carry out transactions without having to contact several agencies. The One-Stop Restaurant Registration Project was an example of successful implementation of e-Service.
4. The government data integration centre system using the UDDI standard, which increased the capacity to efficiently extend the outcome of government data integration to other agencies.

9. Project on the Promotion and Strengthening of Government Chief Information Officers' (CIOs) Network

This project was in response to the government policy for continuous bureaucratic system development through the public sector restructuring and by using ICT in planning and efficient decision making. The objective was to create and strengthen the relationship network of CIOs in the public sector to be a powerful driving force that pushed forward projects in accordance with government policy. ICT was instrumental in providing support for integration of ICT work, thus cutting down unnecessary steps and resulting in using resources efficiently with unity and along the same direction. The outcome is shown below.

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11. Project on Seismic Measurement System, Data Bases and Networking

The objective of this project was to connect the networks of Seismic Measurement stations to increase their capacity to make quick and accurate measurements by using cutting edge ICTs, and to have seismic engineering data that could be applied in designing buildings and structures.

TARGET	OUTCOME
1. To install 15 digital seismic measurement systems in 15 provinces 2. To set up a networking system for the stations of the Meteorological Department, the Royal Irrigation Department and the Electricity Generation Authority of Thailand 3. To set up a satellite communication system from 9 provincial stations 4. To set up a seismic data analyzing and processing system 5. To develop seismic software 6. To train personnel to be able to perform the required work	- Signed a contract to purchase and install seismic measurement systems, data base systems and network connections. with Asiamet Company Limited in fiscal year 2005, The Contract No. 20/2006, dated 11 November 2005, was worth 96,750,000 Baht. - The work was divided into 4 phases, and advance payment of 15% in the amount of 14,512,500 Baht was paid on 15 December 2005. - Installed the software/hardware system and communication equipment at 3 stations in Kanchanaburi Province

12. Project on Hydrometeorological Forecasting through Telemetry System for Disaster Mitigation Phase 3

A system to examine, measure, receive and transmit hydrometeorological data was installed to automate the measurement and communication system. The objective was to have input data that were quick, accurate and could be quickly analyzed and processed for hydrometeorological forecast, and thus be capable of providing efficient flood warnings. This was achieved through the use of a telemetry system and automatic data transmission to obtain real time information. By using models for hydrometeorological forecast, it was possible to analyze data accurately and in a timely manner. At the time of this reporting, one automatic hydrometeorological measurement and data transmission system had been purchased and installed.

13. Project on the Setting up of a Meteorological Station for the Purpose of Tourism and Flood Prevention in Khao Kheao Area in Nakhon Nayok Province

The station would monitor and issue warnings on weather conditions for the purpose of tourism and for flood prevention in the Prachin Buri, Bangpakong and Lower Chao Phraya river basins.

TARGET	OUTCOME
1. To install a C-Band weather radar "Klystron" type system together with a radar tower 2. To install a set of satellite work station equipment and to build an office building and related facilities	● Procured and installed a C-Band weather radar "Klystron" type system ● Procured and installed satellite work station equipment The Meteorological Department built the office building and related facilities and transferred the management to the National Park, Wildlife and Plant Conservation Department. Inspection was completed and the money disbursed at the time of this reporting.

14. Project on the Improvement of Facilities at Rayong Meteorological Station

The station will monitor and issue warnings on weather conditions for the purpose of tourism and flood prevention in the provinces along the eastern seaboard, i.e. Chonburi, Rayong, Chanthaburi and Trat provinces.

TARGET	OUTCOME
- To install a C-Band weather radar system together with a radar tower and a geo-information data management program at Rayong Meteorological Station.	- Installed a C-Band weather radar system together with a radar tower and a geo-information data management program at Rayong Meteorological Station.

Other than the above-mentioned projects, MICT also took action to respond to the following urgent government policies:

1. Regulating the Use of Pre-paid SIM Cards in Mobile Cellular Telephones

MICT took measures to regulate the use of pre-paid SIM cards in mobile cellular telephones in three southern border provinces where mobile cellular telephones had been used to detonate bombs. One hundred percent of mobile cellular telephone users in these provinces have been registered. There were dialogues with the neighbouring country to reduce signal transmission that was intruding into the Thai border area. The scope of the project was expanded to cover the whole country to prevent instigation of unrest that can happen in any locality. At the time of this reporting, 60% of the work had been accomplished.

2. Tsunami Warning Project

Warning towers were installed in 6 provinces along the coast of the Andaman Sea that were affected by the tsunami disaster. The objective was to give advance warning to local residents and tourists in areas vulnerable to natural disasters. At the time of this reporting 62 such towers had been installed. The outcome of the project, commencing on 19 September 2005 is shown below.

Province	Number of Warning Towers
1. Pang-nga	16
2. Phuket	4
3. Krabi	12
4. Trang	11
5. Satun	14
6. Ranong	5
Total	**62**

APPENDIX A

ICT BENCHMARKING DATA

National ICT Benchmarking study

COMPARISON	Singapore	Malaysia	Thailand	Korea*
Basic Information				
- Population (in million)	4.185 (2003)	25.32 (2003)	62.63 (2003)	47.925 (2003)
- Land area (sq.km.)	685.4	329,847	513,115	99,500
- Networked Readiness Index Ranking (2004)[1]	1 out of 104 countries (2004)	27 out of 104 countries (2004)	36 out of 104 countries (2004)	24 out of 104 countries (2004)
- Competitiveness Ranking[2]	6 out of 104 countries (2004)	24 out of 104 countries (2004)	36 out of 104 countries (2004)	17 out of 104 countries (2004)
INFRASTRUCTURE				
Telephone Cost and Usage				
- Fixed telephone lines[3]	1,901,500 (2004)	4,450,000 (2004)	7,032,000 (2005)	22,870,000 (2004)
- Fixed telephone lines per 100 inhabitants[4]	45.44 (2004)	17.2 (2004)	11.23(2005)	47.73 (2004)
- Mobile cellular subscribers[5]	3,860,600 (2004)	14,600,000 (2004)	30,000,000(2005)	36,600,000 (2004)
- Mobile cellular subscribers per 100 inhabitants[6]	82.6 (2004)	43.93 (2004)	47.90 (2005)	70.13 (2004)
- Mobile cellular service providers[7]	N/A	5	6 (2005)	N/A
- (Internet Service Provider)[8]	42 (2001)	6 (2001)	19 (2005)	78 (2005)
- International Internet Bandwidth (Mbps)[9]	2,639 (2001)	733 (2001)	7,910.871 (2005)	5,432 (2001)
- Nationwide telephone use density[10]	44.6% (2004)	17.2% (2004)	12.94% (2003)	47.7% (2004)
- Rural telephone use density[11]	N/A	12% (2003)	6.84% (2003)	N/A

COMPARISON	Singapore	Malaysia	Thailand	Korea*
Internet Usage				
- Computer owners[12]	2,862,540 (2004)	4,200,000 (2004)	2,516,156 (2004)	26,700,000 (2004)
- Computer owners per 100 inhabitants[13]	62.2 (2004)	16.6 (2004)	3.98 (2004)	55.14 (2004)
- Internet users[14]	2,420,000 (2004)	9,880,000 (2004)	11,900,000 (2004)	30,670,000 (2004)
- Internet users per 100 inhabitants[15]	56.12 (2004)	39.71 (2004)	18.59 (2004)	65.68 (2004)
- Broadband subscribers[16]	512,400 (2004)			11,920,000 (2004)
- Broadband subscribers per 100 inhabitants[17]	5.5 (2004)	0.44 (2004)	0.91 (2005)	23.17 (2004)
National ICT Expenditure[18]	ranked 5 (2003) 9.7% of GDP	2.5% of GDP	0.4 % of GDP	1.0 % of GDP
Telecommunication Competition and Price[19]	ranked 11 (2002)	ranked 38 (2002)	ranked 43 (2002)	ranked 16 (2002)
Telecommunication Network	- Singapore National Network Infrastructure (NII) (2000) - Singapore ONE (One Network for Everyone) Hi-speed Network - IDA-Inter Wireless Hotspots & Network for Asiawide Connection	- Hi-speed Network at 10 gbs - Optical Fiber Network covering 62,000 sq.km. connecting states with port cities - ADSL for Multimedia Applications	- Hi-speed network at a maximum speed of 40 gbps (SDH,DWDM,Gigabit) - Nationwide coverage of hi-speed network	- DWDM (Dense Wavelength Division Multiplexing) - ATM (Asynchronous Transfer Mode) - Optical Fiber Technology w520 billion (upto 2005)
HUMAN RESOURCES				
Public Schools Quality[20]	ranked 6 (2002)	ranked 41 (2002)	ranked 42 (2002)	ranked 34 (2002)
IT Training Quality[21]	ranked 5 (2002)	ranked 37 (2002)	ranked 35 (2002)	ranked 28 (2002)
IT "Brain Drain"[22]	ranked 8 (2002) ranked 15 (2003)	ranked 33 (2002) ranked 37 (2003)	ranked 33 (2002)	ranked 36 (2002)

