

PUBLIC OPINION SURVEY ON
THE FUNCTIONING OF THE TELECOMMUNICATIONS MARKET
AND CONSUMER PREFERENCES

REPORT ON SURVEY CONCERNING INDIVIDUAL CUSTOMERS

Warsaw, Gdańsk, 22.12.2017

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BASIC INFORMATION



TITLE

Gathering public opinion as regards the functioning of the telecommunications market



CONTRACTING ENTITY

Office of Electronic Communications (UKE)



CONTRACTOR

DANAE LLC and Realizacja Sp. LLC



SAMPLE SIZE

N=1600 individual customers 15+



TECHNIQUE

CAPI – computer assisted personal interviewing



LOCATION

Survey on a nation-wide level in Poland



PERIOD

From November to December 2017

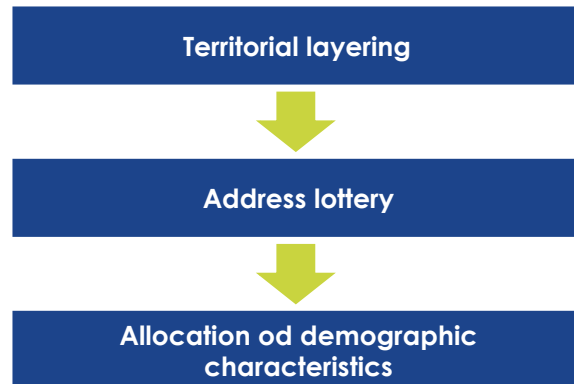


SAMPLE SELECTION

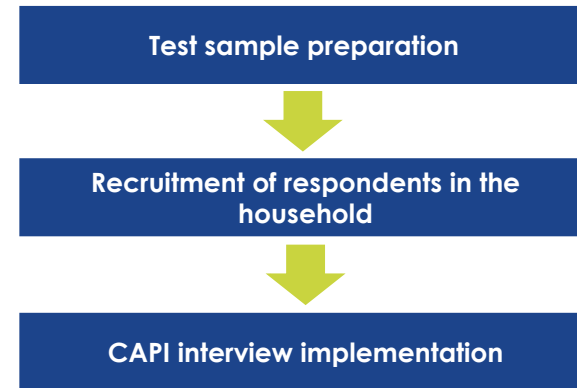
The survey was conducted on the basis of a representative group of individuals selected throughout Poland, aged, 15+, N=1600.

Sample selection was quota and layer in nature.

The foundation for this selection was created by GUS. Layering involved size of locality and territorial distribution within voivodships as well as gender and age of selected individuals.



RECRUITMENT OF RESPONDENTS



Respondents were selected during the first contact with a given household. Individuals who fulfilled criteria regarding demographic aspects, including gender and age, were included in this survey.

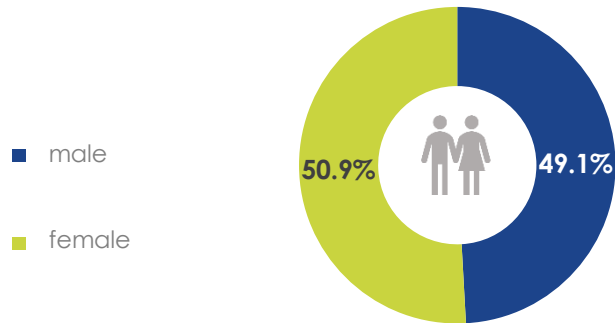
Only one person per household was surveyed.



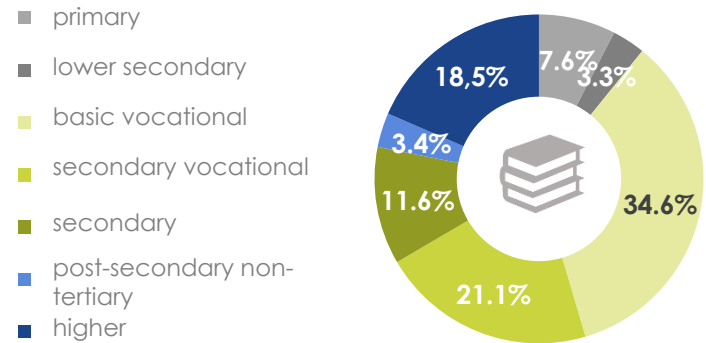
SAMPLE CHARACTERISTICS



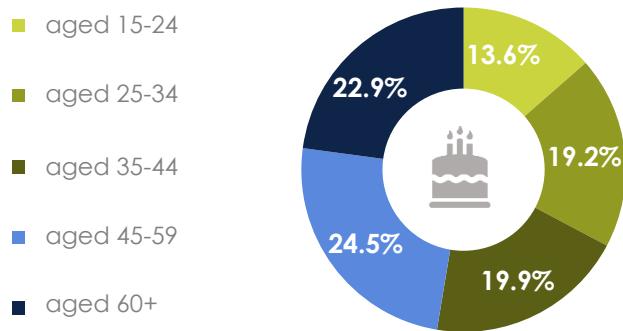
GENDER



EDUCATION



AGE



Female and male participation in this survey was evenly distributed.

While taking education into account, the biggest number of people had elementary and vocational education (34.6%), followed by secondary education (32.7%, including secondary vocational education at 21.1%, and general secondary education at 11.6%). People with higher education constituted 18.5%.

The most numerous age group was 45-59 years old. People above 60 years old represented 23% and the youngest age group (15-24) – 13.6%.

Basis: All respondents, N=1600

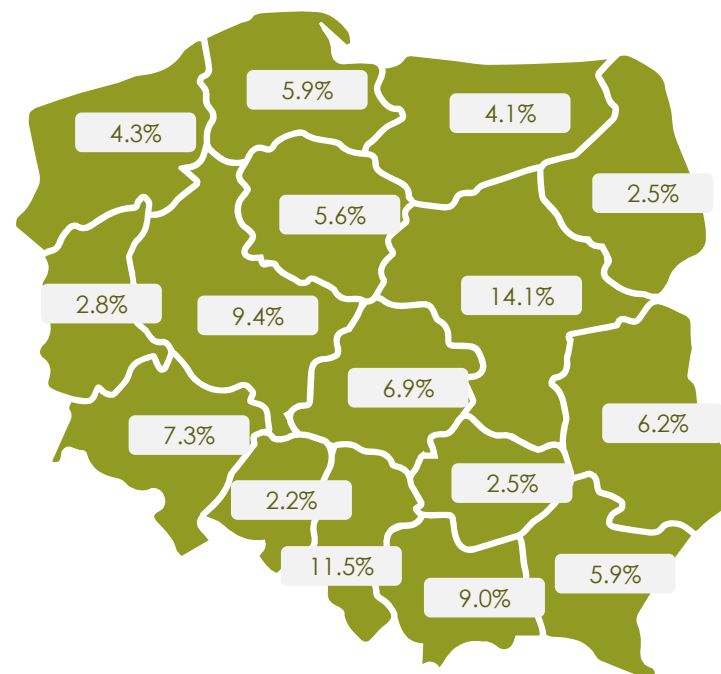
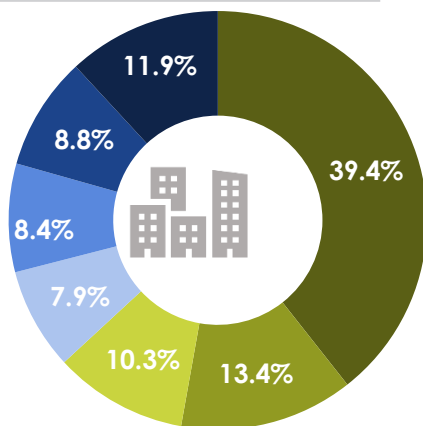


VOIVODSHIP

VOIVODSHIP	%	VOIVODSHIP	%
Lower Silesian	7.3%	Subcarpathian	5.9%
Kuyavian-Pomeranian	5.6%	Podlasie	2.5%
Lublin	6.2%	Pomeranian	5.9%
Lubusz	2.8%	Silesian	11.5%
Łódź	6.9%	Holy Cross	2.5%
Lesser Poland	9.0%	Warmian-Masurian	4.1%
Mazovian	14.1%	Greater Poland	9.4%
Opole	2.2%	West Pomeranian	4.3%

SIZE OF LOCALITY

- country
- town up to 20,000 inhabitants
- town from 20,000 to 50,000 inhabitants
- town from 50,000 to 100,000 inhabitants
- city from 100,000 to 200,000 inhabitants
- city from 200,000 to 500,000 inhabitants
- city over 500,000 inhabitants



Basis: All respondents, N=1600



PROFESSIONAL SITUATION



59.8%

worker



3.4%

entrepreneur/farmer



8.1%

pupil/student



22.3%

retired
person/pensioner



5.9%

unemployed person

NUMBER OF PEOPLE IN A HOUSEHOLD



18.9%

One individual



33.4%

Two individuals



23.9%

Three individuals



17.8%

Four individuals

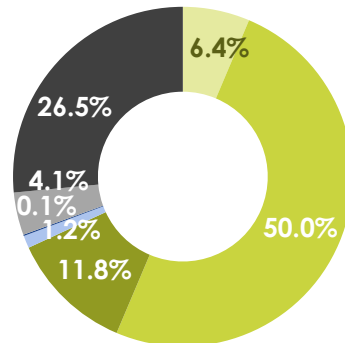


5.9%

Five and more
individuals

INCOME

- up to 1000 pln
- from 1001 to 3000 pln
- from 3001 to 5000 pln
- from 5001 to 10000 pln
- over 10000 pln
- It's hard to tell
- refused to answer



The biggest proportion of participants were the employed (nearly 60%), followed by the retired and pensioners as regards the size (22.3%).

One-third of respondents lived in two-person households, participation of three-person households amounted to 23.9%, One-person households constituted 18.9%, and four-person – 17.8%.

The most common net income of respondents varied from 1001 to 3000 pln.

Basis: All respondents, N=1600



USE OF SERVICES



Mobile phone

91.9%



Landline phone

10.7%



Internet

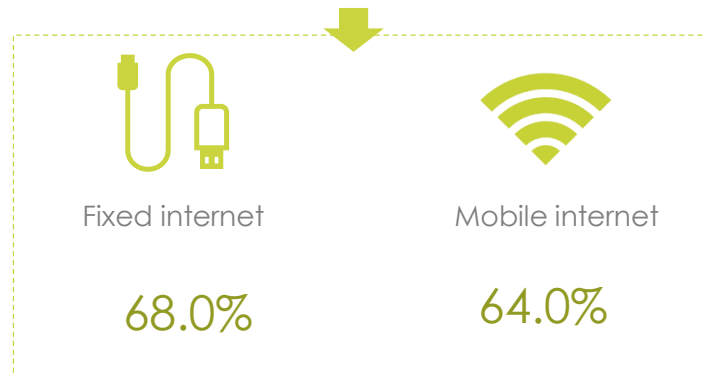
64.5%



I don't use any

Mobile telephony is the most popular service on the telecommunications market, used by more than nine out of ten respondents questioned in this survey. Landline telephony is far less impactful – it is used by every tenth person.

