

Usage of Telecommunication Services by Businesses in 2010

Research Summary for the National Media and Infommunications Authority



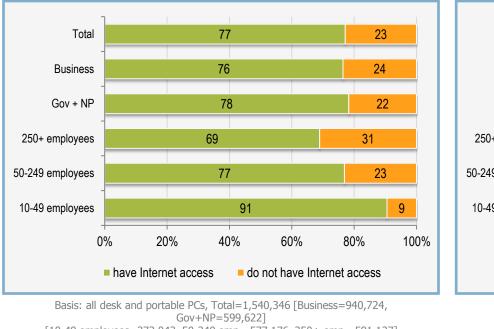
- Target group: enterprises, public institutions, and NGOs employing at least 10 persons
- Sampling: proportionally stratified by regions, not proportionally stratified by number of employees, legal form, and LTO areas. Simple random selection from each subsegment
- Fieldwork: face-to-face internviews after contacting them by phone
- Interviewees: technical or general decision-makers in the fields of Informatics and Telecommunications
- Number of interviews: 1518
- Fieldwork: 25th October to 10th December, 2010

	Population size	Sample size	Sampling error [±%]*
Total [10+]	42 417	1 518	±2,5%
Business [10+]	32 791	971	±3,1%
Government + nonprofit [10+]	9 626	547	±4,1%
250+ employees	1 427	279	±5,3%
50-249 employees	8 202	505	±4,2%
10-49 employees	32 788	734	±3,6%

*at 95% confidence level and taking into account the worst distribution: 50%

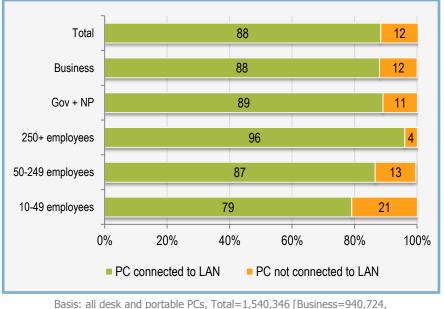
Inaccuracies resulted from the unproportional stratification and probabilities of the fieldwork have been corrected by weighting, i.e. a mathematical-statistical procedure. Thus, our evidences represent the whole population regarding the number of employees, industry, regional distribution, LTO (incumbent operator) areas, and legal form.

Distribution of PCs | By the possibility of accessing the Internet



[10-49 employees=372,043, 50-249 emp.=577,176, 250+ emp.=591,127]

Distribution of PCs | By connection to local network [LAN]

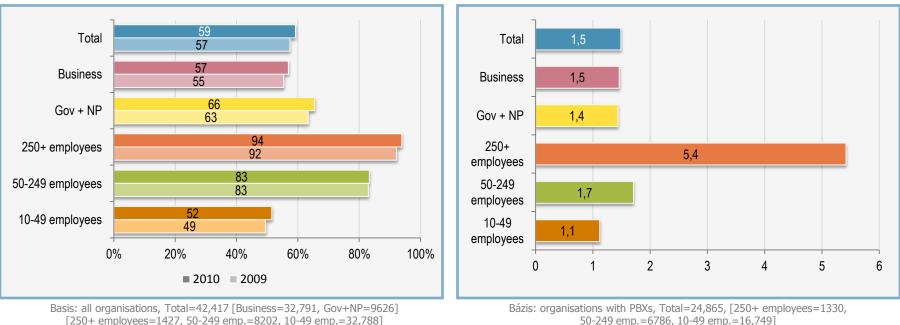


Gov+NP=599.6221 [10-49 employees=372,043, 50-249 emp.=577,176, 250+ emp.=591,127]

- Nearly four-fifth of PCs, i.e. 1.2 million PCs have Internet access. The number of PCs connected to LAN is estimated to be 1.36 million.
- Local networks can be accessed from long distance partly or completely in case of half of the organisations with LAN. In most cases, distant access does not ensure only access to emails but also to applications and data bases.

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NEMZETI MÉDIA- ÉS Infrastructure | PBXs Penetration HÍRKÖZLÉSI HATÓSÁG



Penetration of PBXs

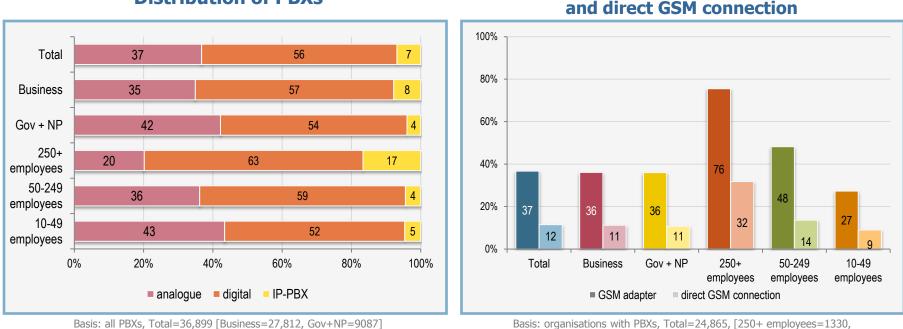
50-249 emp.=6786, 10-49 emp.=16,749]

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Average number of PBXs

- Approximately three fifths of enterprises, public institutions, and NGOs have private branch exchange (PBX). Penetration decreased by 2 percentage points between 2009 and 2010.
- About 25 organisations own nearly 37 thousand PBX devices.
- Only 3-4% of organisations with more than 10 employees have call centre or contact centre.

