

# Usage of Telecommunications Services by Businesses in 2014

Research Summary for the National Media and Infommunications Authority

bellresearch



- Target groups: 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 sub-segment
- Fieldwork: face-to-face interviews after contacting the interviewees by phone
- Interviewees: technical or general decision-makers in the fields of Information Technology and Telecommunications

Number of interviews: 1537

Fieldwork: 1st September to 22nd October 2014

	Population size	Sample size	Sampling error [±%]*	
Total [10+]	39,274	1537	±2.5%	
Business [10+]	31,269	1030	±3.0%	
Government + non-profit [10+]	8005	507	±4.2%	
250+ employees	1345	307	±4.9%	
50-249 employees	6628	507	±4.2%	
10-49 employees	31,301	723	±3.6%	

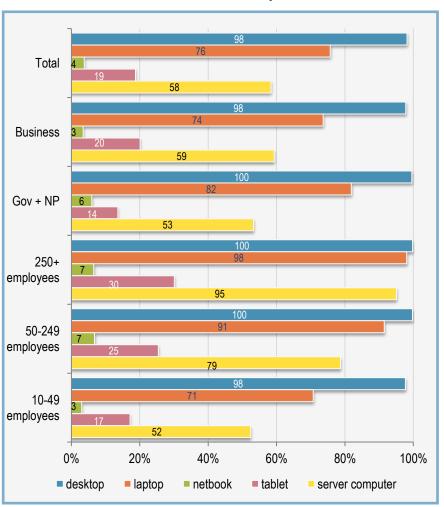
<sup>\*</sup> at 95% confidence level and taking into account the statistically worst distribution: 50%

• Inaccuracies resulted from the disproportionate stratification and randomness 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.



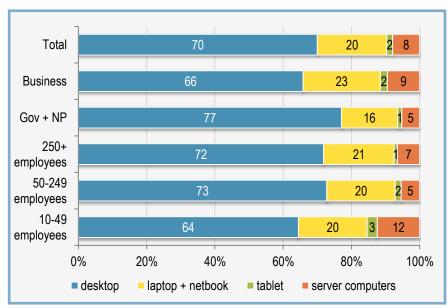


### **Penetration of computers**



### Basis: all organisations, Total=39,274 [Business=31,269, Gov+NP=8005] [250+ emp.=1345, 50-249 emp.=6628, 10-49 emp.=31,301]

### **Volume of computers**



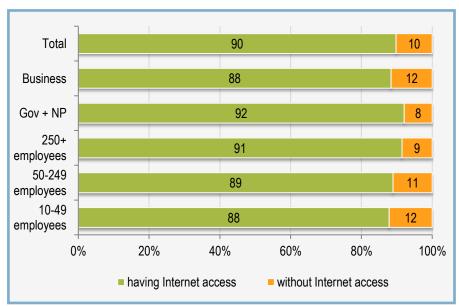
Basis: all PCs and server computers, Total=1,519,441 [Business=937,398, Gov+NP=582,043 ] [250+ emp.=699,342 , 50-249 emp.=412,972, 10-49 emp.=407,128 ]

- 70% of the nearly 1.52 million computers used by organisations are desktop PCs while 22%, i.e. about 365 thousand are laptops, netbooks, and tablets. The proportion of server computers is about 8% [c. 130,000 pcs].
  - The proportion of portable PCs is higher in the business sector [23%], than in the public and non-profit sector [18%].



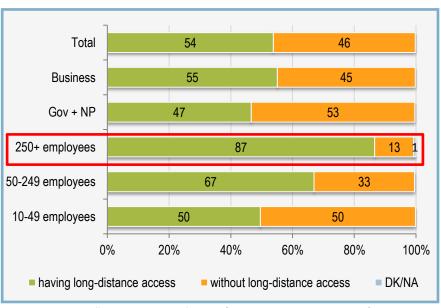


#### **PCs with Internet access**



### Basis: all PCs and server computers, Total=1,519,441 [Business=937,398, Gov+NP=582,043 ] [250+ emp.=699,342,50-249 emp.=412,972,10-49 emp.=407,128 ]

### Long-distance access to local area network (LAN)



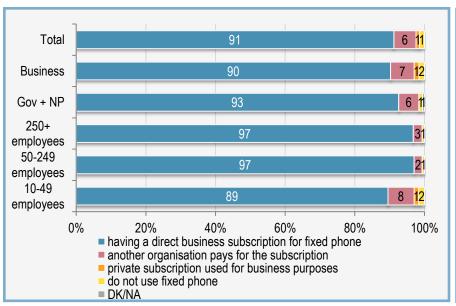
Basis: all organisations, Total=39,274 [Business=31,269, Gov+NP=8005] [250+emp.=1345,50-249 emp.=6628, 10-49 emp.=31,301]

- 90% of all PCs, i.e. about 1.35 million PCs have Internet access.
- 54% of organisations with local area network (LAN) can be partly or fully accessed from long distance. In most cases, long-distance access does not mean only access to emails but ensures access to applications and databases.



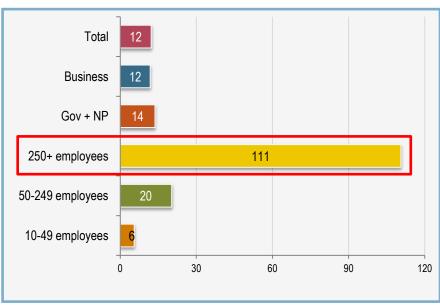


### **Subscription and usage**



Basis: all organisations, Total=39,274 [Business=31,269, Gov+NP=8005] [250+ emp.=1345, 50-249 emp.=6628, 10-49 emp.=31,301]

# Average number of PSTN trunk lines [direct subscriptions]



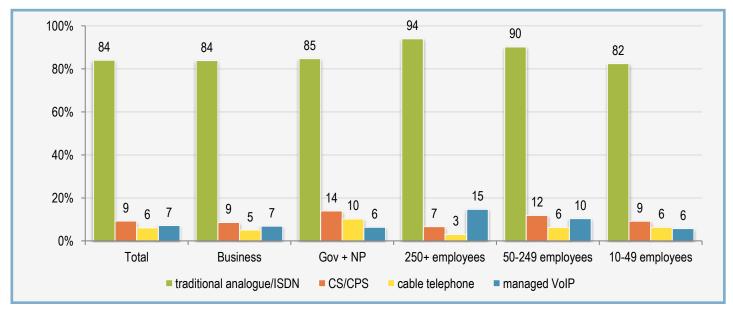
Basis: organisations with direct subscription for analogue or ISDN lines, Total=33,048 [Business=26,265, Gov+NP=6782] [250+ emp.=1263, 50-249 emp.=5974, 10-49 emp.=25,811]

- Practically, all organisations use fixed phone.
- The vast majority have a direct subscription [91%, c. 36 thousand organisations].
- Only 6% use a subscription for fixed phone of another organisation.
- In 2014, organisations maintain 12 PSTN lines on average which is 403 thousand in total. It has not changed significantly compared to 2013.





### Penetration of fixed technologies [direct subscriptions]



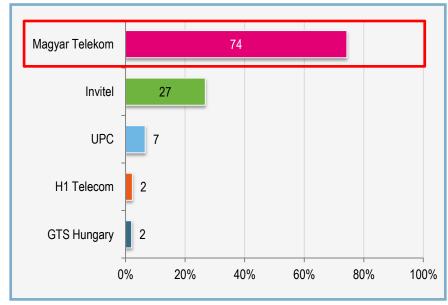
Basis: all organisations, Total=39,274 [Business=31,269, Gov+NP=8005] [250+ emp.=1345, 50-249 emp.=6628, 10-49 emp.=31,301]

- Traditional analogue and ISDN lines are the most widespread: the vast majority of organisations with 10+ employees [84%, c. 33 thousand organisations] have these.
- Penetration of cable telephone and managed VoIP is only 6% and 7%, respectively. In case of organisations with at least 250 employees, penetration of managed VoIP makes up 15%.