COMPARISON	Singapore	Malaysia	Thailand	Korea*
IT Training Project	- Set up an ICT hub for the region (2001) - Infocomm Education Programme (IEP) (2002-2003) - Specialized Infocomm skills training $1.35 million	- Established the Multimedia University in 1998 - 122,910 students must register for courses in ICT and Engineering in 2004 - Established the Computer-based Resource Centre	- National ICT Learning Centre Project - ICT Camp for Thai Children Project - Project on the Development of Thai Students'Networks in the Age of ICT - Project on Capacity Building in ICT for Public Sector Personnel - Project on Development of e-Learning Materials to Enhance Thai People's ICT Potential - Project on the Promotion and Strengthening of Government CIOs' Network	- Set up the Integrated Human Resources Information Network - Developed ICT manpower at the Bachelor's and Master's levels - Set up the Science Information and Research Information Service System (RISS)
Economy and Finance				
Internet-based Payment Usage[23]	ranked 12 (2002)	ranked 42 (2002)	ranked 48 (2002)	ranked 9 (2002)
Business to Customer (B2C) e-Commerce[24]	ranked 11 (2002)	ranked 38 (2002)	ranked 38 (2002)	ranked 28 (2002)
Business to Business (B2B) e-Commerce[25]	ranked 10 (2002)	ranked 32 (2002)	ranked 40 (2002)	ranked 26 (2002)
Venture Capital availability[26]	ranked 12 (2002) ranked 15 (2003)	ranked 34 (2002) ranked 24 (2003)	ranked 36 (2002)	ranked 26 (2002)

COMPARISON	 Singapore	 Malaysia	 Thailand	 Korea*
ICT Law	N/A	- Digital Signature Act 1997 - Copyright Act 1997 - Telemedicine Act 1997 - Communications and Multimedia Act 1998 - Computer Crime Act 2000 - Broadcasting Regulation 2000	- Radio Communication Act 1955 - Act on the Organizations to Assign Radio Frequency and to Regulate the Broadcasting and Telecommunications Services, 2000 - Telecommunications Business Act 2001 - Electronic Transactions Act 2001	- Computer Network Act 1986 - Framework on Informatization Promotion Act 1996 - Digital Signature Act 1999 - Management of The digital Content Act 2000 - Closing the Digital Divide Act 2001
ICT Policy	- National IT Plan (1986-1990) - IT 2000 (1991-2005)[27] - Master Plan For IT In Education (1997-2000)[28]	- The Seven Malaysia Plan : 7MP (1996-2005) : Vision 2020[29]	- IT 2000 (2001-2010)[30] - ICT Master Plan (2002-2006)[31] - ICT Action Plan (2549-2550)[32]	- e-KOREA VISION 2006[33] (The Third master plan for Information Promotion) - Information Superhighway (KII)[34]
e-Government				
Government Success in ICT Promotion[35]	ranked 1 (2002)	ranked 30 (2002)	ranked 40 (2002)	ranked 12 (2002)
Internet-based Transaction[36]	ranked 9 (2002)	ranked 49 (2002)	ranked 28 (2002)	ranked 22 (2002)
Online Government Service Availability[37]	ranked 1 (2002)	ranked 45 (2002)	ranked 50 (2002)	ranked 23 (2002)

COMPARISON	 Singapore	 Malaysia	 Thailand	 Korea*
e-Government	- e-Government Action Plan (2000-2003) $1.5 Billion - e-Government Action Plan II (2003-2006) $1.3 Billion With emphasis on 3 areas: - Delighted Customers - Connected Citizens - Networked Government	**Grand TTL Budget** for ICT-Related Programs and Project (2001-2005) allocated R5.2 Billion identify the programs as follows: - Flagship Applications R1.8 Billion - Computerization R1.6 Billion - Research & Development R0.3 Billion - Bridging the Digital Divide R1.1 Billion - Others R0.3 Billion	- e-Government Project (2003) - Three-year e-Government Development Plan (2004-2006) - Government Contact Centre 1111 Project - e-Procurement - e-Auction - e-Government Development Project (2007-2008) - Project on the Development and Improvement of the Website ecitizen.go.th	- e-Government Action Plan (2001-2005) W34 trillion
e-Education	- Establish a digital library (2000) - The National IT Literacy Programme (2002) - Establish the Institute of Systems Science for e-Learning - BackPack.Net for Experimentation, R & D and Exhibitions of Innovative Educational Infocomm Technology	- Smart School Project extended to cover 8,000 primary and secondary schools	- School Net Project - Project on Development of Thai Children with ICT - School Internet Development Fund - Project to Procure 250,000 computers and hi-speed networks	- Full-time operation of Education Network and 24/7 online Internet service - ICT Literacy Development for 10 million people (2000)

COMPARISON	 Singapore	 Malaysia	 Thailand	 Korea*
e-Industry	- The infocomm Local Industry Upgrading Programme (iLIUP) - Develop Digital Cinema Industry	- ICT Fund 2000 in support of SMEs	- ICT Cities - Programme on Skills and Software Quality Development - Programme on Animation and Multimedia Skill Development - Programme on Computer Game Skills Development - Project on Enhancing ICT Industry Potential - Programme on Promotion of Innovation and Production of Quality Software - Programme on Promotion of Open Source Use and Development	- ICT Fund W120 billion for Application Specific Integrated Circuit (ASIC) Design

COMPARISON	 Singapore	 Malaysia	 Thailand	 Korea*
e-Society	- SingPass (Singapore Personal Access)[38]	- Content Development for Local Capability	- Project on ICT Computers for Thais - Project on ICT Computers for Government Officials - Project on Ict Computers for the Public - Cyber Inspector - GoodNet Project - Thailand Knowledge Centre Project - CleanNet Project - i-Community and Community CIO Project - One Temple One Learning Centre (OTEC) Project - ICT Mobile Project	- Public Relations Campaign on morality of technology consumers and prevention of the circulation of harmful information.
e-Commerce	- Legislation on e-Business, policy frameworks on media commerce, cyber security, privacy protection, Intellectual Property Rights.	- 500 multi-nationals are expected to invest in Multimedia Super Corridor - Establish Cyber JAYA as a regional headquarters	- Develop eb-XML standards in Asia Pacific countries - e-Logistics Project - Project on the Promotion of e-Transactions via e-Commerce - Project on the Promotion of BPO - Project on the Setting Up of BPO Standards - Project on the Setting up of Standards on the Use of Technology in e-Commerce for entrepreneurs at all levels	- Mobile Commerce - e-Commerce Application including payment solution

