

## Usage of Telecommunication Services by Businesses in 2011

Research Summary for the National Media and Infommunications Authority

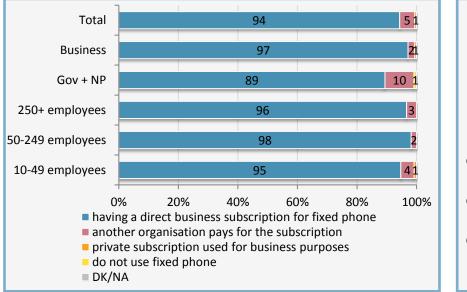
- Target group: enterprises, public institutions, and NGOs employing at least 10 persons
- Sampling: proportionally stratified by regions, not proportionally stratified by number of employees, legal form, and LTO areas. Simple random selection from each subsegment
- Fieldwork: face-to-face interviews after contacting them by phone
- Interviewees: technical or general decision-makers in the fields of Informatics and Telecommunications
- Number of interviews: 1562
- Fieldwork: 19th September to 4th November, 2011

	Population size	Sample size	Sampling error [±%]*
Total [10+]	41 326	1562	±2,4%
Business [10+]	31 726	1030	±3,0%
Government + nonprofit [10+]	9600	532	±4,1%
250+ employees	1356	244	±5,7%
50-249 employees	8041	553	±4,0%
10-49 employees	31 929	765	±3,5%

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

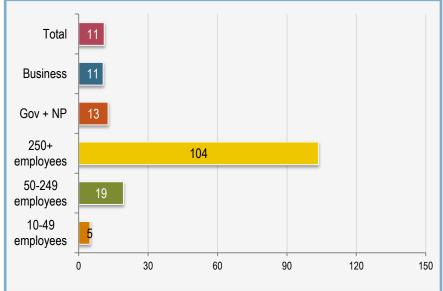
Inaccuracies resulted from the unproportional stratification and probabilities of the fieldwork have been corrected by weighting, i.e. a mathematical-statistical procedure. Thus, our evidences represent the whole population regarding the number of employees, industry, regional distribution, LTO (incumbent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

### NEMZETI MÉDIA- ÉS HÍRKÖZLÉSI HATÓSÁG



#### Subscription and usage

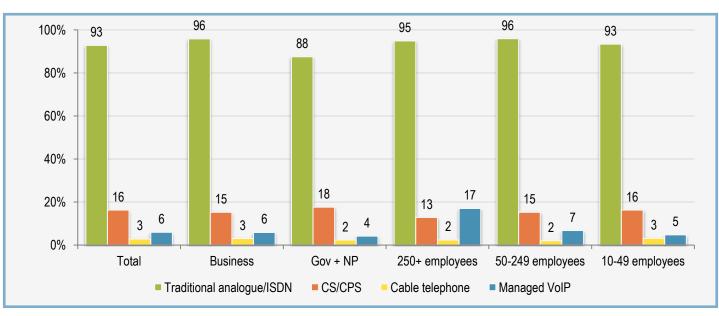




Basis: all organisations, Total=41,326 [Business=31,726, Gov+NP=9,600] [250+ employees=1356, 50-249 emp.=8041, 10-49 emp.=31,929] Basis: all organisations with direct subscription for analogue or ISDN lines, Total=38,803 [Business=30,400, Gov+NP=8403] [250+ emp.=1286, 50-249 emp.=7716, 10-49 emp.=29,801]

- Practically, all organisations use fixed phone. Penetration has not changed compared to the previous years [clients still need fixed telephony service].
- The vast majority have direct subscription [94%, c. 39 thousand organisations].
- Only 5% use a subscription for fixed phone of another organisation. This proportion is higher, 10%, among public and non-profit organisations.
- Organisations maintain 11 PSTN lines on average which is 428 thousand in total. It means a decrease by 56 thousand PSTN lines compared to the previous year.

