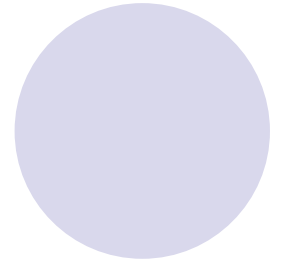
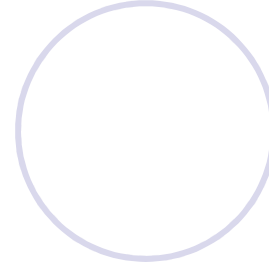
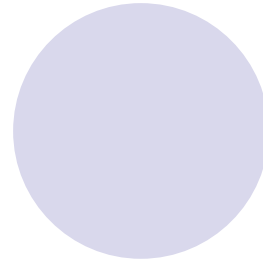


ICT Development



Overview



- Indonesia archipelagos country consists of:
 - 13,000 more islands
 - 5 principle islands
 - 32 provinces
- 1 (one) domestic network provided by Telkom
 - 5 (five) Joint Operation Schemes
 - 5 (Five) Satellite Provider
 - 150 Registered ISP
- New Regulation for liberation UU 36/2000

Objectives



- To share the ICT experiences covering the following areas:
 - Telecommunication Service Center (WARTEL)
 - Internet Café (WARNET)