COMPARISON	Singapore	Malaysia	Thailand	Korea*
Highlights on Major ICT Projects	**6 Programmes are highlighted as follows;** - Knowledge-Based Workplace - Electronic Services Delivery - Technology Experimentation - Operational Efficiency Improvement - Adaptive and Robust Infocomm Infrastructure - Infocomm Education	**3 Programmes are highlighted as follows;** - Multimedia Super Corridor : MSC (1996) : NS - Electronic Government : EC (1996) : NS - e-Malaysia[39]: NS	**4 Programmes are highlighted as follows;** - Bridging the Digital Divide Bt 63 billion - Government Computer Managing Control Bt 24 Billion - Smart Card Bt 7.1 billion - e-Tambon Bt 7 billion	**7 Programmes are highlighted as follows;** - Expand Telecommunication Infrastructure Networks W33.2 Trillion Government Fund upto 2005 - Information Security : NS - e-Commerce (including Payment Solutions) - Wireless Technology and Mobile Commerce - Optical Fiber Technology W520 billion government Fund upto 2005 - Software Development : NS - Application Specific Integrated Circuit (ASIC) Design : W120 billion government Fund up to 2005
Agencies Responsible for ICT	- Ministry of Information, Communications and the Arts - Infocom Development Authority of Singapore : IDA (1999)	- National IT Policy Commission : DTMN (1989) - National Information Technology Council : NITC (1994)	- National Electronics and Computer Technology Center NECTEC - Ministry of Information and Communication Technology : MICT (Oct. 2002) - Software Industry Promotion Agency (Public Agency) (2003)	- Ministry of Information and Communication

* Korea is not a member of ASEAN

** NS : Non Specific Budget Allocation (but still a "Major Project")

Source :

1 International Telecommunication Union (ITU)
2 ITU and World Economic Forum (WEF)
3 Asia-Pacific Telecommunity, APT Yearbook 2005, Corporate Strategy Dept. TOT Pcl, CAT Telecom Pcl
4 Asia-Pacific Telecommunity, APT Yearbook 2005 and Corporate Strategy Dept. TOT Pcl
5 Asia-Pacific Telecommunity, APT Yearbook 2005 and Corporate Strategy Dept. TOT Pcl
6 Asia-Pacific Telecommunity, APT Yearbook 2005
7 Asia-Pacific Telecommunity, APT Yearbook 2003
8 ITU , WEF and Internet Information Resource Center, NECTEC
9 ITU WEF, Internet Information Resource Center, NECTEC, and CAT Telecom Pcl
10 Asia-Pacific Telecommunity, APT Yearbook 2005
11 Asia-Pacific Telecommunity, APT Yearbook 2004
12 ITU, WEF, APT Yearbook 2004 and International Telecommunication Union Research (ITU Research)
13 ITU Research
14 Benchmarking Digital Inclusion A white Paper by GOV3 : www.gov3.net/digitaldashboard
15 Benchmarking Digital Inclusion A white Paper by GOV3 : www.gov3.net/digitaldashboard
16 Asia-Pacific Telecommunity, APT Yearbook 2005
17 Corporate Strategy Department and ITU Research
18 WEF "Global Information Technology Report 2003"
19 WEF "Global Information Technology Report 2003"
20 WEF "Global Information Technology Report 2003"
21 Global Information Technology Report 2002:Readiness for The Networked World, Harvard University & WEF
22 Global Information Technology Report 2002:Readiness for The Networked World, Harvard University & WEF
WEF "Global Information Technology Report 2003"
23 Global Information Technology Report 2002:Readiness for The Networked World, Harvard University & WEF
24 Global Information Technology Report 2002:Readiness for The Networked World, Harvard University & WEF
25 Global Information Technology Report 2002:Readiness for The Networked World, Harvard University & WEF
26 Global Information Technology Report 2002:Readiness for The Networked World, Harvard University & WEF
WEF "Global Information Technology Report 2003"
27 Its objective is to create a "smart Isle" by expanding its ICT infrastructure, based on 5 main strategies: 1) Becoming a major centre of the world 2) Use ICT to improve quality of life 3) Promote economic mechanism by expanding its Trade Net System 4) Connect local networks to the global system 5) Promote individual potential
28 Its four objectives are : 1) Promote connection between schools and the surrounding world
2) Promote creativity and innovation 3) Propel educational innovation 4) Promote efficiency in educational administration and management
29 Its purpose is to fully develop Malaysia into a Knowledge-rich Society by 2020.
30 Consisting of 5 dimensions: 1. e-Commerce 2. e-Industry 3. e-Government 4. e-Society 5. e-Education
31 Consisting of 7 strategies: 1. Industrial development 2. Upgrade quality of life and Thai society 3. Reform R&D 4. Improve fundamentals of Thai society for future competitiveness 5. Develop entrepreneurs' potential 6. ICT for SMEs 7. ICT in public administration
32 With emphasis on 4 areas: 1. Infrastructure 2. Personnel Development 3. Software Development 5. e-Government
33 1) Lead investment and industrial development in a number of key sectors in 2015 in terms of internet, mobile telecommunication, hardware, and software 2) Build a national info-communication network connecting all private homes with optical fiber cables. The project is well underway with a target year of 2010 for completion.
34 Its goal : to provide high-speed information communication service of 20 Mbps to 84% of Korean households by 2005.
35 Global Information Technology Report 2002:Readiness for The Networked World, Harvard University & WEF
WEF "Global Information Technology Report 2003"
36 Global Information Technology Report 2002:Readiness for The Networked World, Harvard University & WEF
37 Global Information Technology Report 2002:Readiness for The Networked World, Harvard University & WEF
WEF "Global Information Technology Report 2003"
38 It is a common password for users to access government e-services.
39 Consisting of 1. e-Economy 2. e-Public Services 3. e-Community 4. e-Learning 5. e-Sovereignty

