SURVEY ON THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN BRAZIL - 2005

Households and Enterprises

May 30th, 2006 – Santiago, CEPAL

Brazilian Internet Steering Committee

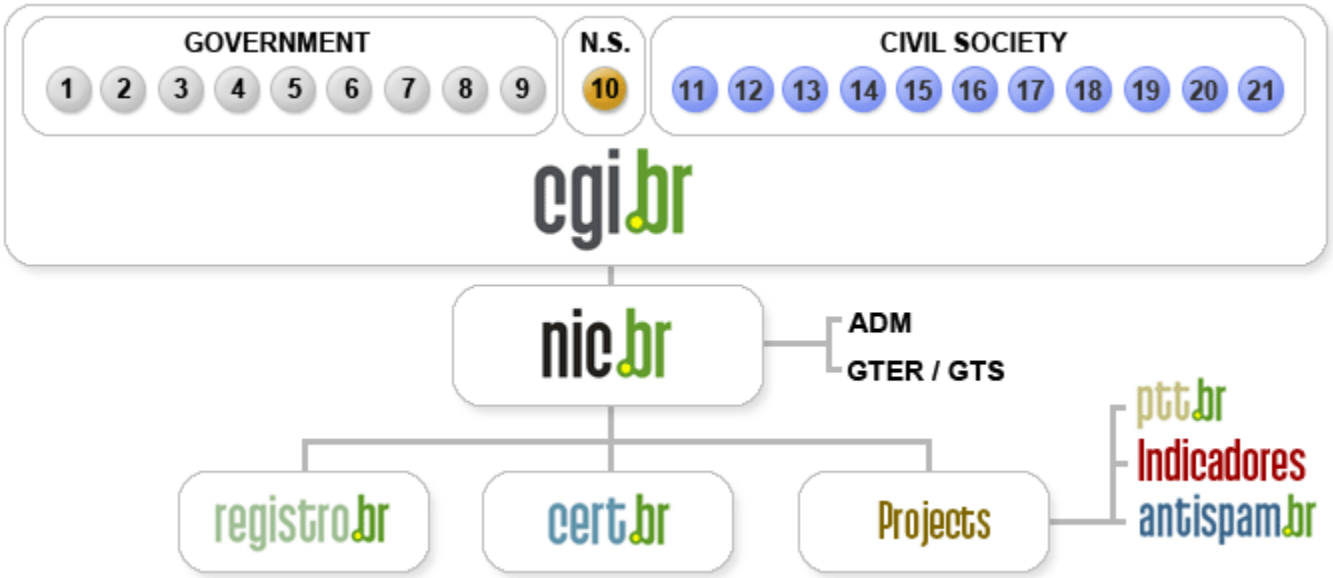
www.cgi.br

Agenda

- The Brazilian Internet Steering Committee (CGI.br)
- CGI.br Indicators' Initiatives
- 2005 ICT Households Survey
- 2005 ICT Enterprises Survey
- Methodological Issues

Brazilian Internet Steering Committe

- created by the Interministerial Ordinance Nº 147, of May 31st 1995
- altered by the Presidential Decree Nº 4,829, of September 3rd 2003
- it is responsible for the coordination and integration of Internet services in Brazil
- it is a multistakeholder organization composed of representatives from the Government, Private Sector, Third Sector and Academic Community



1 – Ministry of Science and Technology;
2 – Ministry of Communications
3 – Presidential Cabinet
4 – Ministry of Planning, Budget and Management
5 – Ministry of Development, Industry and Foreign Trade
6 – Ministry of Defense
7 – National Telecommunications Agency
8 – National Council of Scientific and Technological Development
9 – National Forum of Estate Science and Technology Secretaries
10 – Internet expert

11 – Internet services providers
12 – Telecommunications infrastructure providers
13 – Hardware and software industries
14 – General bussiness sector users
15 – Third Sector
16 – Third Sector
17 – Third Sector
18 – Third Sector
19 – Academic Community
20 – Academic Community
21 – Academic Community

www.cgi.br

Main attributions:

- to establish strategic directives related to the use and development of Internet in Brazil;
- to recommend standards for technical and operational procedures for the Internet;
- to coordinate the allocation of Internet addresses (IPs) and the registration of domain names using <.br>;
- to propose policies and procedures related to the regulation of Internet activities;
- to collect, organize and disseminate information on Internet services, including indicators and statistics.

Initiatives

1. Partnership with IBGE – Brazilian Statistical Institute

- ICT Module at the National Household Sample Survey (PNAD) 2005 with questions on the Basic Core Indicators for ICT use by Household and Individuals
- Results in October 2006

2. Partnership with IBOPE//NetRatings

List of Indicators for ICT use by household and individuals published monthly at www.nic.br/indicadores

- Individual Internet Access at Households
- Sessions per Person
- PC Time per Person
- Audience Profile by gender, age, education
- Internet Penetration at Households
- Internet Activities Undertaken
- Global Internet Access

Initiatives

3. ICT HOUSEHOLDS Survey

– **measured the Internet penetration and usage in households, including use of e-government, e-commerce, security, education and access barriers**

4. ICT ENTERPRISES Survey

– **investigated the internet penetration and usage in companies, including use of electronic government, electronic commerce, security, among others**

→ Ipsos Opinion Institute

→ carried through August and September 2005

ICT Households and ICT Enterprises

Methodology

- based on OECD and Eurostat questionnaires and methodology
- interviews in-home (households) and by telephone (enterprises)

Sample

- probabilistic sample based on IBGE´s PNAD 2003
- maximum margin of error of 1.5% nationally and 5% regionally, and confidence level of 95%

- **Households**
  - 8,540 households and with individuals over 10 years old interviewed (over sample 500)
  - results allow to present the indicators by 15 regions and metropolitan areas, family income ranges, social class, education level, age and gender.

- **Enterprises**
  - 2,030 companies with 10 employees or more interviewed
  - corporate sample targeted companies of the 7 segments of the National Economic Activities Classification (NACE) - section D, F, G, K, I, group 55.1 and 55.2, and group 92.1 and 92.2
  - results are obtained by region (N, S, MW,NE, SE), activity and size

ICT HOUSEHOLDS 2005 Survey

Survey on the Use of ICT in Brazil - 2005
May 30th, 2006 – Santiago, CEPAL

ICT ENTERPRISE Indicators

Household access to ICT

A1 - *PROPORTION OF HOUSEHOLDS WITH ICT EQUIPMENTS*

Use of computer

B1 - *PROPORTION OF HOUSEHOLDS WITH COMPUTER*
B2 - PROPORTION OF INDIVIDUALS WITH COMPUTER ACCESS AT HOME
B3 - PROPORTION OF INDIVIDUALS WHO USED A COMPUTER (FROM ANY LOCATION)
B4 - LOCATION OF INDIVIDUAL USE OF COMPUTER
B5 - FREQUENCY OF INDIVIDUAL USE OF COMPUTER

Use of Internet

C1 - PROPORTION OF HOUSEHOLDS WITH INTERNET ACCESS
C2 - PROPORTION OF INDIVIDUALS WITH INTERNET ACCESS AT HOME
C3 - TYPE OF DEVICE USED TO ACCESS THE INTERNET AT HOME
C4 - PROPORTION OF HOUSEHOLDS WITH ACCESS TO THE INTERNET BY ACCESS TYPE
C5 - PROPORTION OF INDIVIDUALS WHO ACCESSED THE INTERNET (FROM ANY LOCATION)
C6 - LOCATION OF INDIVIDUAL INTERNET ACCESS
C7 - FREQUENCY OF INDIVIDUAL ACCESS TO THE INTERNET
C8 - TIME SPENT ON INTERNET – WEEKLY
C9 - REASONS FOR NOT ACCESSING INTERNET AT HOME
C10 - INTERNET ACTIVITIES UNDERTAKEN BY INDIVIDUALS
C11 - PURPOSE OF THE INTERNET ACTIVITIES UNDERTAKEN BY INDIVIDUALS

