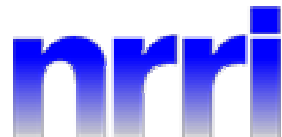# Getting to know you:
Good practices in user-centered ICT indicators

The National Regulatory Research Institute

Presented by Lilia Pérez-Chavolla, Ph.D.
Research Associate

Panel on International Good Practices

Workshop on ICT Indicators for Benchmarking
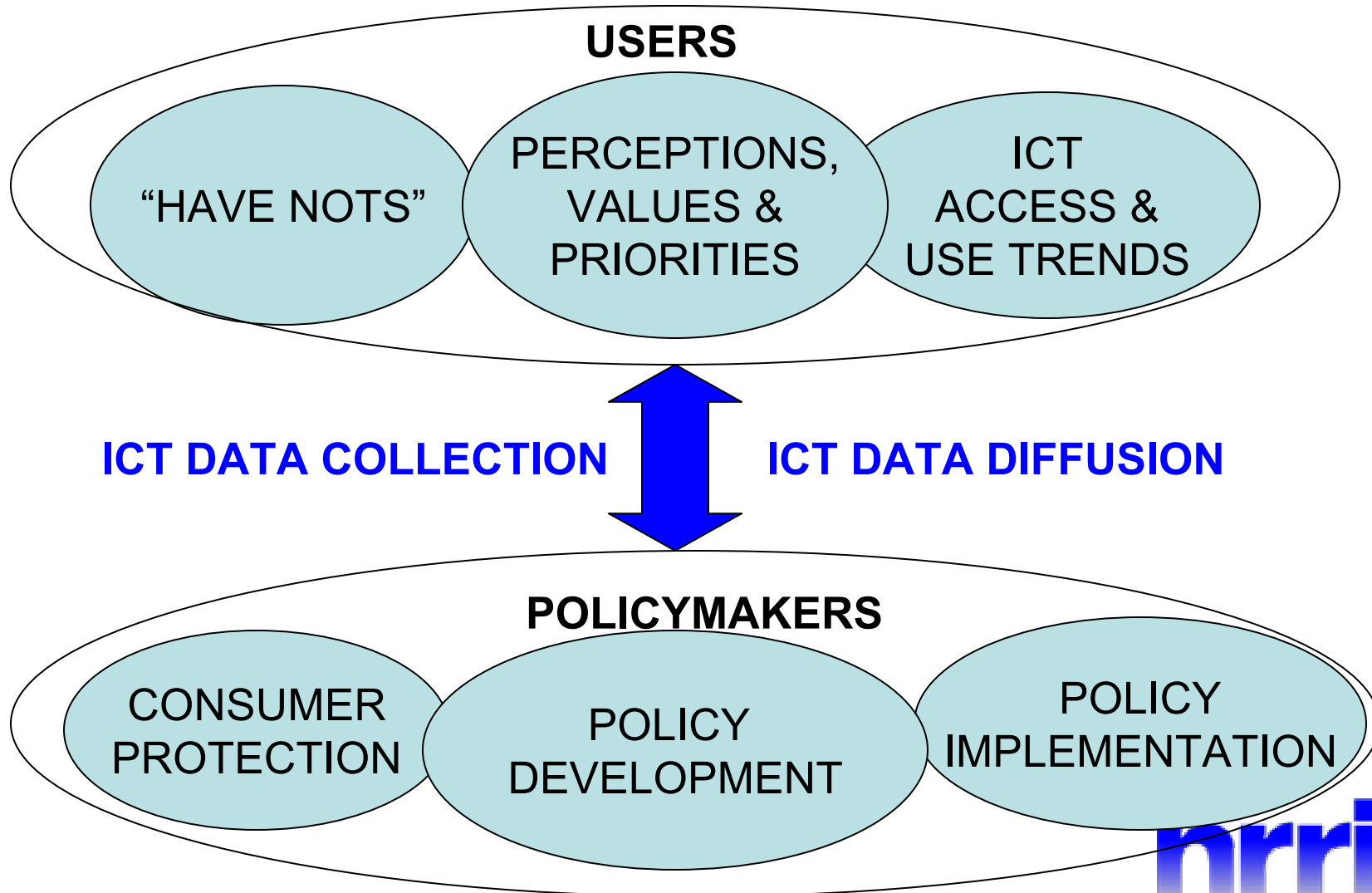Performance in Network and Services Development
New Delhi, 2 March 2006

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Keeping the user in mind

- Improving our knowledge of ICT users
- Improving user's knowledge of ICT data collected