Use of the Internet is also fairly common (64.5%), while the percentage of fixed and mobile Internet users is comparable.



Basis: All respondents, N=1600

Basis: Internet users, N=1025



MOBILE TELEPHONY

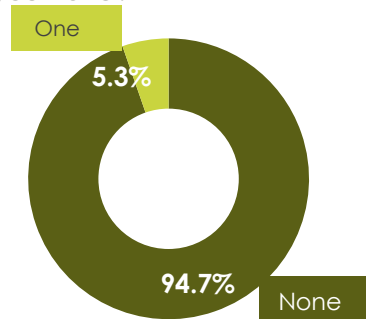


AMOUNT OF ACTIVE NUMBERS

How many active numbers do you have?



Private numbers

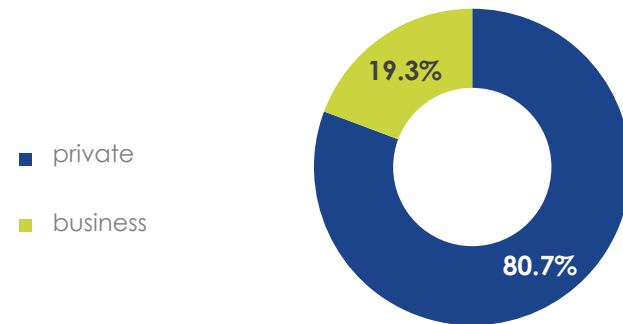


Business numbers



PRIVATE OR BUSINESS NUMBER?

Which of those numbers do you use more often?



4.6% of respondents have both private and business numbers, while the telephone generally is considerably more often used for private purposes (80.7%).

Those who have a private number, usually have only one active telephone number.

Business number is not that common among Poles – only 5% of survey participants have one.

Basis: Mobile telephone users, N=1470

Basis: Users of both private and business numbers, N=92



TYPE OF TELEPHONE

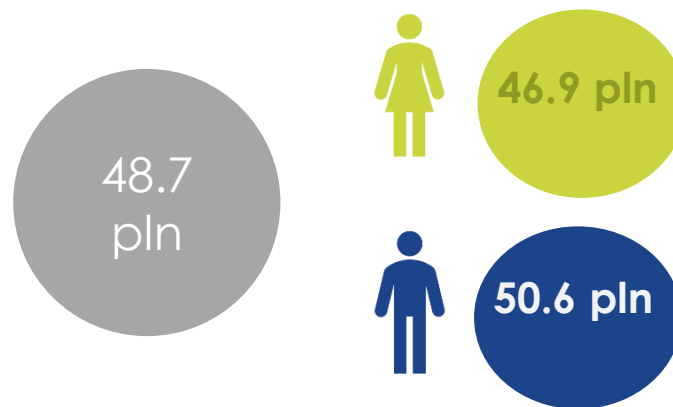
What type of telephone do you use?



Smartphone is the most popular type of a telephone, used by nearly seven out of ten questioned individuals. Less than every third user of mobile telephony uses a traditional phone (30%).

AVERAGE MONTHLY EXPENSES

On a monthly basis, how much do you spend on mobile telephony services?



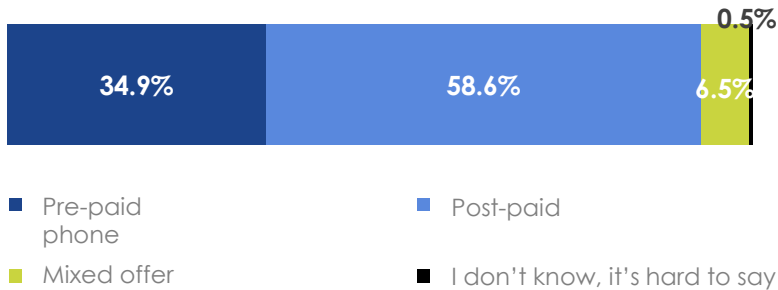
Average monthly expenses related to the use of a telephone amount to 48.7 pln, while the highest amount of money spent on that purpose is 500 pln.

Basis: Mobile telephone users, N=1470



TYPE OF MOBILE PHONE OFFER

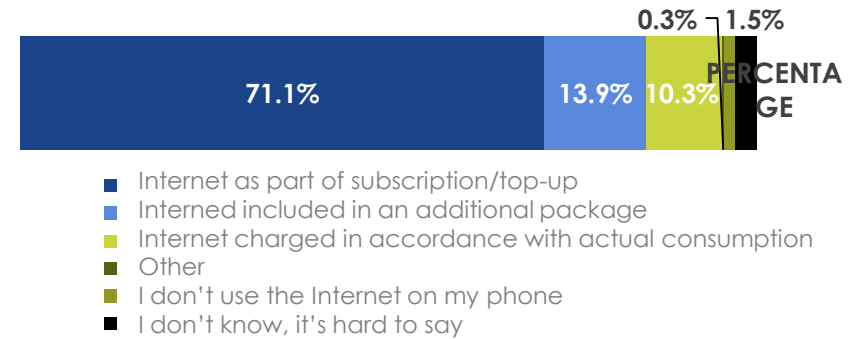
What type of mobile phone offer do you use?



Monthly subscription is the most commonly selected offer, used by 58.6%. Slightly less popular are pre-paid card phones (i.e. top ups) preferred by more than every third person.

TYPE OF THE INTERNET ACCESS OFFER

What type of the Internet access in your phone do you use?



Internet access under subscription or pre-paid is the most dominant type of offer (71%), much fewer users decide to use the Internet as part of an additional package, or choose settlements based on actual consumption.

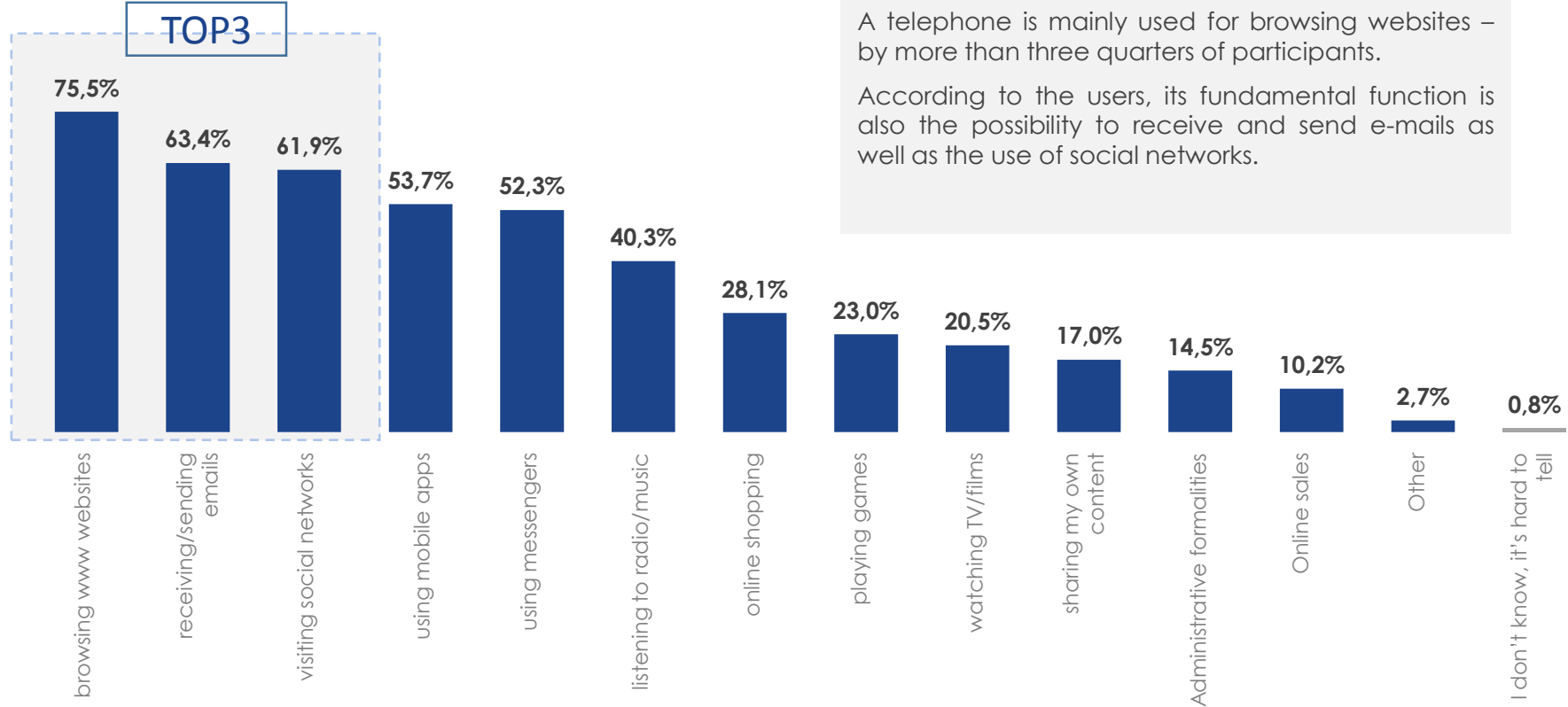
Basis: Mobile telephone users, N=1470

Basis: Mobile phone and mobile Internet users, N=425



THE INTERNET ON THE PHONE

What do you use Internet on the phone for?



A telephone is mainly used for browsing websites – by more than three quarters of participants.

According to the users, its fundamental function is also the possibility to receive and send e-mails as well as the use of social networks.

Basis: Mobile phone and mobile Internet users, N=425

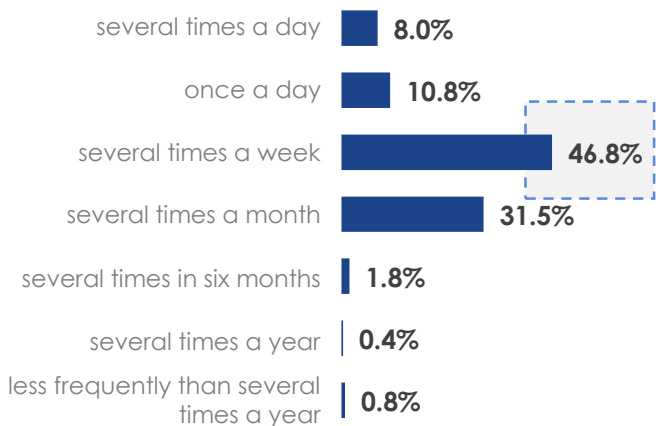


BANKING APP

Have you installed a banking app on your phone?