4



Distribution of PBXs



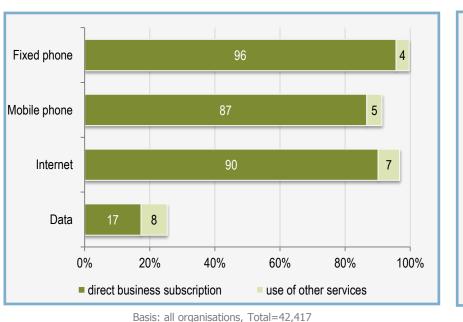
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- More than half of PBXs [56%] are digital.
- The proportion of IP-PBXs makes up only 7%, while the proportion of analogue PBXs is still high: 37% of the total number. The proportion of analogue PBXs is higher than average in the segment of public administration and NGOs.
- 37% of organisations having a PBX use GSM adapters as well and it is rather widespread among organisations with 250+ employees. The number of users of GSM adapters decreased a bit in the business sector while increased in the governmental sector compared to the previous year [2009, business: 39%, public administration: 25%].
- There was no significant change in the proportion of organisations with direct GSM connection compared to 2009.

[250+ employees=7075, 50-249 employees=11,380, 10-49 employees=18,444]

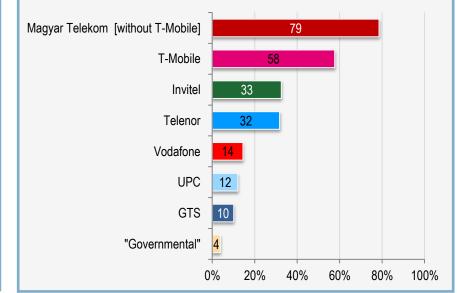
Basis: organisations with PBXs, Total=24,865, [250+ employees=1330, 50-249 emp.=6786, 10-49 emp.=16,749]

NEMZETI MÉDIA- ÉS HÍRKÖZLÉSI HATÓSÁG



Penetration of telecommunication services

Direct business subscribers of all telecommunication services at the most significant service providers of the market



Basis: all organisations, Total=42,417 [Business=32,791, Gov+NP=9626] [250+ employees=1427, 50-249 emp.=8202, 10-49 emp.=32,788]

- About all organisations having at least 10 employees use fixed phone and the Internet. The vast majority have mobile phone subscription as well. Only data communication services are less widespread: these are used by one quarter of enterprises, public institutions, and NGOs.
- Magyar Telekom [c. 33 thousand clients] and T-Mobile [c. 24-25 thousand clients] have the most favourable position on the market regarding the proportion of clients. They are followed by Invitel [14 thousand clients] and Telenor [13.5 thousand clients].

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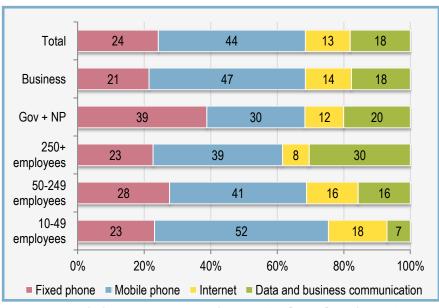
6

The market of telecommunication services in 2010 [net sums, million HUF]

	Fixed phone	Mobile phone	Internet	Data and business communi- cation	Total
Business	27 864	60 880	17 937	22 947	129 628
Gov + NP	9 537	7 251	2 856	4 924	24 568
250+ employees	12 803	21 959	4 513	17 164	56 439
50-249 employees	12 272	18 267	6 880	6 966	44 385
10-49 employees	12 326	27 905	9 400	3 741	53 372
Total	37 401	68 131	20 792	27 871	154 195

Basis: total telecommunication expenditures in 2010 [m HUF], Total=154,195 [Business=129,628, Gov+NP=24,568] [10-49 emp.=53,372, 50-249 emp.=44,385, 250+ emp.=56,439]