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Improving our knowledge of ICT users

Importance of collecting data about ICT users

USERS

"HAVE NOTS"

PERCEPTIONS, VALUES & PRIORITIES

ICT ACCESS & USE TRENDS

ICT DATA COLLECTION   **ICT DATA DIFFUSION**

POLICYMAKERS

CONSUMER PROTECTION

POLICY DEVELOPMENT

POLICY IMPLEMENTATION

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Approaches to ICT users data collection

- Quantitative approach
  - Data disaggregation for different ICT indicators
  - Tracking indicators of interest to users, such as quality of service (QoS)
- Qualitative approach
  - Customer surveys
  - Focus groups
  - Interviews

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ICT user data collection in USA: The case of FCC

- Goal: Monitor the impact of increased competition and universal service programs on ICT users, particularly on low-income households

- Under contract with the Federal Communications Commission (FCC), US Bureau of the Census collects:
  - Decennial census data on telephone penetration at the household level
  - Data on telephone availability, every four months, to monitor demographic trends between censuses

- Data published annually in FCC's *Universal Service Monitoring Report*

FCC's data disaggregation

- Telephone penetration statistics are collected for the United States and each of the states

- Data disaggregated at the household level

- Based on various demographic characteristics:

    – Household size

    – Head of household's age and race

    – Income (expressed in March 1984 dollars).

    – Labor force status for adult individuals

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Other FCC data on the user

- Statistics on deployment of high-speed services for internet access:
  - Disaggregated for residential, small business, larger business and others subscribers at the zip code level, state-by-state and per household income
  - Reported semi-annually by all facilities-based carriers
  - Mobile carriers report subscribers who are directly billed or pre-paid
- Consumer complaints for Tier 1 carriers, disaggregated at the state level

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Benchmarks for service quality

- U.S. QoS regulation and data collection is shared between state and federal regulators
- The FCC has adopted a "hands-off" approach to regulation, but
  - Gathers and publishes annual data (Monitoring Report, ARMIS data) for regional Bell companies, Sprint and other price-cap regulated incumbent local exchange carriers
  - Data track service quality provided to retail customers (business and residential) and access customers (inter-exchange carriers)
- State regulators set most QoS standards and impose penalties
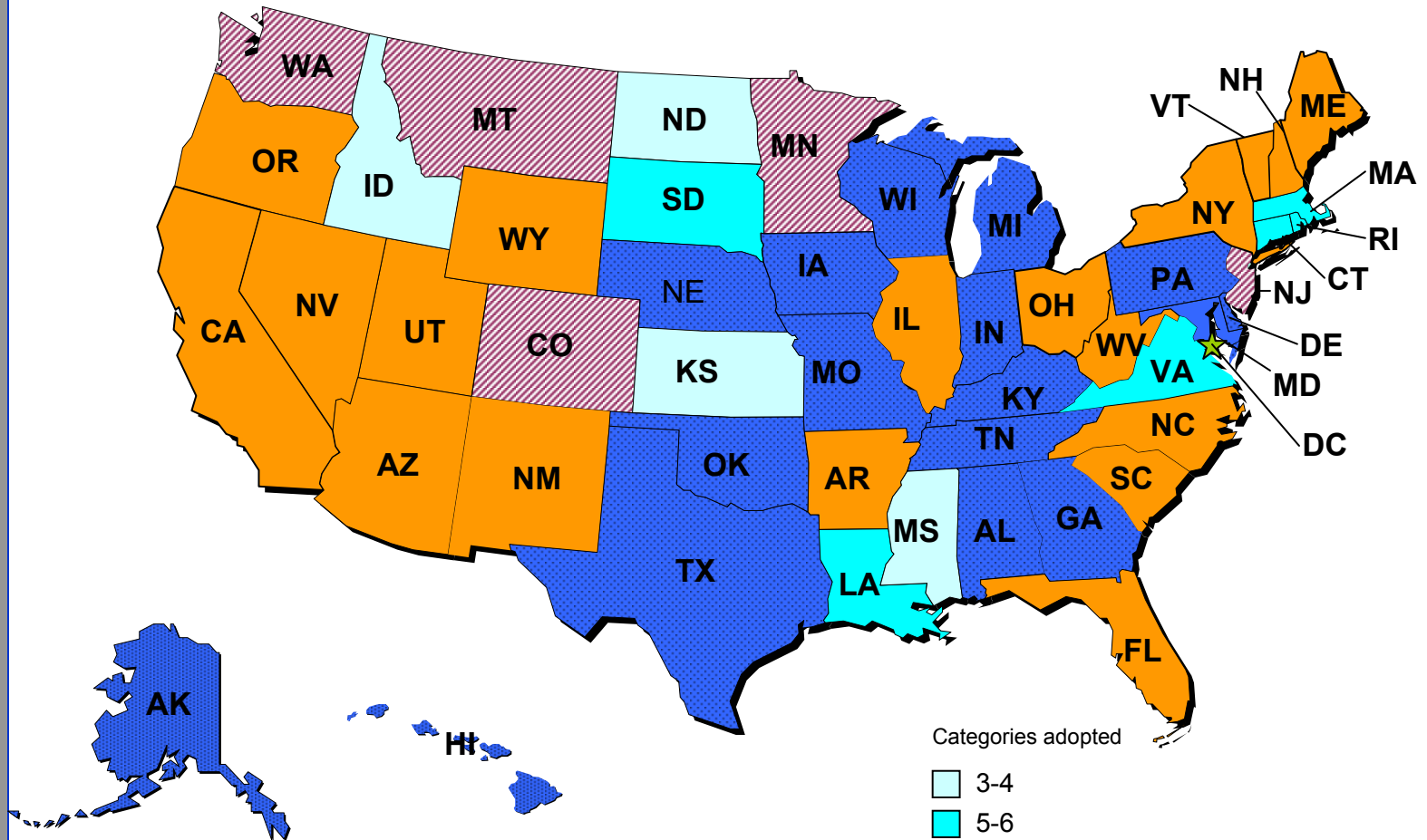
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QoS indicators collected at the Federal level (FCC)