# NEMZETI MÉDIA- ÉS Fixed Telephony | Technologies



#### Penetration of fixed technologies [direct subscriptions]

Basis: all organisations, Total=41,326 [Business=31,726, Gov+NP=9600] [250+ employees=1356, 50-249 emp.=8041, 10-49 emp.=31,929]

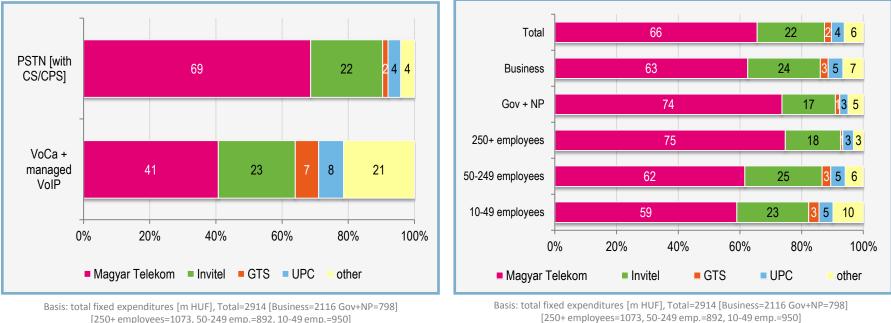
- Traditional analogue and ISDN line is the most widespread: the vast majority of organisations [93%, c. 39 thousand organisations] have these.
- In case of organisations with 10-49 employees, penetration of cable telephone and managed VoIP is only 3% and 6%, respectively [1.2 and 2 thousand subscribers, respectively]. Managed VoIP is more typical at large organisations than at smaller ones.
- 84% of organisations do not use carrier selection services. The main reason is that many organisations do not need it [66%] or do not think they could save a significant amount of costs [25%].

### NEMZETI MÉDIA- ÉS HÍRKÖZLÉSI HATÓSÁG

#### Market share of the main players | by technology

Market share of the main players | by segments

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<sup>[250+</sup> employees=1073, 50-249 emp.=892, 10-49 emp.=950]

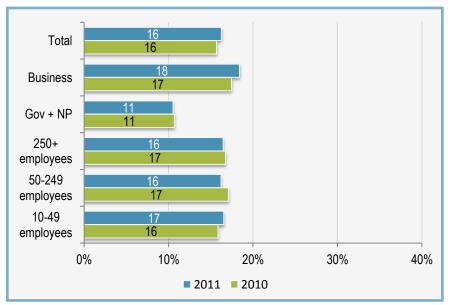
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- On the market of traditional PSTN [traditional fixed + CS/CPS], 69% of total revenue is realized by Magyar Telekom while 22% by Invitel.
- The market of VoIP-like services [cable telephone + managed VoIP] is more balanced: MT has 41% while Invitel 23% market share. It is remarkable that small operators such as GTS and UPC have 15% market share together.
- All in all, MT has a two thirds share on the market of fixed telephony.

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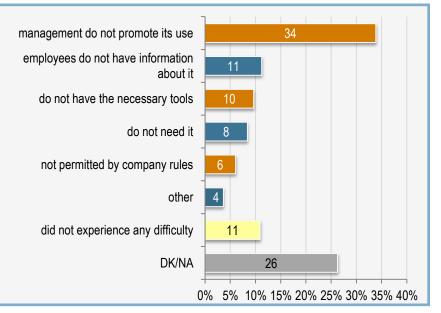
### TINH NEMZETI MÉDIA- ÉS HÍRKÖZLÉSI HATÓSÁG Fixed Tele

#### Proportion of VoIN users





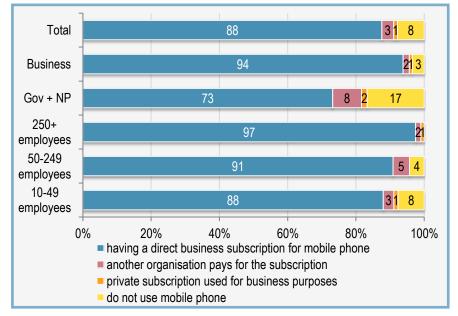
#### Difficulties experienced when using VoIN



Basis: all organisations, Total=41,326 [Business=31,726, Gov+NP=9600] [250+ employees=1356, 50-249 emp.=8041, 10-49 emp.=31,929]

- 16% of organisations use VoIN services at least occasionally. 
   Only one out of ten of them has already used pay-VoIN.
- Most of them use Skype.
- Only 2% of those who do not use VoIN presently used it before .
- Most users [87%] have a "text address" [i.e. a text username or login name which replaces phone numbers as an individual ID].