APPENDIX B

COMPARISON OF ICT DEVICES PER 100 HOUSEHOLDS

COMPARISON OF NUMBERS OF ICT DEVICES PER 100 HOUSEHOLDS, CLASSIFIED BY REGION AND ADMINISTRATIVE AREA

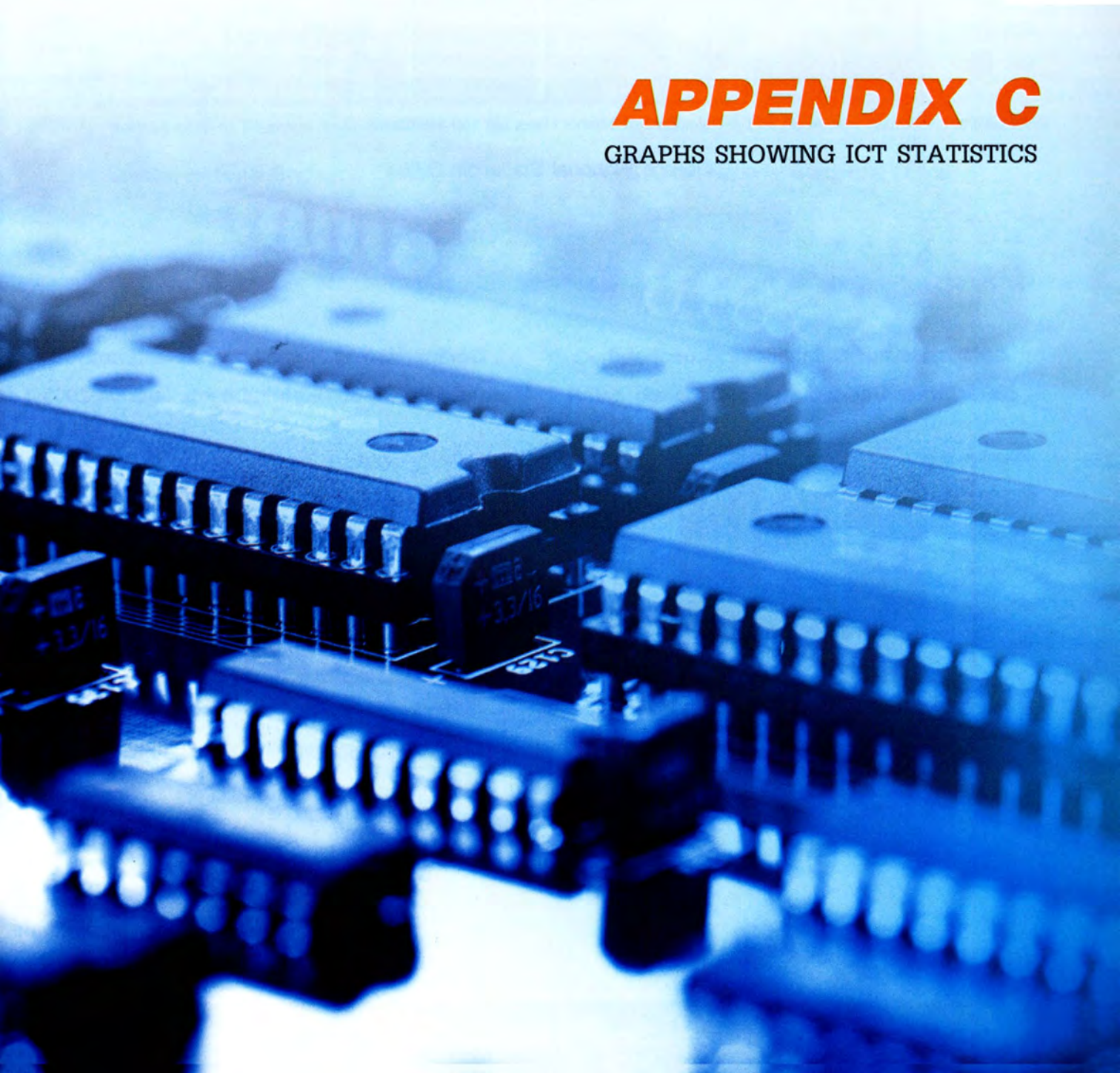
REGION/ ADMIN AREA	Total number of households	Total number per 100 households 2003				Total number of households	Total number per 100 households 2003				Total number of households	Total number per 100 households 2003			
		Telephone*	Fax	Computer	Internet		Telephone*	Fax	Computer	Internet		Telephone*	Fax	Computer	Internet
Nationwide	16,017,465	-	2.3	9.6	4.4	16,652,476	-	1.7	11.7	5.7	16,785,961	26.8	1.5	15.5	6.2
Within Municipal Areas	5,289,095	-	5.0	20.6	10.6	5,437,729	-	4.4	24.2	13.8	5,473,668	52.1	3.6	30.7	14.8
Outside Municipal Areas	10,728,370	-	1.0	4.1	1.4	11,214,747	-	0.5	5.6	1.8	11,312,293	14.6	0.5	8.2	2.1
Bangkok Metropolis	2,062,049	-	8.0	29.4	17.1	2,076,899	-	7.0	30.6	20.1	2,079,640	64.3	5.7	39.5	22.5
Central Region	3,627,345	-	2.2	8.9	3.8	3,805,864	-	1.6	12.2	6.0	3,851,677	33.0	1.6	16.7	6.0
Northern Region	3,098,927	-	1.4	6.8	2.7	3,256,602	-	0.9	9.5	3.9	3,308,770	24.4	1.0	13.5	4.5
Northeastern Region	5,120,584	-	1.0	4.9	1.3	5,331,283	-	0.5	6.5	1.8	5,353,721	11.5	0.4	8.5	2.0
Southern Region	2,108,560	-	1.5	6.6	3.1	2,181,827	-	1.2	8.8	3.9	2,192,152	21.1	1.0	11.1	4.1

N.B. Fixed telephone lines

Source : National Statistical Office

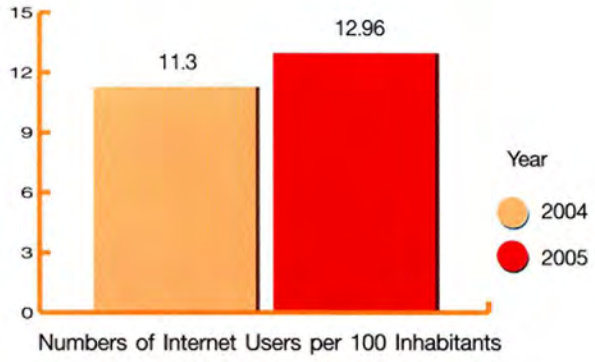
APPENDIX C

GRAPHS SHOWING ICT STATISTICS



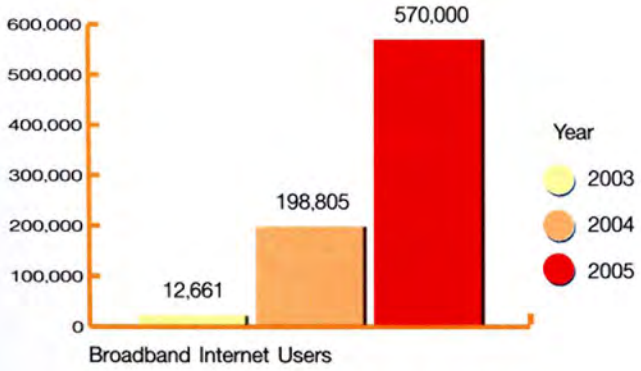
GRAPHS SHOWING ICT STATISTICS

Comparison of Numbers of Internet Users per 100 Inhabitants in 2004 and 2005



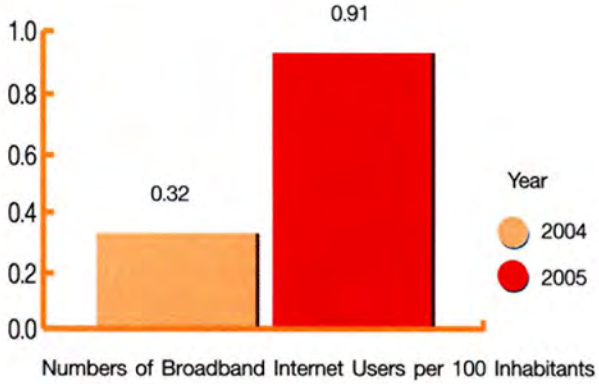
Source: National Statistical Office

Comparison of Numbers of Broadband Internet Users during 2003-2005



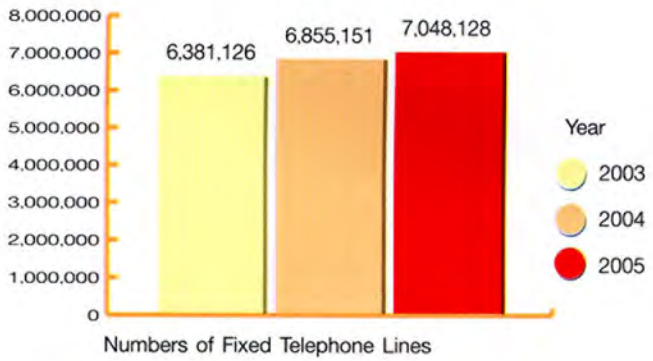
Source: National Statistical Office

Comparison of Numbers of Broadband Internet Users per 100 Inhabitants in 2004-2005



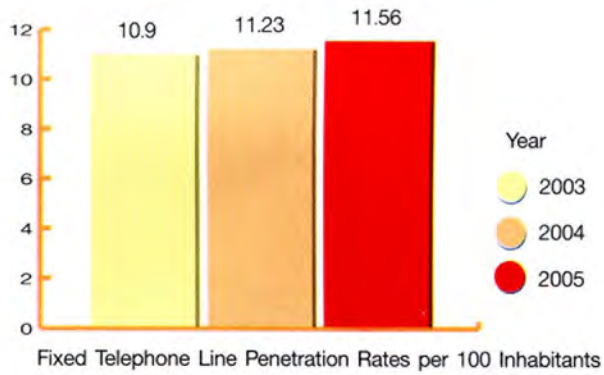
Source: National Statistical Office

Comparison of Numbers Fixed Telephone Lines during 2003-2005



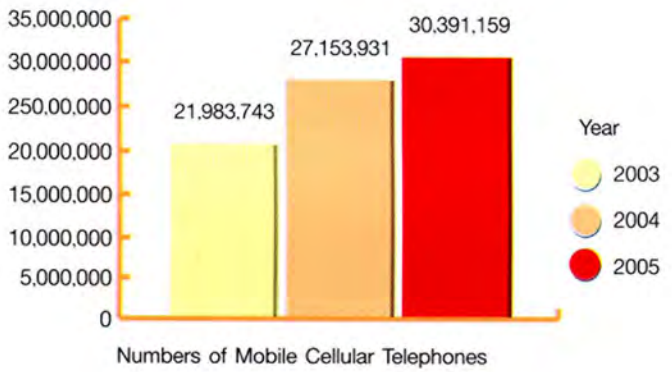
Source: National Statistical Office

Comparison of Fixed Telephone Line Penetration Rates per 100 Inhabitants during 2003-2005