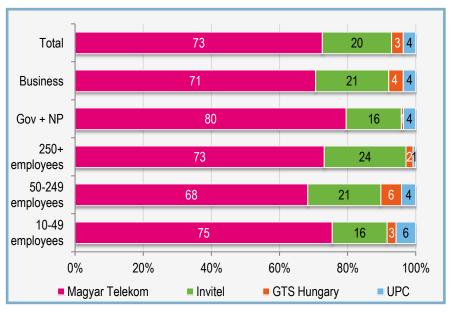


# Relation to service providers regardless of the technology of fixed phone [Top 5 operators]



Basis: organisations with direct subscription for fixed phone, Total=35,673 [Business=28,216, Gov+NP=7457] [250+ emp.=1301, 50-249 emp.=6418, 10-49 emp.=27,954]

# Shares of service providers of all B-channels [analogue + ISDN]

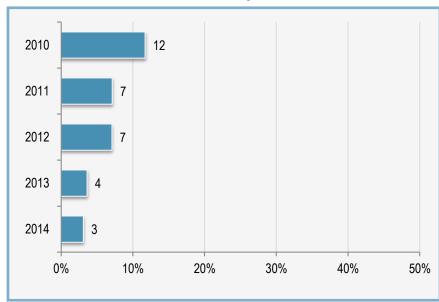


Basis: number of B-channels in each segment, Total=403,253 [Business=310,331, Gov+NP=92,923] [250+ emp.=139,680, 50-249 emp.=121,098, 10-49 emp.=1,442,475]

- In case of fixed telephony service [and taking into account the direct subscriptions only], Magyar Telekom (MT) is the most significant SP: 74% of the organisations are clients of MT. Invitel is the second main service provider with 27% of organisations with 10+ employees.
- 73% of B-channels are provided by Magyar Telekom and another one-fifth are provided by Invitel.
- Magyar Telekom has the highest share among organisations with 10-49 employees [75%] while Invitel is the strongest among organisations with 250+ employees [24%].

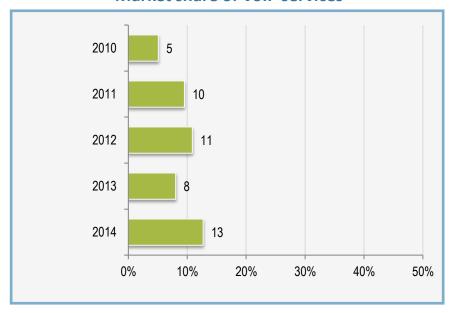


### Market share of CS/CPS services



Basis: total expenditure on fixed phone [m HUF], different in each year

#### Market share of VoIP services



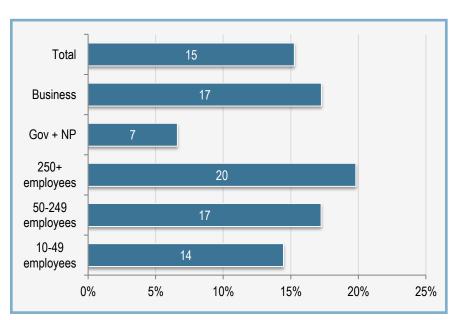
Basis: total expenditure on fixed phone [m HUF], different in each year

- As the market of fixed telephony is decreasing, the role of CS/CPS services and service providers appears to be more and more marginalised. Possible savings by CS/CPS services are getting less and less significant both in absolute terms and by their importance in the structure of organisational expenditures. As a result, this business model is less and less sustainable.
- In contrast, VoIP services are more and more important and what is more, it may be anticipated that incumbent service providers will sooner or later start the mass migration of clients from PSTN to VoIP.

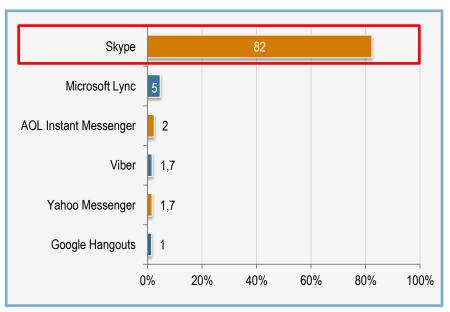


**VoIN:** VoIN is defined here as phone calls via the Internet, e.g. with Skype, etc. In case of VoIN, no contract is necessary with service providers, the softwares/applications are downloaded and used on PCs with Internet access, the quality of services is not guaranteed though.

#### **Proportion of VolN users**



### **Programs used for VoIN communications**



Basis: all organisations, Total=39,274 [Business=31,269, Gov+NP=8005] [250+ emp.=1345, 50-249 emp.=6628, 10-49 emp.=31,301]

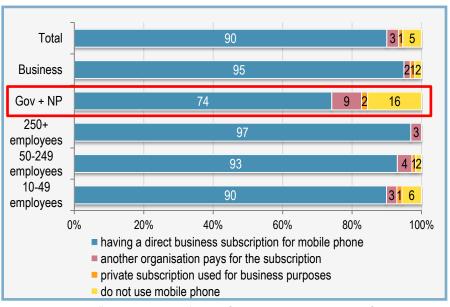
Basis: organisations using VoIN

- One out of six organisations uses VoIN services at least occasionally. It is more popular in the business sector than among public and non-profit organisations. The use of VoIN has not changed significantly since 2013.
- Skype is still the only major player in this field, most companies and institutions use this software.



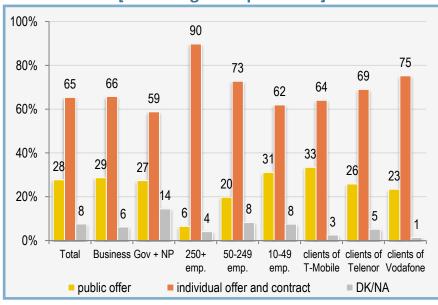


### Subscription and usage



Basis: all organisations, Total=39,274 [Business=31,269, Gov+NP=8005] [250+ emp.=1345, 50-249 emp.=6628, 10-49 emp.=31,301]

### Distribution of public and individual offers [according to respondents]



Basis: organisations with direct subscription for mobile phone, Total=35,596 [Business=29,662, Gov+NP=5935] [250+ emp.=1303, 50-249 emp.=6164, 10-49 emp.=28,129]

- 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 16% of them do not use mobile voice service]. Penetration has not changed significantly since 2013.
- Two thirds of the organisations believe to have received an individual offer from the service provider. In case of organisations with at least 250 employees, it seems to be taken for granted.
- Since 2013, the proportion of those thinking they got an individual offer has increased significantly.
- According to other research experiences it is important to notice, though, that individual offers are not always really custom made for the company. Operators tend to design standard subscription packages and sell them as individual ones. bellresearch

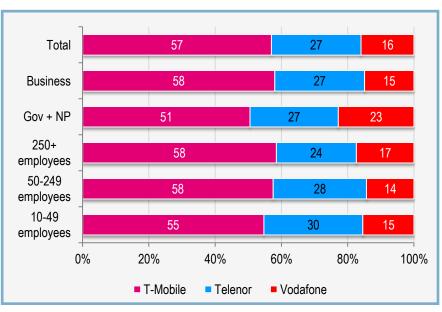


### **Average number of direct subscirptions**

#### Total 31 Business 32 Gov + NP 25 250+ employees 359 50-249 employees 45 10-49 employees T-Mobile 31 Telenor Vodafone 100 200 300 400