How often do you use that banking app?



CONTACTLESS PAYMENT

Do you use contactless payment on your phone?



Three out of ten questioned individuals have a banking app on their phones (30.0%), only less than half of them use it several times a week.

Fewer people decide to use contactless payment – this function is used by every fourth user of a banking app (26.1%). Contactless payments are used several times a week.

Basis: Smartphone users, N=1008

Basis: Individuals that have a banking app on their phone, N=302



USE OF PREMIUM RATE SERVICES

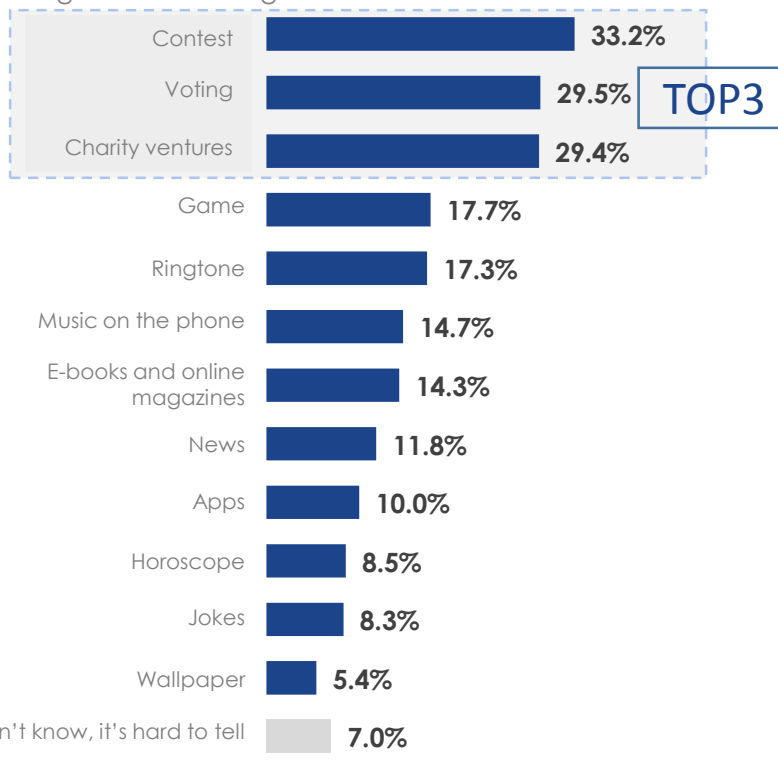
Do you use Premium Rate services, i.e. additionally paid services through a text message?



Premium Rate services, i.e. additionally paid services through a text message, are not commonly used by mobile phone owners. They are used by only 3.6% of survey participants .

In case when respondents decide to send a payable text message, they do it in order to participate in a contest, voting, or charity actions.

Which of the following Premium Rate services have you paid for through a text message?



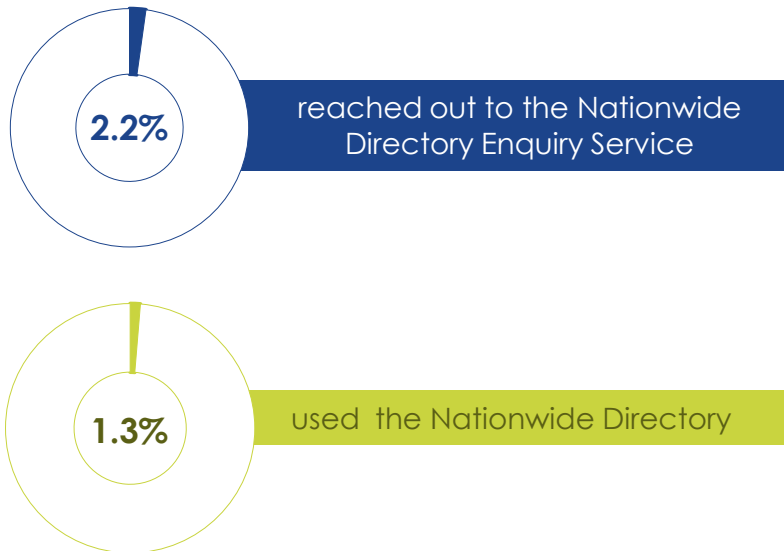
TOP3

Basis: Mobile phone users, , N=1470

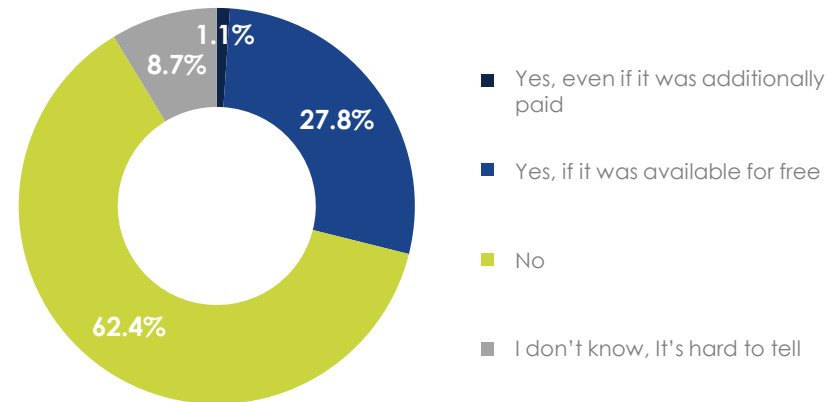
Basis: Users of Premium Rate services N=55



USE OF UNIVERSAL SERVICES ELEMENTS



Would you use the directory published on a website instead of the currently available directory formats (e.g. standard telephone directory and CD/DVD) if such an online directory existed?



A negligible percentage of Poles reaches out to the Nationwide Directory Enquiry Service or the Nationwide Directory. If they happen to use any of those services, it occurs several times a year, or less frequently (National Directory Enquiry Service) or not more than several times during six months.

The majority do not show the intention to use an online directory (62.4%), but even when they gave a positive answer, they would use it only if such service was free of charge (27.8%).

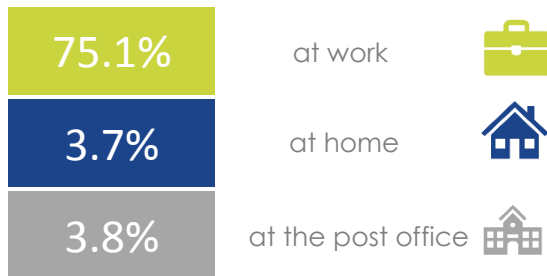
Basis: Phone users, N=1535



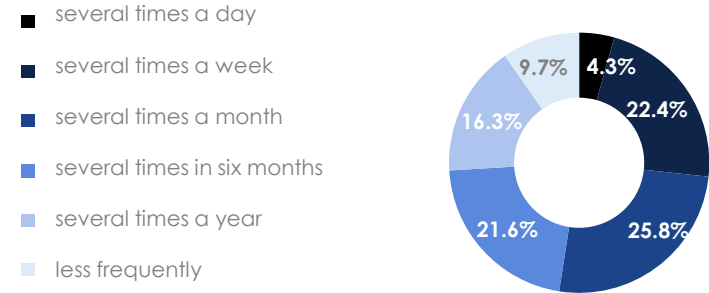
USE OF FAX



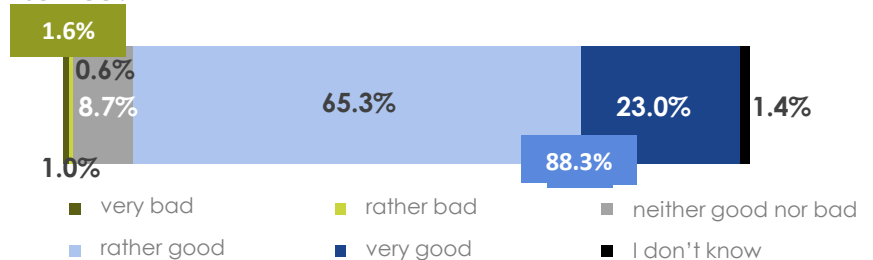
Where do you most often use fax?



How often did you use fax in the previous year ?



How would you rate the quality of connection as part of the fax service?



Use of fax in the previous year was declared by 8.1% of the questioned individuals, but it was mainly used in their workplace (75.1%). Only 3.7% use fax at home and 3.8% at the post office. Among fax users, 4.3% use it everyday, 22.4% several times a week, and one fifth (25.8%) several times a month. The remaining group uses fax even less frequently.

A great majority of respondents (88.3%) give positive reviews on the quality of connection related to the use of this service (including 23.0% very good, 62.5% rather good). A negligible percentage have a negative opinion on the connection quality(1.6%).

Basis: All respondents , N=1600

Basis: Fax users, N=157

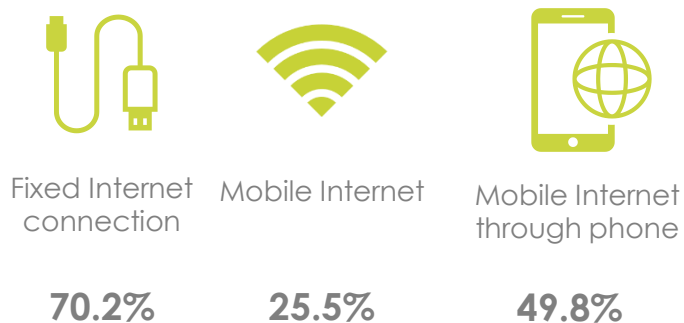


ACCESS TO THE INTERNET



ACCESS TO THE INTERNET

What type of Internet connection do you have?

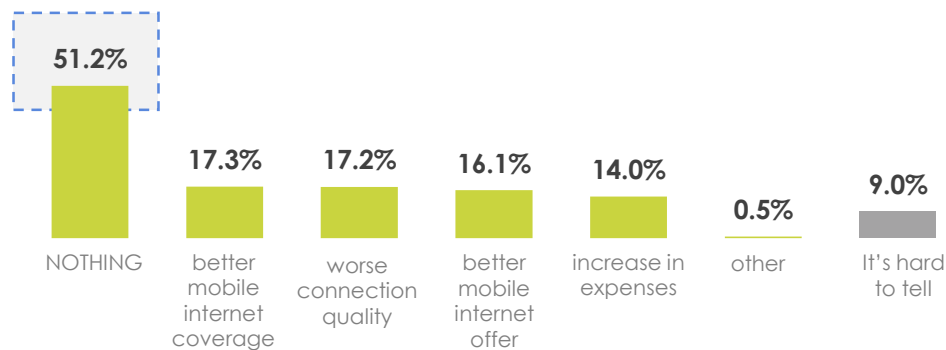


Most common reasons for potential resignation from fixed Internet connection would be better coverage of mobile Internet (17.3%), deterioration of connection quality (17.2%) and more favorable offer for mobile Internet (16.1%). However, over half of respondents would not resign from this service.