- The ARMIS Report on Quality of Service collects data for residential and business lines in categories such as:

  – average installation intervals in days

  – percentage local installation commitments met

  – initial trouble reports per 100 access lines

  – repeat out-of-service (OOS) trouble reports as a percentage of initial OOS trouble reports

  – OOS repair intervals in hours

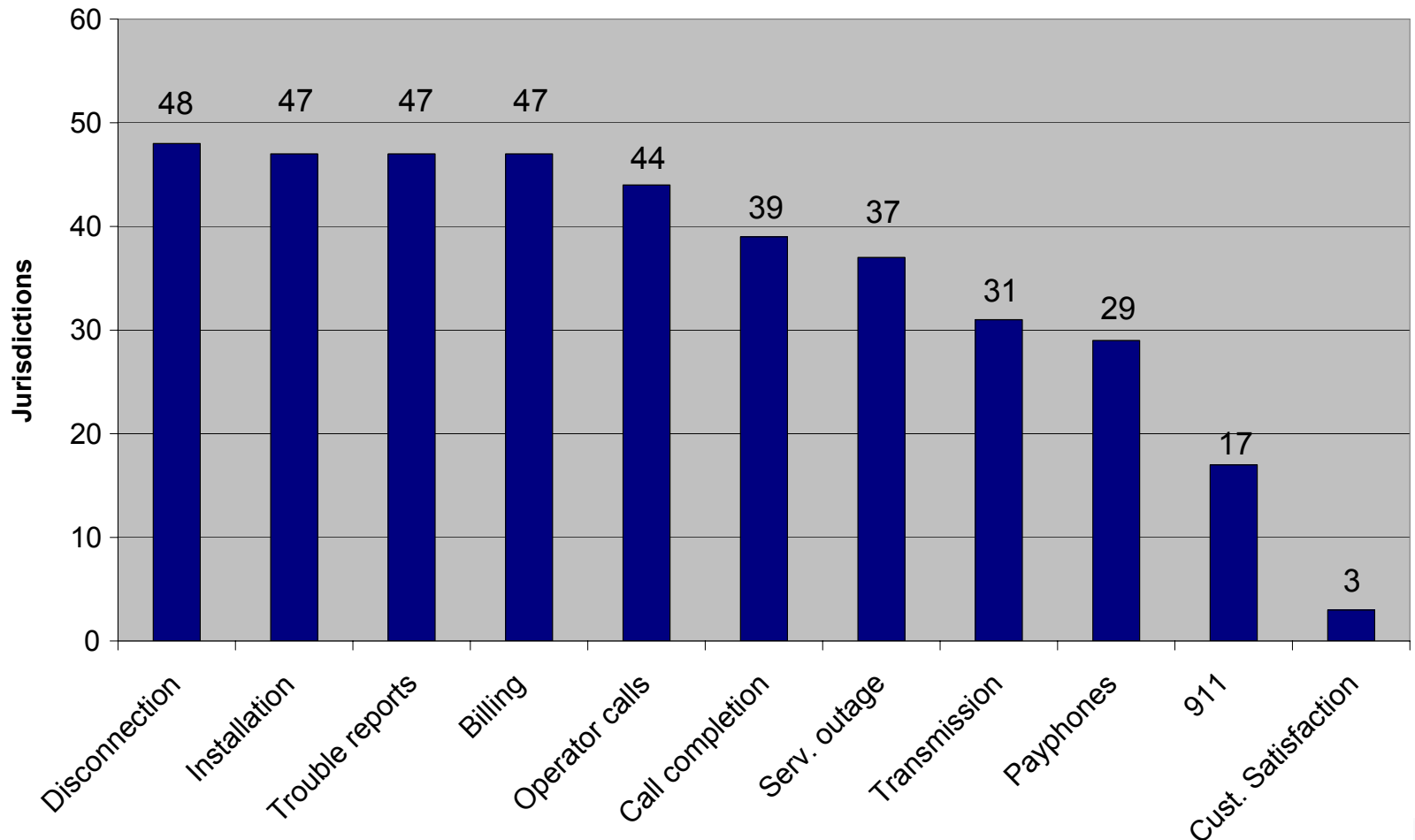**nrri**

QoS indicators collected at the state level

- Installation of service
- Operator handled calls
- Transmission and noise requirements
- Network call completion
- Customer trouble reports

- Service disconnection
- Billing and collection
- Major service outages
- Customer satisfaction
- Public payphones
- 911 database

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Variability in state adoption of QoS Indicators

Categories adopted

- 3-4
- 5-6
- 7-8
- 9
- 10

QoS indicators collected at state level in the United States

Chart — Jurisdictions (vertical axis, 0 to 60):

- Disconnection: 48
- Installation: 47
- Trouble reports: 47
- Billing: 47
- Operator calls: 44
- Call completion: 39
- Serv. outage: 37
- Transmission: 31
- Payphones: 29
- 911: 17
- Cust. Satisfaction: 3

Source: NRRI Report 03   17s, April 2003

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Qualitative approach: The user perspective

- Insight on service trends:
  - service decline or improvement over time
  - new service areas requiring attention (slamming, cramming, privacy, billing, new services)
- Understanding of consumers' attitudes, expectations, concerns, and values
- Sources: Informal complaints, customer surveys and interviews