### Basis: organisations with direct subscription for mobile phone, Total=35,596 [Business=29,662, Gov+NP=5935] [250+ emp.=1303, 50-249 emp.=6164, 10-49 emp.=28,129]

### Service providers' shares of direct subscriptions

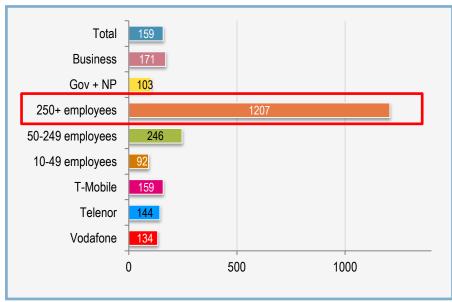


Basis: organisations with direct subscription for mobile phone, Total=35,596 [Business=29,662, Gov+NP=5935] [250+ emp.=1303, 50-249 emp.=6164, 10-49 emp.=28,129]

- The nearly 35.6 thousand organisations having a direct subscription for mobile phone have approximately 1.107 million subscriptions in total. Thus, the number of direct subscriptions has increased slightly since 2013.
- 90% of all SIM cards are used by companies while the other 10% are used by public institutions and NGOs.
- T-Mobile is the service provider of 57% of SIM cards [c. 630 thousand cards]. 27% [c. 300 thousand] belongs to Telenor while 16% [c. 180 thousand] to Vodafone.

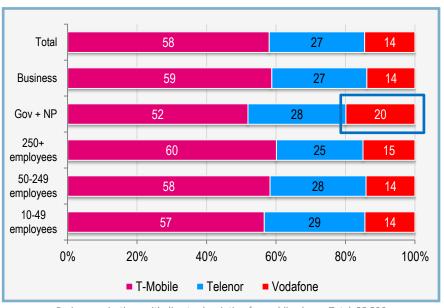


# Average monthly expenditure per organisation ['000 HUF]



Basis: organisations with direct subscription for mobile phone, Total=35,596 [Business=29,662, Gov+NP=5935] [250+ emp.=1303, 50-249 emp.=6164, 10-49 emp.=28,129]

### Shares of service providers of total expenditures



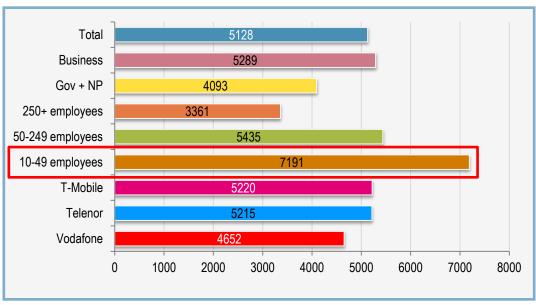
Basis: organisations with direct subscription for mobile phone, Total=35,596 [Business=29,662, Gov+NP=5935] [250+ emp.=1303, 50-249 emp.=6164, 10-49 emp.=28,129]

- Altogether, organisations with 10+ employees have an average of 159,000 HUF monthly expenditure on direct subscriptions for mobile phones.
- The estimated worth of the whole of mobile voice market of business subscribers is about 5.7 billion HUF per month.
- Market shares of service providers have been stable on the mobile voice market for many years. Vodafone recently gained a higher share among public institutions and NGOs, mainly as a result of their winning the public procurement tender of mobile telecommunications services.





### Average monthly revenue per user [ARPU] by segment and service provider

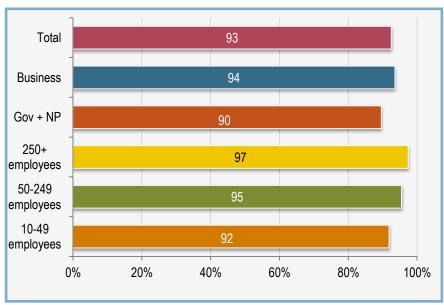


Basis: organisations with direct subscription for mobile phone, Total=35,596 [Business=29,662, Gov+NP=5935] [250+ emp.=1303, 50-249 emp.=6164, 10-49 emp.=28,129]

- Organisations with 10+ employees spend a monthly average of 5.1 thousand HUF per mobile subscription. This amount has slightly decreased since 2013.
- Large organisations [with 250+ employees] pay the least per subscription due to lower tariff preferences because of the larger number of SIM cards while the smallest organisations pay the highest price per subscription.
- T-Mobile has the highest ARPU while Vodafone has the lowest among the three operators.



# Penetration of direct Internet subscriptions [regardless of the technology of Internet access]



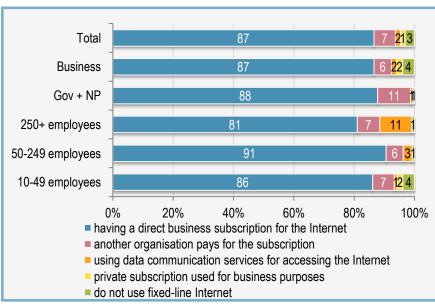
Basis: all organisations, Total=39,274 [Business=31,269, Gov+NP=8005] [250+ emp.=1345, 50-249 emp.=6628, 10-49 emp.=31,301]

- The vast majority [93%, ca. 36 thousand] of organisations having at least ten employees have direct Internet access while the number of organisations using the Internet is about 39 thousand. In 2014, penetration has not changed significantly compared to 2013.
- Share of direct subscriptions is higher in the business sector than in the public and non-profit sector.
- The size of organisations does not seem to have an effect on penetration.



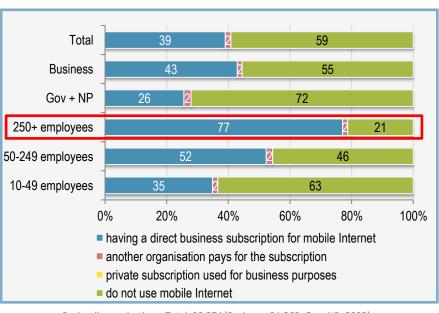


### Fixed-line Internet | Subscription and usage



Basis: all organisations, Total=39,274 [Business=31,269, Gov+NP=8005] [250+ emp.=1345, 50-249 emp.=6628, 10-49 emp.=31,301]

### Mobile Internet | Subscription and usage



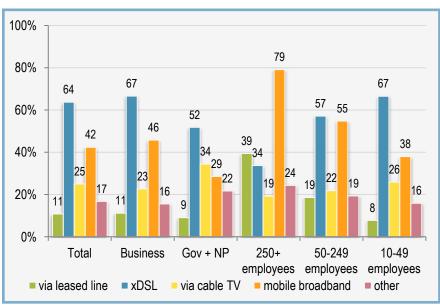
Basis: all organisations, Total=39,274 [Business=31,269, Gov+NP=8005] [250+ emp.=1345, 50-249 emp.=6628, 10-49 emp.=31,301]

- The vast majority [87%, ca. 34 thousand] of organisations having at least ten employees have direct subscription for fixed-line Internet access and 39% have direct subscription for MBB.
- MBB usage is lower in the public and non-profit sector, it makes up only 26%.
- Mobile broadband is rather widespread, nearly 77% of organisations with 250+ employees have a direct subscription.