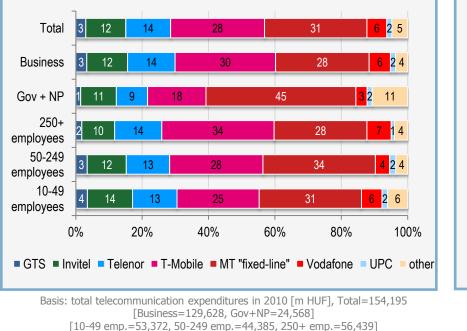
Structure of the market



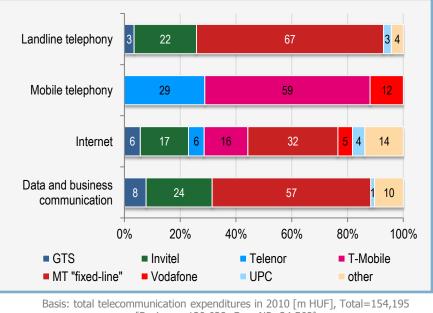
Basis: total telecommunication expenditures in 2010 [m HUF], Total=154,195 [Business=129,628, Gov+NP=24,568] [10-49 emp.=53,372, 50-249 emp.=44,385, 250+ emp.=56,439]

- We estimate the total size of the telecommunication market about 154 billion HUF. Mobile telephony
 makes the largest part [44%] while fixed telephony makes up one quarter of the market.
- Expenditures on fixed phones are overrepresented in the segment of public administration and NGOs.
 And in relation to this, their spending on mobile phones makes up a lower market share.
- In case of organisations with at least 250 employees, expenditures on data communication contribute more than average to the total size of the market.





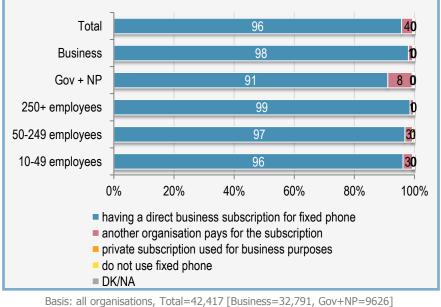
Market revenue of service providers by markets



asis: total telecommunication expenditures in 2010 [m HUF], Total=154,19: [Business=129,628, Gov+NP=24,568] [10-49 emp.=53,372, 50-249 emp.=44,385, 250+ emp.=56,439]

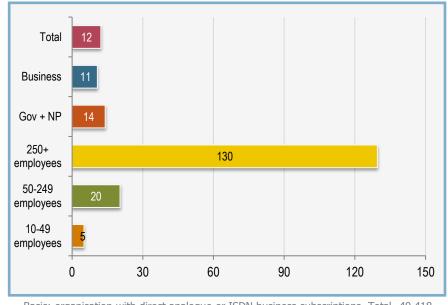
- The Magyar Telekom Group [MT "fixed-line" and T-Mobile] owns nearly three-fifths of the market of telecommunication services.
- The MT Group cover two-thirds of fixed telephony, 59% of mobile telephony, and 57% of data communication expenditures. The MT Group have less than 50% market share only in case of Internet services. This submarket is much more fragmented compared to the others.

NEMZETI MÉDIA- ÉS Fixed Telephony | Penetration



Subscription and Usage

Average number of PSTN trunk lines

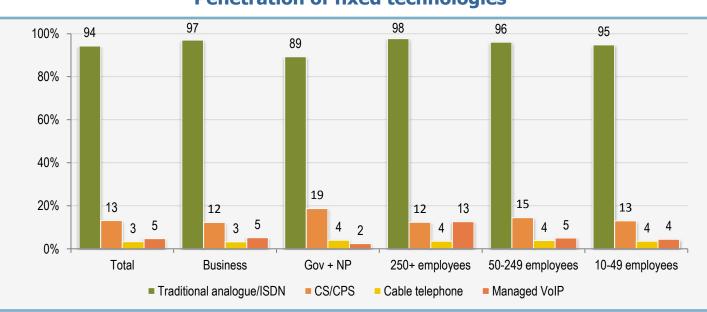


Basis: organisation with direct analogue or ISDN business subscriptions, Total=40,418 [Business=31,818, Gov+NP=8600] [250+ employees=1395, 50-249 emp.=7887, 10-49 emp.=31,135]

- Practically, all organisations use fixed phones.
- The vast majority have direct business subscription [96%, c. 41 thousand organisations]. The level of penetration did not really change compared to 2009, the decrease of market share is rather induced by the decline of the number of accesses and the length of phone calls.
- Organisations maintain 12 PSTN channels on average, i.e. 484 thousand in total. This shows a decrease by 12 thousand PSTN channels compared to the previous year.