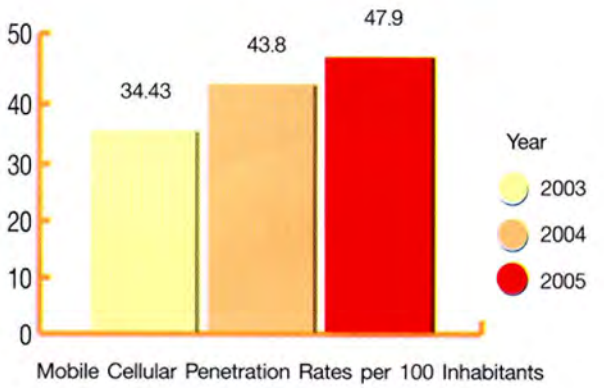
Source: National Statistical Office

Comparison of Numbers of Mobile Cellular Telephones during 2003-2005



Source: National Statistical Office

Comparison of Mobile Cellular Penetration Rates per 100 Inhabitants during 2003-2005



Source: National Statistical Office

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APPENDIX D

DATA ON ICT INDICATORS

Data on ICT Indicators

No.	Indicators	2541 1998	2542 1999	2543 2000	2544 2001	2545 2002	2546 2003	2547 2004	2548 2005
	1. Telecommunications (11 indicators)								
1	Basic telephone line capacity per 100 inhabitants	12.1	12.4	12.4	12.4	12.7	13.5	13.9	14.0
2	Mobile cellular subscribers per 100 inhabitants	1.7	1.9	2.3	6.2	14.8	20.7	24.0	25.7
3	Basic telephone line subscribers per 100 inhabitants	8.2	8.5	9.0	9.7	10.4	10.5	11	11.3
4	Public pay phone lines (in thousand)	113.2	139.3	179.0	207.6	262.7	311.9	331.0	363.8
5	Number of telephone lines capable of data transmission (min. speed at 32 kbps) for rural communities	-	-	-	-	-	2,234	-	-
6	Monthly household telephone tariffs	498	448	447	430	422	399	352	194
7	Monthly business telephone tariffs	1,058	967	954	944	961	1,000	886	500
8	Monthly mobile cellular tariff s(470 MHz only)	455	457	378	283	195	180	228	51
9	Fixed telephone line subscribers per 100 inhabitants	8.0	8.2	8.7	9.4	9.9	10.0	10.4	10.7
10	Proportion of mobile cellular owners who are over 6 years old by region								
	- Nationwide	-	-	-	-	-	22.5	28.2	36.7
	- Bangkok Metropolis	-	-	-	-	-	42.4	47.8	59.3
	- Central Region	-	-	-	-	-	28.8	34.8	44.6
	- Northern Region	-	-	-	-	-	18.8	25.7	32.8
	- Northeastern Region	-	-	-	-	-	13.3	19.0	26.7
	- Southern Region	-	-	-	-	-	20.0	24.2	34.2
11	Facsimile machines per 100 households by region								
	- Nationwide	-	-	-	-	-	2.3	1.7	1.5
	- Bangkok Metropolis	-	-	-	-	-	8.0	7.0	5.7
	- Central Region	-	-	-	-	-	2.2	1.6	1.6
	- Northern Region	-	-	-	-	-	1.4	0.9	1
	- Northeastern Region	-	-	-	-	-	1.0	0.5	0.4
	- Southern Region	-	-	-	-	-	1.5	1.2	1.0

No.	Indicators	2541 1998	2542 1999	2543 2000	2544 2001	2545 2002	2546 2003	2547 2004	2548 2005
	2. Internet (19 Indicators)								
9	Number of Tambon (sub-district) with public Internet access centres (Tambon Administration Organizations that offer Internet services)								
	Nationwide	-	-	-	-	-	-	4,999	
	Central Region	-	-	-	-	-	-	1,506	
	Northern Region	-	-	-	-	-	-	1,192	
	Northeastern Region	-	-	-	-	-	-	1,416	
	Southern Region	-	-	-	-	-	-	885	
11	Number of computers in households per 100 6-year-old and over inhabitants by region								
	Nationwide	-	-	-	-	-	2.6	3.3	
	Bangkok Metropolis	-	-	-	-	-	8.1	8.5	
	Central Region	-	-	-	-	-	2.4	3.4	
	Northern Region	-	-	-	-	-	2.0	2.9	
	Northeastern Region	-	-	-	-	-	1.3	1.8	
	Southern Region	-	-	-	-	-	1.8	2.5	
12	Number of computers per 100 households by region								
	Nationwide	-	-	-	5.0	-	9.6	11.7	15.5
	Bangkok Metropolis	-	-	-	19.8	-	29.4	30.6	39.5
	Central Region	-	-	-	5.1	-	8.9	12.2	16.7
	Northern Region	-	-	-	2.8	-	6.8	9.5	13.5
	Northeastern Region	-	-	-	2.0	-	4.9	6.5	8.5
	Southern Region	-	-	-	2.2	-	6.6	8.8	11.1
13	Proportion of business enterprises where computers are used by region								
	Nationwide	-	-	-	-	-	11.1	20.6	
	Bangkok Metropolis	-	-	-	-	-	23.1	29.1	
	Central Region	-	-	-	-	-	9.2	20.3	
	Northern Region	-	-	-	-	-	7.6	14.3	
	Northeastern Region	-	-	-	-	-	8.2	14.5	
	Southern Region	-	-	-	-	-	10.4	17.3	
14	Proportion of households with Internet access by region								
	Nationwide	-	-	-	3.0	-	4.4	5.7	6.2
	Bangkok Metropolis	-	-	-	14.7	-	17.1	20.1	22.5
	Central Region	-	-	-	2.6	-	3.8	6.0	6.0
	Northern Region	-	-	-	1.3	-	2.7	3.9	4.5
	Northeastern Region	-	-	-	0.8	-	1.3	1.8	2.0
	Southern Region	-	-	-	1.0	-	3.1	3.9	4.1

No.	Indicators	2541 1998	2542 1999	2543 2000	2544 2001	2545 2002	2546 2003	2547 2004	2548 2005
15	Proportion of 6-year-old and over Internet users by region								
	- Nationwide	-	-	-	-	-	10.4	11.9	
	- Bangkok Metropolis	-	-	-	-	-	26.9	26.6	
	- Central Region	-	-	-	-	-	10.1	11.2	
	- Northern Region	-	-	-	-	-	9.7	11.4	
	- Northeastern Region	-	-	-	-	-	5.6	7.7	
	- Southern Region	-	-	-	-	-	8.1	9.9	
16	Proportion of 6-year-old and over Internet users by access site								
	- Total	-	-	-	-	-	100.0	100.0	
	- home	-	-	-	-	-	23.3	24.9	
	- office	-	-	-	-	-	24.4	22.9	
	- educational institution	-	-	-	-	-	28.2	31.4	
	- Internet cafe	-	-	-	-	-	22.0	19.0	
	- mobile cellular telephone	-	-	-	-	-	0.1	0.1	
	- friend's or relative's home	-	-	-	-	-	1.5	1.3	
	- others	-	-	-	-	-	0.5	0.4	
17	Percentage of 6-year-old and over Internet users by purpose								
	- Total	-	-	-	-	-	100.0	100.0	
	- e-mail	-	-	-	-	-	9.6	8.4	
	- online games	-	-	-	-	-	17.3	17.0	
	- search	-	-	-	-	-	55.0	59.6	
	- news update	-	-	-	-	-	10.1	9.4	
	- download (all kinds of content)	-	-	-	-	-	2.4	2.1	
	- chat room/instant messaging	-	-	-	-	-	4.2	2.3	
	- Others	-	-	-	-	-	1.4	1.2	
18	Proportion of business enterprises using computers by region								
	- Nationwide	-	-	-	-	-	4.2	9.0	
	- Bangkok Metropolis	-	-	-	-	-	9.3	14.9	
	- Central Region	-	-	-	-	-	3.6	7.5	
	- Northern Region	-	-	-	-	-	3.3	5.9	
	- Northeastern Region	-	-	-	-	-	1.6	5.2	
	- Southern Region	-	-	-	-	-	5.4	7.3	