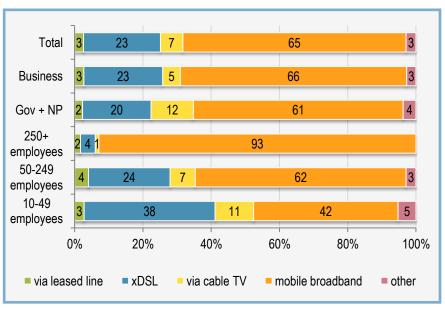


### **Penetration of Internet technologies**



Basis: organisations with direct subscription for the Internet, Total=36,414 [Business=29,240, Gov+NP=7174] [250+ emp.=1311, 50-249 emp.=6332, 10-49 emp.=28,771]

# Shares of direct Internet subscriptions by technology



Basis: organisations with direct subscription for the Internet, Total=36,414 [Business=29,240, Gov+NP=7174] [250+ emp.=1311, 50-249 emp.=6332, 10-49 emp.=28,771]

- Regarding the shares of organisations with direct subscription, DSL is still the most widespread access technology, but in case of organisations with more than 250 employees, penetration of mobile Internet is already higher. Since 2013, penetration of cable Internet has also increased and it reaches 25% by now.
- Regarding the number of direct subscriptions, mobile broadband makes up the majority while DSL, although being the leading technology, takes up only 23%. It is also important to add that MBB is rather for individual usage while other technologies ensure simultaneous Internet access for a bigger amount of users.



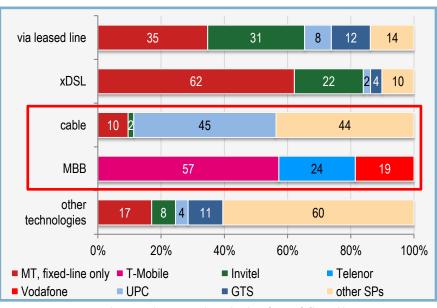


#### Market shares of service providers by segments

#### Total 6 26 20 6 13 Business Gov + NP 31 29 250+ 21 24 12 employees 50-249 27 employees 10-49 30 6 14 18 employees 0% 20% 40% 60% 80% 100% ■ MT, fixed-line only ■ T-Mobile Telenor Invitel Vodafone UPC GTS other SPs

### Basis: total expenditure on the Internet [m HUF], Total=1812 [Business=1486, Gov+NP=326] [10-49 emp.=822, 50-249 emp.=567, 250+ emp.=423]

### Market shares of service providers by technology



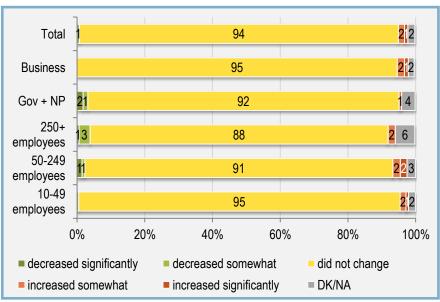
Basis: expenditure on the Internet by technology [m HUF], [leased line=482, xDSL=477, cable=109, MBB=574, other technologies=199]

- Magyar Telekom has the highest market share [27%; and 45% together with T-Mobile] and Invitel has the second highest with 14%. These numbers have not changed significantly since 2013.
- Telekom [35%] and Invitel [31%] hold the strongest positions on the market of leased lines while T-Mobile is the front runner of the market of MBB [57%].
- UPC is the largest service provider in the market of cable technology (45%), although smaller operators aggregatedly represent a similar proportion in the market.



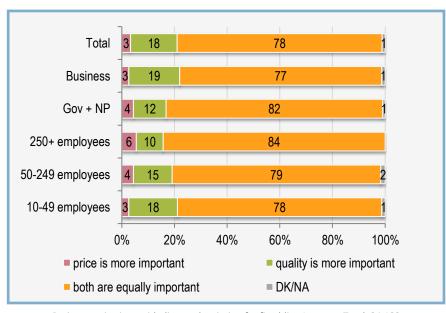


### Change in expenditures on fixed-line Internet access in the last 12 months



Basis: organisations with direct subscription for fixed-line Internet, Total=34,102 [Business=27,071, Gov+NP=7031] [250+ emp.=1097, 50-249 emp.=6014, 10-49 emp.=26,991]

Fixed-line Internet service: role of price and quality of the service



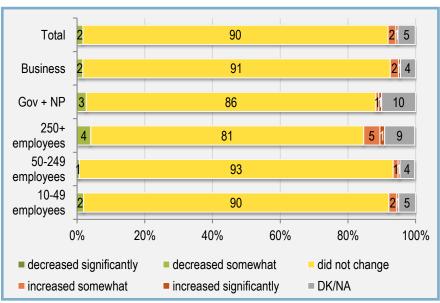
Basis: organisations with direct subscription for fixed-line Internet, Total=34,102 [Business=27,071, Gov+NP=7031 ] [250+ emp.=1097, 50-249 emp.=6014, 10-49 emp.=26,991 ]

- 94% of respondents said that their fixed-line Internet expenditures have not changed since last year, thus, the proportion of organisations experiencing stagnation has increased in this market segment as well.
- Price and quality of fixed-line Internet services are equally important for 78% of organisations.
- It is important to add that fixed-line Internet is the only telecommunications service where quality prevails price according to the majority of respondents. At the same time, the proportion of users with more sensitivity to quality has increased since 2013.



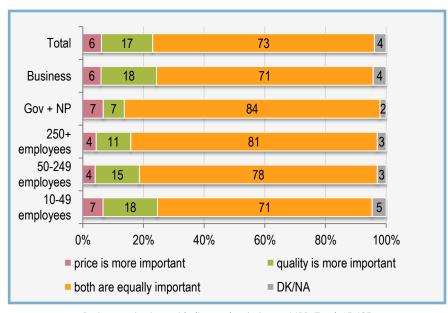


### Change in expenditures on MBB access in the last 12 months



Basis: organisations with direct subscription for MBB, Total=15,435 [Business=13,386, Gov+NP=2048] [250+emp.=10,137, 50-249 emp.=3469, 10-49 emp.=10,929]

### MBB services: role of price and quality of the service



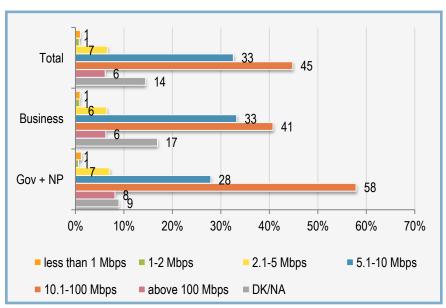
Basis: organisations with direct subscription on MBB, Total=15,435 [Business=13,386, Gov+NP=2048] [250+ emp.=10,137, 50-249 emp.=3469, 10-49 emp.=10,929]

- 90% of respondents say that their expenditures on MBB have not changed since last year. Only 2% pay more and another 2% pay less than before.
- Price and quality of MBB services are equally important for 73% of all organisations.
- As in the case of fixed-line Internet, more MBB users think that quality is more important than price. The difference between the two opinion groups is smaller though than in case of the fixed-line service.