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Basis: all organisations, Total=42,417 [Business=32,791, Gov+NP=9626] [250+ employees=1425, 50-249 emp.=8202, 10-49 emp.=32,788]



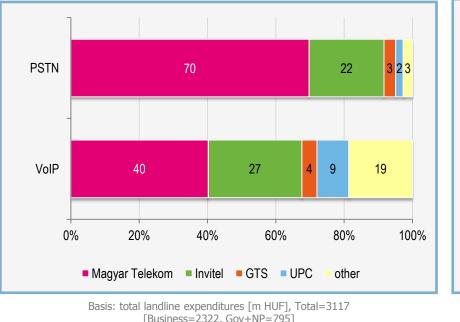
Penetration of fixed technologies

Basis: all organisations, Total=42,417 [Business=32,791, Gov+NP=9626] [250+ employees=1425, 50-249 emp.=8202, 10-49 emp.=32,788]

- Traditional PSTN line technology is the most widespread: the vast majority of organisations [94%, c. 40 thousand organisations] use it.
- Penetration of cable telephone and managed VoIP is only 3-5% [1.5-2 thousand subscribers per each].
- Managed VoIP services are rather used by big organisations.

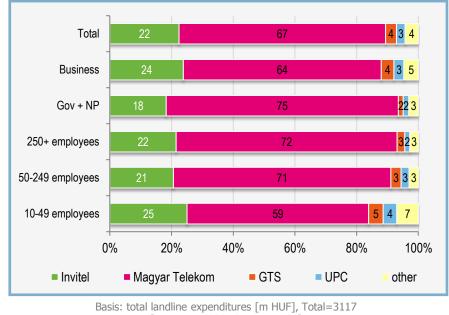
NEMZETI MÉDIA- ÉS HÍRKÖZLÉSI HATÓSÁG

Market share of the main players | By technology



[Business=2322, Gov+NP=795] [250+ employees=1067, 50-249 emp.=1023, 10-49 emp.=1027]

Market share of the main players | By segments



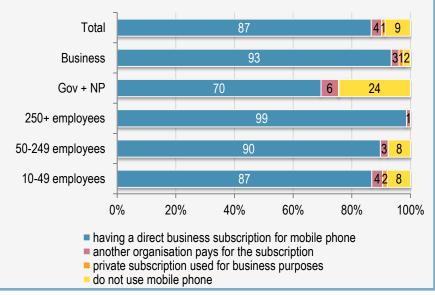
[Business=2322, Gov+NP=795] [250+ employees=1067, 50-249 emp.=1023, 10-49 emp.=1027]

- On the traditional PSTN market [traditional fixed + CS/CPS], 70% of the revenue is realized by Magyar Telekom while 22% by Invitel.
- The market of VoIP-like services [cable telephone + managed VoIP] is more balanced: MT has 40% while Invitel has 27% market share. It is also remarkable that about one-fifth of the market belongs to smaller service providers.
- All in all, MT has a two-thirds share on the market of fixed telephony.

Usage of Telecommunication Services by Businesses | 2010

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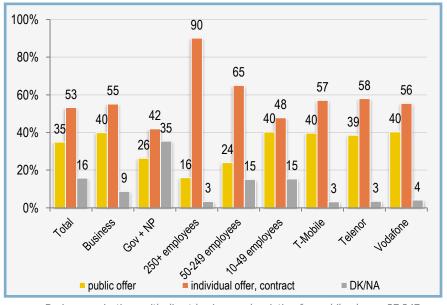
11



Subscription and Usage

Basis: all organisations, Total=42,417 [Business=32,91, Gov+NP=9626] [250+ employees=1427, 50-249 emp.=8202, 10-49 emp.=32,788]

Subscriptions by public and individual offers



Basis: organisations with direct business subscription for mobile phone=37,247 [Business=30,555, Gov+NP=6692] [250+ employees=1407, 50-249 emp.=7364, 10-49 emp.=28,476]

- The use of mobile phones is highly widespread among the organisations we focused on in this research. It generally means the use of an own business subscription.
- In case of the institutional sphere, there is much place to expand.
- Half of the observed organisations had the ability to enforce their interests to get an individual offer. The vast majority of large organisations took this opportunity.
- It is less frequent among public institutions and NGOs to have an individual contract.

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NEMZETI MÉDIA- ÉS HÍRKÖZLÉSI HATÓSÁG Mobile Telephony | Relations to Service Providers

Average number of subscriptions

Proportion of business subscriptions by service providers

29

29

32

27

32

60%

Vodafone

29

80%

58

59

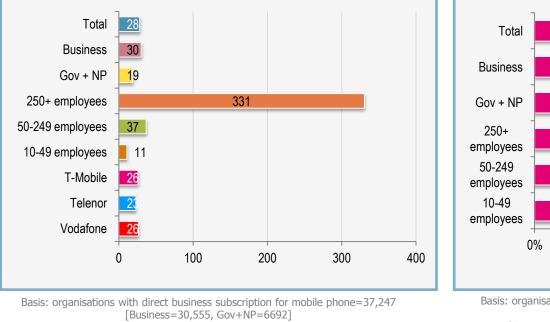
60

61

54

20%

T-Mobile



[250+ employees=1407, 50-249 emp.=7364, 10-49 emp.=28,476]

