

Vietnam's ICT - Challenges for International Integration

I. Basic Facts about Vietnam (March 2004)

II. Vietnam's ICT

III. Challenges for Internat. Integation

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I. Basic Facts about Viet Nam

(March 2004)

Sources: Government Data, UNDP, WEF, IMF, EBRD

- **GENERAL INFORMATION**

- **Population (2003): 80.7 million**

- + *Urban* 25%

- + *Rural* 75%

- **Annual population growth rate: 1.18%**

- **Population density** (persons per square kilometre): **243.6**

- **Land area** (square kilometres): **331,114**

I. Basic Facts about Viet Nam

(March 2004)

• ECONOMY

- **GDP per capita (2003) US\$485**
- **Real growth of GDP (2003) 7.24%**
- **Ann. aver.GDP growth rate (1990-2003) 6.12%**
- **Sectoral share of GDP (2003)**
 - **Agriculture 21.80%**
 - **Industry and Construction 39.97%**
 - **Services 38.23%**

I. Basic Facts about Viet Nam

(March 2004)

- **Exchange rate** (average 2003): **US\$1 = VND 15,472**
- **Inflation** (end 2003; year-on-year): **3%**
- **Revenues:** **22.66%**
- **Expenditures:** **24.70%**
- **Deficit** **2.04%**
- **Foreign Debt** (percent of GDP, end 2002): **40%**

I. Basic Facts about Viet Nam

(March 2004)

- **Exports (f.o.b.) US\$19.88 billion**
- **Imports (c.i.f.) US\$24.99 billion**
- **Trade Deficit US\$5.11 billion**
- **Principal exports (2003):**
crude oil (19%); garments and textiles (18%); sea products (11%); footwear (11%); rice (4%); coffee (3%); others (34%).

I. Basic Facts about Viet Nam

(March 2004)

- **Principal imports (2003):**
capital equipment (21%), refined petroleum (10%), textile (8%), steel (7%), Cloth (5%), electronic components (2%), fertilizers (2%), Motorbikes (1%); others (44%).
- **Principal export markets (2003):**
US (20%), Japan (14%), China (9%), Australia (7%), Singapore (5%), Taiwan (China) (4%), Germany (4%), UK (4%), France (2%), Netherlands (2%), others (29%).

I. Basic Facts about Viet Nam

(March 2004)

- **Competitiveness** (Over. Ranking out of 80 count., 2002): **65**
- **Technology Index: 68**
- **Public Institutions Index: 62**
- **Macroeconomic environment Index: 38**
- **The Networked Readiness Index** (Ranking out of 82 countries, 2002) **71**

I. Basic Facts about Viet Nam

(March 2004)

• SOCIAL DEVELOPMENT

• HEALTH

- Life expectancy at birth (2001): **68.2 years** *Man: 65.5 years; Women: 70.1 years*
- Under-five mortality rate (2002): **40/1,000**
- **Child Malnutrition** (percentage underweight, 2002): **30%**
- **Fertility rate** (births per woman, 2002): **1.9**
- **Maternal Mortality Rates** (deaths per 100.000 live births, 2002): **165/100,000**

I. Basic Facts about Viet Nam

(March 2004)

- **EDUCATION**

- **Adult literacy rate (2002-total): 91%**
- **Net primary school ratio (2002-total): 92%**
- **Net lower secondary school ratio (2002): 67%**
- **Net upper secondary school ratio (2000): 38%**

I. Basic Facts about Viet Nam

(March 2004)

- **POVERTY**

- **Poverty** (percentage poor, national poverty line, 2002): **12%**

- **Poverty** (percentage poor households, international poverty line, 2002): **29%**

- **Food Poverty Line** (percentage poor households, 2002 estimate): **11%**

I. Basic Facts about Viet Nam

(March 2004)

- **HUMAN DEVELOPMENT**

- **Human development index** (Ranking out of 175 countries, 2003): **109**

- **Gender related development index** (Ranking out of 144 countries, 2003): **89**

- **Human poverty index** (Ranking out of 94 developing countries, 2003): **39**

II. Vietnam's ICT

- **ICT Policy**

- **ICT is a strategic role in accelerating Vietnam's to a knowledge society and integration into the global economy; one of the highest priorities for the coming decade.**
- **ICT sector in Vietnam is quite young, but very dynamic and experiencing rapid growth (highly capable work force and relatively low wages)**