Main reasons for resignation from mobile Internet involve deterioration of the coverage of mobile Internet (13.16%) or more favorable offer of the fixed Internet connection (13.2%). Almost 60% of respondents do not even consider the possibility of resigning from mobile Internet,

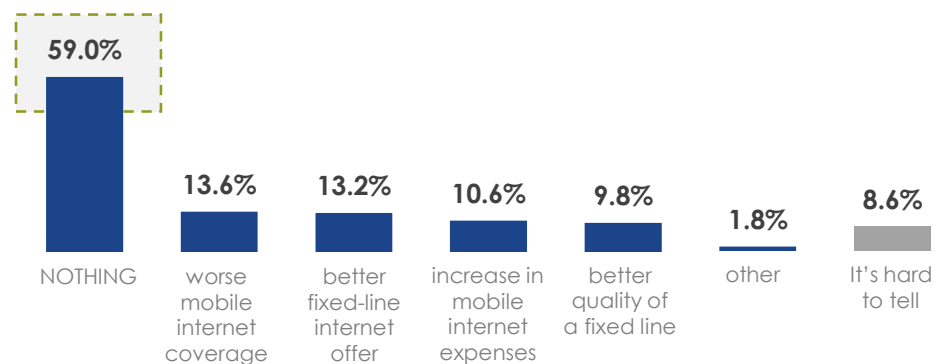
RESIGNATION

What would make you resign from fixed Internet connection in favour of mobile Internet?



Basis: Users of fixed Internet connection, N=708

What would make you resign from mobile Internet in favour of fixed Internet connection?

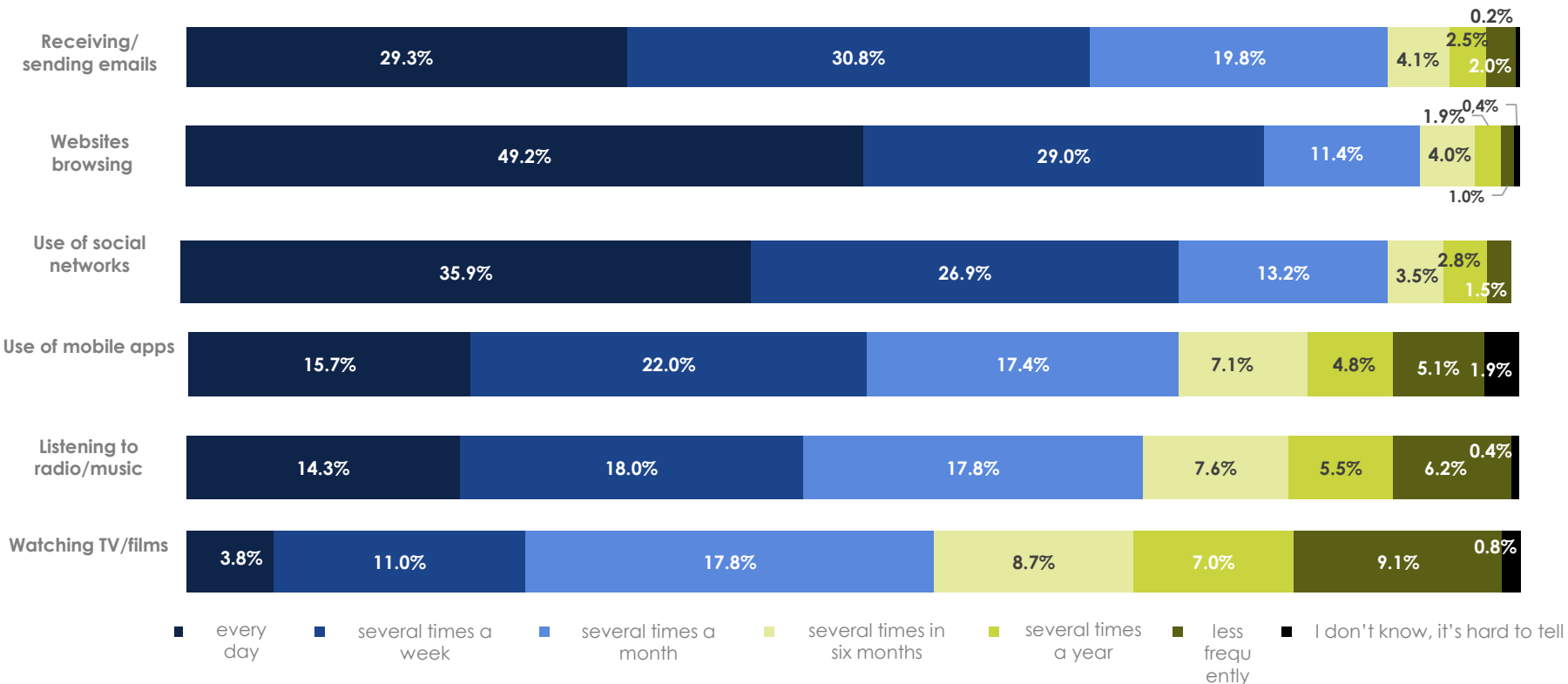


Basis: Users of mobile Internet, N=441



USE OF THE INTERNET SERVICES

How often in the past year did you use the following Internet services?

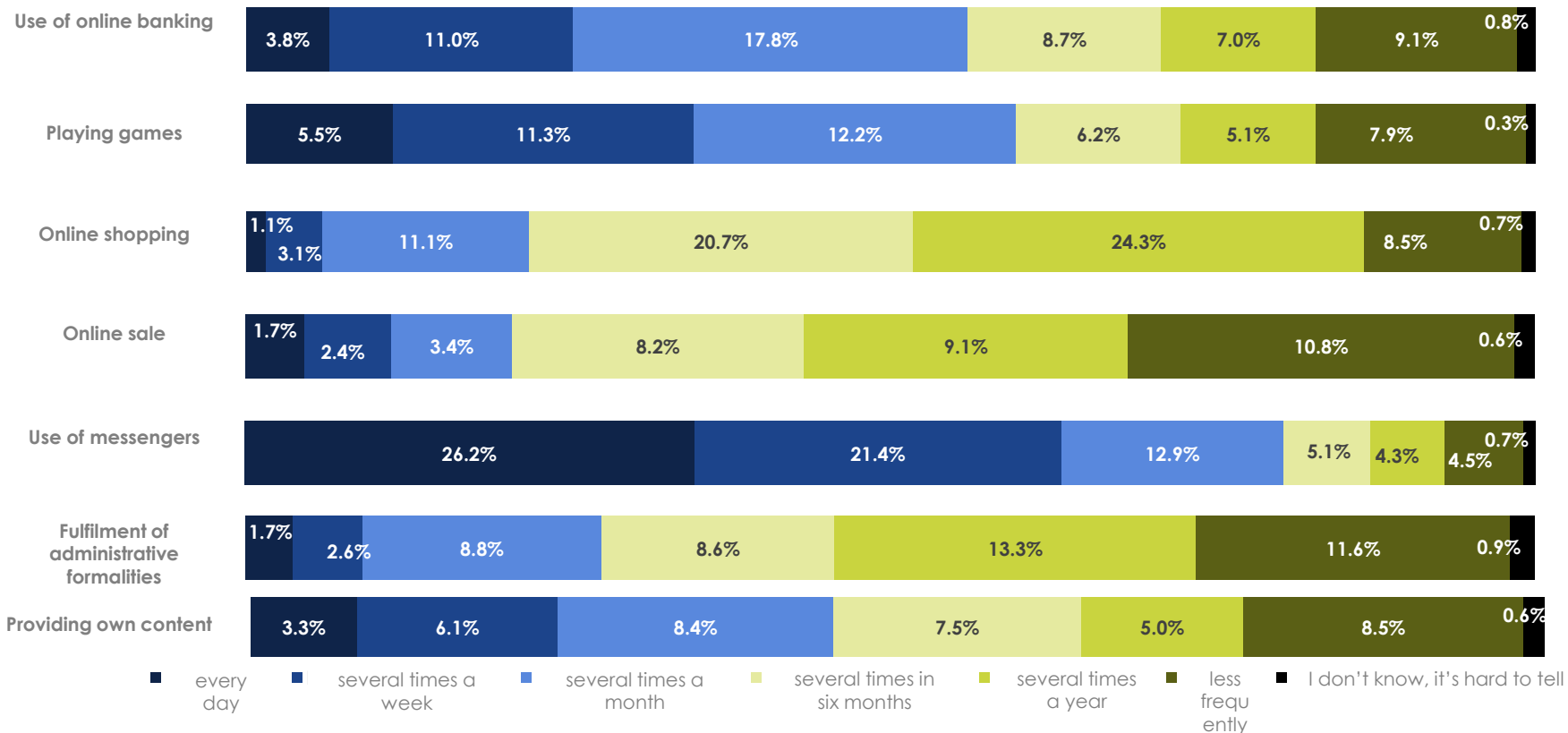


Basis: Internet users N=997



USE OF INTERNET SERVICES

How often in the past year did you use the following internet services?