Use of e-government

D1 - PROPORTION OF INDIVIDUALS WHO USE E-GOVERNMENT SERVICES
D2 - E-GOVERNMENT SERVICES USED IN THE INTERNET

CGI

ICT ENTERPRISE Indicators

Use of e-commerce

E1 - PROPORTION OF INDIVIDUALS WHO BOUGHT GOODS AND SERVICES VIA INTERNET
E2 - PRODUCTS AND SERVICES BOUGHT VIA INTERNET
E3 - AVERAGE EXPENSES WITH PRODUCTS AND SERVICES PURCHASED OVER THE INTERNET
E4 - PAYMENT CONDITIONS FOR PURCHASES VIA INTERNET
E5 - PROPORTION OF INDIVIDUALS WHO HAD PROBLEMS BUYING GOODS AND SERVICES VIA INTERNET
E6 - PROBLEMS FACED WHILE BUYING VIA INTERNET
E7 - REASONS FOR NOT BUYING VIA INTERNET

Security

F1 - SECURITY PROBLEMS FACED USING THE INTERNET
F2 - COMPUTER SECURITY MEASURES ADOPTED
F3 - ANTIVIRUS UPDATING FREQUENCY

Use of mobile phone

G1 - PROPORTION OF INDIVIDUALS WHO USE A MOBILE TELEPHONE
G2 – ACTIVITIES BY CELL PHONE

E-skills

H1 - PROPORTION OF INDIVIDUALS WITH COMPUTING AND INTERNET COURSES
H2 - COMPUTER RELATED SKILLS
H3 - INTERNET RELATED SKILLS
H4 - HOW DID THE PERSON GET HIS/HER COMPUTER AND INTERNET SKILLS

ICT ENTERPRISE Indicators

Use of e-mail

I1 - TYPE OF E-MAIL ACCOUNT
I2 - NUMBER OF E-MAIL ACCOUNTS FOR PERSONAL USE (PAID)
I3 - NUMBER OF FREE E-MAIL ACCOUNTS FOR PERSONAL USE
I4 - NUMBER OF E-MAIL ACCOUNTS FOR WORK
I5 - PRIMARY USE E-MAIL ACCOUNT

Spam

J1 - SPAM MESSAGES RECEIVED AT THE PRIMARY E-MAIL ACCOUNT FOR PERSONAL USE
J2 - FREQUENCY OF SPAM AT THE PRIMARY E-MAIL ACCOUNT FOR PERSONAL USE
J3 - NUMBER OF SPAM RECEIVED AT THE PRIMARY E-MAIL ACCOUNT FOR PERSONAL USE
J4 - TIME SPENT WITH SPAM RECEIVED AT THE PRIMARY E-MAIL ACCOUNT FOR PERSONAL USE

CGI

Intention to purchase ICT equipment and services

K1 - MAXIMUM STATED AMOUNT AN INDIVIDUAL WOULD SPEND FOR A COMPUTER
K2 - MAXIMUM STATED AMOUNT AN INDIVIDUAL WOULD SPEND FOR INTERNET ACCESS

Ipsos

Main Results

- 55% never used a computer
- 30% used a computer in the last 3 months
- 13,8% uses a computer daily

- 68% never used the Internet
- 9,6% uses the Internet daily
- 24% accessed the Internet in the last 3 months
  - 41% uses the Internet for education/studying
  - 32% uses the Internet for personal purposes
  - 26% uses the Internet for work

Core ICT Indicators

Basic core	Percentage (%)
HH-1Households with a radio	91,64
HH-2 Households with a TV	95,7
HH-3 Households with a fixed line telephone	54,02
HH-4 Households with a mobile telephone	61,21
HH-5 Households with a computer	16,91
HH-6 Individuals that used a computer (from any location) **in the last 3 months**	29,72
HH-7 Households with Internet access	21,43
HH-8 Individuals that used the Internet (from any location) **in the last 3 months**	24,41
HH-9 Location of individual use of the Internet from all locations **in the last 3 months:**	
• At home	42,03
• At work	26,44
• Place of education	21,32
• At another person's home	17,68
• Free Public Internet Access Centre	1,93
• Charged Public Internet Access Centre	17,59
• Others	3,58

Core ICT Indicators

Basic core	Percentage (%)
HH-10 Internet activities undertaken by individuals **in the last 3 months:**	
• For getting information	80,96
o About goods or services	36,64
o Related to health or health services	17,52
o From government organizations/public authorities via websites or e-mail	21,73
o Other information or general Web browsing	32,95
• For communicating	81,67
• Purchasing or ordering goods or services	6,91
• Internet banking or other financial services	12,98
• For education and learning	56,45
• For dealing with government organizations/public authorities	28,22
• For leisure activities	71,25
o Playing/downloading video or computer games	26,18
o Obtaining movies, music or software	24,21
o Reading/downloading electronic books, newspapers or magazines	35,51
o Other leisure activities	23,3

Core ICT Indicators

Extended core	Percentage (%)
HH-11 Proportion of individuals with use of a mobile telephone	54,55
HH-12 Proportion of households with access to the Internet by type of access from home	
• Modem (dial-up access)	39,49
• Broadband connection through DSL	8,12
• Mobile phone	6,28
• Satellite Internet	5,31
HH-13 Frequency of individual access to the Internet **in the last 3 months**	
• at least once a day	39,64
• at least once a week but not every day	40,26
• at least once a month but not every week	14,06
• less than once a month	6,04

Hosts and Domain Names

Number of Internet hosts in Brazil

Percentage (%)	Hosts
January 2006	5.094.730
July 2005	4.392.693
January 2005	3.934.577
July 2004	3.485.773
January 2004	3.163.349
January 2003	2.237.527
July 2002	1.988.321
January 2002	1.644.575
July 2001	1.025.067
January 2001	876.596
July 2000	662.910
January 2000	446.444
July 1999	310.138
January 1999	215.086
July 1998	163.890
January 1998	117.200