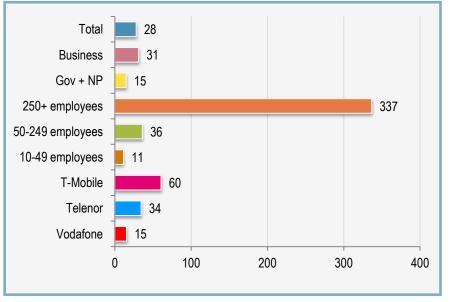
#### Subscription and usage

Basis: all organisations, Total=41,326 [Business=31,726, Gov+NP=9,600] [250+ employees=1356, 50-249 emp.=8041, 10-49 emp.=31,929]

- The use of mobile phone is rather widespread in the population we focused on in the survey [public institutions and non-profit organisations are a bit exceptional as 17% of them do not use mobile voice service]. Penetration has not changed significantly since 2010.
- The most typical subscription is direct business subscription.

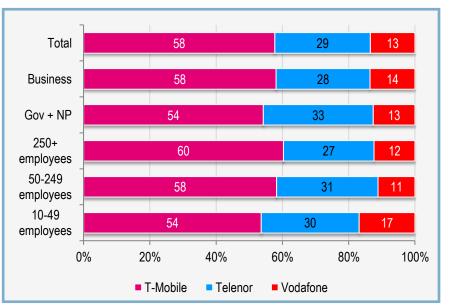
## Mobile Telephony | Direct Subscriptions

Average number of direct subscriptions



Basis: organisations with direct subscription for mobile phone =36,802 [Business=29,776, Gov+NP=7026] [250+ emp.=1321, 50-249 emp.=7322, 10-49 emp.=28,159]





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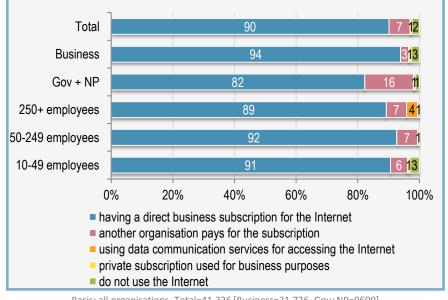
- The nearly 37 thousand organisations having a direct subscription for mobile phones have approximately 1.028 million subscriptions in total. It is a decrease compared to the 1.04 million last year, but it is not a significant change in statistical terms.
- Companies have 31 SIM cards while public and non-profit organisations have 15 cards on average. 90% of all SIM cards are used by companies.
- T-Mobile is the service provider of 58% of SIM cards [c. 594 thousand cards]. 29% [c. 296 thousand] belongs to Telenor while 13% [c. 138 thousand] to Vodafone.

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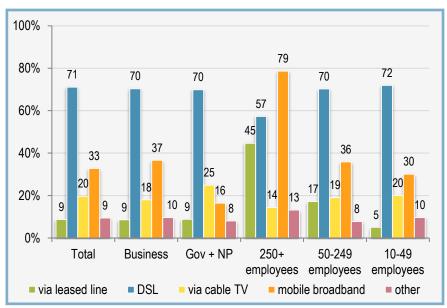
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#### NEMZETI MÉDIA- ÉS HÍRKÖZLÉSI HATÓSÁG Internet | Penetration



#### Subscription and usage



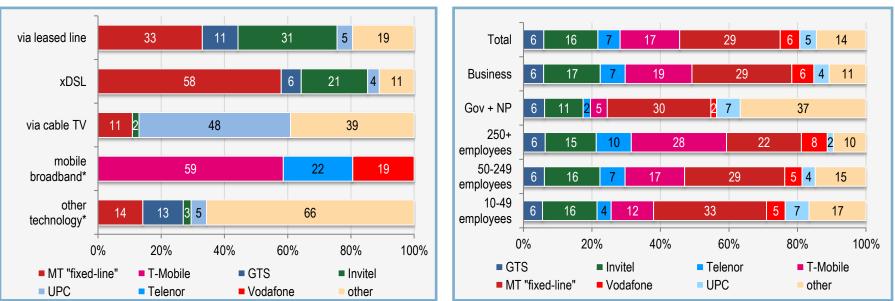


Basis: organisations having a direct subscription for the Internet, Total=37,165 [Business=29,732, Gov+NP=7885] [250+ emp.=1181, 50-249 emp.=7335, 10-49 emp.=28,650]

- The vast majority [90%, c. 37 thousand] of organisations having at least ten employees have direct Internet access while the number of organisations using the Internet is about 40 thousand. Penetration has not changed significantly compared to the previous year.
- Indirect subscription is more likely in the public and non-profit sector [e.g. using the subscription of the parent company/institution].
- In sum, DSL still has been the most widespread direct access technology, but in case of organisations with more than 250 employees, penetration of mobile Internet has already been higher.