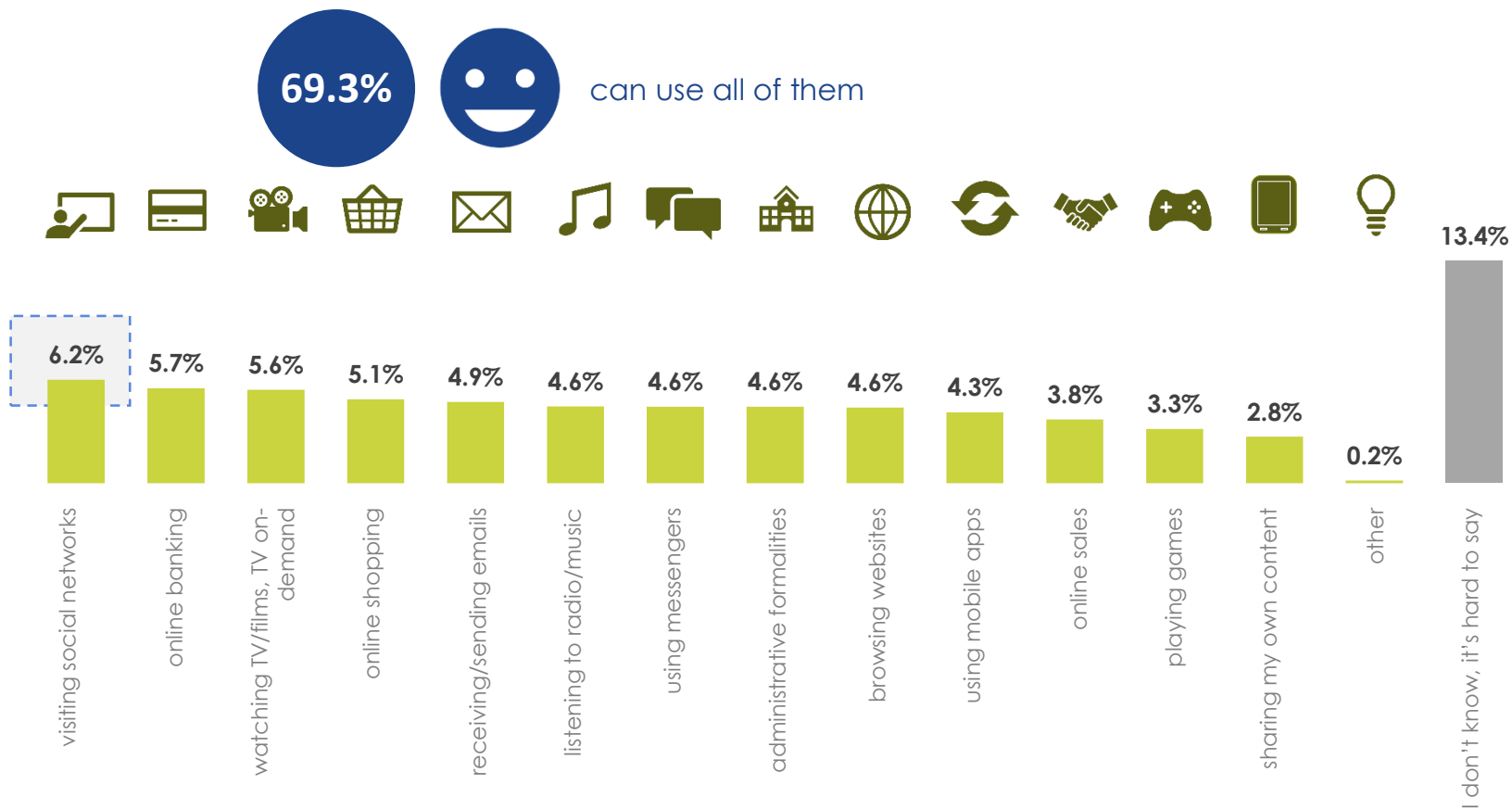


Basis: Internet users, N=997



NO POSSIBILITY TO USE THE INTERNET SERVICES

Let us know which of the following services you can't use due to your current line speed?

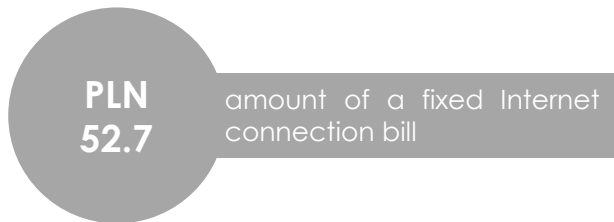


Basis: Internet users, N=997



EXPENDITURE

What is the average monthly amount of your fixed internet connection bill?



52.7 pln is the average monthly amount of respondents' payment for fixed Internet connection.

The maximum connection speed is on average 84.7 Mb/s, while 72.3% of respondents are unable to determine it.

Most often respondents' decision regarding their speed of Internet connection was based on its favourable price (36.7%).

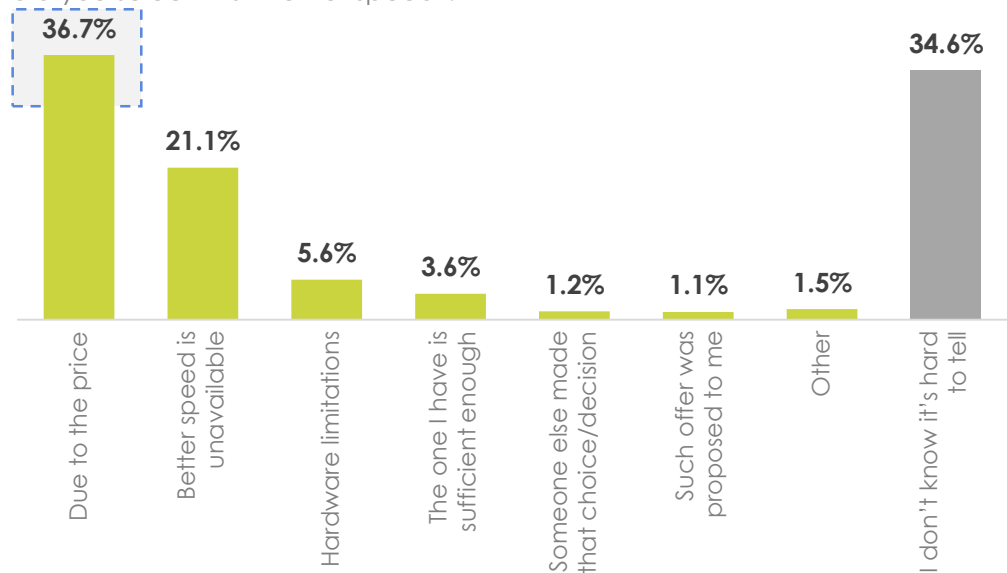
SPEED OF CONNECTION

What is, according to the contract with your supplier, the maximum speed of your fixed Internet connection?



*amounted to MB/s

Why did you select this Internet speed ?

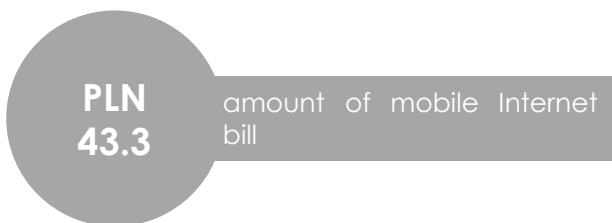


Basis: Users of fixed Internet connection , N=708



EXPENDITUR

What is the average monthly amount of your mobile Internet bill?



43.3 pln is the average amount of respondents' expenditure on a monthly basis related to the use of mobile Internet.

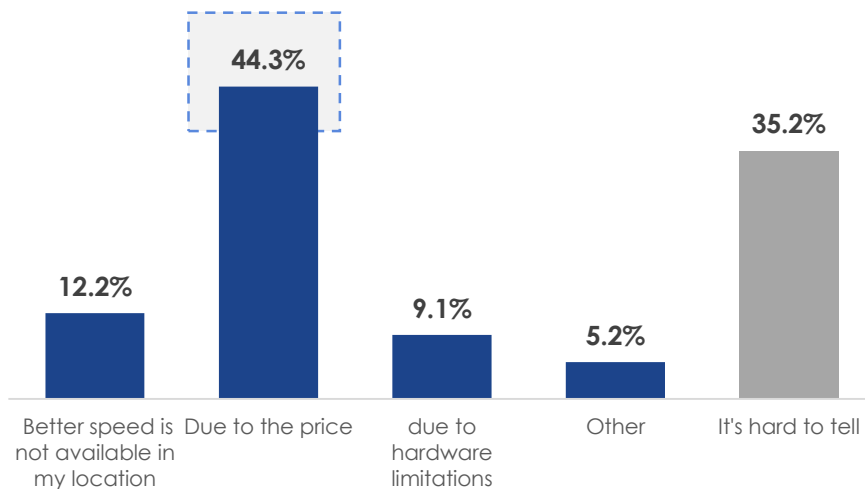
Usually, respondents' decision regarding the speed of mobile Internet was based on its favourable price(43.3%).

SPEED OF CONNECTION

What is, according to the contract with your supplier, maximum speed of your mobile Internet?



Why did you select this Internet speed ?

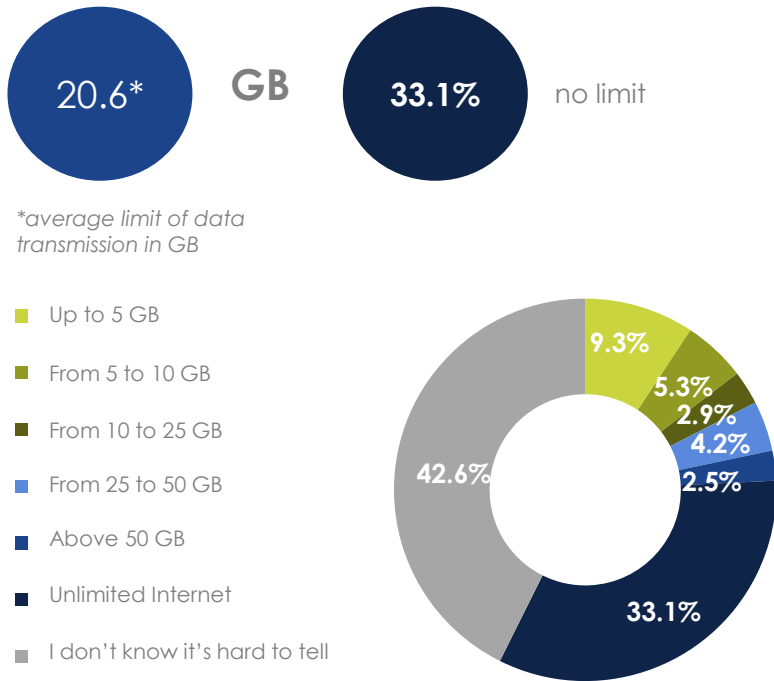


Basis: Users of mobile Internet, N=441



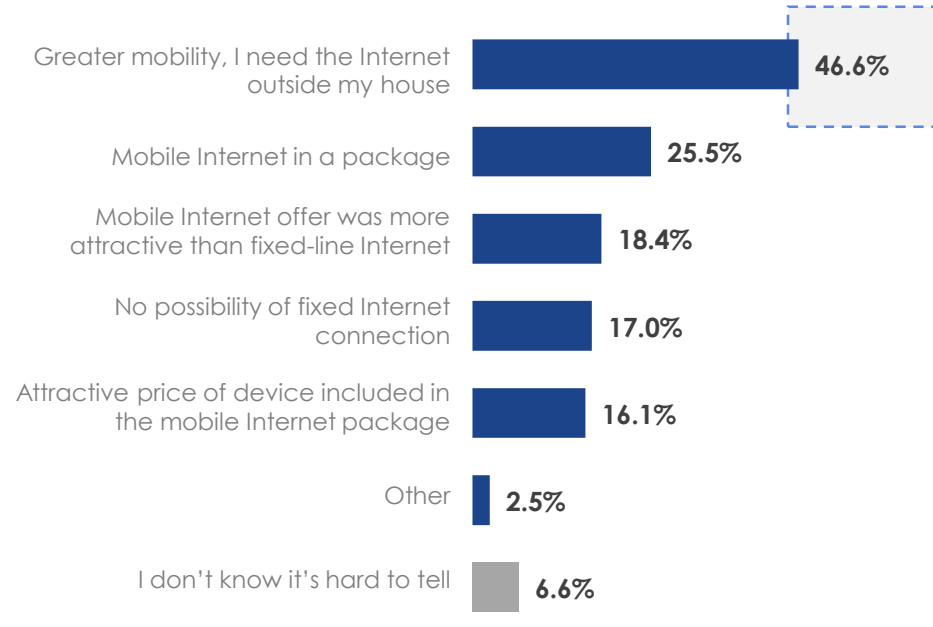
DATA TRANSMISSION

What is, according to the contract with your supplier, your mobile Internet data transmission limit?