No.	Indicators	2541 1998	2542 1999	2543 2000	2544 2001	2545 2002	2546 2003	2547 2004	2548 2005
19	Percentage of business enterprises with Internet access by type of access								
	Analog modem (dial-up via standard telephone line)	-	-	-	-	-	-	87.4	
	- ISDN	-	-	-	-	-	-	4.0	
	- xDSL	-	-	-	-	-	-	6.4	
	- Cable modem	-	-	-	-	-	-	3.8	
	- Leased Line	-	-	-	-	-	-	3.6	
	- Other fixed connectivity	-	-	-	-	-	-	0.7	
	- Wireless connection	-	-	-	-	-	-	0.5	
20	Proportion of business employees using computers								
	- Nationwide	-	-	-	-	-	-	6.4	
	- Bangkok Metropolis	-	-	-	-	-	-	9.3	
	- Central Region	-	-	-	-	-	-	4.1	
	- Northern Region	-	-	-	-	-	-	4.1	
	- Northeastern Region	-	-	-	-	-	-	3.7	
	- Southern Region	-	-	-	-	-	-	4.6	
21	Proportiion of business employees using computers by region								
	- Nationwide	-	-	-	-	-	12.4	15.1	
	- Bangkok Metropolis	-	-	-	-	-	18.9	18.6	
	- Central Region	-	-	-	-	-	12.2	14.2	
	- Northern Region	-	-	-	-	-	8.2	9.5	
	- Northeastern Region	-	-	-	-	-	10.1	10	
	- Southern Region	-	-	-	-	-	7.9	11.1	
22	Number of Internet hosts	-	-	-	-	-	-	4,513.5	
23	Internet subscribers per 100 inhabitants	-	-	-	5.6	7.6	9.4	11.9	
24	Thailand domestic Internet traffic volume (GB/day)	57.8	169.8	529.5	1231.8	3264.8	5438.2	15466.4	31,826.6
25	Proportion of business enterprises using computers and the Internet by region								
	Computer use								
	- Nationwide	-	-	-	-	-	-	16.7	
	- Bangkok Metropolis	-	-	-	-	-	-	25.8	
	- Central Region	-	-	-	-	-	-	15.1	
	- Northern Region	-	-	-	-	-	-	12.8	
	- Northeastern Region	-	-	-	-	-	-	10.4	
	- Southern Region	-	-	-	-	-	-	11.9	

No.	Indicators	2541 1998	2542 1999	2543 2000	2544 2001	2545 2002	2546 2003	2547 2004	2548 2005
	Internet use								
	- Nationwide	-	-	-	-	-	-	8.0	
	- Bangkok Metropolis	-	-	-	-	-	-	14.7	
	- Central Region	-	-	-	-	-	-	6.4	
	- Northern Region	-	-	-	-	-	-	5.4	
	- Northeastern Region	-	-	-	-	-	-	3.4	
	- Southern Region	-	-	-	-	-	-	5.5	
26	Proportion of business enterprises using computers and the Internet by type of business								
	Computer use								
	- Manufacturing	-	-	-	-	-	-	18.7	
	- Construction	-	-	-	-	-	-	49.4	
	- Sales, maintenance,repair of motor vehicles and motorcycles, including retail sale of automotive fuel	-	-	-	-		-	18.8	
	- Wholesale trade and commission trade except motor vehicles and motorcycles	-	-	-	-	-	-	41.6	
	- Retail trade	-	-	-	-	-	-	20.0	
	- Hotels and restaurants	-	-	-	-	-	-	9.8	
	- Land transport and travel agencies	-	-	-	-	-	-	22.0	
	- Real estate, computer and related activities	-	-	-	-	-	-	33.7	
	- Renting of machinery and equipment without operators and of personal and household goods, research and development and other business activities	-	-	-	-	-	-	64.6	
	- Recreational, cultural and sporting activities	-	-	-	-	-	-	46.4	
	- Other service activities	-	-	-	-	-	-	2.7	
	Internet use								
	- Manufacturing	-	-	-	-	-	-	51.3	
	- Construction	-	-	-	-	-	-	23.1	
	- Sales, maintenance,repair of motor vehicles and motorcycles, including retail sale of automotive fuel	-	-	-	-	-	-	41.6	
	- Wholesale trade and commission trade except motor vehicles and motorcycles	-	-	-	-	-	-	62.0	
	- Retail trade	-	-	-	-	-	-	38.0	
	- Hotels and restaurants	-	-	-	-	-	-	59.4	

No.	Indicators	2541 1998	2542 1999	2543 2000	2544 2001	2545 2002	2546 2003	2547 2004	2548 2005
	- Land transport and travel agencies	-	-	-	-	-	-	69.6	
	- Real estate, computer and related activities	-	-	-	-	-	-	42.5	
	- Renting of machinery and equipment without operators and of personal and household goods, research and development and other business activities	-	-	-	-	-	-	38.3	
	- Recreational, cultural and sporting activities	-	-	-	-	-	-	74.0	
	- Other service activities	-	-	-	-	-	-	40.4	
27	Proportion of business enterprises using computers and the Internet by number of employees								
	Computer use								
	- 1 - 15 employees	-	-	-	-	-	10.1	18.3	
	- 16 - 25 employees	-	-	-	-	-	72.4	77.5	
	- 26 - 30 employees	-	-	-	-	-	68.7	83.7	
	- 31 - 50 employees	-	-	-	-	-	48.2	86.5	
	- 51 - 200 employees	-	-	-	-	-	90.1	95.3	
	- Over 201 employees	-	-	-	-	-	97.4	99.3	
	Internet use								
	- 1 - 15 employees	-	-	-	-	-	3.6	7.2	
	- 16 - 25 employees	-	-	-	-	-	32.7	45.6	
	- 26 - 30 employees	-	-	-	-	-	38.4	52.6	
	- 31 - 50 employees	-	-	-	-	-	18.4	59.4	
	- 51 - 200 employees	-	-	-	-	-	60.5	73.3	
	- Over 201 employees	-	-	-	-	-	80.6	90.1	
28	Proportion of business enterprises using computers by Internet use, by Web site ownership and by tyoe of business								
	Computer use								
	- Manufacturing	-	-	-	-	-	-	51.3	
	- Construction	-	-	-	-	-	-	23.1	
	- Sales, maintenance,repair of motor vehicles and motorcycles, including retail sale of automotive fuel	-	-	-	-	-	-	41.6	
	- Wholesale trade and commission trade except motor vehicles and motorcycles	-	-	-	-	-	-	62.0	
	- Retail trade	-	-	-	-	-	-	38.0	