Basis: organisations with direct business subscription for mobile phone=37,247 [Business=30,555, Gov+NP=6692] [250+ employees=1407, 50-249 emp.=7364, 10-49 emp.=28,476]

40%

Telenor

- About 37 thousand organisations have approximately 1.04 million business subscriptions for mobile phone in total.
- Enterprises use 30 SIM cards while public institutions and NGOs only 19 on average. 88% of all SIM cards belong to the businesses.
- T-Mobile is the service provider of about two-thirds of SIM cards [c. 605 thousand]. 29% [c. 303 thousand] SIMs belong to Telenor and 13% [c. 133 thousand] to Vodafone.

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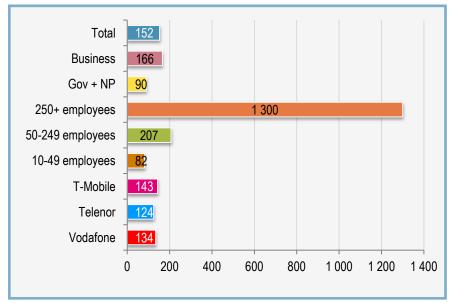
Usage of Telecommunication Services by Businesses | 2010

13

13

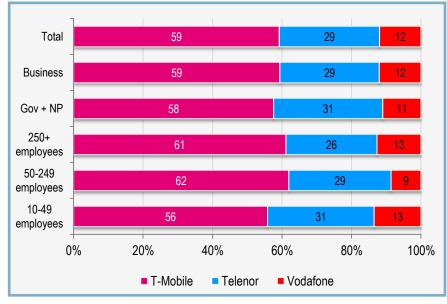
100%

Average monthly expenditures by segments and service providers



Basis: organisations with direct business subscription for mobile phone=37,247 [Business=30,555, Gov+NP=6692] [250+ employees=1407, 50-249 employees=7364, 10-49 employees=28,476]

Proportion of market revenues by sevice provider



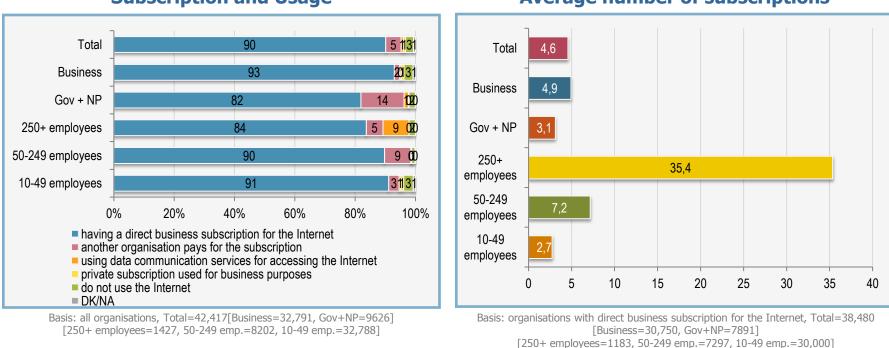
Basis: total monthly direct business expenditures on mobile telephony [mFt], Total=5572 [Business=4987, Gov+NP=585] [250+ employees=1734, 50-249 employees=1496, 10-49 employees=2342]

- Subscriptions for mobile phones costed 152 thousand HUF per month on average for organisations covered by this survey.
- All in all, the market of mobile telephony [voice traffic] is estimated to be 5.57 billion HUF per month.
- T-Mobile is the front runner, its monthly revenue is about 3.4 billion HUF in the business sector. Telenor can realize approximately 1.6 billion HUF while Vodafone can make about 600-650 million HUF. **bel** research

Usage of Telecommunication Services by Businesses | 2010

14

NEMZETI MÉDIA- ÉS HÍRKÖZLÉSI HATÓSÁG Internet | Penetration



Subscription and Usage

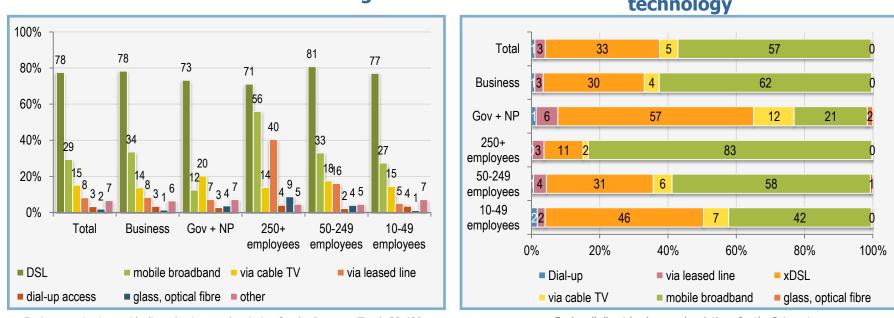
The vast majority [90%, c. 38 thousand] of organisations with at least 10 employees have direct business subscription for accessing the Internet while about 41 thousand organisations use the Internet.