II. Vietnam's ICT

- **"Vietnam has one of the fastest growing telecommunications infrastructure in the developing world and the fastest growing telecom market in Southeast Asia" (ITU, 2002);**

II. Vietnam's ICT

- **ICT National Strategy up to the year 2020**
(Source: MPT and UNDP)
 - **IT Vision towards 2020** (ambitious) :
 - + **Viet Nam will become a promising IT market**
(one of the top 3 countries among the ASEAN in terms of Information Technology and Telecommunication Infrastructure)
 - + **Domestic ICT industry will reach US\$ 5.5 billion in 2010**, accounting for 9% of GDP (Today the ICT industry accounts for 1.5% of GDP)

II. Vietnam's ICT

- The Strategy's Four Pillars include:**
 - 1. Upgrading Viet Nam's IT infrastructure;**
 - 2. Developing human resources;**
 - 3. Improving IT applications, and**
 - 4. Strengthening the domestic IT industry, contributing to the socio-economic development goals**

II. Vietnam's ICT

- Vietnam ICT Market (mill. \$US)

1996	1997	1998	1999
150	180	200	220

2000	2001	2002
300	340	400

Vietnam ICT Market

Software and Service Market (mill. \$US)

Year	Software and Service	Hardware	Total
2000	50	250	300
2001	60	280	340
2002	75	325	400

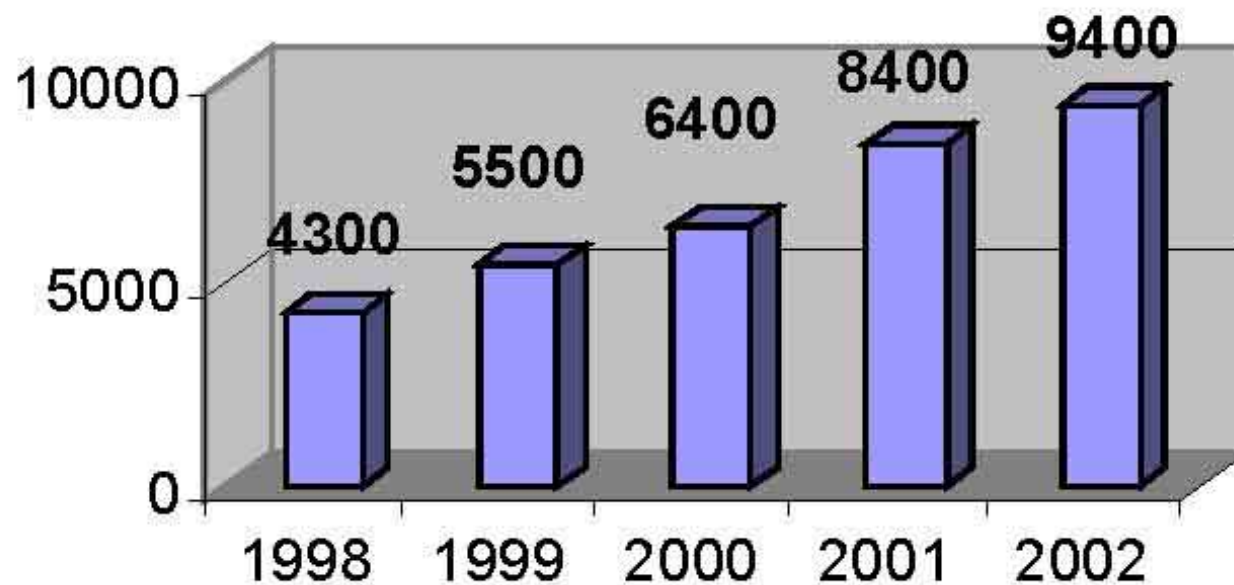
ICT Software

- **Efficiency of Software making**
(**\$US/person/year**)

Year	1998	1999	2000
	4,300	5,500	6,400
	2001	2002	
	8,400	9,400	

Efficiency of Software making (\$US/person/year)

Năng suất làm phần mềm (USD)



Internet Usage in Vietnam

Year	subscribers	Users
Jun-00	80.000	500.000
Jun-01	134.000	1.000.000
Jun-02	174.000	1.300.000
Jun-03	466.000	1.900.000

International Connection Capacity (Mbps)

Month/Year

Capacity (Mbps)