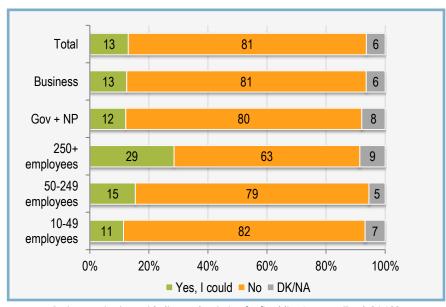


### Maximum speed of fixed-line Internet subscriptions



Basis: organisations with direct subscription for fixed-line Internet, Total=34,102 [Business=27,071, Gov+NP=7031] [250+ emp.=1097, 50-249 emp.=6014, 10-49 emp.=26,991]

### Could you imagine that the organisation switches to a higher speed package in the following 12 months?



Basis: organisations with direct subscription for fixed-line Internet, Total=34,102 [Business=27,071, Gov+NP=7031] [250+ emp.=1097, 50-249 emp.=6014, 10-49 emp.=26,991]

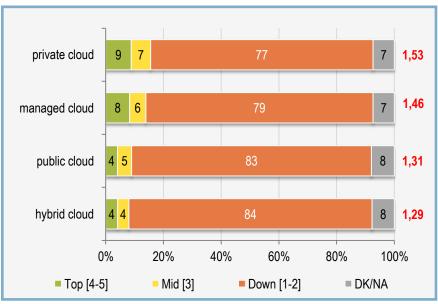
- Four fifths of organisations having a direct subscription for fixed broadband Internet connection have more than 5 Mbps as maximum speed in their package while only 8% have a maximum speed up to 5 Mbps. Bandwidth of Internet subscriptions has significantly increased since 2013.
- More than four fifths of organisations could not imagine to switch to a higher speed Internet package in the next 12 months.
- 29% of organisations with 250+ employees plan to upgrade their Internet package.





#### Attractivity of cloud technology solutions

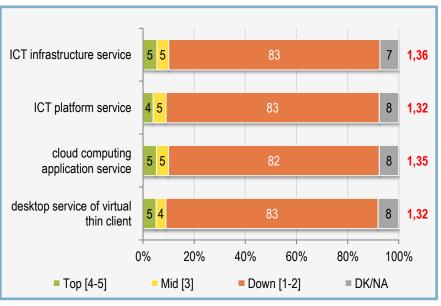
Answers on a 5-point scale, 1=not attractive at all; 5=very attractive



Basis: organisations with Internet access, Total=36,414 [Business=29,240, Gov+NP=7174] [250+ emp.=1311, 50-249 emp.=6332, 10-49 emp.=28,771]

### **Attractivity of built-in services**

Answers on a 5-pont scale, 1=not attractive at all; 5=very attractive



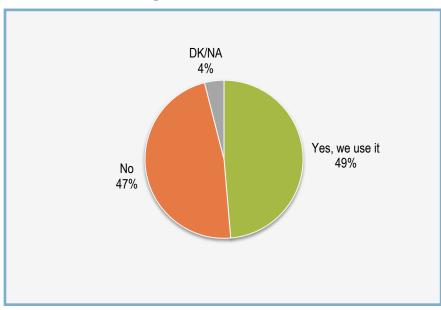
Basis: organisations with Internet access, Total=36,414 [Business=29,240, Gov+NP=7174] [250+ emp.=1311, 50-249 emp.=6332, 10-49 emp.=28,771]

- Cloud technology solutions could not gain much popularity among organisations with at least 10 employees yet. Only a small minority of organisations consider it positively. Even the most popular private cloud service was mentioned only by 9% of respondents as interesting.
- Cloud services are not attractive for Hungarian organisations: still more than 80% refuse to use them.
- Only 9% of organisations having Internet access use cloud services. It has slightly increased since last year
   [2013: 6%].



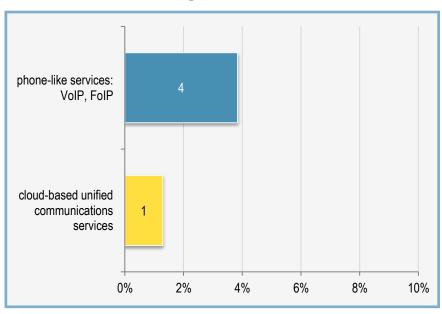


## Use of Software-as-a-Service [SaaS] among users of cloud services



Basis: organisations using cloud services, Total=3385 [Business=3042, Gov+NP=343] [250+ emp.=175, 50-249 emp.=837, 10-49 emp.=2374]

# Use of Communication-as-a-Service [CaaS] among users of SaaS



Basis: organisations using Software-as-a-Service [Saas], Total=1839 [Business=1756, Gov+NP=83] [250+ emp.=42, 50-249 emp.=367, 10-49 emp.=1431]

- Half of organisations using cloud services use Software-as-a-Service [SaaS]. This makes up 4-5% among all organisations with 10+ employees.
- 4% of organisations using SaaS use phone-like cloud-based services, e.g., voice over IP and fax over IP while only 1% use cloud-based unified communications services, e.g., PABX (internal phone system), call centre, and video conference.





### **Advantages**

- Save costs of investment [22%]
- Save costs of daily operation [18%]
- Fast introduction [13%]
- Service can be accessed regardless of location
   [12%]
- Applications are more trustful and better at being at service [12%]
- Servers provided by operators are stored in data centres with high-level of security [12%]
- Equipments are updated and maintained regularly, and are up-to-date [12%]
- Pay-as-you-go payment model [11%]
- Save costs of workforce [10%]
- Save place in the office [10%]
- No advantage [38%]

### **Disadvantages**

- Dependency on an external operator [42%]
- Privacy concerns about data management
   [38%]



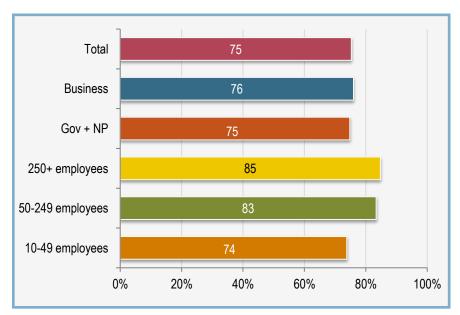
- Satisfaction with the present, non-cloud computing solution [28%]
- The service is not available in case of a failure of the Internet access [24%]
- It has no reference yet [11%]
- Parent company would not support it [8%]
- Sound investment has already been made into the present, non-cloud computing solution [7%]
- Systems are integrated and thus, cannot be placed out in parts [6%]
- Not all softwares have a virtualized version [5%]
- Security, legal, and regulatory rules of the organisation do not make it possible [5%]
- No disadvantage [18%]

Basis: organisations with Internet access, Total=36,414 [Business=29,240, Gov+NP=7174] [250+ emp.=1311, 50-249 emp.=6332, 10-49 emp.=28,771]

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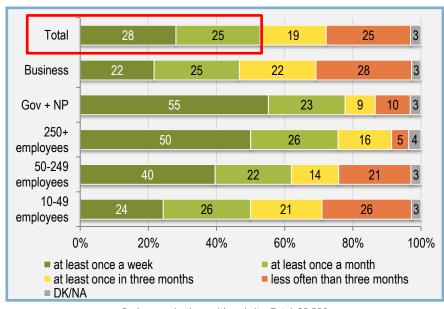


### Share of organisations having a website



### Basis: organisations with Internet access, Total=36,414 [Business=29,240, Gov+NP=7174] [250+ emp.=1311, 50-249 emp.=6332, 10-49 emp.=28,771]

### Frequency of website updates



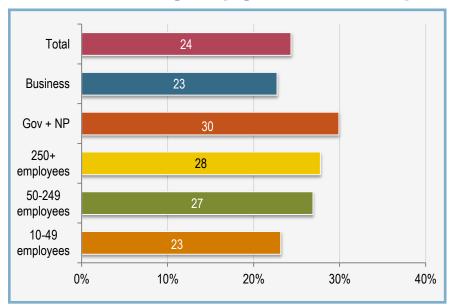
Basis: organisations with website, Total=29,506 [Business=23,536, Gov+NP=5970] [250+ emp.=1142, 50-249 emp.=5532, 10-49 emp.=22,832]

- As information technologies are evolving companies strive to provide/find as many information as possible for/about clients and costumers, thus, about three-quarters of organisations have a website [about 29 thousand organisations].
- Penetration of websites is a bit higher among organisations with at least 50 employees [it is partly because of legal regulations] than among small ones.
- Although, updating the website is not a frequent activity: 53% of organisations have regular website updates, at least once a month. Significant change has not taken place in this respect since 2013.