- "Indirect" subscriptions [e.g. using the subscription of the parent company/institution] are rather widespread among public institutions and NGOs.
- The average number of subscriptions is a bit higher among enterprises than among public institutions and NGOs. bellresearch

Usage of Telecommunication Services by Businesses | 2010

Average number of subscriptions

NEMZETI MÉDIA- ÉS HÍRKÖZLÉSI HATÓSÁG INTERNET | Technology



Penetration of Internet technologies

Proportion of Internet subscriptions by technology

Basis: organisations with direct business subscription for the Internet, Total=38,480 [Business=30,750, Gov+NP=7891] [250+ employees=1183, 50-249 emp.=7297, 10-49 emp.=30,000] Basis: all direct business subscriptions for the Internet, Total=173,639 [Business=149,583, Gov+NP=24,56] [10-49 employees=79,913, 50-249 emp.=51,964, 250+ emp.=41,763]

- The DSL technology is the most widespread for accessing the Internet and its penetration could increase compared to the previous year [2009: 76%]. In case of enterprises with 250 or more employees, mobile broadband and access via leased line are also popular.
- Mobile broadband could develop the fastest: its penetration increased by nearly 5 percentage points in one year [2009: 24%].
- Regarding the number of subscriptions, the vast majority are mobile broadband while DSL technology makes up only one third. Despite that the latter is more widespread. [However, it is important to keep in mind that mobile Internet subscriptions are rather personal while in case of other technologies, one subscription makes Internet access possible for more people at the same time].

10-49

employees

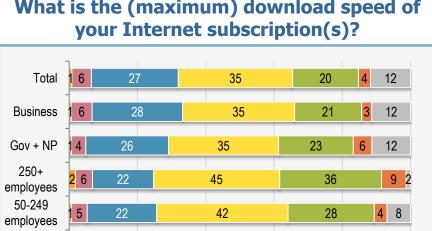
6

<1 Mbps</p>

5,1-10 Mbps

20%

0%



What is the (maximum) download speed of

Basis: organisations with direct business subscription for the Internet, Total=38,480 [Business=30,750, Gov+NP=7891] [250+ employees=1183, 50-249 emp.=7297, 10-49 emp.=30,000]

1-2 Mbps

10,1-100 Mbps

40%

Regarding our data about the maximum Internet bandwith, it can be noticed that organisations with 250 or more employees have the largest bandwith.

31

60%

19

3 14

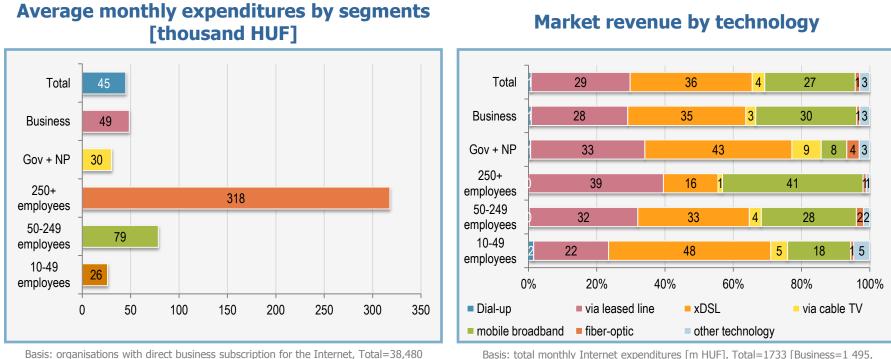
more than 100 Mbps

100%

80%

2,1-5 Mbps

- There are more organisations with higher download speed than 10 Mbps among public institutions than among enterprises.
- In sum, three-fifths of organisations have higher maximum download speed than 10 Mbps.



Basis: total monthly Internet expenditures [m HUF], Total=1733 [Business=1 495, Gov+NP=238] [10-49 emp.=783, 50-249 emp.=573, 250+ emp.=376]

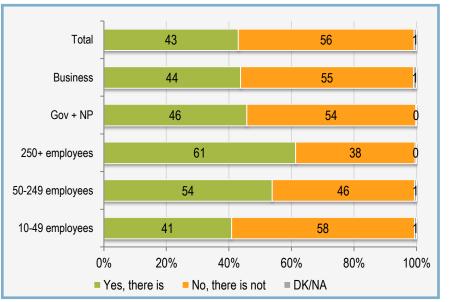
- Organisations of this survey spend 45 thousand HUF on the Internet per month on average. Average monthly expenditures are much higher among enterprises than among public institutions and NGOs.
- 36% of market share belong to DSL and 29% to leased line technology. Mobile Internet expenditures made up 27% in 2010. The proportion of mobile Internet increased while the level of DSL and leased line technologies slightly decreased in the whole market during the year before. bellresearch