REASONS FOR USE

Why did you decide to use mobile Internet?



The greatest advantage of mobile Internet is the possibility to use it outside the house meaning greater independence (44.6%). One-fourth of respondents point out that they received it as part of a bundle (25.5%), 18.4%, were attracted by lower price when compared to fixed Internet connection, whereas 17% have no possibility of using fixed Internet.

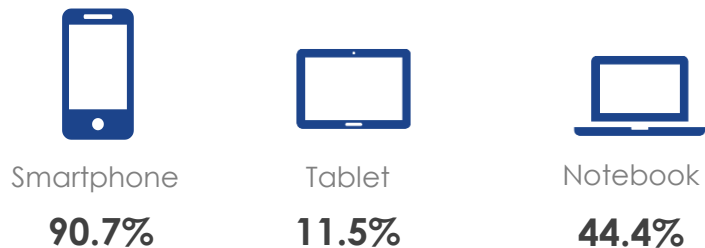
Basis: Users of mobile Internet, N=441



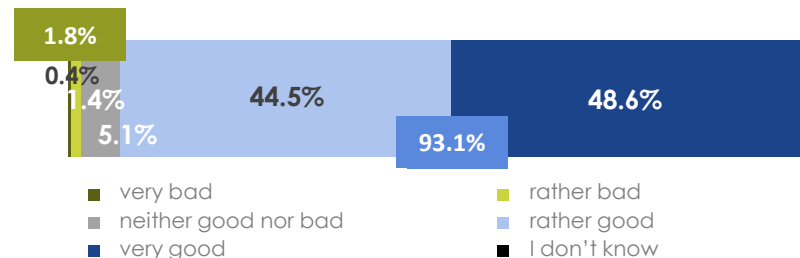
LTE TECHNOLOGY



On what devices do you use mobile Internet in LTE technology?



How would you rate the service of mobile Internet in LTE technology?



Two-thirds of respondents are familiar with LTE technology. Among all people who have access to the Internet, 73.1% use LTE technology.

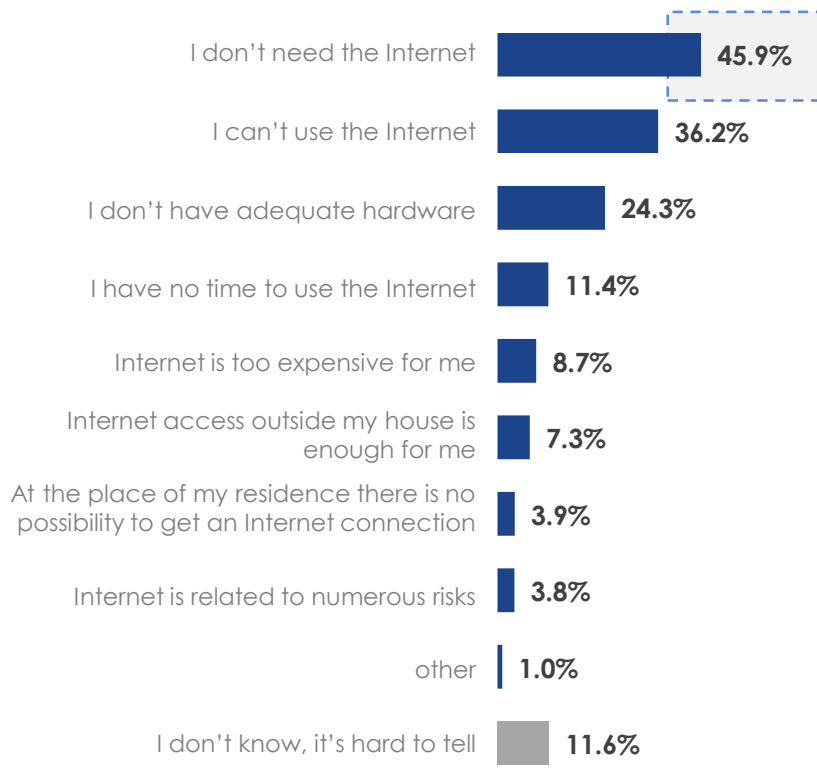
Respondents usually use a smartphone for mobile Internet in LTE technology (90.7%). Also, fairly often a notebook is used for this purpose (44.4%). In addition, 11.5% selected a tablet for their answer. A great majority of questioned individuals gave positive reviews on the use of mobile Internet in LTE technology (93.1% - answers in total "rather good" and "certainly good"). Less than 2% gave a negative opinion on the quality of this service.

Basis: All respondents , N=1600



REASONS FOR NOT HAVING THE INTERNET

Why do you have no Internet access?



The most commonly indicated reason for not having access to the Internet was no need to have one (45.9%) followed by lack of skills concerning its use (36.2%). Every fourth person admitted that they don't have the required device. Lack of time was suggested by 11.4%. In addition, 8.7% of respondents have no access due to too high charges, and 7.3% mentioned that access to the Internet outside the house is sufficient for them.

Low percentage of respondents pointed at the lack of possibility to connect in the place of their residence (3.9%), some (3.8%) mentioned risks associated with the use of the Internet.

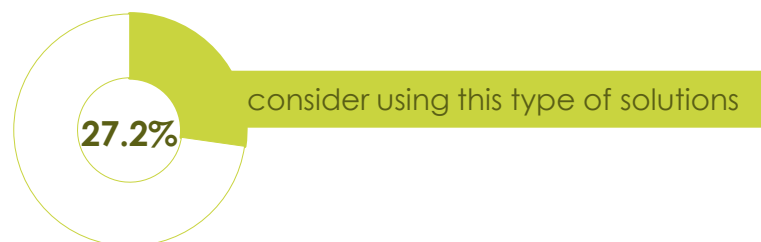
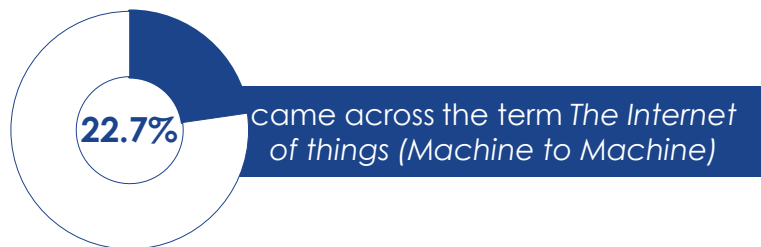
Basis: Respondents who have no access to the Internet, N=603



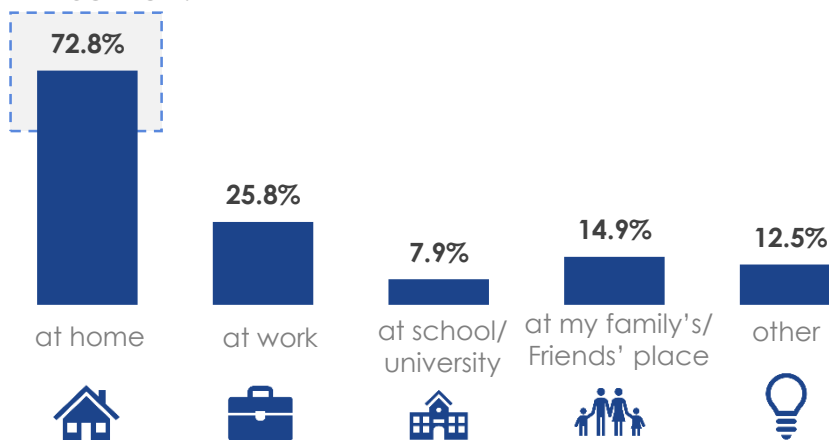
THE INTERNET OF THINGS



KORZYSTANIE Z ROZWIĄZAŃ M2M



Gdzie korzysta Pan/Pani z rozwiązań typu „machine to machine” ?



The Internet of things (IoT), Machine2Machine (M2M) are the newest solutions which provide the Internet connection with such devices as: a TV set, a refrigerator, an alarm system or a car.

Among all respondents, nearly 23% came across the term „Internet of things”. Every tenth person used such type of solutions, whereas only 27% consider using them in the future.

„Machine to machine” solutions are most frequently used at home (72.8%). Every fourth respondent uses such solutions at work.

Basis: All respondents, N=1600



SERVICES IN THE M2M PACKAGE

What services are included in your purchased subscription as part of the internet of things/M2M services?



Additional data transmission package
16.6%



SMS package
23.5%



Package of minutes for voice calls
12.7%

Respondents who purchased the Internet of things/machine to machine most often benefit from an SMS package (23.5%). This is followed by the purchase of additional data transmission package (12.7%).

OPERATORS

What are the names of the operators that provide you with these solutions?

TOP 3

30.0%

ORANGE

11.3%

PLUS

10.1%

PLAY

Orange, Plus and Play are among leading suppliers of machine to machine services.

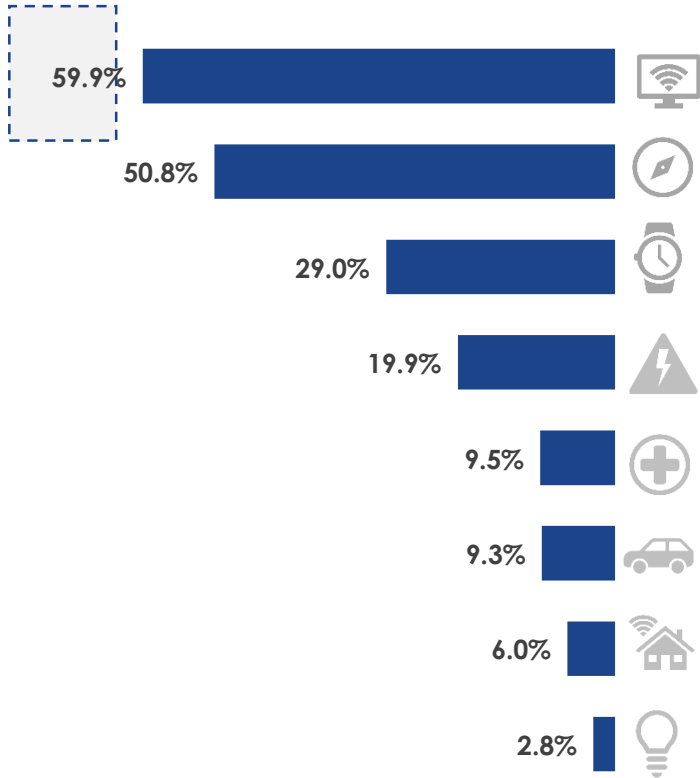
22.1% of surveyed individuals are unable to name the providers of such services.