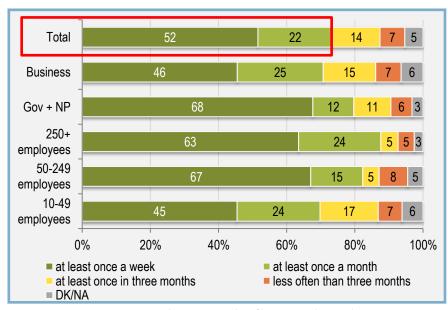


### Share of organisations with organisational profile on a social networking site [e.g., Facebook, Twitter]



Basis: organisations with Internet access, Total=36,414 [Business=29,240, Gov+NP=7174] [250+ emp.=1311, 50-249 emp.=6332, 10-49 emp.=28,771]

### Frequency of updating organisational profiles

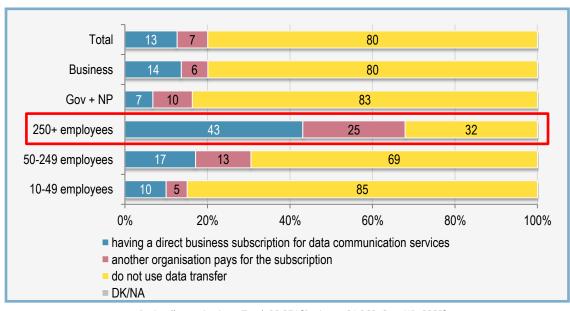


Basis: organisations with organisational profile on a social networking site

- The growing importance of social networking sites in business communication can be noticed as about one quarter of organisations have at least one organisational profile while many organisations have even more profiles on different sites. In sum, about 9-10 thousand organisations have a profile on a social networking site.
- Penetration is higher among big organisations than among small ones, although, similarly to websites, this parameter is not really determinative.
- Frequent update of organisational profiles is a question of organisational culture as well, but in general, company profiles are updated more often than company websites. 52% of organisations update their profile at least once a week and another 22% at least once a month.



### Subscription and usage



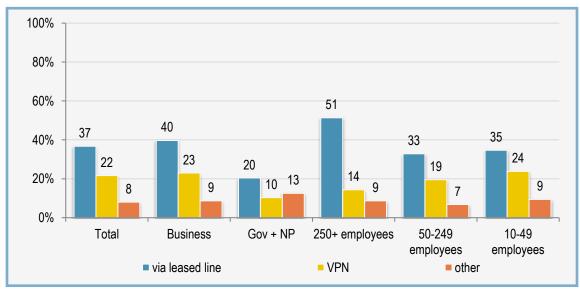
Basis: all organisations, Total=39,274 [Business=31,269, Gov+NP=8005] [250+ emp.=1345, 50-249 emp.=6628, 10-49 emp.=31,301]

- 13%, i.e. about 4.8 thousand businesses, public institutions, and non-profit organisations use data transfer services with direct subscription.
- Another 7% use the subscription of another organisation or have a solution for their own.





### **Penetration of technologies**



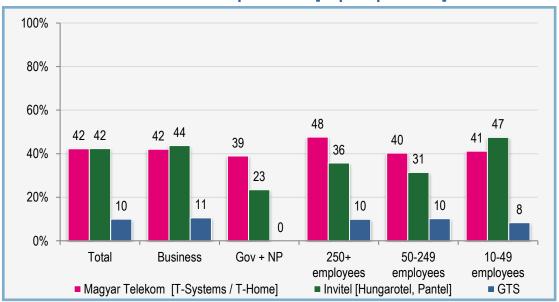
Basis: organisations using data transfer with direct subscription, Total=4827 [Business=4285, Gov+NP=542] [250+ emp.=581, 50-249 emp.=1133, 10-49 emp.=3112]

- Regarding direct subscriptions, leased line technology [37%] and virtual private networks [22%] are the most widespread. More businesses [especially, small ones] have been using leased line technology while penetration of other technologies has decreased since 2013. The latter has gained a higher proportion in the public and non-profit sector.
- 39% of direct subscriptions for leased lines are based on copper wire, one fourth on microwave, and another one third
  on fiber technology. Half [51%] of subscriptions for leased line technology among organisations with 250+ employees
  are based on copper wire.
- In case of virtual private networks, terminal nodes access the network mainly through a leased line [94%] or DSL [16%]. 63% of VPNs used by organisations are Layer2 VPN/Ethernet VPN while another 34% are IP-VPNs.









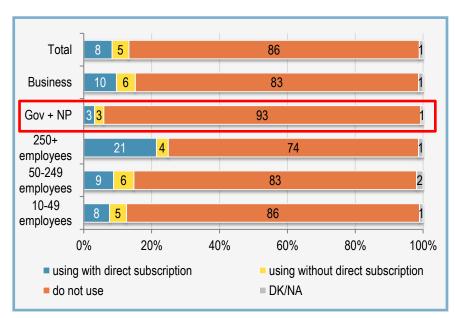
Basis: organisations using data transfer with direct subscription, Total=4827 [Business=4285, Gov+NP=542] [250+ emp.=581, 50-249 emp.=1133, 10-49 emp.=3112]

- In 2014, 42% of organisations use the data transfer services of Magyar Telekom with a direct subscription compared to the 52% in 2013. This decrease is the most noticeable among organisations with 10-49 employees while some decline can be seen in case of organisations with 250+ employees as well.
- Invitel is the service provider of 42% of organisations which means 2000 subscribers. There has been an increase
  of 12 percentage points since 2013.
- The situation of GTS has not changed generally [9%→10%], although, the proportion of its clients has significantly decreased in the public and non-profit sector.



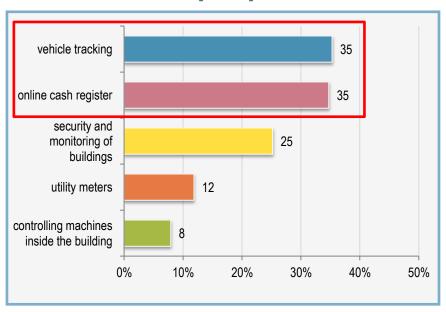


### Subscription and usage of M2M communication cards



Basis: all organisations, Total=39,274 [Business=31,269, Gov+NP=8005] [250+ emp.=1345, 50-249 emp.=6628, 10-49 emp.=31,301]

### Main functions of using M2M communication cards [TOP 5]



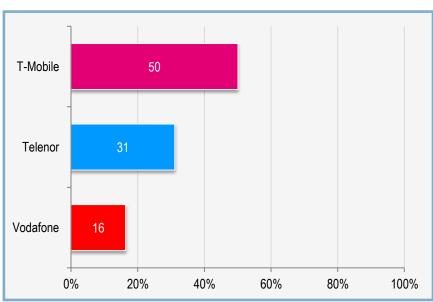
Basis: organisations with subscription for machine-to-machine communication cards, Total=5288 [Business=4811, Gov+NP=477] [250+ emp.=339, 50-249 emp.=989, 10-49 emp.=3960]

- 13%, i.e. 5300 organisations use machine-to-machine communication cards while 8% have a direct subscription. Organisations using M2M communication cards have a direct subscription for about 175,000 SIM cards.
- Organisations use M2M SIM cards mostly for vehicle tracking and operating online cash registers while one fourth use them for security and monitoring of buildings.