9/2000 10

12/2000

24

6/2001 42

1/2002

61

5/2002 106

12/2002

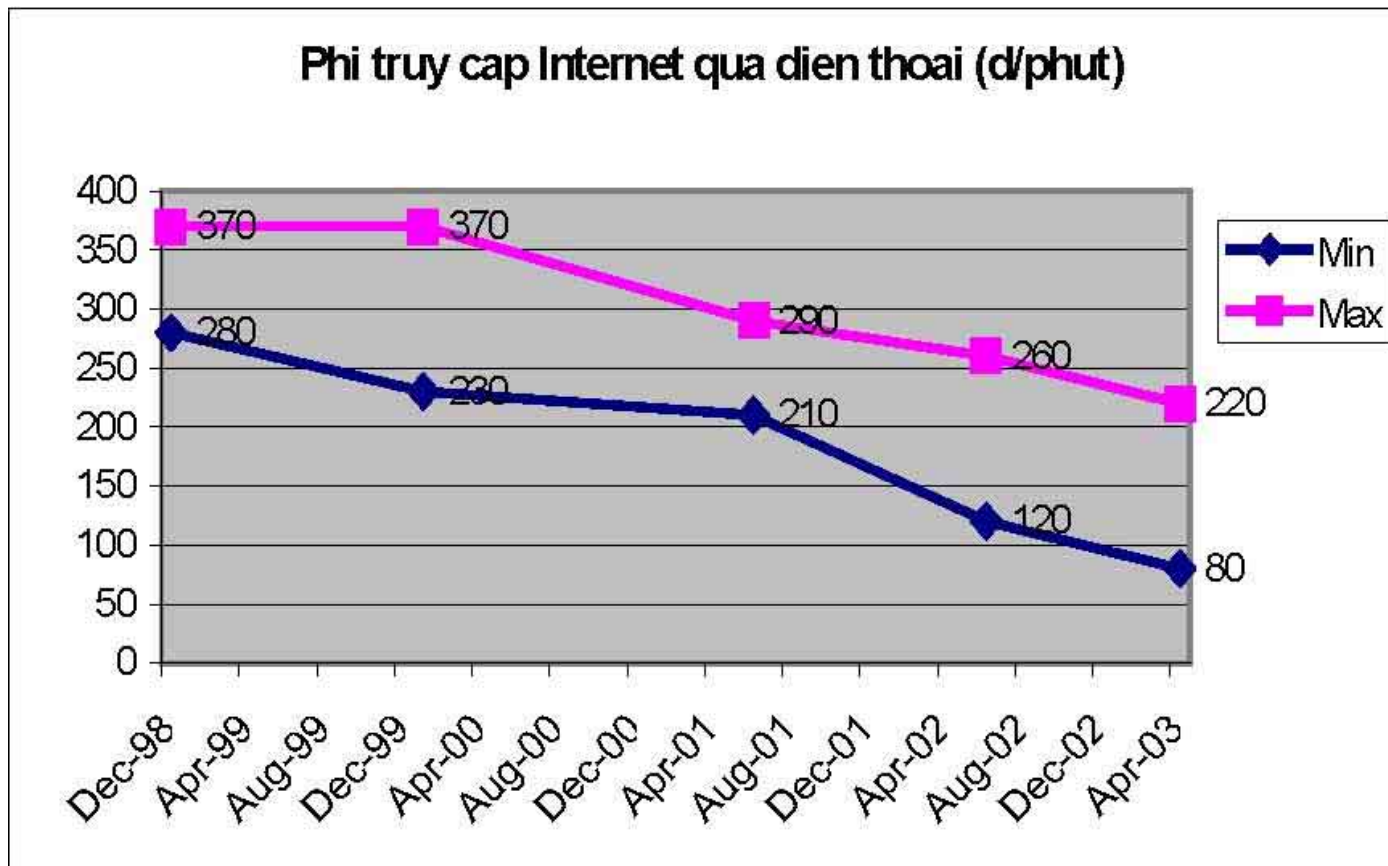
145

4/2003 210

10 /03

360

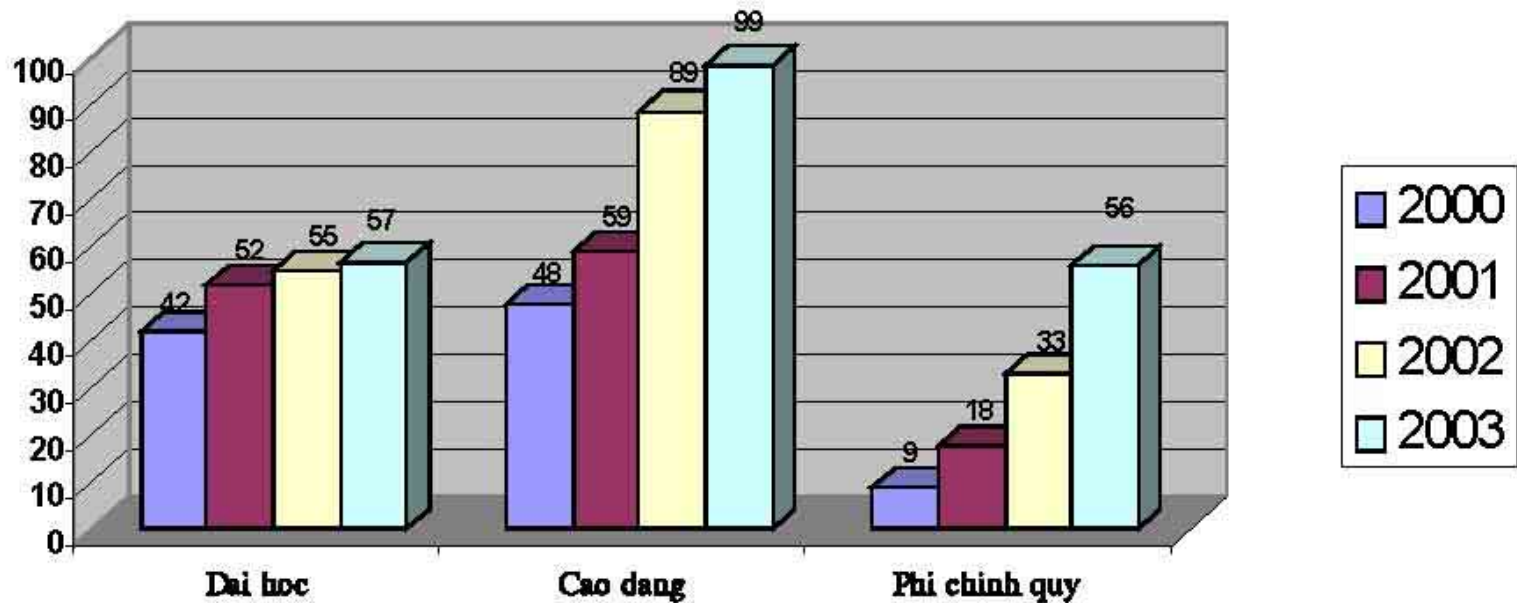
Internet connection Rates by telephone (VND/minute)



Number of IT education institutions

(University, Higher school, and non-formal)

So luong cac co so dao tao CNTT 2000-2003



III. Challenges for Internat. Integation

• Comparative ICT Density Rates

Selected ICT Indicators	Vietnam	EAP	Global
GNP per capita (PPP value)	\$US 2,010	4,130	6,870
Fixed Lines per 1000 people	50 (125/196)	109	158
Mobile phones per 1000 people	19 (144/196)	70	86
Radios per 1000 people	107	302	420
PCs per 1000 people	11 (124/196)	21.7	68.4
Internet Penetration (% of pop)	.22% (126/196)	1.5%	8%

Source: ITU data and VNTP data, 2002

III. Challenges for Internat. Integation

- **Policy and Regulatory Constraints**
 - **Lack of Market Competition** (legacy of heavy centralized control);
 - **Lack of Independent Regulatory Framework** (rulemaking process is not enough transparent and objective);
 - **Restrictive Licensing Policies** (Licensing Policies and Procedures restrict competition and growth);

III. Challenges for Internat. Integation

- Tariffs and Pricing Structure** (High interconnection rates for the Internet and lease lines limit the growth of Internet usage);
- Lack of Universal Service Policy** (Legislative measures are needed to have incentives to develop rural network infrastructure, and subsidies for Internet access at education institution and community centers).

III. Challenges for Internat. Integation

- **Quality of ICT Education**
 - **IT higher education programmes are not producing the needed numbers of technically-qualified graduates;**
 - **The quality of IT university graduates is not currently up to international standards;**
 - **Current Internet access is limited in formal education institutions at all levels;**

III. Challenges for Internat. Integation

- English language skills are limited and instruction is lacking in education system (particularly at secondary school level);**
- Lack of practical opportunities with Internet based tools in formal education.**

Thank you for attention