Usage of Telecommunication Services by Businesses | 2011

Basis: all organisations, Total=41,326 [Business=31,726, Gov+NP=9600] [250+ employees=1356, 50-249 emp.=8041, 10-49 emp.=31,929]



#### Market share of service providers by technology

Basis: Internet expenditures by technology [m HUF], [via leased line=487, xDSL=568, via cable TV=71, mobile broadband=701, other technology=102] Basis: total Internet expenditures [m HUF], Total=1931 [Business=1661, Gov+NP=271] [10-49 employees=1109, 50-249 emp.=570, 250+ emp.=251]

- Magyar Telekom has the largest market share [29%, and 46% together with T-Mobile] and Invitel has the second largest share [16%].
- UPC is the major operator on the cable market [but smaller operators have a high share as well on this market].
- T-Mobile is the leading operator of the market of mobile broadband [59%]. Telekom [33%] and Invitel [31%] are the strongest on the market of leased line.
- Magyar Telekom has a significant share among public and non-profit institutions as well. 23 percentage points of the 37% proportion of other operators belongs to governmental telecommunication services and operators.

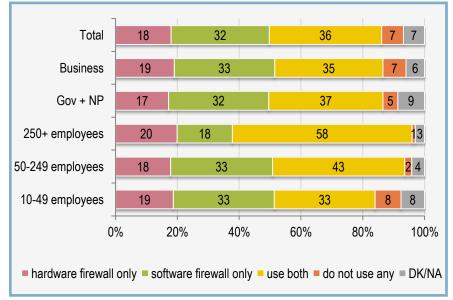
\*Data need to be handled carefully because of the low number of respondets.

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#### Market share of service providers by segments



### nemzeti média- és Hírközlési hatóság Internet | IT Security

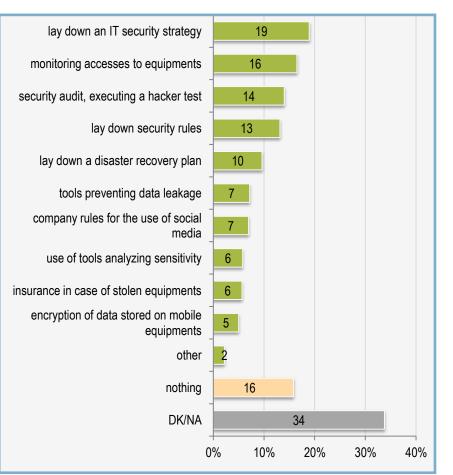


#### Use of hardware or software firewalls

Basis: organisations with Internet access, Total=40,313 [Business=30,870, Gov+NP=9465] [250+ emp.=1349, 50-249 emp.=8041, 10-49 emp.=30,924]

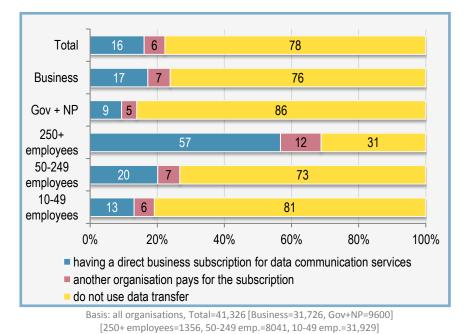
- Firewalls are provided by IT departments in case of half of the organisations, by the Internet operators in case of one fifth, and by another external service provider in case of one third of the organisations.
- Organisations strengthened their IT security by setting up a compehensive IT security strategy and by monitoring the access of IT tools during the last year [one sixth did not do anything and 34% could not answer].