Source: Network Wizards

Number of Domain Names under .br

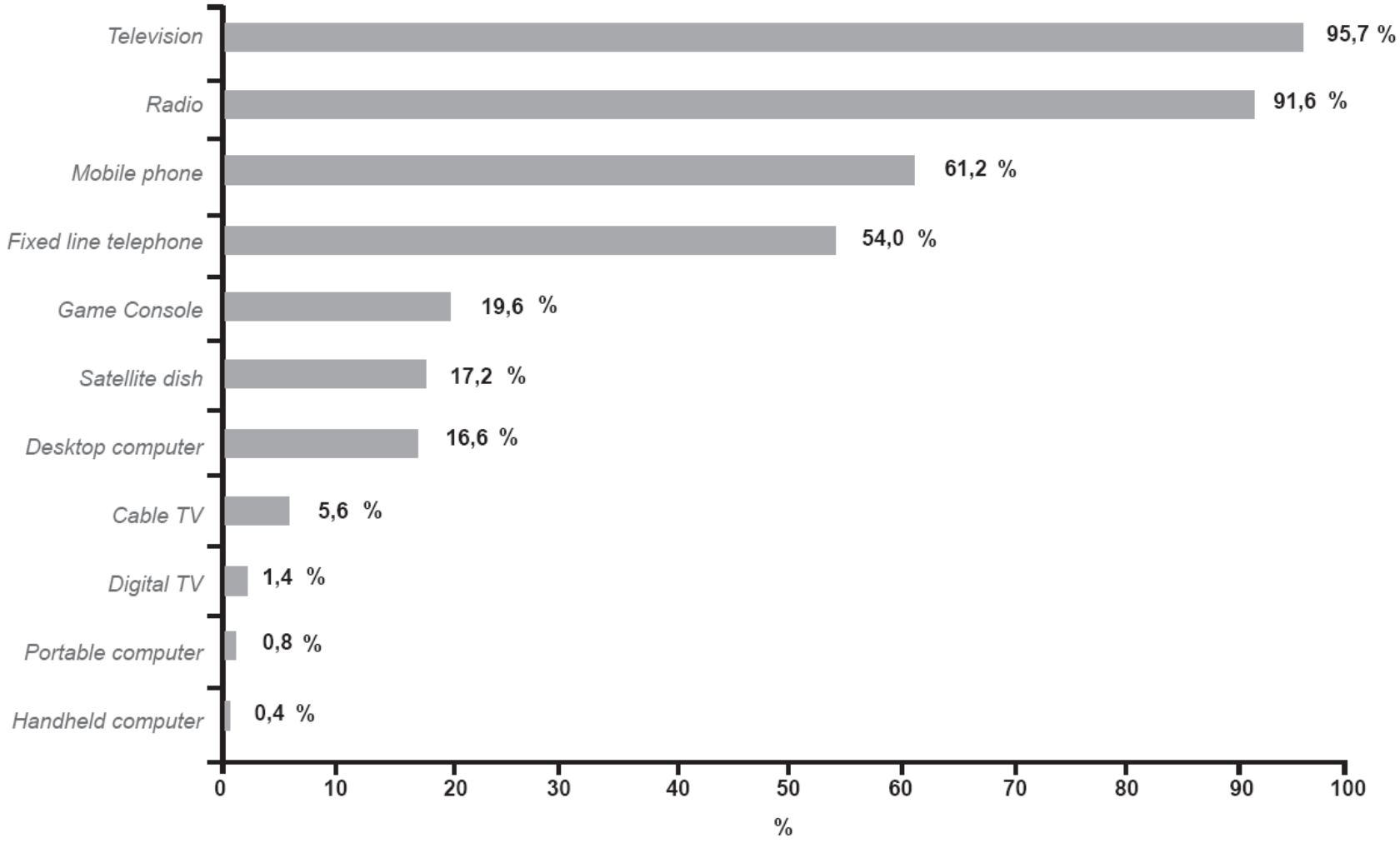
Percentage (%)	Domains
January 2006	866.969
July 2005	796.837
January 2005	715.152
July 2004	657.458
Januarv 2004	558.408
July 2003	507.809
January 2003	425.121
Julv 2002	408.416
January 2002	417.610
July 2001	416.277
January 2001	369.857
July 2000	292.539
January 2000	163.659
July 1999	108.192
January 1999	70.882
July 1998	46.512
January 1998	27.592
July 1997	15.007
January 1997	7.998
July 1996	3.769
January 1996	851

Source: Registro.br

ey on the Use of ICT in Brazil - 2005
May 30th, 2006 – Santiago, CEPAL

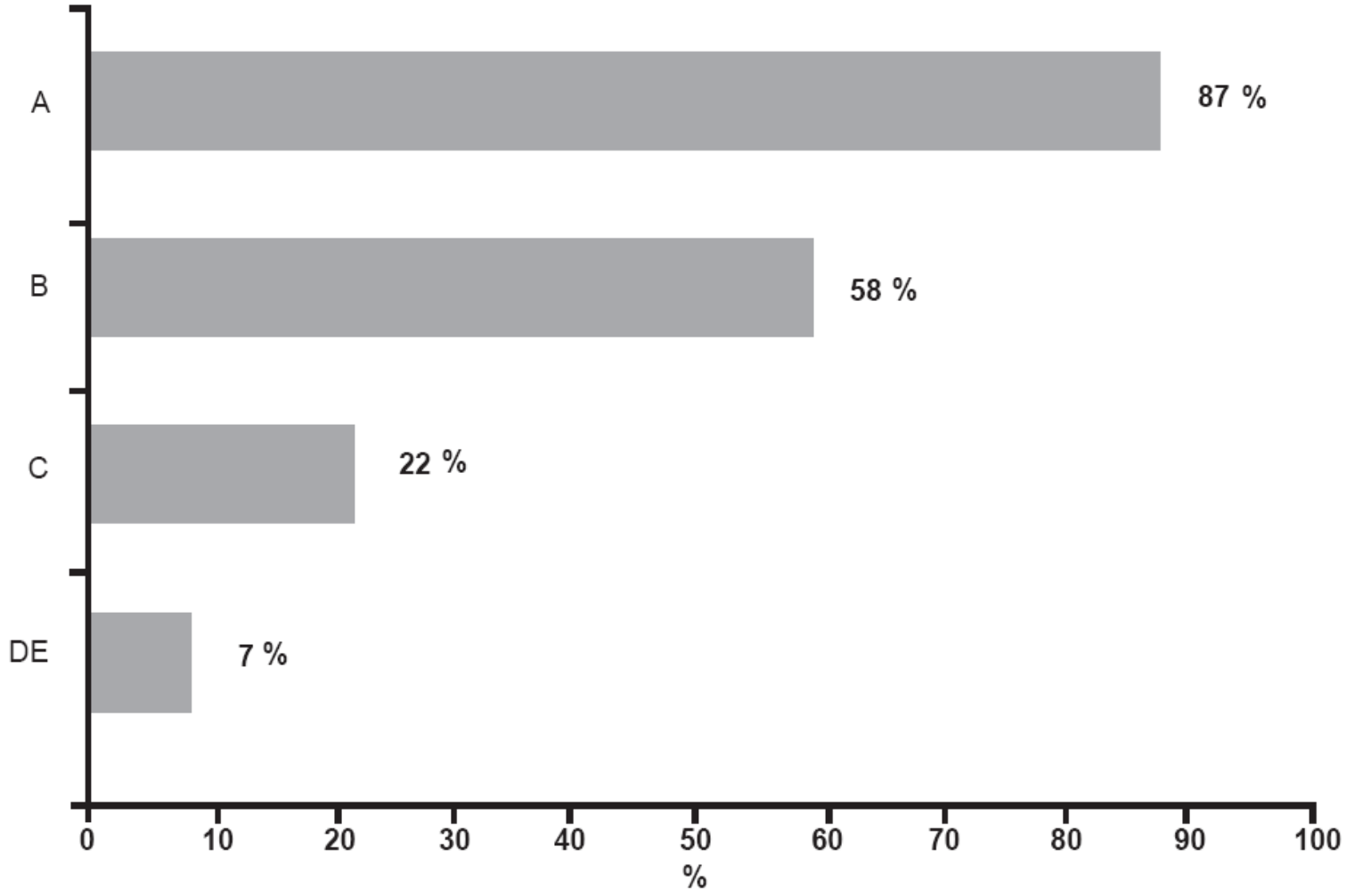
Proportion of households with access to ICT equipments