 - Calling Card
 - Voice over IP
 - Payment System
 - Certificate Authorization (digital ID)
 - Smart Card System

The Present Situation



- Telephone Subscriber Line: 8 millions
- Telephone Density: 3%
- Mobile Subscribers:
 - Telkomsel - TelkoMobile:
 - Satelindo
 - ProXL:
- Internet Users: 2.4 millions

Present Situation (cont.)

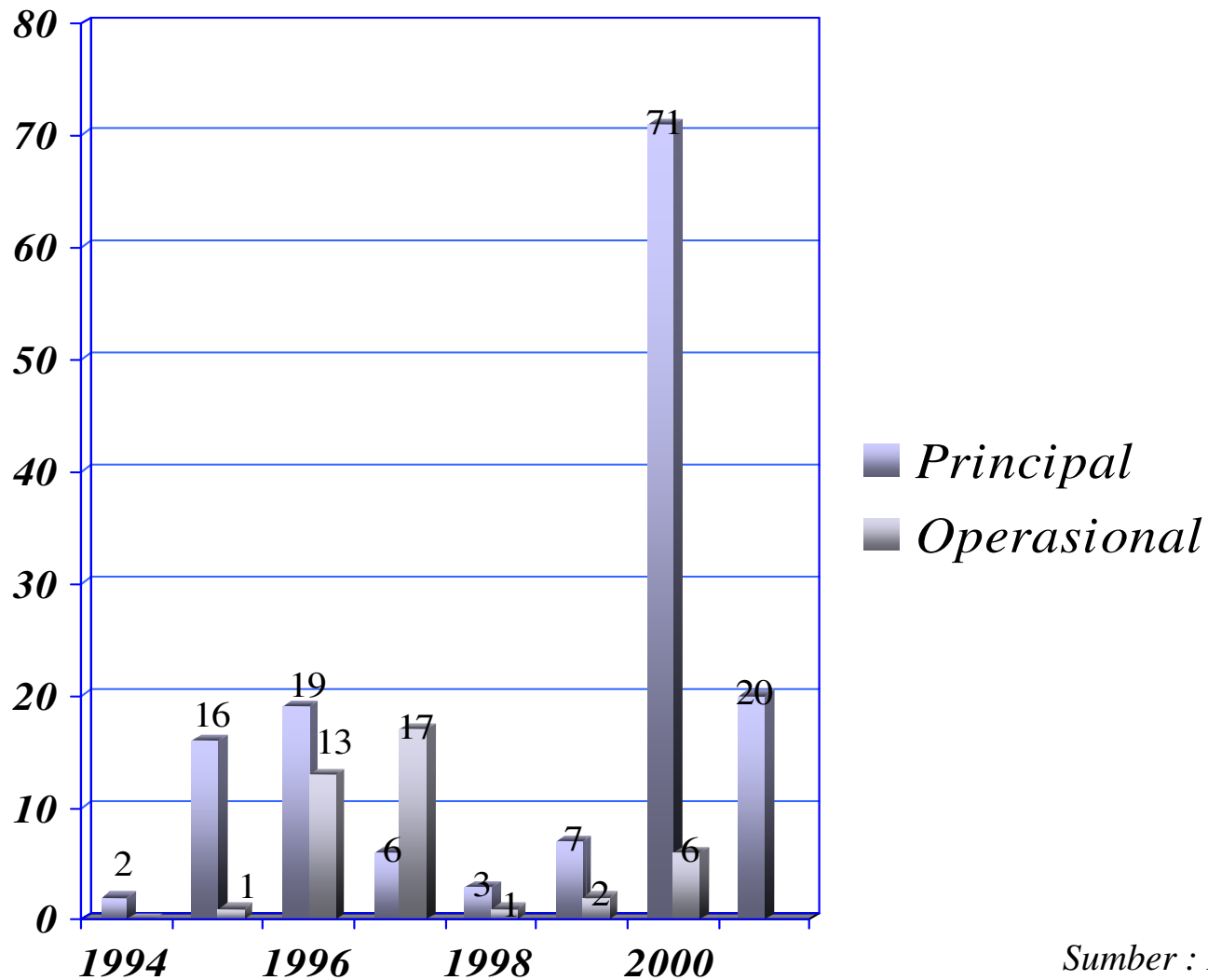
- Telecomm Service Center: (WARTEL)
187.000
- Internet Cafe: 2,550
- Payphone: 250,000
- Television: < 27 millions
- ATM: < 5,000
- ATM Subscribers 5.000.000
- EDC Point of Sale: <17,500
- PCs = 2.700.000