#### Measures to strengthen IT security in the last year

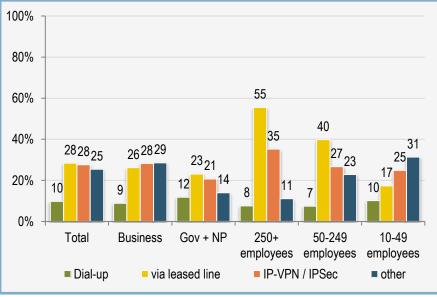


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### TTTT NEMZETI MÉDIA- ÉS HÍRKÖZLÉSI HATÓSÁG Data Transfer | Subsription and Usage



#### Subscription and usage

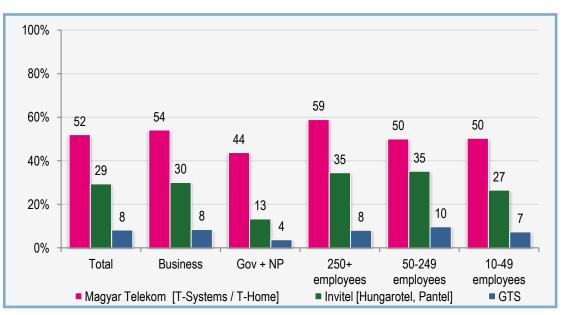


#### Penetration of technologies\*

Basis: organisations using data transfer, Total=9500 [Business=8086, Gov+NP=1 414] [250+ employees=939, 50-249 emp.=2279, 10-49 emp.=6281]

- 16%, i.e. about 7 thousand organisations use data transfer services with direct subscription. There are another 6% which use the subscription of another organisation or have their own solution. Altogether, there are about 9-10 thousand organisations using data transfer services.
- Regarding direct subscriptions, the IP-VPN, IP-Sec [28%], and leased line technology [28%] are the most widespread. The proportion of dial-up subscriptions is 10%. The technology used correlates with the size of the organisation: larger organisations mostly use IP based data transfer via leased line while smaller ones rather use IP-VPN and other technologies. In case of IP based solutions, terminal nodes access the network mostly through DSL [28%] or leased line [22%]. IP-VPNs used by the organisations are mostly IP-VPNs managed by an operator.

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#### Relation to service providers [the 3 main operators]\*

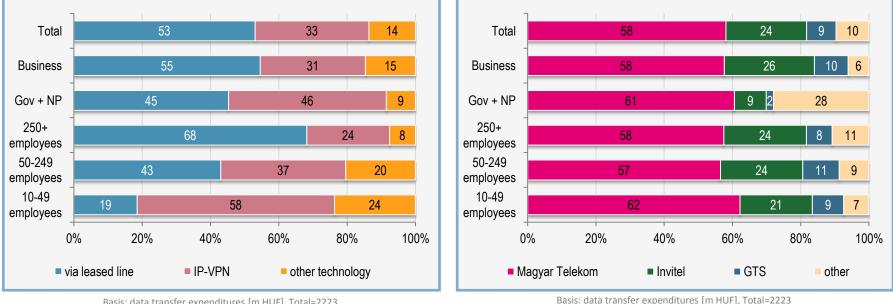
Basis: organisations with a direct subscription for data transfer, Total=6766 [Business=5868, Gov+NP=898] [250+ employees=783, 50-249 emp.=1668, 10-49 emp.=4315]

- 52% of relevant organisations use direct data transfer service by Magyar Telekom. Magyar Telekom has the strongest position among organisations with 250+ employees [59% of them using data transfer services are provided by Magyar Telekom].
- Invitel has direct business relationship with 29%, i.e. 2,000 clients on the market of data transfer and business communication.

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Usage of Telecommunication Services by Businesses | 2011

## **Data Transfer | Structure of the Market**

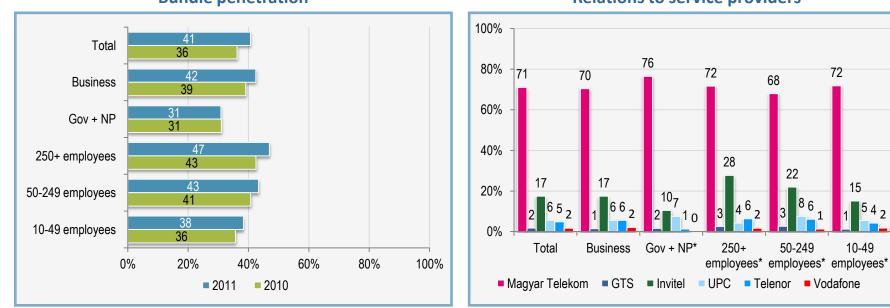


#### Structure of the market by technology

Market share of the main service providers

Basis: data transfer expenditures [m HUF], Total=2223 [Business=1861, Gov+NP=362] [250+ emp.=1273, 50-249 emp.=553, 10-49 emp.=398] Basis: data transfer expenditures [m HUF], Total=2223 [Business=1861, Gov+NP=362] [250+ emp.=1273, 50-249 emp.=553, 10-49 emp.=398]

- Regarding the structure of the market, leased line technology is the most common: it takes 53% of all revenues. The market share of leased line technology is the highest among organisations with 250+ employees.
- Magyar Telekom is the front runner on the market of data transfer with a market share of 58%. Invitel has a 24% share.