Percentage over the total number of households



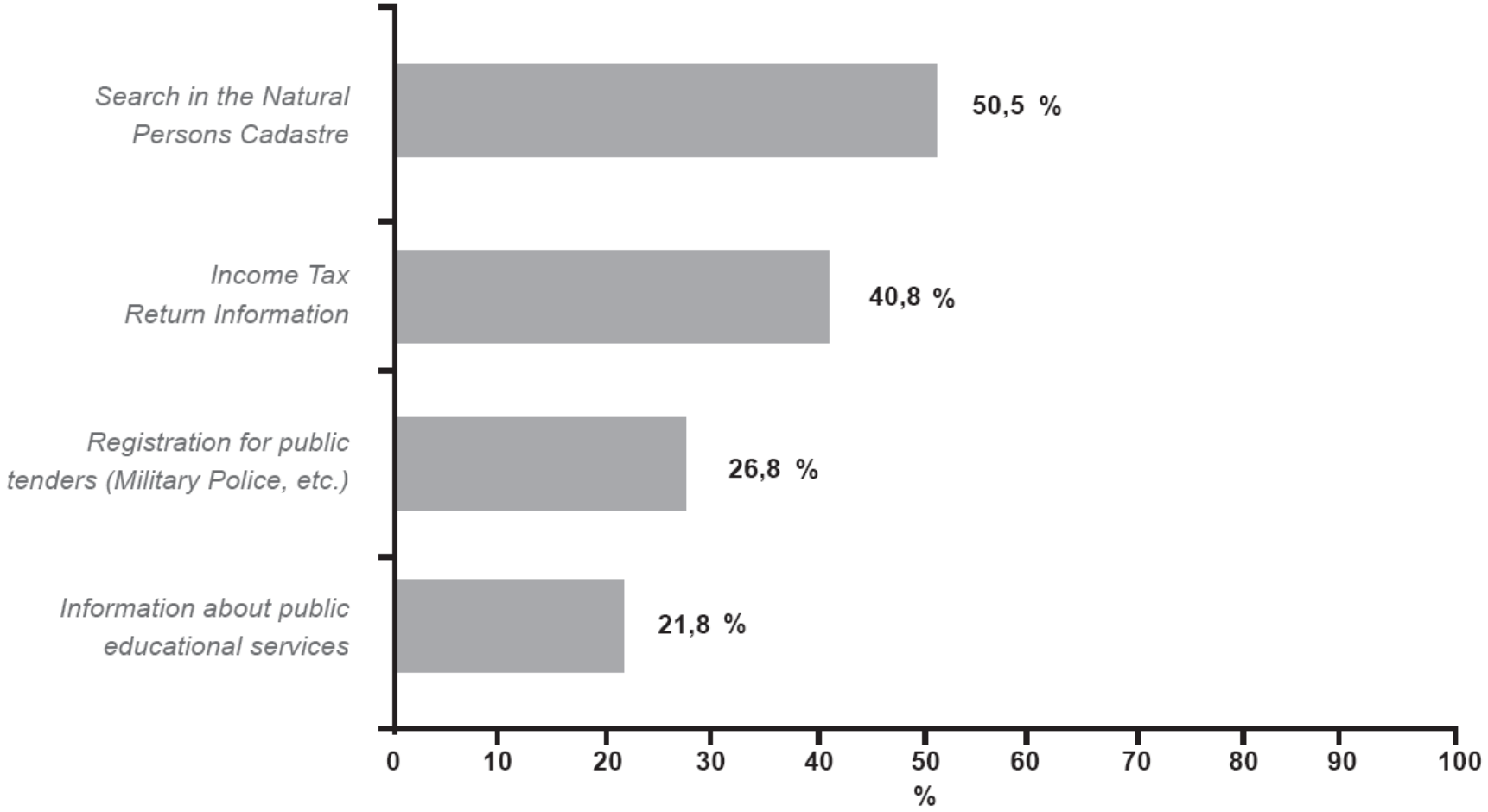
Proportion of households with Internet access, by social class

Percentage over the total number of households



E-government services used in the internet

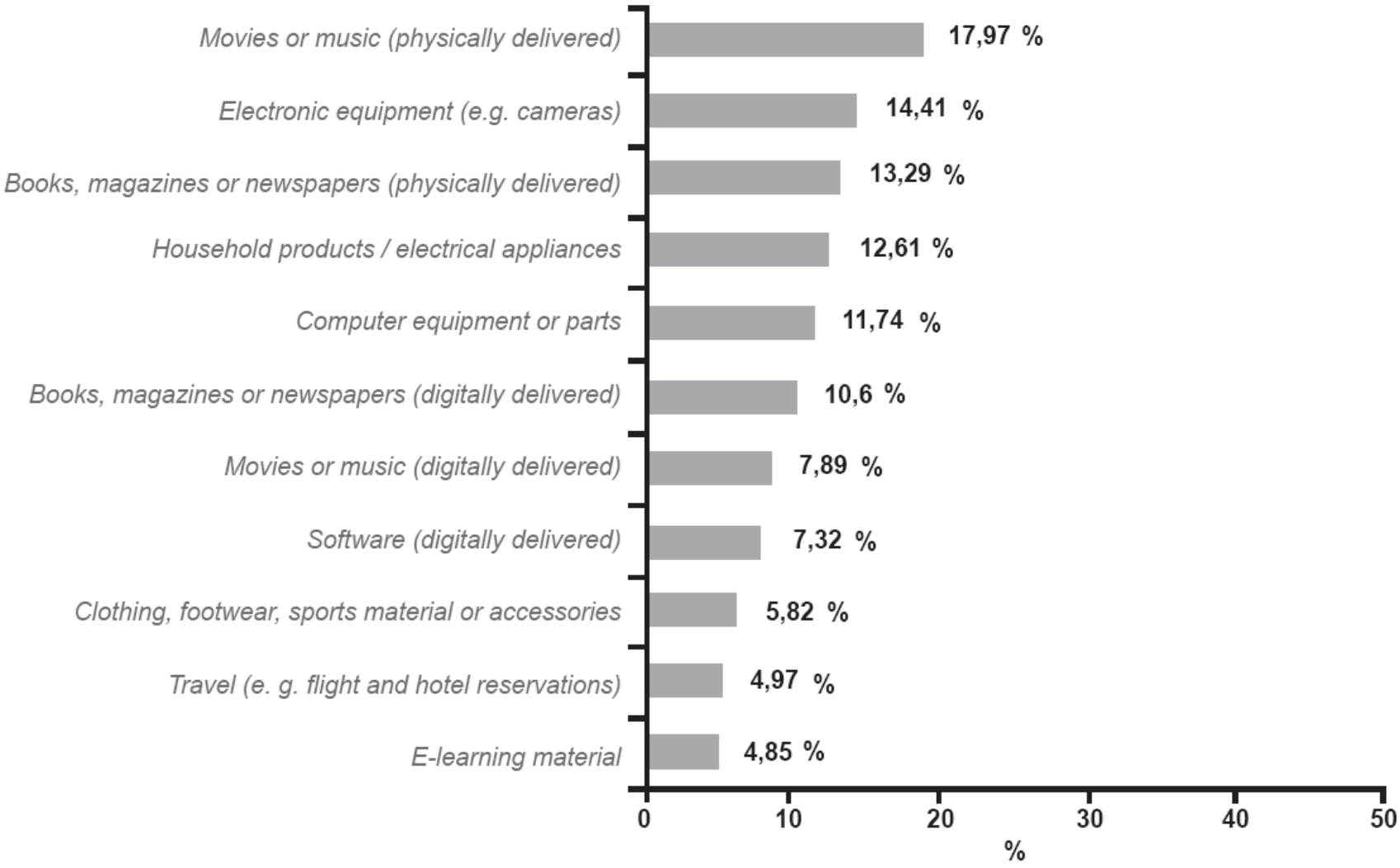
Percentage over the total number of individuals who accessed e-government services



Survey on the Use of ICT in Brazil - 2005
May 30th, 2006 – Santiago, CEPAL

Products and services bought via internet

Percentage over the total number of individuals who bought products and services via Internet



ICT ENTERPRISES 2005 Survey

Survey on the Use of ICT in Brazil - 2005
May 30th, 2006 – Santiago, CEPAL

ICT ENTERPRISE Indicators

Access to ICT

A1 - PROPORTION OF BUSINESSES USING COMPUTERS
A2 - PROPORTION OF EMPLOYEES USING COMPUTERS
A3 - PROPORTION OF ENTERPRISES WITH NETWORK (LAN, INTRANET and EXTRANET)
A4 - PROPORTION OF EMPLOYEES WITH REMOTE ACCESS TO THE ENTERPRISE'S COMPUTER
A5 - REMOTE ACCESS PLACES TO THE ENTERPRISE'S COMPUTER SYSTEM
A6 - DIFFICULTIES IN RECRUITING PERSONNEL WITH ICT SKILLS
A7- TYPE OF DIFFICULTY FACED IN RECRUITING
A8 - PROPORTION OF BUSINESSES WITH IT SYSTEMS TO MANAGE THE PLACING OR RECEIPT OF ORDERS
A9 - AUTOMATIC LINK FROM THE IT SYSTEMS TO ORDERS MANAGEMENT
A10 - SUBSTITUTION LEVEL OF TRADITIONAL POSTAL MAIL BY ELETRONIC COMMUNICATION