Internet Platform in Indonesia

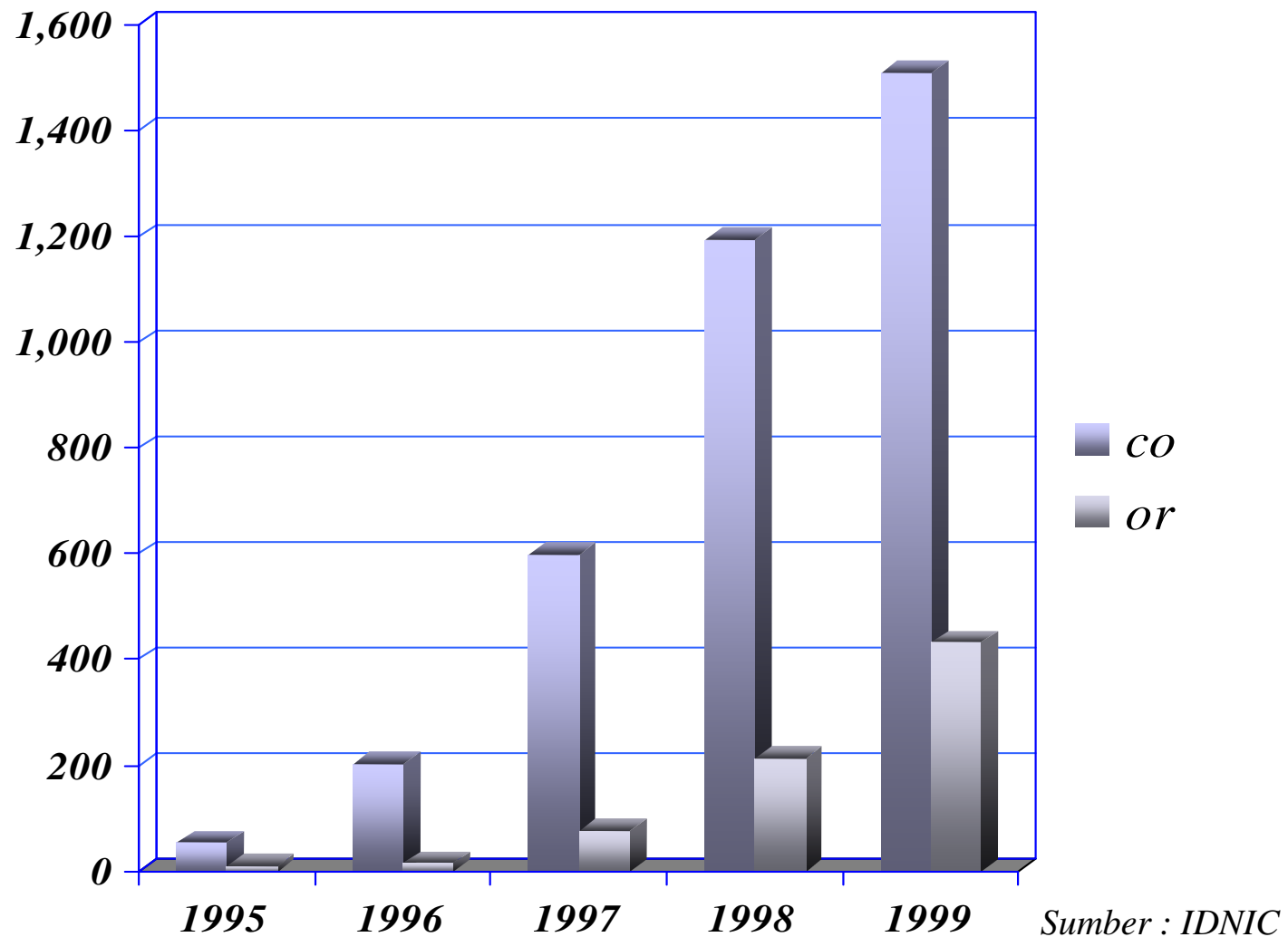
- 150 ISP with principal license.
- 80 Member Indonesian ISP Assoc. (APJII)
- ±40 Active in provide service
- Run in > 100 cities, all provices.
- Shared Facilities
 - APJII Indonesian Internet Exchange.
 - APJII IDNIC
 - Domain Registration & NIR (APNIC)