**Bundle penetration** 

Basis: all organisations, Total=41,326 [Business=31,726, Gov+NP=9600] [250+ employees=1356, 50-249 emp.=8041, 10-49 emp.=31,929]

Basis: organisations with bundled services, Total=16,527 [Business=13,523, Gov+NP=3005] [250+ employees=643, 50-249 emp.=3512, 10-49 emp.=12,373]

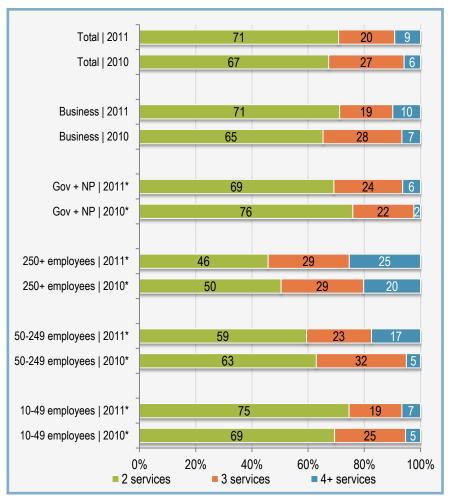
- 41% of organisations with at least 10 employees use telecommunication services in bundle. It means about 16.5 thousand enterprises, public institutions, and non-profit organisations. A slight, 5% increase can be noticed compared to 2010.
- Seven out of ten organisations using bundled services are clients of Magyar Telekom. 17% subscribe for bundled services at Invitel.
- Telenor could double 3% share in 2010 by 6% in 2011 among subscribers for bundled services [as a result of the spreading of mobile Internet].

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#### **Relations to service providers**

### **REMZETI MÉDIA- ÉS** HÍRKÖZLÉSI HATÓSÁG Bundle | Services in Bundle

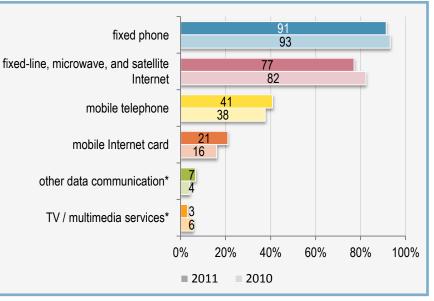


Number of services used in bundle

Basis: organisations with bundled services, Total= 16,527 [Business=13,523, Gov+NP=3 005] [250+ employees=643, 50-249 emp.=3512, 10-49 emp.=12,373]

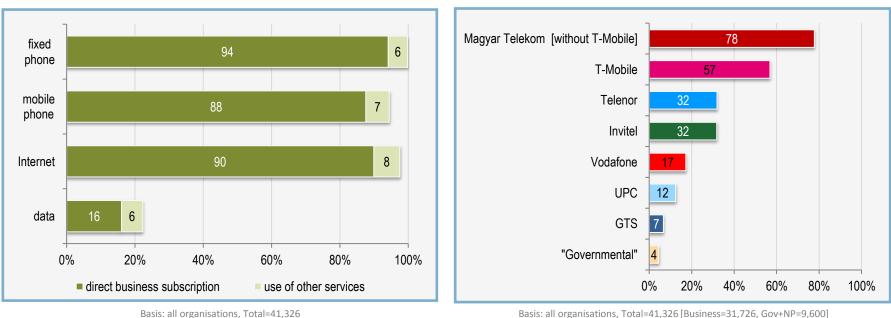
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#### Services used in bundle [%]



Basis: organisations with bundled services, Total=16,527 [Business=13,523, Gov+NP=3005] [250+ employees=643, 50-249 emp.=3512, 10-49 emp.=12,373]

Organisations use fixed phone and the Internet in bundle the most often [43%]. 18% use the combination of fixed phone, mobile phone, and the Internet. Another 7% of organisations use the combination of these three services supplemented with mobile broadband in bundle.