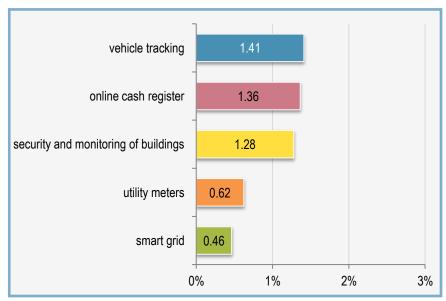


### Relations to service providers



Basis: organisations with direct subscription for machine-to-machine communication cards, Total=3292 [Business=3037, Gov+NP=256], [250+ emp.=292, 50-249 emp.=592, 10-49 emp.=2409]

### Which areas are expected to see any investment or innovation in the next 12 months? [TOP 5 priorities]



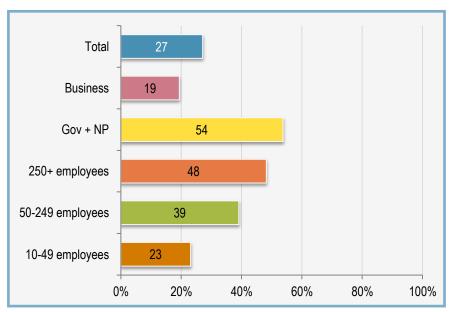
Basis: all organisations, Total=39,274 [Business=31,269, Gov+NP=8005] [250+ emp.=1345, 50-249 emp.=6628, 10-49 emp.=31,301]

- Half of the organisations have a contract with T-Mobile which means about 73 thousand subscriptions. Telenor has approxiamtely 60 thousand while Vodafone has nearly 43 thousand subscriptions.
- On average, an organisation uses 53 SIM cards and spends 82 thousand HUF in a month for M2M services.
- Regarding investment plans, organisations would like to develop more the most popular activities. About 1700 organisations plan investment in M2M services while 1000 of these organisations have not used any M2M SIM cards yet.



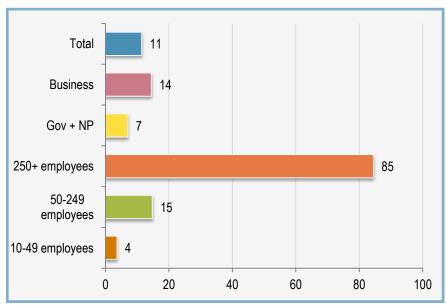


### **Proportion of organisations with TV set**



Basis: all organisations, Total=39,274 [Business=31,269, Gov+NP=8005] [250+ emp.=1345, 50-249 emp.=6628, 10-49 emp.=31,301]

### **Average number of television sets**



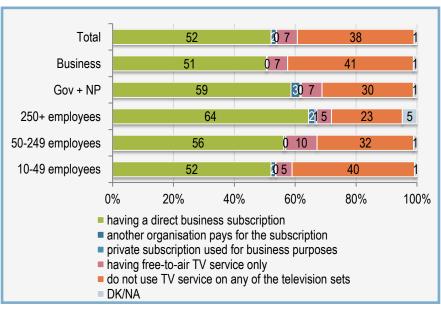
Basis: organisations with an operating TV set, Total=10,366 [Business=6063, Gov+NP=4303 [250+ emp.=642, 50-249 emp.=2564, 10-49 emp.=7160]

- One quarter of organisations have at least one operating television set. This proportion is much higher in the public and non-profit sector [54%] than in the business sector [19%].
- There is a direct correlation between penetration of television sets and the size of the organisation: the bigger
  the organisation, the higher the probability of owned TV sets. (The number of TV sets is also in direct
  correlation with the size of the organization.)
- In sum, there are about 10 thousand organisations that own about 118 thousand television sets altogether.





### Do you have pay TV service?



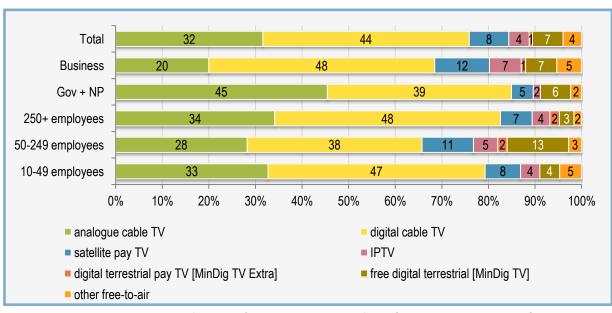
Basis: organisations with an operating TV set, Total=10,366 [Business=6063, Gov+NP=4303], [250+ emp.=642, 50-249 emp.=2564, 10-49 emp.=7160]

- 52% of organisations with television sets [i.e. about 5600 organisations] have a direct business subscription for pay TV service while more than one third do not use TV sets to watch TV programmes but for other purposes. 7% of organisations with TV sets use free-to-air TV services only.
- Proportion of subscribers for pay TV services is higher among big organisations.





#### **Penetration of technologies**



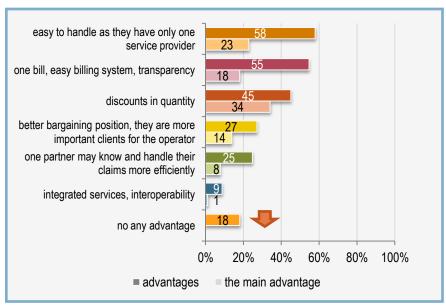
Basis: organisations with pay TV or free-to-air TV services, Total=6512 [Business=3517, Gov+NP=2996] [250+ emp.=486, 50-249 emp.=1750, 10-49 emp.=4276]

- Digital [44%] and analogue [32%] cable technology is the most widespread, about three-quarter of organisations with TV service subscribe for cable TV.
- About one tenth of organisations with TV service use satellite while about 7% use free digital terrestrial TV service.
- Penetration of cable TV service is higher in the public and non-profit sector while free digital terrestrial TV is more often used among organisations with 50-249 employees than in other segments of the market.



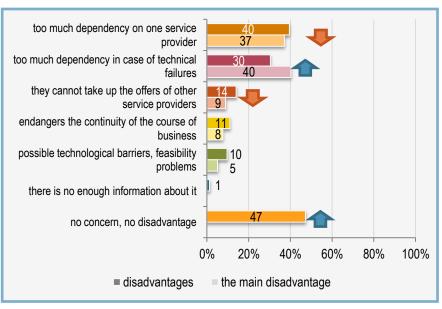


### **Advantages of bundling**



Basis: all organisations, Total=39,274 [Business=31,269, Gov+NP=8005] [250+ emp.=1345, 50-249 emp.=6628, 10-49 emp.=31,301]

### **Disadvantages of bundling**



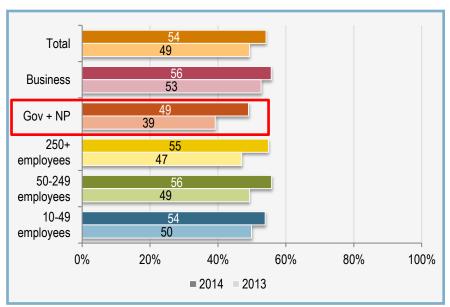
Basis: all organisations, Total=39,274 [Business=31,269, Gov+NP=8005] [250+ emp.=1345, 50-249 emp.=6628, 10-49 emp.=31,301]

- Easy handling, simple billing, and discounts are the main factors of attractiveness of bundled telecommunications services. Discounts have the main driving force as it was mentioned in the highest proportion to be the main advantage.
- Too much dependency on one service provider in general and in case of technical failures are the main concerns. Although, 47% of respondents do not see any disadvantage. The proportion of those complaining too much about dependency on one service provider and of those complaining about not being able to take up the offers of other service providers have significantly decreased since last year. In contrast, concerns about too much dependency in case of technical failures have increased.
- In sum, it can be noticed that advantages of bundling are more and more important in the thoughts of decisions-makers while concerns are becoming less discouraging.