Principal & Operational Licensed

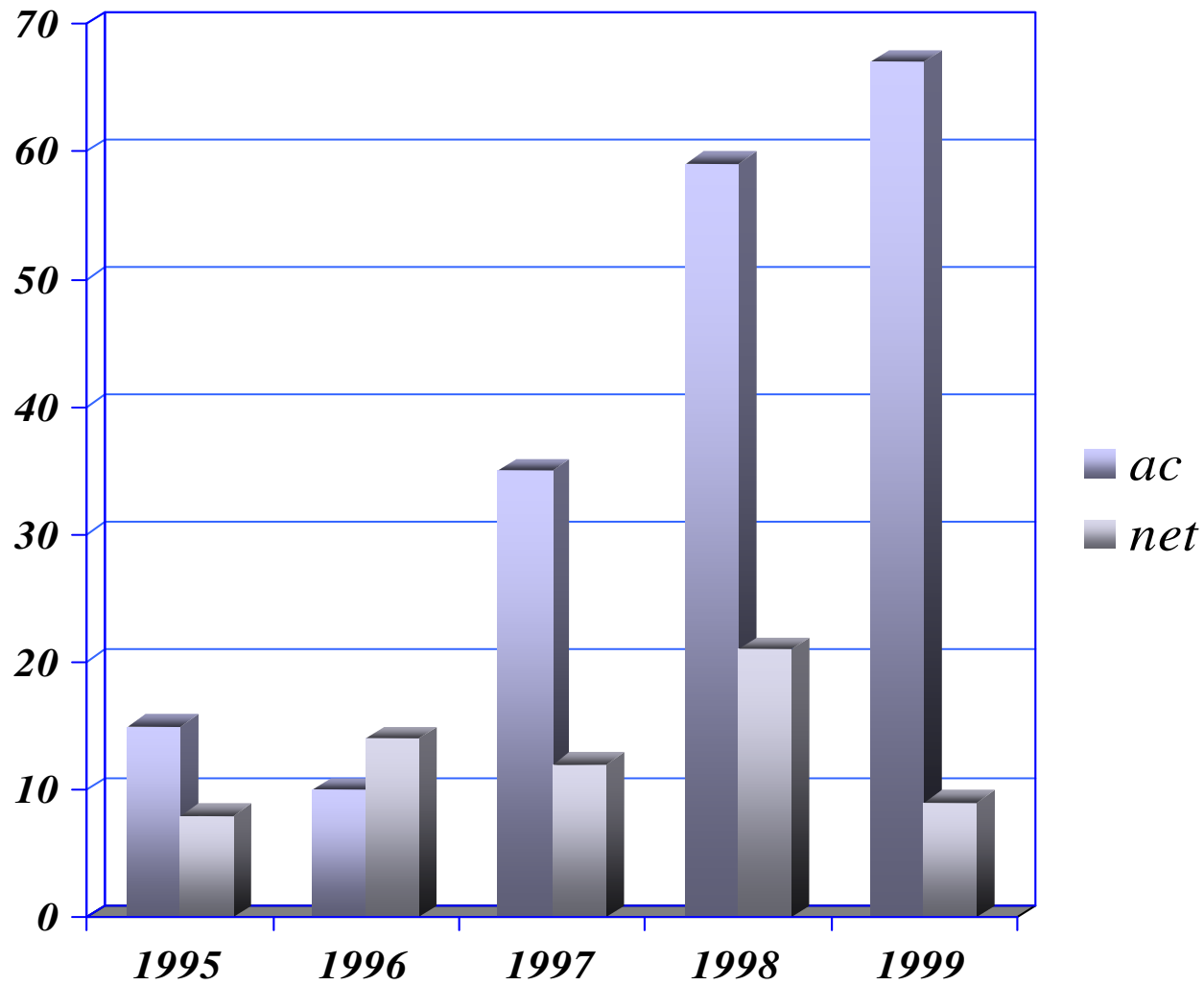


Sumber : Dirjen Postel

Domain Growth

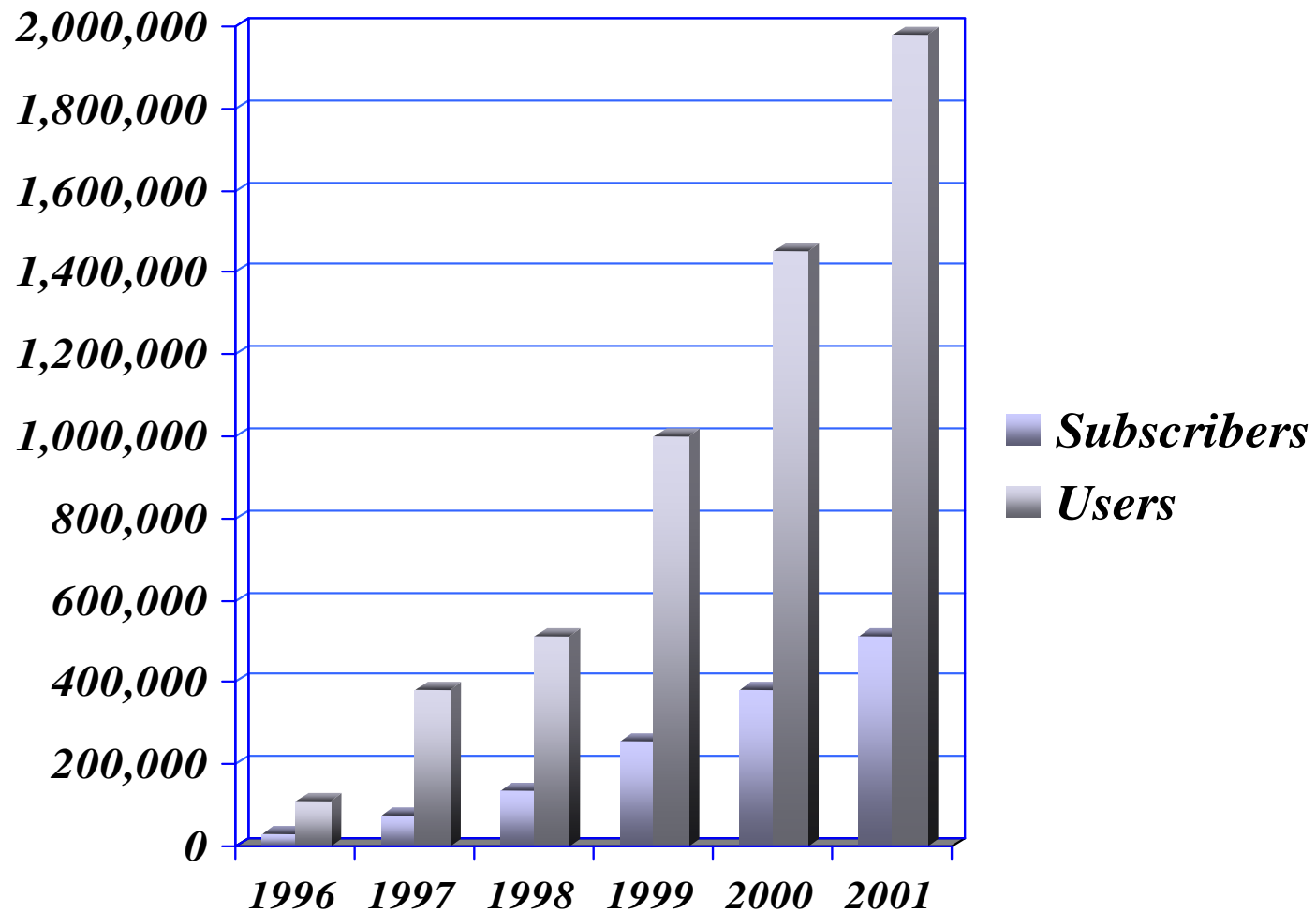


Domain Growth



Sumber : IDNIC

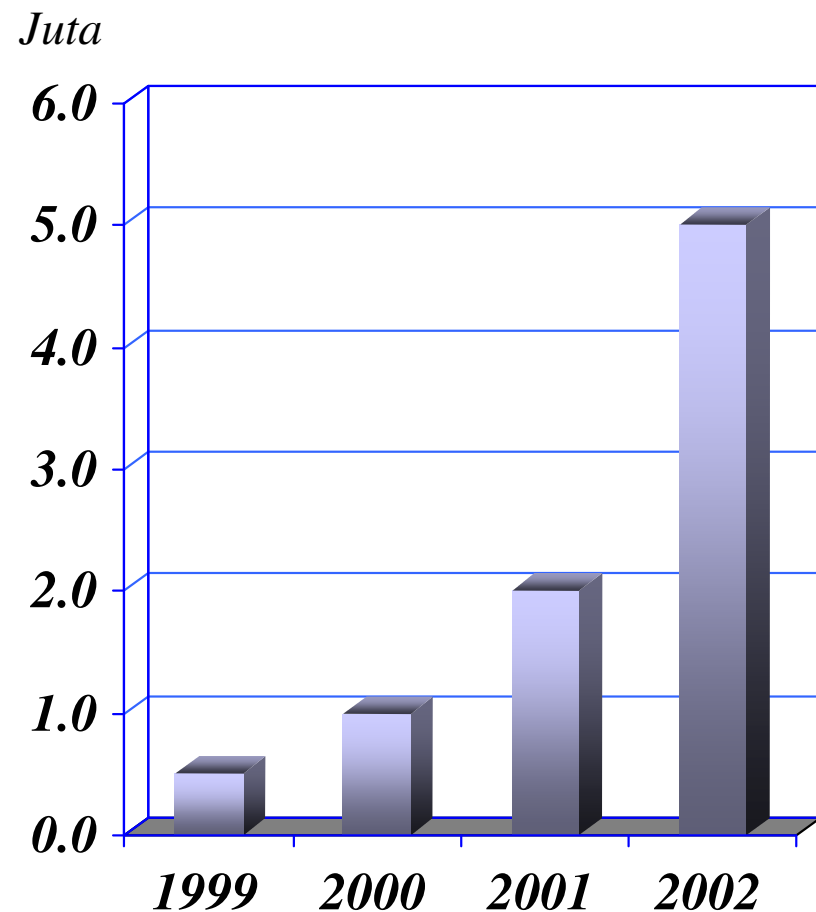
Internet Users & Subscribers



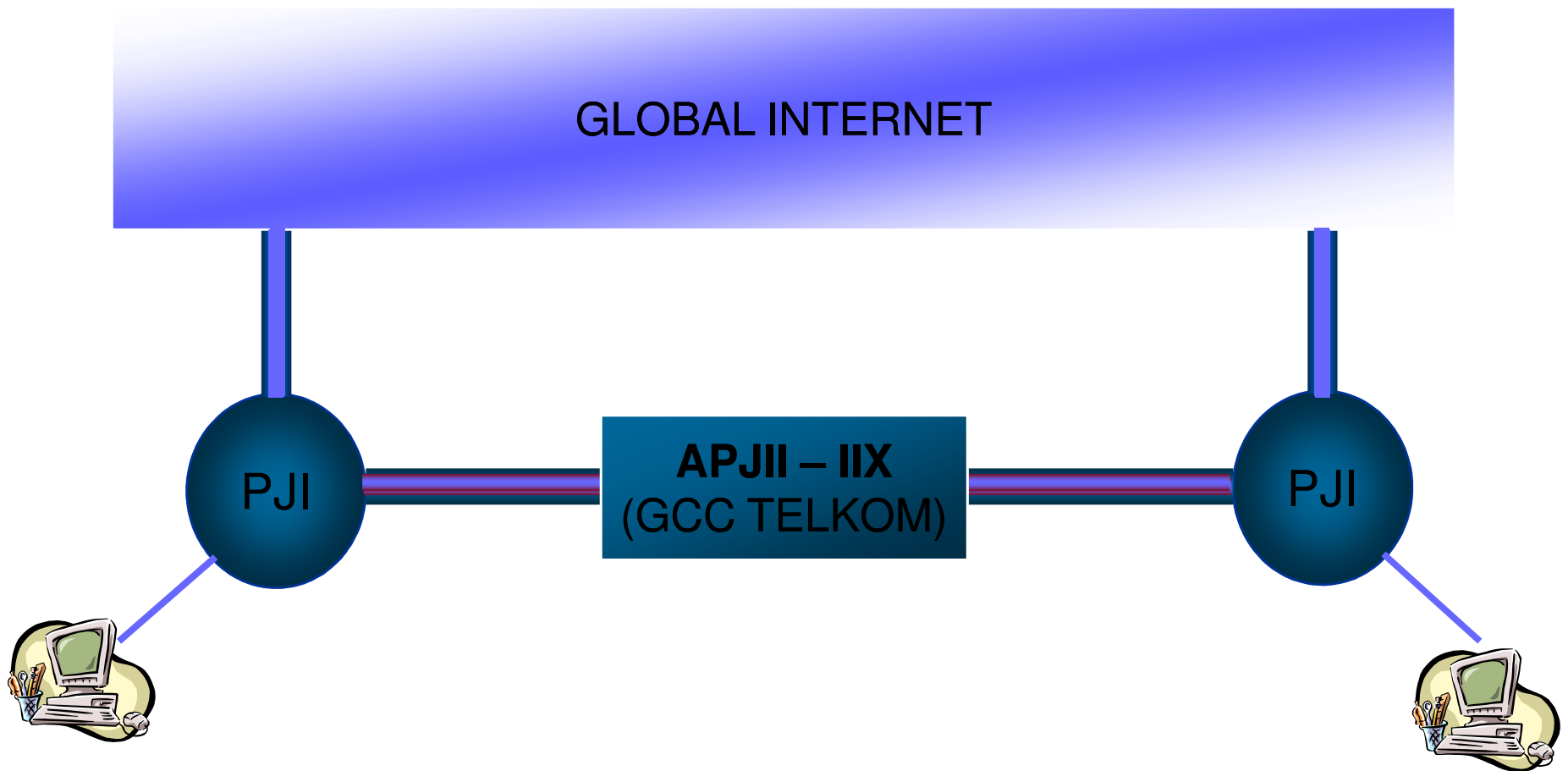
Sumber : APJII

Trend of Internet Users

- Five (5) million Internet users by 2002.
- Internet Exchange all over the province by the end 2002