Internet use

B1 - PROPORTION OF ENTERPRISES USING THE INTERNET
B2 - PROPORTION OF EMPLOYEES USING THE INTERNET
B3 - PROPORTION OF ENTERPRISES WITH A WEBSITE
B4 - RESOURCES PROVIDED BY THE ENTERPRISE'S WEBSITE
B5 - PROPORTION OF BUSINESSES ACCESSING THE INTERNET BY CONNECTION
B6 - PROPORTION OF ENTERPRISES USING THE INTERNET BY ACTIVITY TYPE
B7 - MAXIMUM DOWNLOAD SPEED OFFERED BY THE INTERNET PROVIDER

ICT ENTERPRISE Indicators

ICT E-commerce

C1 - PROPORTION OF ENTERPRISES PLACING ORDERS OVER THE INTERNET (PURCHASE)
C2 - PROPORTION BETWEEN ORDERS VIA INTERNET AND THE TOTAL AMOUNT OF PURCHASES
C3 - PROPORTION OF ENTERPRISES MAKING ONLINE PAYMENTS VIA INTERNET
C4 - TYPE OF GOODS AND SERVICES ORDERED VIA INTERNET
C5 - PROPORTION OF ENTERPRISES RECEIVING ORDERS VIA INTERNET (SALES)
C6 - SALES AMOUNT FROM ORDERS RECEIVED VIA INTERNET
C7 - TOTAL OF INTERNET SALES BY CLIENT CATEGORY
C8 - TOTAL OF INTERNET SALES BY DESTINATION
C9 - TOTAL OF INTERNET SALES ACCORDING TO PRODUCTS AND SERVICES
C10 - BENEFITS DUE TO INTERNET SELLING
C11 - ORDERS RECEIVED VIA EXTERNAL COMPUTER NETWORKS OTHER THEN THE INTERNET (SALES)
C12 - SALES AMOUNT FROM ORDERS RECEIVED VIA EXTERNAL COMPUTER NETWORKS OTHER THEN INTERNET
C13 - ORDERS VIA EXTERNAL COMPUTER NETWORKS OTHER THEN THE INTERNET (PURCHASE)
C14 - VALUE OF THE PURCHASES VIA EXTERNAL COMPUTER NETWORKS OTHER THEN INTERNET
C15 - FACTORS THAT DIDN'T ALLOW SALES VIA INTERNET OR EXTERNAL COMPUTER NETWORK
C16 - REASONS WHY THE ENTERPRISE DO NOT USE COMPUTERS

E-government

D1 - PROPORTION OF ENTERPRISES DEALING WITH GOVERNMENTAL ORGANIZATIONS OVER THE INTERNET
D2 - E-GOVERNMENT SERVICES ACCESSED OVER THE INTERNET

Security

E1 - IDENTIFIED IT SECURITY PROBLEMS
E2 - IT SECURITY MEASURES ADOPTED
E3 - ANTIVIRUS UPDATING FREQUENCY
E4 - COMMUNICATION SECURITY DEVICES

Core ICT Indicators

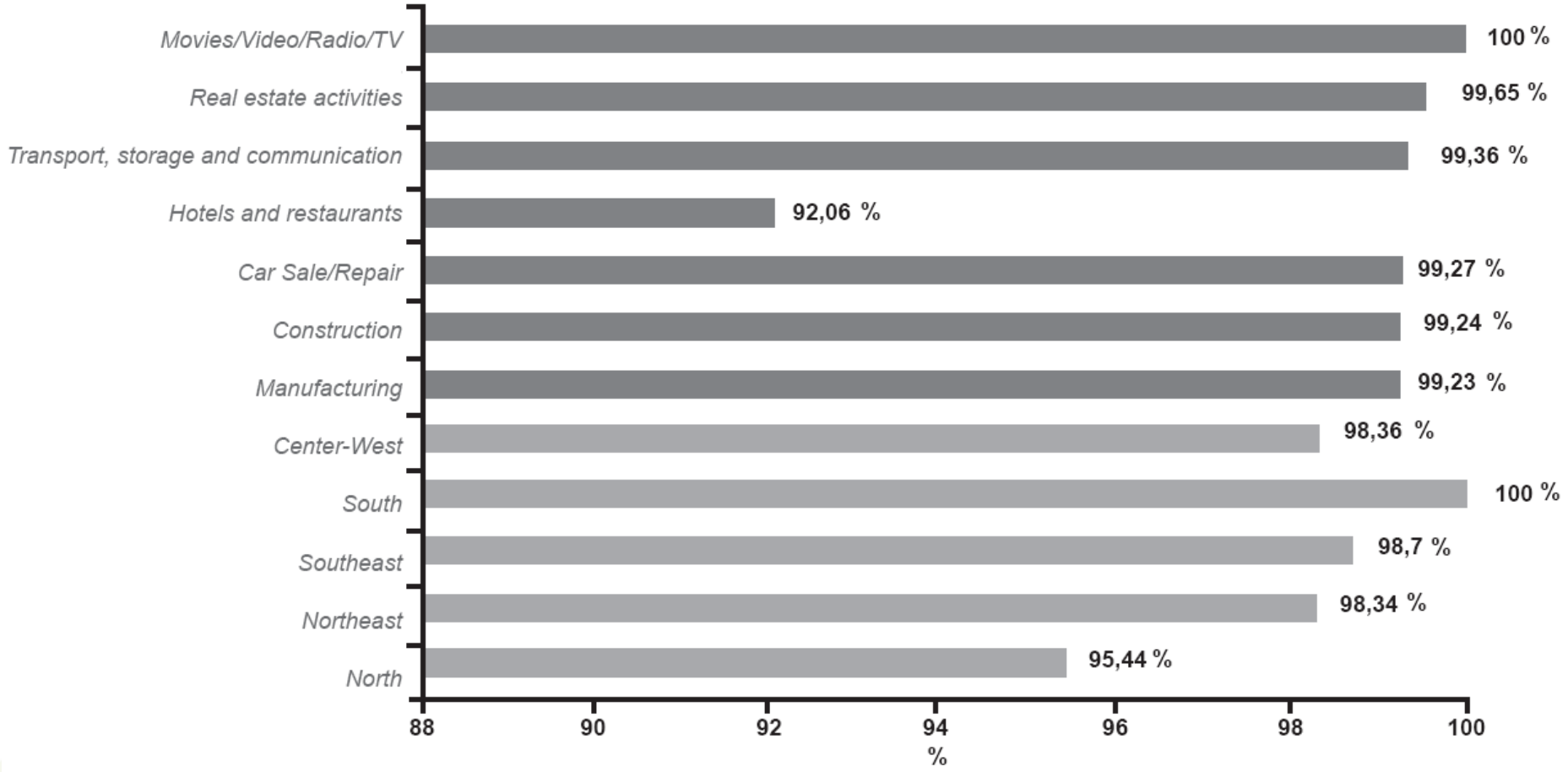
Basic core	Percentage (%)
B-1 Proportion of businesses using computers	98,76
B-2 Proportion of employees using computers	57,05
B-3 Proportion of businesses using the Internet	96,29
B-4 Proportion of employees using the Internet	38,19
B-5 Proportion of businesses with a website	59,06
B-6 Proportion of businesses with an intranet	39
B-7 Proportion of businesses receiving orders over the Internet	59,66
B-8 Proportion of businesses placing orders over the Internet	54,59

Core ICT Indicators

Extended core	Percentage (%)
B-9 Proportion of businesses accessing the Internet by modes of access	
• Traditional Modem	45,07
• ISDN Connection	10,95
• DSL Connection (ADSL, etc.)	57,95
• Other fixed Internet connection (cable, rented line, etc.)	20,46
• Mobile wide band connection	23,95
• Mobile narrow band connection	5,72
B-10 Proportion of businesses with a Local Area Network (LAN)	
• LAN/Wireless Network	14,21
• LAN/Wire base Network	80,46
B-11 Proportion of businesses with an extranet	22,16
B-12 Proportion of businesses using the Internet by type of activity	
• Internet e-mail	XXX
• Getting information	
o About goods or services	XXX
o From government organizations/public authorities via websites or e-mail	61,39
o Other information searches or research activities	XXX
• Performing Internet banking or accessing other financial services	78,96
• Dealing with government organizations/public authorities	64,78
• Providing customer services	47,59
• Delivering products online	58,88