Basis: Respondents who use M2M solutions, N=50



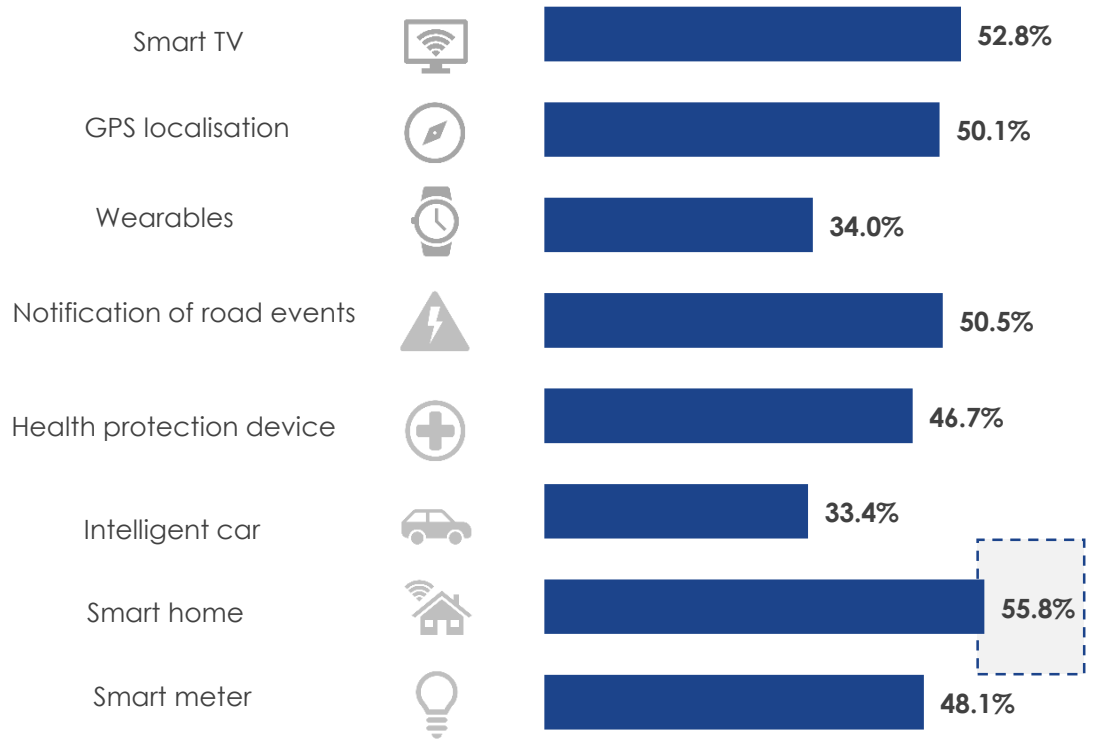
WHAT DO THEY USE?

What types of machine to machine" services do you use?



WHAT TYPES OF SERVICES WOULD YOU LIKE TO PURCHASE?

What types of "machine to machine" services would you like to implement in the future?



Basis: Respondents who benefit from M2M solution, N=50

Basis: Respondents who consider using M2M solutions in the future, N=103



BENEFITS

What benefits related to these solutions do you notice?

✓	Better adjustment of services to needs	36.9%
✓	Better sense of control over devices	17.7%
✓	Reduction in the use of media	14.6%
✓	Time saver	42.8%
✓	Better management of physical condition and health	16.3%
✓	Improved sense of safety	4.9%
✓	Access to promotion and exclusive offers	8.7%
✓	Other	1.6%

Respondents who benefit from solutions related to M2M (42.8%) pointed at saving time as its biggest benefit. It's followed by better adjustment of services to needs (36.9%). Nearly 18% of them mentioned better sense of control over devices (17.7%).

RISKS

What risks do you associate with "the Internet of things"/"machine to machine" services?

18.1%	Attacks of third parties on devices	!
17.2%	Reduced sense of safety	!
16.3%	No control over companies that supply customers with M2M solutions	!
22.2%	Risk of unauthorised access to data	!
15.5%	Higher energy consumption	!
22.5%	Lower sense of privacy	!
0.2%	Other	!

Reduced sense of privacy was the most common fear expressed by respondents (22.5%). In addition, users are aware of potential unauthorised access to data (22.2%). Meanwhile, 18.1% of respondents see the risk of attacks of third parties on devices with such solutions installed.

Basis: Respondents who benefit from M2M solutions, N=50

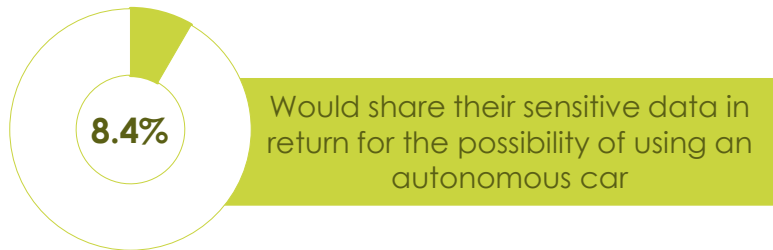
Basis: All respondents, N=1600



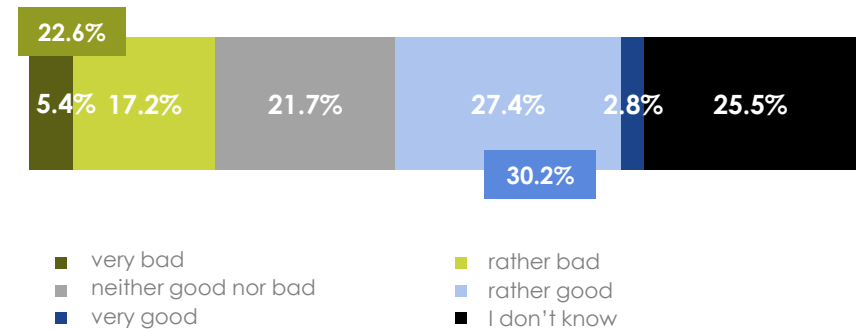
AUTONOMOUS VEHICLES



AUTONOMOUS VEHICLES



How would you assess the safety level of autonomous cars in comparison with traditional cars?



Among all respondents 23.4% came across the term „autonomous car.“ 18.7% respondents are aware that they could buy a car with an autopilot function. 8.4% would share their sensitive data in return for the possibility of using an autonomous car.

Taking into account the safety level of autonomous cars in comparison with traditional ones, one should notice that 30.2% respondents declare that autonomous cars are safer. At the same time, every fourth individual does not have an opinion in this regard (I don't know, hard to say). Every fifth person (21.7%) is neutral in this regard (neither good nor bad).

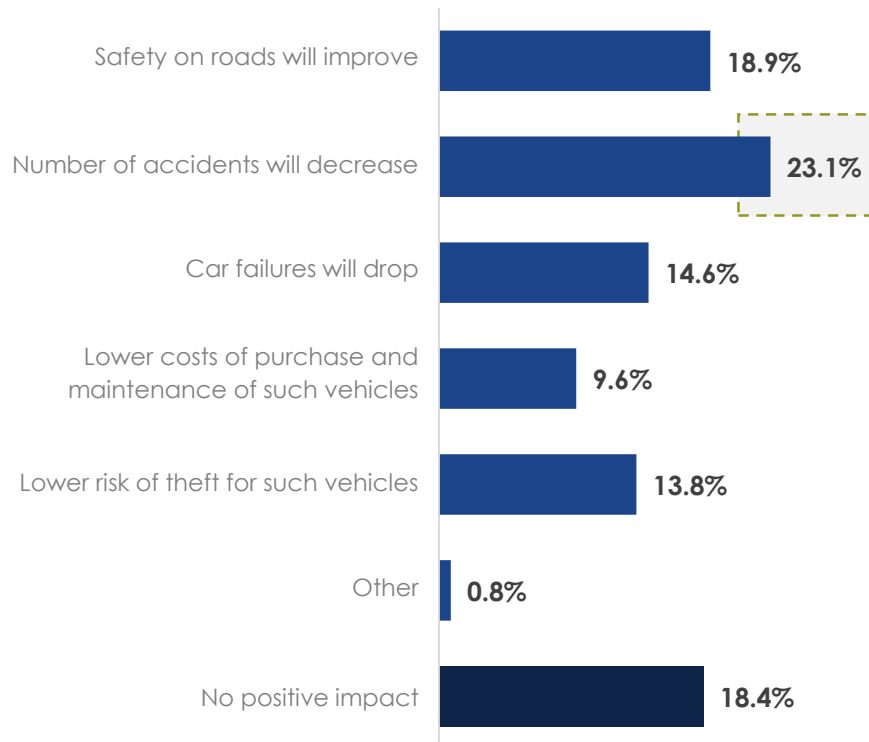
Basis: All respondents, N=1600



POSITIVES



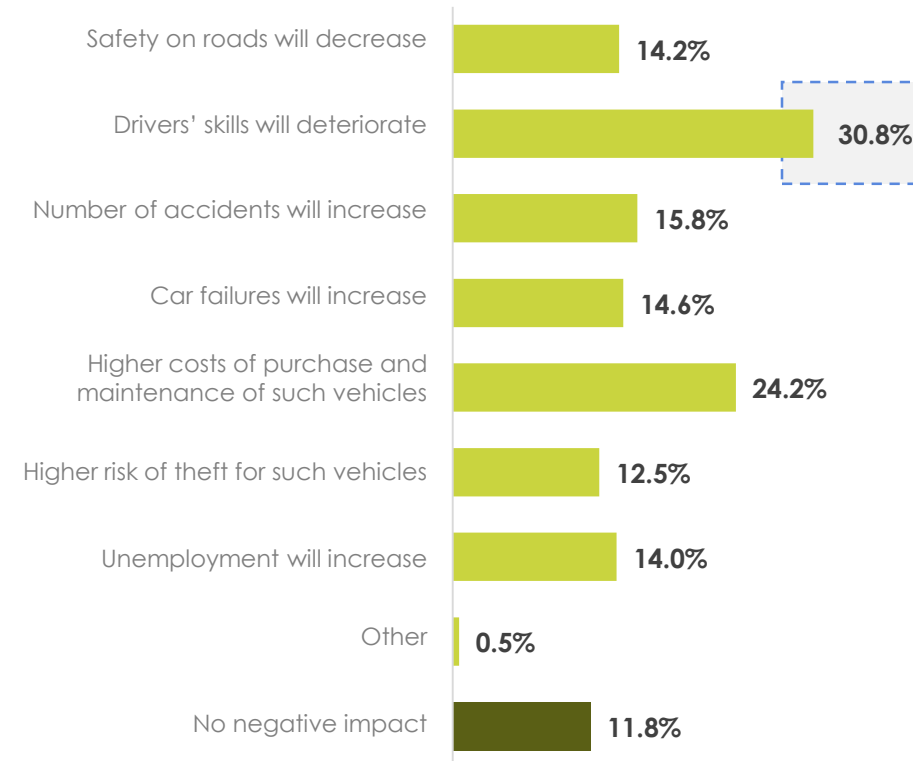
What positive impact on the society life will autonomous vehicles have in your opinion ?