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State Complaints per Million Lines
(All reporting ILECs, Business & Residence)
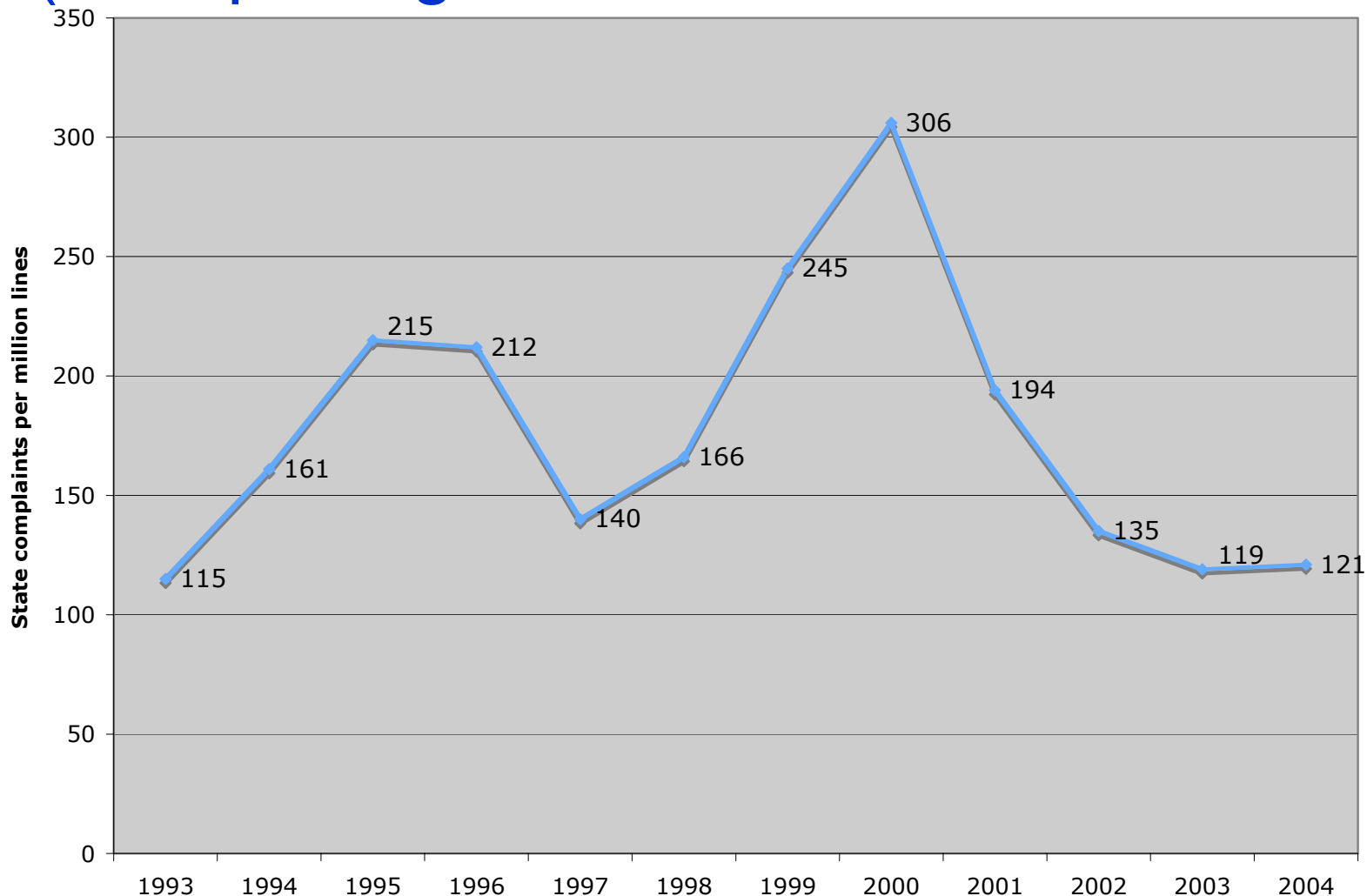
Source: FCC ARMIS 43-05 Report, Table V, Column (da) Total, Rows 320 Number of Business Access Lines, 322 Number of State Complaints - Business, 330 Number of Residence Access Lines, 332 Number of State Complaints - Residence.

Bell Operators' customer perception surveys

- FCC Report 43-06, the ARMIS Customer Satisfaction Report, must be provided annually by study area. It is comprised of the following table:

COMPANY: SBC/AMERITECH CORPORATION
STUDY AREA: SBC/AMERITECH
PERIOD: From: Jan 2004 To: Dec 2004
COSA: AMTR

TABLE I - SUMMARY CUSTOMER SATISFACTION SURVEY

ROW	CLASSIFICATION	Residential		Small Business		Large Business	
		Number Surveyed (ab)	Percent Dissatisfied (ac)	Number Surveyed (ad)	Percent Dissatisfied (ae)	Number Surveyed (af)	Percent Dissatisfied (ag)
0040	Installations	10,708	7.56	10,484	11.75	3,864	7.74
0060	Repairs	10,505	11	10,724	10.71	3,869	7.59
0080	Business Office	21,038	8.15	20,346	9.10	4,479	6.74