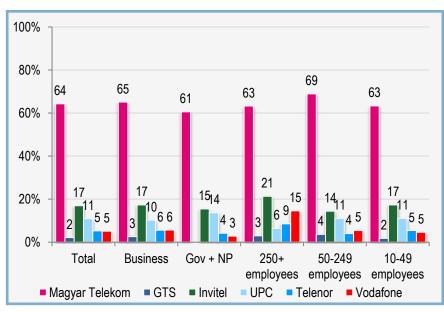


#### **Penetration of bundles**



Basis: all organisations, Total=39,274 [Business=31,269, Gov+NP=8005] [250+ emp.=1345, 50-249 emp.=6628, 10-49 emp.=31,301]

### Relation to service providers



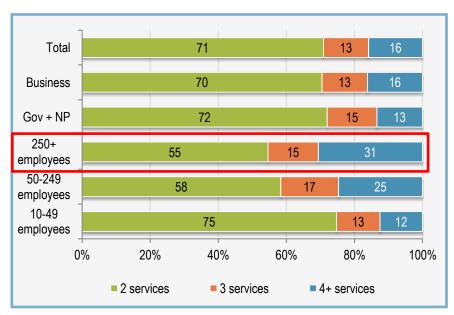
Basis: organisations having services in bundle, Total=21,514 [Business=17,520, Gov+NP=3994 ] [250+ emp.=755, 50-249 emp.=3756, 10-49 emp.=17,004]

- 54% of organisations with at least 10 employees use telecommunications services in bundle. It means about 21.5 thousand enterprises, public institutions, and non-profit organisations. An increase of 5 percentage points can be noticed compared to 2013, most noticably in the public and non-profit sector.
- Two thirds of organisations using bundled services are clients of Magyar Telekom. 17% subscribe for bundled services at Invitel.
- UPC, Telenor, and Vodafone also have a significant amount of clients with bundled services.



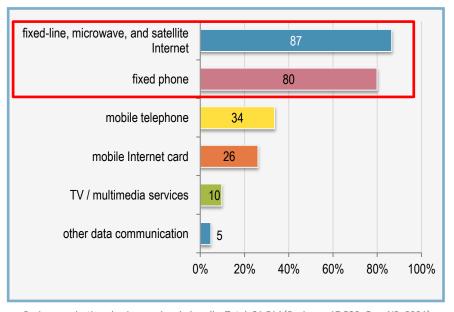


#### Number of services used in bundles



Basis: organisations having services in bundle, Total=21,514 [Business=17,520, Gov+NP=3994], [250+ emp.=755, 50-249 emp.=3756, 10-49 emp.=17,004]

#### Services used in bundles



Basis: organisations having services in bundle, Total=21,514 [Business=17,520, Gov+NP=3994], [250+ emp.=755, 50-249 emp.=3756, 10-49 emp.=17,004]

- 71% of organisations using bundled services subscribe for 2 services in a bundle. Another 16% use 4 or more services in a bundle.
- Fixed-line Internet [87%] and fixed phone [80%] are the most common services in bundle.
- The proportion of organisations using fixed phone in bundle has decreased by 8 percentage points since 2013 being the most significant change.
- Besides telecommunications services, clients of Magyar Telekom can use gas and electricity services bundled withthe telecom services, however, penetration is rather low yet [about 4%].

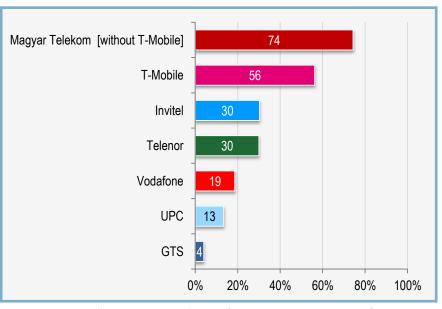


#### **Penetration of telecommunications services**

#### fixed phone 7 5 mobile phone fixed-line 87 10 Internet mobile Internet 39 data 20% 40% 60% 80% 100% 0% ■ direct business subscription use of other services

Basis: all organisations, Total=39,274 [Business=31,269, Gov+NP=8005] [250+ emp.=1345, 50-249 emp.=6628, 10-49 emp.=31,301]

### Direct business subscribers of all telecommunications services at the most significant service providers



Basis: all organisations, Total=39,274 [Business=31,269, Gov+NP=8005] [250+ emp.=1345, 50-249 emp.=6628, 10-49 emp.=31,301]

- Practically, all organisations with at least 10 employees use fixed phone and fixed-line Internet. The vast
  majority subscribe for mobile phone and 41% subscribe for mobile broadband as well. Only data
  communications services are less widespread, but a good 20% of organisations still use them.
- Magyar Telekom [c. 28.6 thousand clients] and T-Mobile [c. 21.7 thousand clients] have the most favourable positions in the market regarding the proportion of subscribers. Telenor and Invitel are in a tie for third place with 11.6-11.6 thousand clients, respectively. The proportion of subscriber organisations of Telekom has increased significantly since 2013.

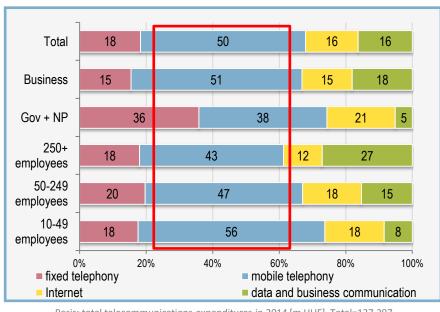


### The market of telecommunications services in 2014 [net sum, million HUF]

_	Fixed telephony	Mobile telephony	Internet	Data and business communication	Total
Business	18 321	60 769	17 836	21 409	118 336
Gov + NP	6836	7334	3911	981	19 061
250+ employees	7869	18 880	5077	11 826	43 653
50-249 employees	7572	18 229	6805	5887	38 492
10-49 employees	9716	30 994	9865	4677	55 252
Total	25 157	68 103	21 747	22 390	137 397

Basis: total telecommunications expenditures in 2014 [m HUF], Total=137,397 [Business=118,336, Gov+NP=19,061], [10-49 emp.=55,252, 50-249 emp.=38,492, 250+ emp.=43,653]

#### Structure of the market



Basis: total telecommunications expenditures in 2014 [m HUF], Total=137,397 [Business=118,336, Gov+NP=19,061], [10-49 emp.=55,252,50-249 emp.=38,492, 250+ emp.=43,653]

- The whole market of telecommunications services can be estimated to be about 137 billion HUF. Mobile telephony takes the largest part [50%] while fixed telephony makes up 18%, Internet, data and business communications services make up 16-16% of the market, respectively.
- Expenditures on fixed-line services are overrepresented in the public and non-profit sector. In parallel, their expenditures on mobile services make up a lower market share.
- Expenditures on data communication services of organisations with 250+ employees contribute above average to the whole market.