No.	Indicators	2541 1998	2542 1999	2543 2000	2544 2001	2545 2002	2546 2003	2547 2004	2548 2005
	- Hotels and restaurants	-	-	-	-	-	-	59.4	
	- Land transport and travel agencies	-	-	-	-	-	-	69.6	
	- Real estate, computer and related activities	-	-	-	-	-	-	42.5	
	- Renting of machinery and equipment without operators and of personal and household goods, research and development and other business activities	-	-	-	-	-	-	38.3	
	- Recreational, cultural and sporting activities	-	-	-	-	-	-	74.0	
	- Other service activities	-	-	-	-	-	-	40.4	
	Internet use								
	- Manufacturing	-	-	-	-	-	-	4.1	
	- Construction	-	-	-	-	-	-	12.6	
	- Sales, maintenance,repair of motor vehicles and motorcycles, including retail sale of automotive fuel	-	-	-	-	-	-	2.3	
	- Wholesale trade and commission trade except motor vehicles and motorcycles	-	-	-	-	-	-	13.1	
	- Retail trade	-	-	-	-	-	-	2.2	
	- Hotels and restaurants	-	-	-	-	-	-	1.7	
	- Land transport and travel agencies	-	-	-	-	-	-	6.6	
	- Real estate, computer and related activities	-	-	-	-	-	-	5.8	
	- Renting of machinery and equipment without operators and of personal and household goods, research and development and other business activities	-	-	-	-	-	-	10.3	
	- Recreational, cultural and sporting activities	-	-	-	-	-	-	6.6	
	- Other service activities	-	-	-	-	-	-	0.7	
29	Proportion of medium and small business enterprises using computers and the Internet by region								
	Computer use								
	- Bangkok Metropolis	-	-	-	-	-	-	28.8	
	- Central Region	-	-	-	-	-	-	20.0	
	- Northern Region	-	-	-	-	-	-	14.2	
	- Northeastern Region	-	-	-	-	-	-	14.5	
	- Southern Region	-	-	-	-	-	-	17.2	

No.	Indicators	2541 1998	2542 1999	2543 2000	2544 2001	2545 2002	2546 2003	2547 2004	2548 2005
	Computer use								
	- Bangkok Metropolis	-	-	-	-	-	-	14.5	
	- Central Region	-	-	-	-	-	-	7.2	
	- Northern Region	-	-	-	-	-	-	5.9	
	- Northeastern Region	-	-	-	-	-	-	5.2	
	- Southern Region	-	-	-	-	-	-	7.2	
30	Proportion of medium and small-sized business enterprises using computers and the Internet								
	Computer use								
	- Medium (51-200 employees)	-	-	-	-	-	-	95.3	
	- Small (1-50 employees)	-	-	-	-	-	-	19.9	
	Internet use								
	- Medium (51-200 employees)	-	-	-	-	-	-	73.3	
	- Small (1-50 employees)	-	-	-	-	-	-	8.3	
31	Proportion of 15-year-old and over employees using computers and the Internet by region								
	Computer use								
	- Nationwide	-	-	-	-	-	14.6	14.6	
	- Bangkok Metropolis	-	-	-	-	-	32.2	30.4	
	- Central Region	-	-	-	-	-	14.4	13.9	
	- Northern Region	-	-	-	-	-	11.8	12.6	
	- Northeastern Region	-	-	-	-	-	9.4	9.6	
	- Southern Region	-	-	-	-	-	13.3	13.4	
	Internet use								
	- Nationwide	-	-	-	-	-	8.5	9.1	
	- Bangkok Metropolis	-	-	-	-	-	24.7	23	
	- Central Region	-	-	-	-	-	7.7	8.3	
	- Northern Region	-	-	-	-	-	6.6	7.6	
	- Northeastern Region	-	-	-	-	-	4.1	5	
	- Southern Region	-	-	-	-	-	6.6	7.8	
32	Proportion of 15-year-old and over ICT workers by occupation								
	- Legislators, senior government officials and managers	-	-	-	-	-	21.7	23.7	
	- Professionals	-	-	-	-	-	83.9	84.9	
	- Technicians and related professionals	-	-	-	-	-	63.7	61.9	

No.	Indicators	2541 1998	2542 1999	2543 2000	2544 2001	2545 2002	2546 2003	2547 2004	2548 2005
	- Clerks	-	-	-	-	-	66.3	66.3	
	- Service sector personnel, shop and market assistants	-	-	-	-	-	16	14.8	
	- Skilled agricultural and fishery workers	-	-	-	-	-	3.1	2.4	
	- Craft and related trade workers	-	-	-	-	-	7.1	6.7	
	- Plant and machine operators and assemblers	-	-	-	-	-	7.3	6.7	
	- Elementary occupations in sales and services	-	-	-	-	-	3.5	2.5	
	- Occupations not classified elsewhere	-	-	-	-	-	70.9	55.5	
33	Percentage of 15-year-old and over ICT workers by work status								
	- Employers	-	-	-	-	-	18.9	20.4	
	- Government employees	-	-	-	-	-	57.7	60.0	
	- Private employees	-	-	-	-	-	17.1	15.8	
	- Self-employment (with no employee)	-	-	-	-	-	3.1	3.5	
	- Unpaid family business help	-	-	-	-	-	10.8	9.3	
	- Members of cooperatives	-	-	-	-	-	1.0	13.3	
34	Percentage of 6-year-old and over Internet users by age group								
	- 6 - 14 years of age	-	-	-	-	-	5.4	7.2	15.1
	- 15 - 25 years of age	-	-	-	-	-	27.8	32.1	46.8
	- 25 - 34 years of age	-	-	-	-	-	11.5	12.2	19.1
	- 35 - 49 years of age	-	-	-	-	-	6.6	7.7	15.3
	- Over 50 years of age	-	-	-	-	-	1.7	1.9	3.7
	3. Broadcasting (1 indicator)								
35	Number of community radio and television stations Number of radio stations								
	- Nationwide	-	-	-	-	-	-	1,950	
	- Central Region	-	-	-	-	-	-	766	
	- Northern Region	-	-	-	-	-	-	357	
	- Northeastern Region	-	-	-	-	-	-	664	
	- Southern Region	-	-	-	-	-	-	163	

No.	Indicators	2541 1998	2542 1999	2543 2000	2544 2001	2545 2002	2546 2003	2547 2004	2548 2005
	4. e-Commerce (6 indicators)								
36	Value of electronic transactions						63,436		
	- B2B						91.0		
	- B2G						8.0		
	- B2C						1.0		
37	Web sites of medium- and small-sized entrepreneurs (Percentage of medium- and small-sized enterprises with Web sites) small (1-50 employees)								
	- Nationwide	-	-	-	-	-	100.0	16,090	
	- Bangkok Metropolis	-	-	-	-	-	36.0	9,678	
	- Central Region	-	-	-	-	-	25.6	2,782	
	- Northern Region	-	-	-	-	-	9.4	1,435	
	- Northeastern Region	-	-	-	-	-	7.2	1,080	
	- Southern Region	-	-	-	-	-	21.8	1,115	
	- Medium (51-200 employees)								
	- Nationwide	-	-	-	-	-	100.0	2,301	
	- Bangkok Metropolis	-	-	-	-	-	59.3	1,488	
	- Central Region	-	-	-	-	-	16.9	537	
	- Northern Region	-	-	-	-	-	6.1	96	
	- Northeastern Region	-	-	-	-	-	5.2	67	
	- Southern Region	-	-	-	-	-	12.5	94	
38	Proportion of business enterprises receiving orders over the Internet								
	- Nationwide	-	-	-	-	-	-	0.8	
	- Bangkok Metropolis	-	-	-	-	-	-	1.5	
	- Central Region	-	-	-	-	-	-	0.7	
	- Northern Region	-	-	-	-	-	-	0.6	
	- Northeastern Region	-	-	-	-	-	-	0.3	
	- Southern Region	-	-	-	-	-	-	0.6	
39	Proportion of business enterprises placing orders over the Internet by size								
	- 1 - 15 employees	-	-	-	-	-	-	0.9	
	- 16 - 25 employees	-	-	-	-	-	-	9.1	
	- 26 - 30 employees	-	-	-	-	-	-	10.8	
	- 31 -50 employees	-	-	-	-	-	-	12.1	