Penetration of telecommunication services

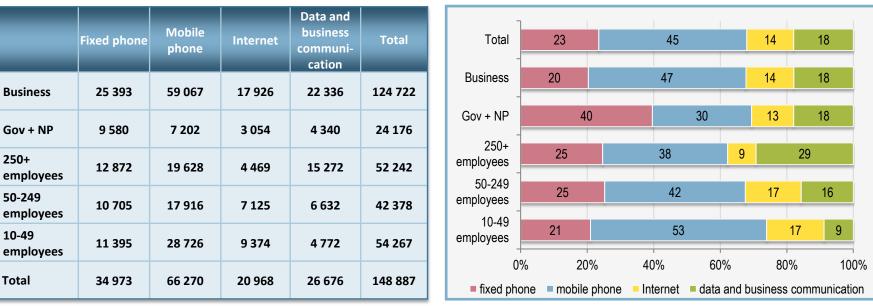
Direct business subscribers of all telecommunication services at the most significant service providers of the market

> Basis: all organisations, Total=41,326 [Business=31,726, Gov+NP=9,600] [250+ employees=1356, 50-249 emp.=8041, 10-49 emp.=31,929]

- Practically, all organisations with at least 10 employees use fixed phone and the Internet. The vast majority subscribe for mobile phone as well. Only data communication services are less widespread: one quarter of enterprises, public institutions, and non-profit organisations use it.
- Magyar Telekom [c. 31.5 thousand clients] and T-Mobile [c. 23 thousand clients] have the most favourable positions in the market regarding the proportion of subscribers. Telenor and Invitel share the third place with 13-13 thousand clients.

#### The market of telecommunication services in 2011 [net sum, million HUF]

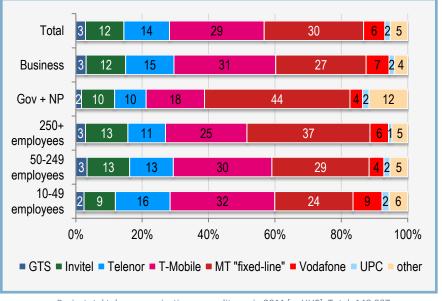
#### Structure of the market



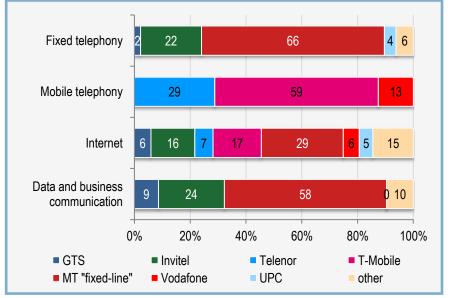
Basis: total telecommunication expenditures in 2011 [m HUF], Total=148,887 [Business=124,722, Gov+NP=24,176] [10-49 emp.=54,267, 50-249 emp.=42,378, 250+ emp.=52,242] Basis: total telecommunication expenditures in 2011 [m HUF], Total=148,887 [Business=124,722, Gov+NP=24,176] [10-49 emp.=54,267, 50-249 emp.=42,378, 250+ emp.=52,242]

- The whole market of telecommunication services can be estimated by 149 billion HUF. It shows a 3-4% decrease compared to the previous year [2010: 154 billion HUF]. Mobile telephony makes the largest part [45%] while fixed telephony makes up one quarter of the market.
- Expenditures on fixed telephony is overrepresented among public and non-profit organisations. In parallel, their expenditures on mobile telephony makes up a lower market share.
- Expenditures on data communication services of organisations with 250+ employees contribute more than average to the whole market.

### NEMZETI MÉDIA- ÉS HÍRKÖZLÉSI HATÓSÁG "Big Picture" | Market Share



#### Market revenue of service providers by segments



#### Market revenue of service providers by markets

Basis: total telecommunication expenditures in 2011 [m HUF], Total=148,887 [Business=124,722, Gov+NP=24,176] [10-49 emp.=54,267, 50-249 emp.=42,378, 250+ emp.=52,242] Basis: total telecommunication expenditures in 2011 [m HUF], Total=148,887 [Business=124,722, Gov+NP=24,176] [10-49 emp.=54,267, 50-249 emp.=42,378, 250+ emp.=52,242]

- The Magyar Telekom Group [MT "fixed-line" and T-Mobile] owns about three-fifths of the whole telecommunication market.
- The MT Group covers two thirds of the market of fixed telephony, 59% of mobile telephony, and 58% of data communication. It has a market share lower than 50% only in the Internet market. This submarket is much more fragmented than the others.