[Business=30,750, Gov+NP=7891]

[250+ employees=1183, 50-249 emp.=7297, 10-49 emp.=30,000]

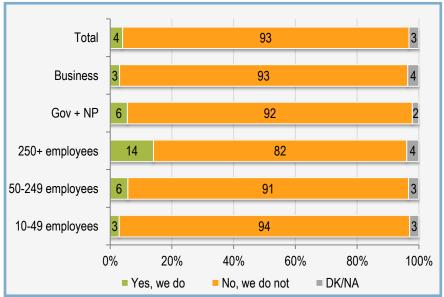
18

Is there a possibility for wireless Internet access [WiFi, WLAN] at your enterprise / institution?



Basis: organisations with any kind of Internet access, Total=41,285 [Business=31,800, Gov+NP=9431] [250+ employees=1398, 50-249 emp.=8115, 10-49 emp.=31,771]

Do you plan to provide wireless Internet access [WiFi, WLAN] in the next 12 months?

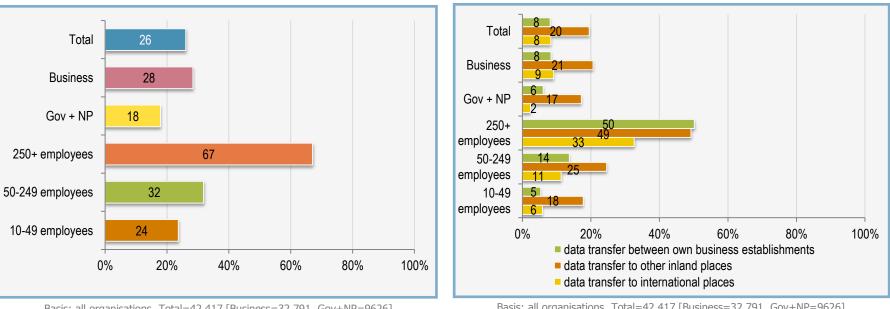


Basis: organisations without wireless Internet access

- The majority of organisations of this survey have not built up yet a wireless Internet network, but more than half of the medium and big organisations have already had WLAN.
- 4% of organisation without wireless Internet plan to provide WiFi / WLAN access in the coming year. A bit more decisions-makers plan to have WLAN at the public administration and at NGOs than at enterprises.

NEMZETI MÉDIA- ÉS HÍRKÖZLÉSI HATÓSÁG **Data Transfer | Direction of Data Transfer**

Organisations using data communication services



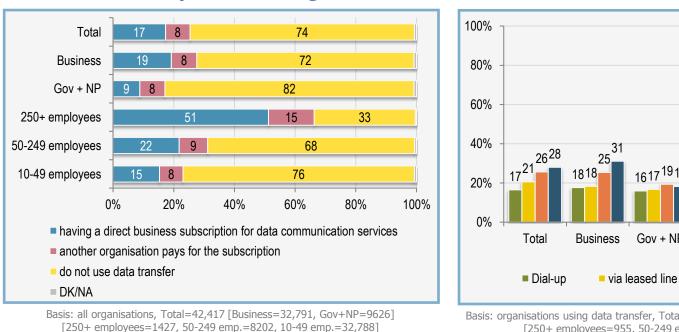
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Basis: all organisations, Total=42,417 [Business=32,791, Gov+NP=9626] [250+ employees=1427, 50-249 emp.=8202, 10-49 emp.=32,788]

Directions of data transfer

- 26% of domestic enterprises, institutions, and NGOs, i.e. about 11 thousand organisations use data communication services. This proportion is especially high among large organisations: it makes up 66% among organisations employing 250 or more persons.
- Most organisations transfer data between inland places and only large organisations manage significant international data transfer.
- The main targets of data transfer are banks and financial institutions [in case of enterprises], and public bodies [in case of public institutions and NGOs].

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Subscription and Usage



16171918

Gov + NP

35

250+

10

13

employees employees

IP-VPN / IPSec

3128

50-249

15

Penetration of technologies

Basis: organisations using data transfer, Total=11,249 [Business=9502, Gov+NP=1747] [250+ employees=955, 50-249 emp.=2605, 10-49 emp.=7688]

- 17% of domestic organisations with at least 10 employees, i.e. 7.3 thousand organisations use data transfer directly from a service provider.
- However, there are other organisations using data transfer: 8% use the subscription of another organisation. Thus, all in all, there are 11 thousand organisations receiving data communication services from a service provider.
- One quarter of the organisations using data transfer subscribe for IP-VPN / IPSec technology. Penetration of data transfer via leased line is 21% and it is more usual among organisations with at least 250 employees.