No.	Indicators	2541 1998	2542 1999	2543 2000	2544 2001	2545 2002	2546 2003	2547 2004	2548 2005
	- 51 - 200 employees	-	-	-	-	-	-	13.2	
	- Over 200 employees	-	-	-	-	-	-	20.2	
40	Value of goods ordered by business enterprises over the Internet					52,360	63,436	-	
41	Percentage of business enterprises using the Internet by purpose								
	- Banking and financial transactions						2.8	5.8	
	- Purchase/sale of goods and services or business transactions with trading partners						24.4	18.2	
	- Advertising of own goods and services						11.1	16.7	
	- Other communication						8.5	11.4	
	- e-mail						62.9	70.2	
	- Market monitoring						32.6	39.3	
	- Search						78.6	85.0	
	5. ICT Market and Industry (23 indicators)								
42	Growth rate of ICT exports	-	-	-	- 4.8	23	10.9	12.5	11.9
43	Trade balance of ICT sector (in billion baht)	-	-	89.6	36.1	58.8	112.7	120.5	149.25
44	Growth rate of ICT imports	-	-	-	4.6	19.4	3.6	13.9	10.6
45	ICT imports as a percentage of total imports	-	-	20.6	19.7	23.3	21.4	22.1	17.9
46	ICT exports as a percentage of total exports	-	-	21.8	19.9	24.2	23.5	19.8	22.6
47	Growth rate of domestic software market	- 39.4	35.4	15	40.9	29.8	20.5	15.9	21.7
48	Growth rate of employment in ICT sector				2.8	3.0	3..1		
	6. ICT Human Resources (15 indicators)								
57	Number of graduates from ICT training courses for labour development conducted by the Ministry of Labour (in 1000)	-	-	-	2.1	35.0	37.3	32.3	
58	Number of IT trainees sponsored by the Ministry of Labour (in 1000)								
	- Total	-	-	-	-	42.3	43.8		
	- Male	-	-	-	-	19.5	23.6		
	- Female	-	-	-	-	22.8	20.2		
59	Mean years of schooling for the 15 year-old and over	-	-	6.8	7.1	7.2	7.3	7.5	7.5

No.	Indicators	2541 1998	2542 1999	2543 2000	2544 2001	2545 2002	2546 2003	2547 2004	2548 2005
60	Gross tertiary science enrolment ratio	27.6	25.9	25.7	24.8	-	-	-	
61	Number of schools with Internet connection and number of computers in those that have intranet. Nimber of schools with Internet access	-	-	-	-	-	8,571	14,657	
62	Proportion of the 15 year-old and over secondary graduates (including post-secondary diploma) by region								
	- Nationwide	-	-	-	-	-	15.5	15	
	- Bangkok Metropolis	-	-	-	-	-	23.3	35.4	
	- Central Region	-	-	-	-	-	16.9	16.6	
	- Northern Region	-	-	-	-	-	13.4	13.1	
	- Northeastern Region	-	-	-	-	-	11.8	11.8	
	- Southern Region	-	-	-	-	-	16.8	15.4	
63	Proportion of the 15 year-old and over tertiary graduates by region								
	- Nationwide	-	-	-	-	-	6.8	7.1	6.8
	- Bangkok Metropolis	-	-	-	-	-	18.7	19.6	20.1
	- Central Region	-	-	-	-	-	6.7	6.7	7.2
	- Northern Region	-	-	-	-	-	4.8	5.0	4.7
	- Northeastern Region	-	-	-	-	-	3.7	3.4	3.6
	- Southern Region	-	-	-	-	-	5.4	5.7	6.3
64	Gross primary, secondary and tertiary enrolment ratio								
	- Primary	-	-	94.2	94.6	94.8	-	-	
	- Lower secondary	-	-	80.4	79.8	79.7	-	-	
	- Upper secondary	-	-	56.5	58.2	58.3	-	-	
	- Tertiary	-	-	15.2	20.0	16.3	-	-	
66	Computer/student ratio by type and level								
	- Primary	-	-	-	-	-	-	11.1	
	- Secondary	-	-	-	-	-	-	31.3	
	- Vocational	-	-	-	-	-	-	47.6	
	- Tertiary	-	-	-	-	-	-	125.0	
	- Non-formal	-	-	-	-	-	-	1.4	
67	Gross Maths and Computer Science enrolment ratio	3.0	3.0	2.8	2.8	-	-	-	
68	Proportion of Maths and Computer Science graduates	2.3	2.6	2.5	-	-	-	-	

No.	Indicators	2541 1998	2542 1999	2543 2000	2544 2001	2545 2002	2546 2003	2547 2004	2548 2005
69	Number of ICT workers (15 year-old and over) by production sector and economic activities								
	- Agriculture, hunting, forestry and fishery	-	-	-	-	-	3.1	2.4	
	- Manufacturing	-	-	-	-	-	14.2	13	
	- Electricity, gas and water works	-	-	-	-	-	38.8	50.9	
	- Construction	-	-	-	-	-	7.4	6.6	
	- Wholesale and resale trades	-	-	-	-	-	18.6	17.3	
	- Hotels and restaurants	-	-	-	-	-	11.8	10.4	
	- Transport, warehousing, and communications	-	-	-	-	-	17.6	20.1	
	- Real estate	-	-	-	-	-	46	44.4	
	- Public administration, education, health and community service	-	-	-	-	-	61.3	62.9	
	- Mining and quarrying	-	-	-	-	-	13.9	11.5	
	- Financial intermediation	-	-	-	-		78.3	78.3	
70	Employment ratio in ICT industry								
	- Manufacture of office machinery	-	-	-	-	-	21.1	-	
	- Manufacture of insulated wire and cable	-	-	-	-	-	16.2	-	
	- Manufacture of electronic tubes	-	-	-	-	-	253.3	-	
	- Manufacture of television and radio transmitters	-	-	-	-	-	12.2	-	
	- Manufacture of television and radio receivers	-	-	-	-	-	31.9	-	
	- Manufacture of marine and air transport equipment	-	-	-	-	-	1.0	-	
99	Percentage of 15-year-old and over employees with ICT access by region								
	- Bangkok Metropolis	-	-	-	-	-	29.7	28.5	
	- Central Region	-	-	-	-	-	23.7	23.3	
	- Northern Region	-	-	-	-	-	14.7	16.1	
	- Northeastern Region	-	-	-	-	-	19.8	19.9	
	- Southern Region	-	-	-	-	-	12.1	12.2	
100	Percentage of (15-year-old and over) employees searching the Internet by region								
	- Bangkok Metropolis	-	-	-	-	-	39.1	34.5	
	- Central Region	-	-	-	-	-	21.6	22.2	
	- Northern Region	-	-	-	-	-	14.6	15.5	
	- Northeastern Region	-	-	-	-	-	14.9	16.5	
	- Southern Region	-	-	-	-	-	10.3	11.3	
119	Number of graduates from ICT training courses for labour development conducted by the Ministry of Labour by gender								

No.	Indicators	2541 1998	2542 1999	2543 2000	2544 2001	2545 2002	2546 2003	2547 2004	2548 2005
	- Total	-	-	-	-	35.1	36.3		
	- Male	-	-	-	-	15.9	19.2		
	- Female	-	-	-	-	19.2	17.1		
	7. ICT in Public Sector (14 indicators)								
72	Government ICT budget (hardware and software) in billion baht	2,498	1,383	1,735	3,300	4,180	3,909	2,361	4,312
82	Proportion of government agencies with Web sites							100*	
101	Value of e-auction in the public sector								
	- Government	-	-	-	-	0.6	966.3	2,783.2	23,841.9
	- State enterprises	-	-	-	-	176	3,940.9	8,324.0	17,062.4
	8. R & D and Patents (4 indicators)								
87	Number of patents per 1 million population	19.1	9.7	12	24.3	39.3	36.9	33	21.2
89	Ratio of ICT patents (in Thailand)	0.4	0.5	1.3	1.4	1.9	1.3	1.4	1.1
90	Growth rate of ICT patents	- 79.4	15.4	16	12.8	31.8	- 27.6	2.4	- 19.8
92	Government expenditure on ICT R&D (in million baht)		6,342	8,087	8,202	8,138	8,694	-	
	9. Additional Economic Data (2 indicators)								
94	Growth of electrical and electronic industry /GDP ratio (in Thailand)	-	-	-	10.0	18.2	7.7	-	
95	Per capita consumption of electricity (kilowatt/hour)	-	1,321	1,421	1,481	1,595	1,696	1,841	

Source : *ATCI: Association of Thai Computer Industry ATC Industry*
ATSI: Association of Thai Software Industry
CAT: CATTelecom Public Company Ltd. TOT: TOT Public Company Ltd.
NECTEC: National Electronics and Computer Technology Centre

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