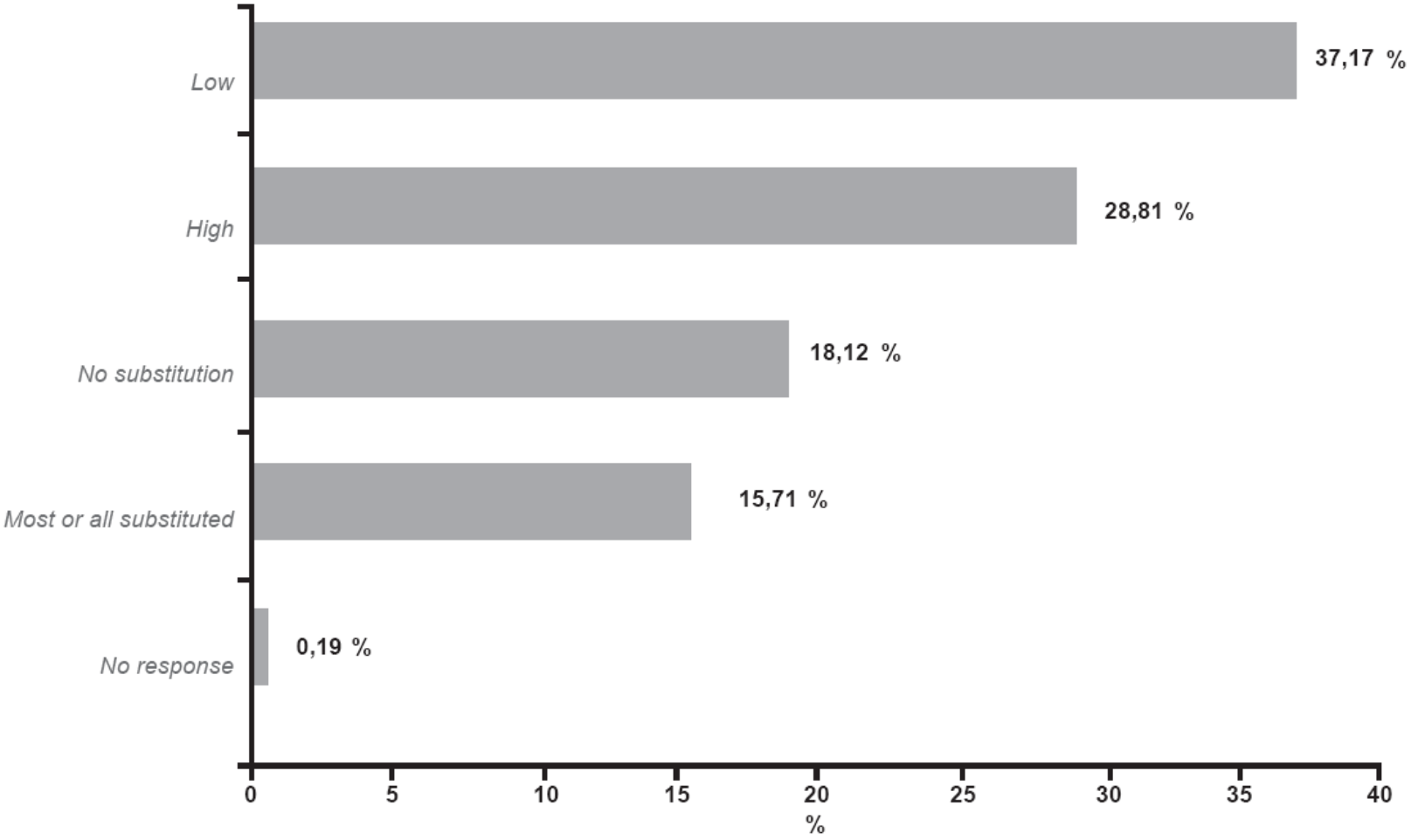
Proportion of businesses using computers, by industry and region

Percentage over the total of interviewed enterprises



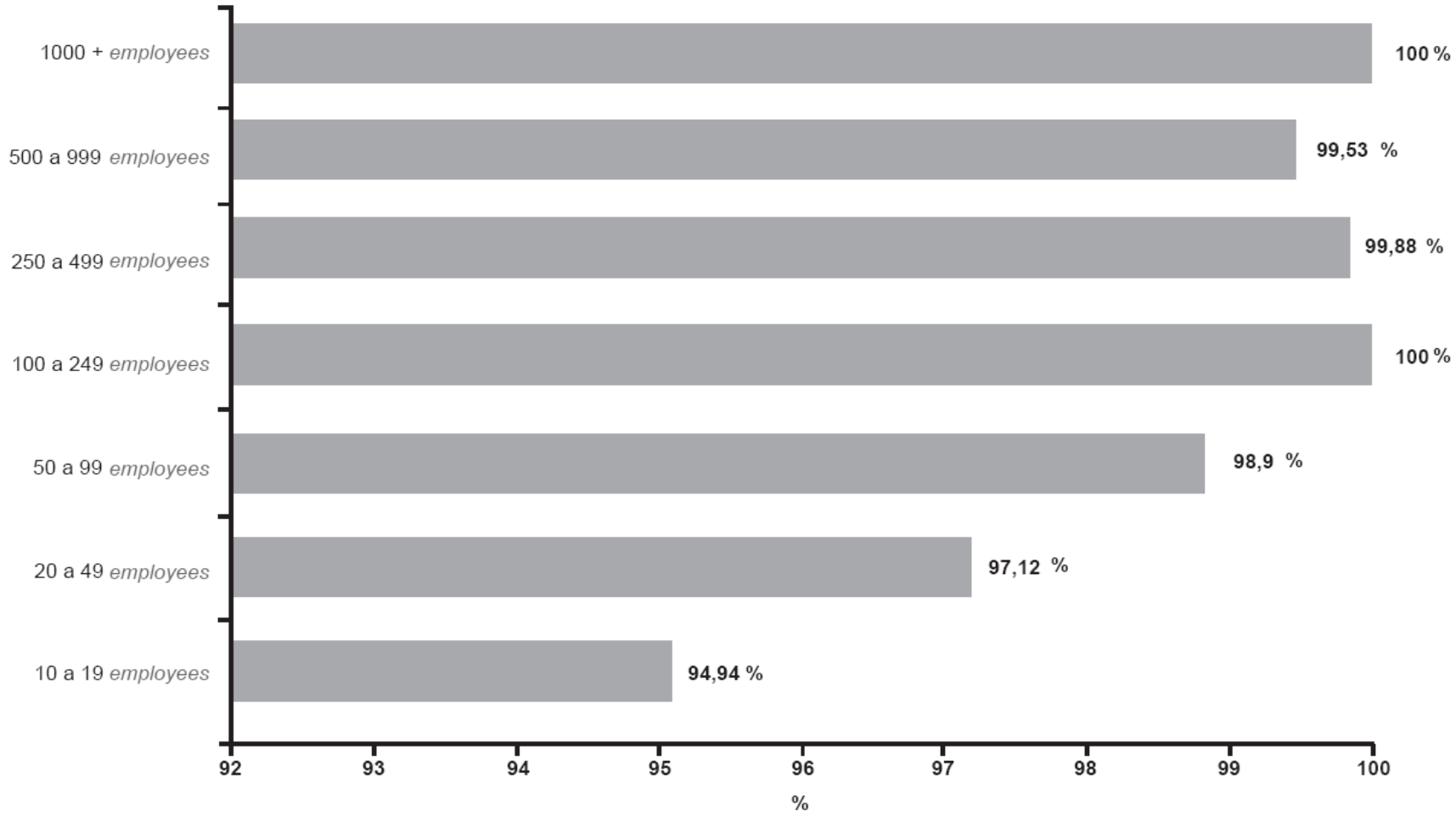
Substitution level of traditional postal mail by eletronic communication