FOOTNOTE TABLE
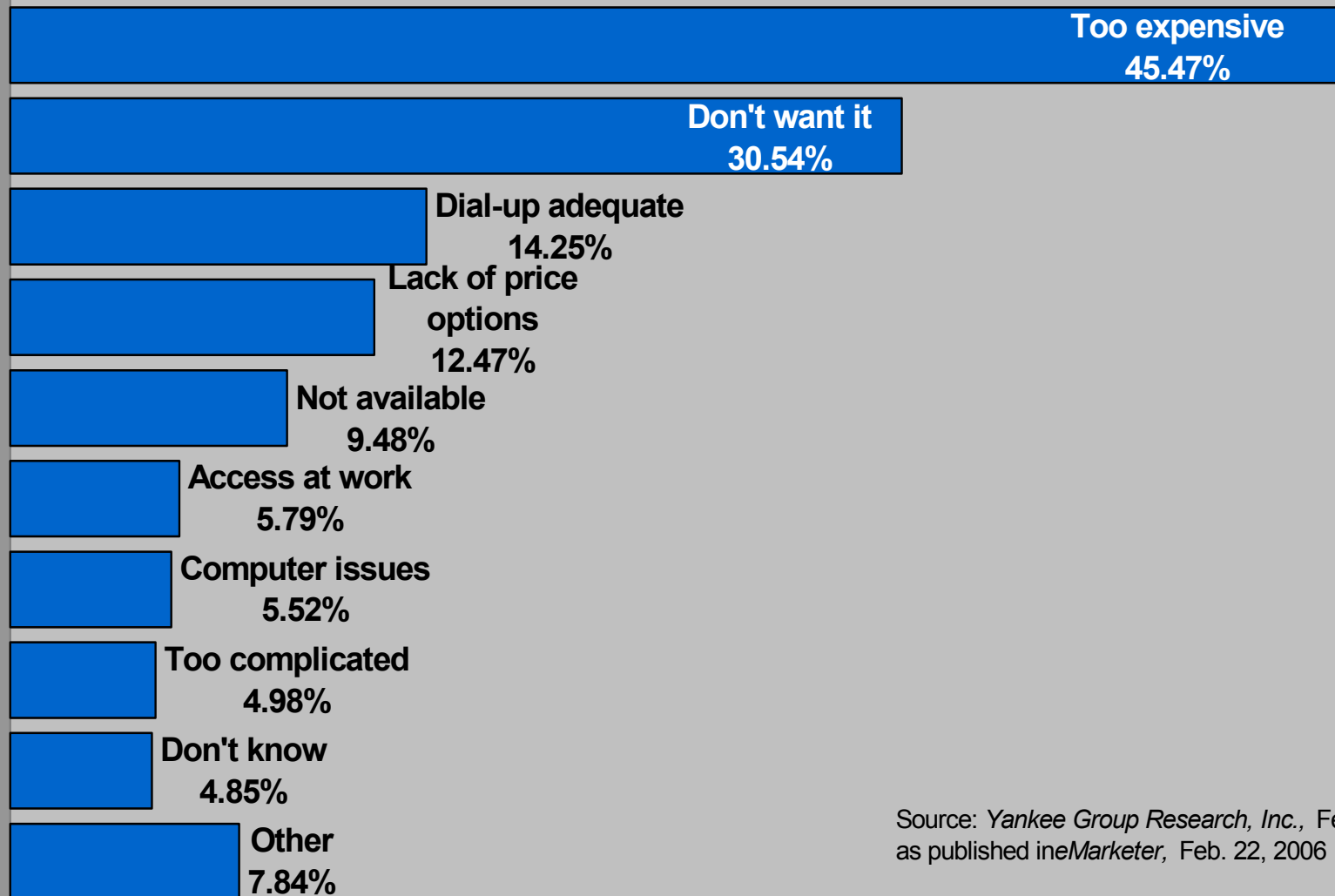
Table	Row	Col	FN#	Footnote
I	ALL	AF	1	RESULTS INCLUDE MEDIUM AND LARGE BUSINESS CUSTOMERS. LARGE BUSINESS RESULTS ONLY AVAILABLE AT REGION LEVEL.

Good practices: Australia's Consumer Satisfaction Survey

- Annual publication of the Australian Communications and Media Authority (ACMA)

- Evaluates residential and small business consumer satisfaction with fixed line, mobile and internet services

- Key topics include: customer service, pricing, mobile contracts and technical quality, bundling, as well as attitudes towards information offered by service providers and competitive aspects of key telecommunications services

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If we build it will they come?

Reasons that US consumers do not subscribe to broadband (2005, % of respondents)

Too expensive
45.47%

Don't want it
30.54%

Dial-up adequate
14.25%

Lack of price
options
12.47%

Not available
9.48%

Access at work
5.79%

Computer issues
5.52%

Too complicated
4.98%

Don't know
4.85%

Other
7.84%

Improving the user's knowledge of ICT data collected

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Empowering ICT users

- Need for improved diffusion of ICT data collected
  - Communicate to the public the regulator's goal of promoting consumer interests and increasing ICT access
  - Pressure on providers to improve QoS
  - Support consumers in making informed choices (price, quality)
- Public consultation & participation

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Good practice: Ofcom's approach

- Take quick and effective action when public may be at risk
- Encourage provision of up-to-date, unbiased and reliable company information for consumers
- Get the message across to different groups of people
- Use the most effective method for each group
- Consider language or disability barriers

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Summary

- Disaggregated data improves knowledge of digital divide impact

- Include indicators of relevance to users

- Challenge of understanding decision-making processes influencing the patterns of access and use found in data

- Diffuse information collected in a user-friendly manner

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Thanks!

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