Indonesia Internet Exchange



Success Story

1

- WARTEL & WARNET, (Tele Center)
- Despite of last 3 Years Economic Crisis WARNET increasing by 2.550 unit, 20 – 30 percent increase yearly
- 10 to 20 % of WARNETS already implement broadband access via cable TV, ADSL, ISDN, outdoor wireless technology and satellite.

Success Story

2

- Calling Card system have been installed in more than 60 locations nation wide
- VoIP has been implement in any kind of network (PSTN, HFC, GSM, and future Frame Relay, ADSL and ATM)
- end-to-end Payment System covering from the terminal (in-door/outdoor), payment switching and management system to the banks

Success Story

3

- CA (digital ID) implementation with scalability, modularity, multi channels (PC, set-top-box, Mobile cellular, etc)
- Smart Card system:
 - Crypto engine ready
 - Support for GSM SIM Card
 - Low cost

Project Development

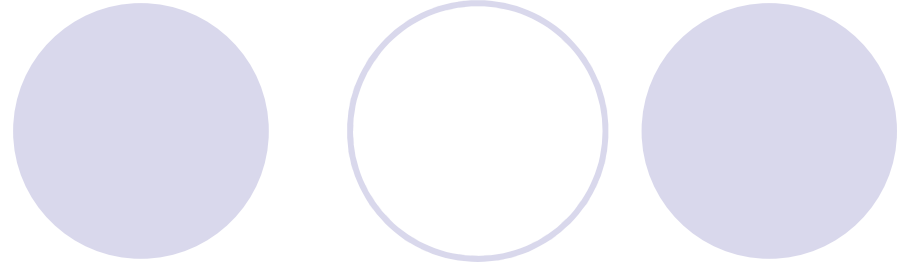
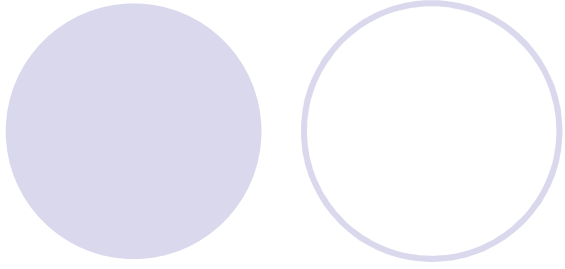


- *InePS*
- *i*-trust digital ID
- Calling card System (Kartu Bebas, Merdeka)
- VoIP system (Cable TV's, Mobile, Regional POPs)
- CRM (Cable TV, and Telkom)
- SmartAkses

Potential Collaboration



- Turn key
- B.O.O or B.O.T
- Revenue sharing
- etc



Thank You