Percentage over the total of interviewed enterprises using computers



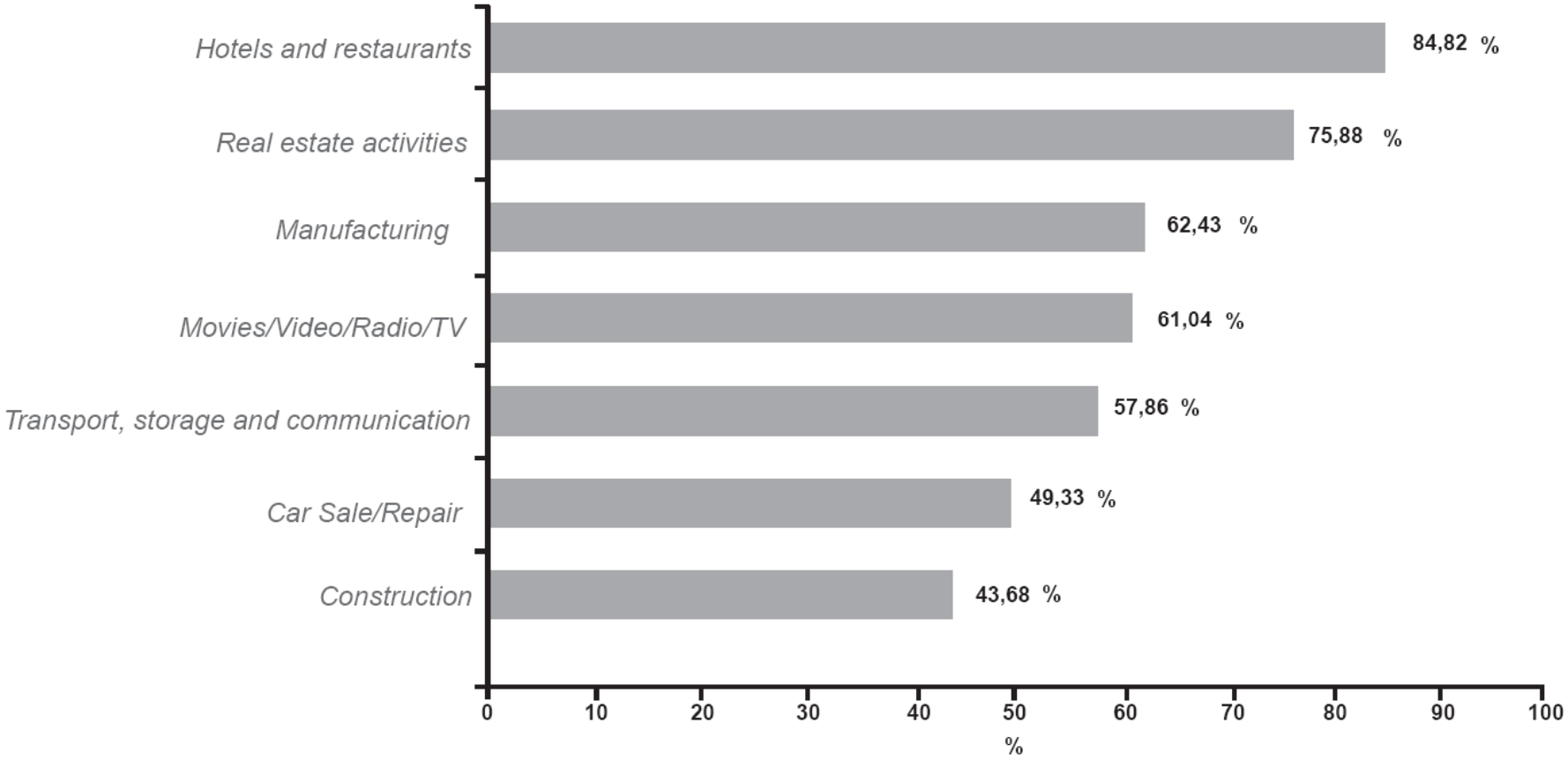
Proportion of enterprises using the internet, by size

Percentage over the total of interviewed enterprises using computers



Proportion of enterprises with a website, by industry

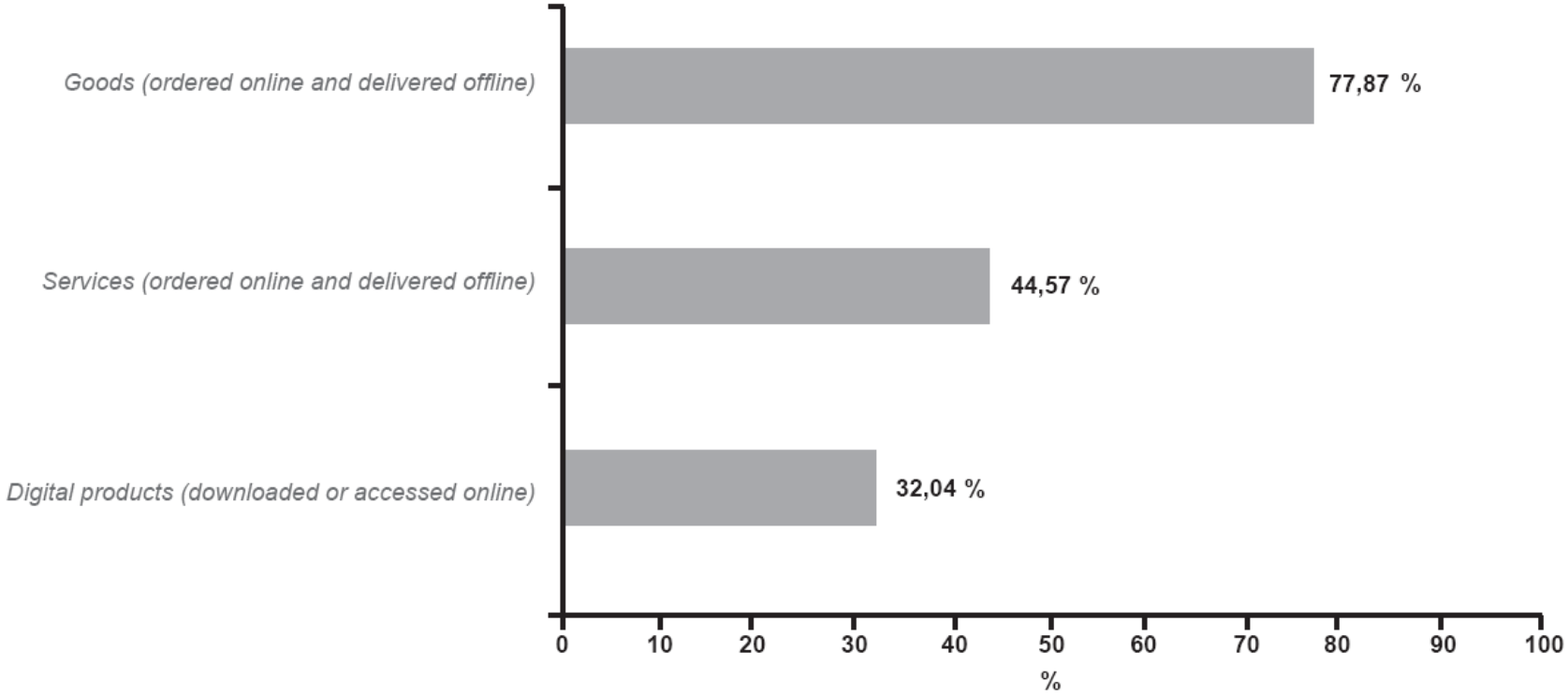
Percentage over the total of interviewed enterprises with Internet access