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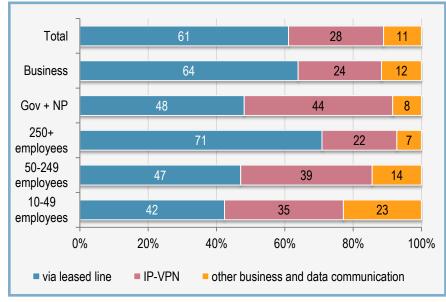
23

10-49

employees

other

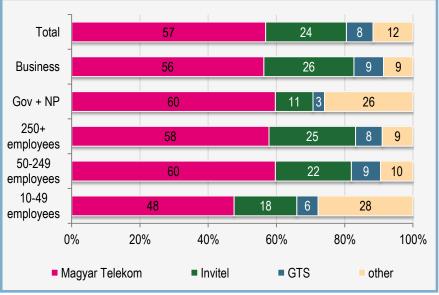
18



Structure of the market by technology

Basis: data transfer expenditures [m HUF], Total=2323 [Business=2912, Gov+NP=410] [250+ emp.=1410, 50-249 emp.=580, 10-49 emp.=312]

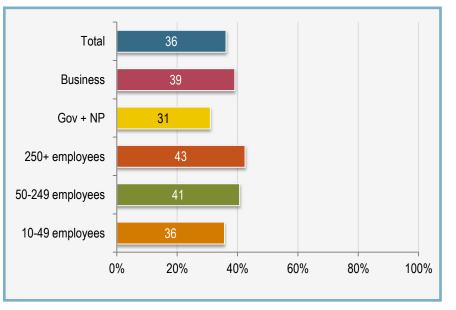
Market share of the main operators



Basis: data transfer expenditures [m HUF], Total=2323 [Business=2912, Gov+NP=410] [250+ emp.=1410, 50-249 emp.=580, 10-49 emp.=312]

- Regarding the structure of the market, leased line technology is the most common: it takes 61% of all expenditures. The proportion of leased line technology in the market of data communication is the highest [71%] among organisations with 250 or more employees.
- Magyar Telekom is the front runner in this part of the telecommunication market: it realizes more than half [57%] of the market revenue. The market share of Invitel is 24%.

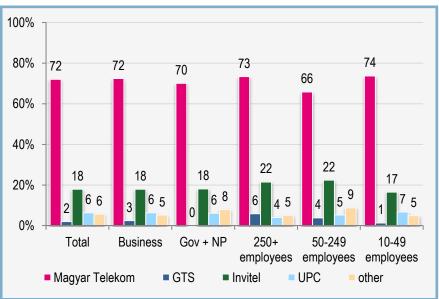
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Bundling penetration

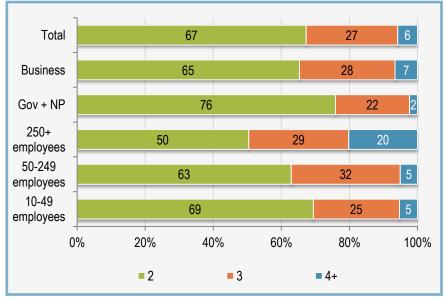
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Relations to service providers



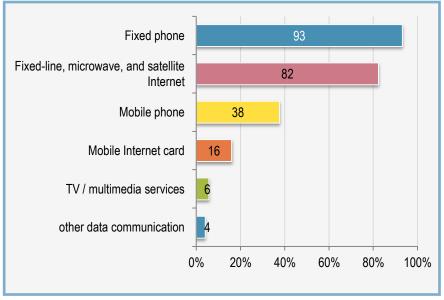
Basis: organisations using bundled services, Total= 16,014 [Business=12,975, Gov+NP=3039] [250+ emp.=623, 50-249 emp.=3439, 10-49 emp.=11,952]

- 36% of enterprises, public institutions, and NGOs employing at least 10 persons, i.e.
 16 thousand organisations use bundled telecommunication services.
- Seven out of ten organisations using bundled services have their subscription at Magyar Telekom. Invitel provides bundled telecommunication services for 18%.



Number of bundled services

Type of telecommunication services used as bundled



Basis: organisations using bundled services, Total= 16,014 [Business=12,975, Gov+NP=3039] [250+ emp.=623, 50-249 emp.=3439, 10-49 emp.=11,952] Basis: organisations using bundled services, Total= 16,014 [Business=12,975, Gov+NP=3039] [250+ emp.=623, 50-249 emp.=3439, 10-49 emp.=11,952]

- 67% of organisations using bundled services receive two services in their package. 27% subscribe for 3 services in bundling.
- Organisations mostly use [53%] fixed phone and Internet service as bundled services. 17% use the combination of fixed phone, mobile phone, and the Internet. 6-7% of the organisations using bundled services subscribe for fixed and mobile phone services as bundled.