Survey on the Use of ICT in Brazil - 2005
May 30th, 2006 – Santiago, CEPAL

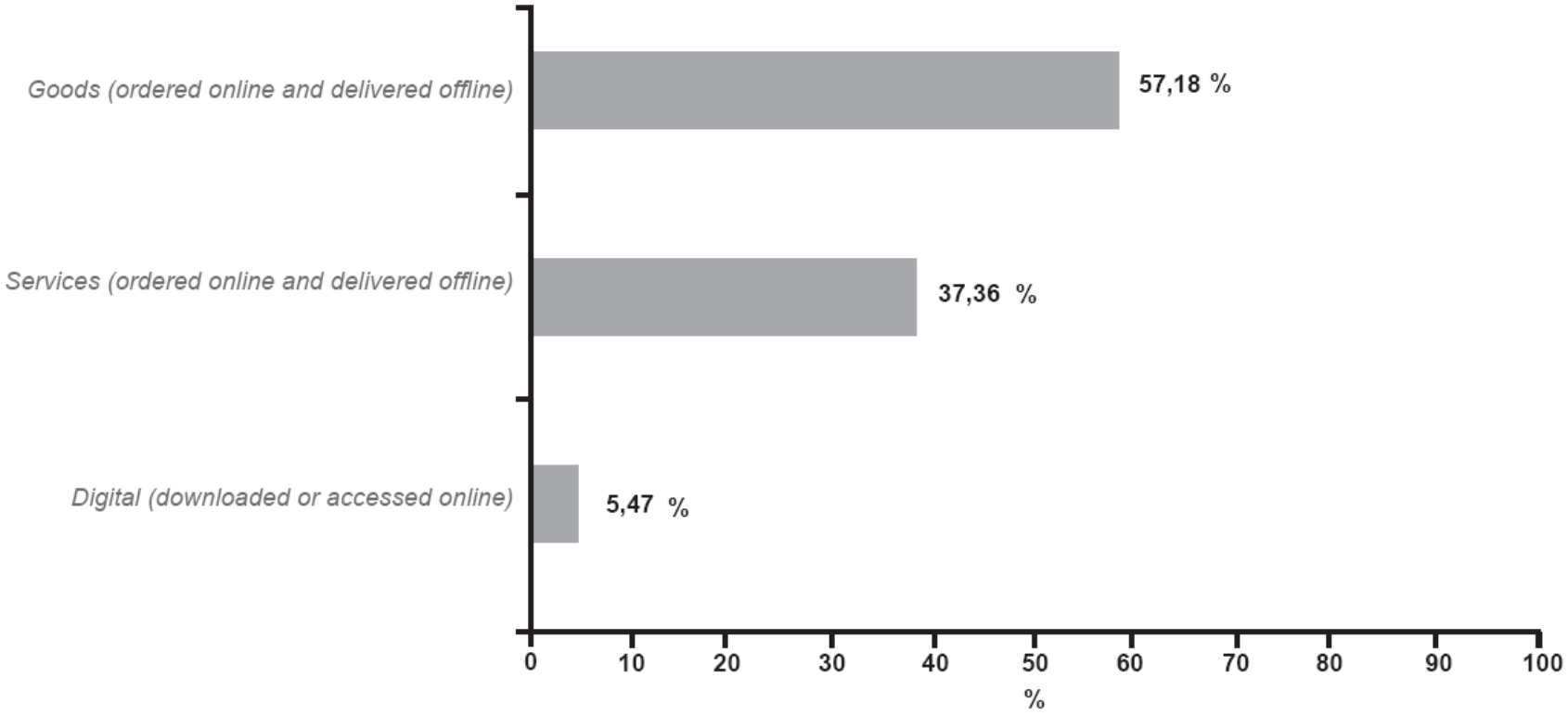
Type of goods and services ordered via Internet

Percentage over the total of interviewed enterprises placing orders via Internet (purchase)



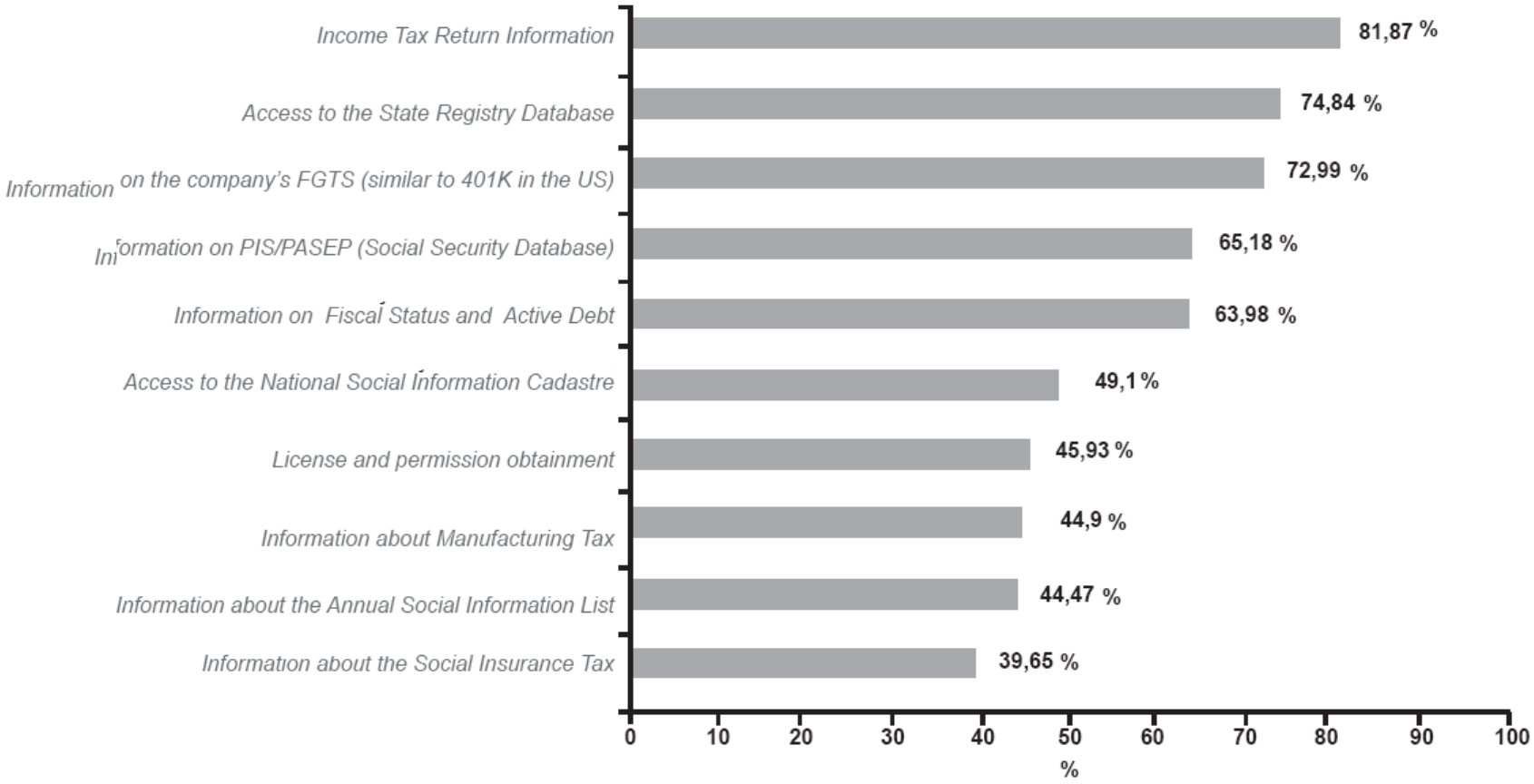
Total of Internet sales according to products and services

Percentage over the total of interviewed enterprises that received orders via Internet (sales)



E-government services accessed over the Internet

Percentage over the total of interviewed enterprises with Internet access



Survey on the Use of ICT in Brazil - 2005
May 30th, 2006 – Santiago, CEPAL

Final considerations

- CGI.br will continue to regularly produce and disseminate official indicators on the use and penetration of Internet

- and make sure that statistical data produced will be comparable to national and international statistic standards

Methodological Issues

- Questionnaire Design
- Sample Design
- Data Collection
- Data analysis
- Data Publication
- Data Use

More information available at:
www.nic.br/indicadores

Mariana Balboni
mariana@nic.br
Obrigado!