NEGATIVES



What negative impact on the society life will autonomous vehicles have in your opinion?



Basis: All respondents, N=1600

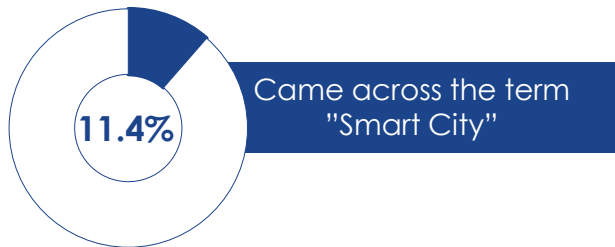


SMART CITY

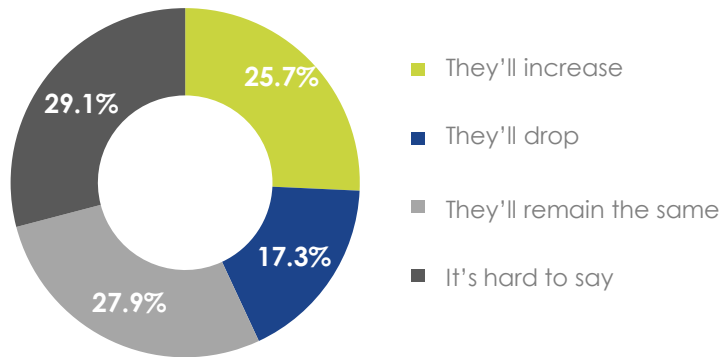


SMART CITY

What types of Smart City solutions would you like to see being implemented?



Do you think that Smart City will enhance reduction or increase in the expenses of everyday city life?



TOP 5

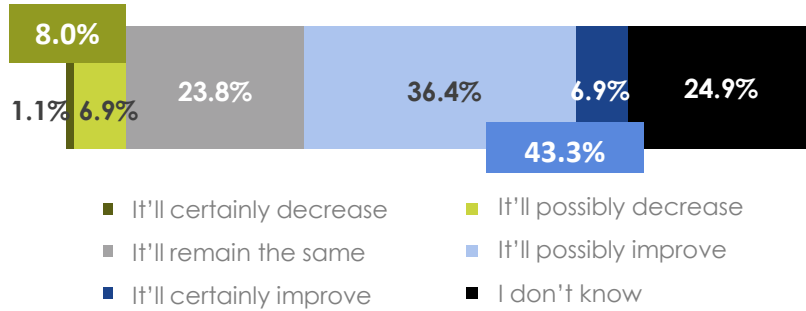
- ✓ Smart lighting – remote management of city lighting **39.1%**
 - ✓ Smart roads – sensors in the roads informing about surface condition, unfavourable conditions **35.0%**
 - ✓ Automated urban communication system informing about emerging difficulties and assigning alternatives to reach the goal **32.5%**
 - ✓ Smart parking enabling parking-planning **29.6%**
 - ✓ Monitoring of facilities' technical condition **26.2%**
- 18.5%** Would like none of these solutions to be implemented

All respondents, N=1600



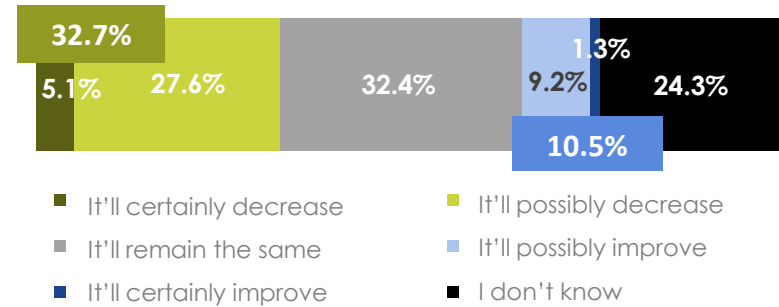
SAFETY ON THE ROADS

Please rate the impact of Smart City solutions on enhancement of safety on the roads



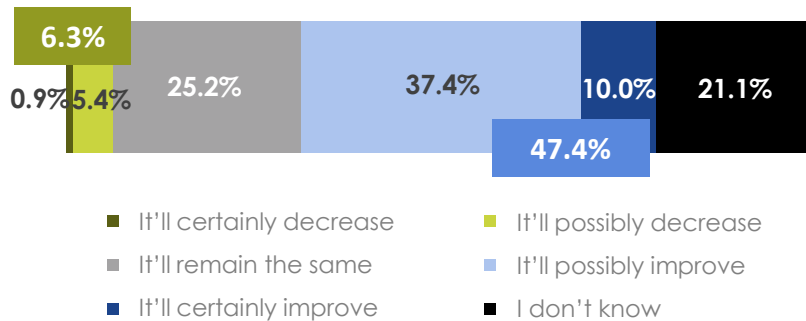
TRAFFIC IN THE CITY

Please rate the impact of Smart City solutions on reduction of traffic in cities?



SAFETY ON THE STREETS

Please rate the impact of Smart City solutions through bigger number of cameras and monitoring on city residents' safety on the streets?



Respondents gave rather positive reviews on solutions related to the development of smart cities.

43.3% of questioned individuals agree that Smart City solutions can become a factor in the improvement of safety on the roads. 8% of surveyed people have an opinion that safety on the roads can deteriorate.

Nearly half of respondents think that Smart City (cameras and monitoring) can improve safety of city residents on the streets. A contrary opinion is expressed by 6.3% of participants.

Only 10.5% of surveyed individuals think that Smart City solutions might lead to more traffic jams in cities, while 32.7% of respondents claim otherwise.

Basis: All respondents, N=1600



SMART HOME



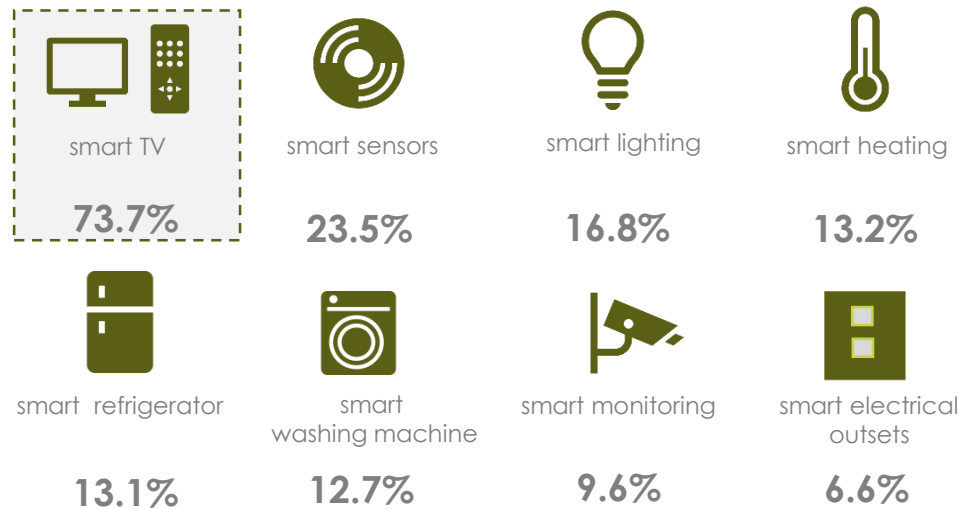
SMART HOME



What devices with access to the internet do you use?

35.5% of surveyed individuals heard the term "Smart Home". Only a negligible proportion (5.4%) confirmed the usage of such solutions.

Smart TV is the most commonly mentioned device with access to the Internet. It is used by 73.7% of respondents. Smart sensors also generated some interest (23.5%) as well as smart lighting (16.8%). Surveyed people also benefit from smart heating (13.2%), smart refrigerator (13.1%), smart washing machine (12.7%), smart monitoring (9.6%) and smart electrical outlets (6.6%).



Basis: All respondents, N=1600

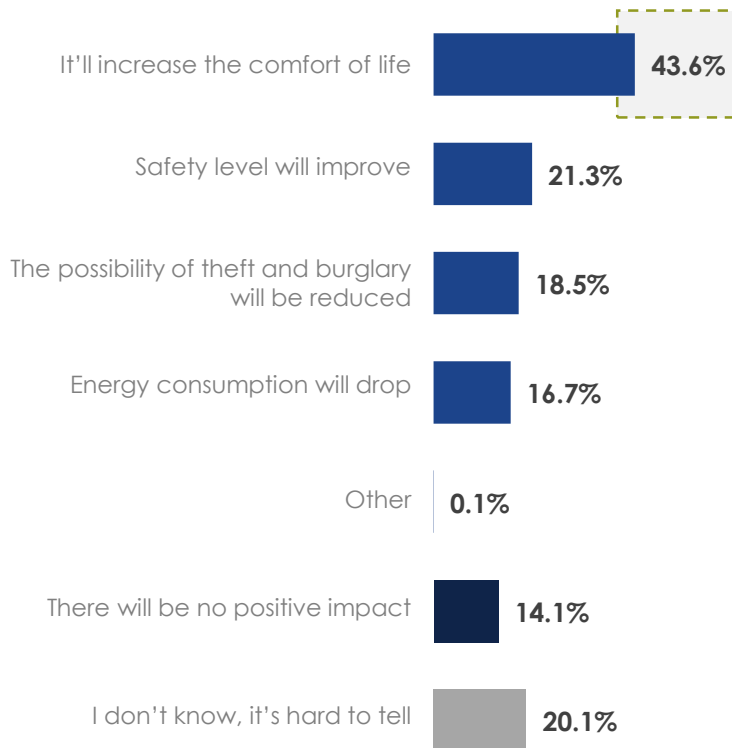
Basis: Users of Smart Home, N=83



POSITIVES



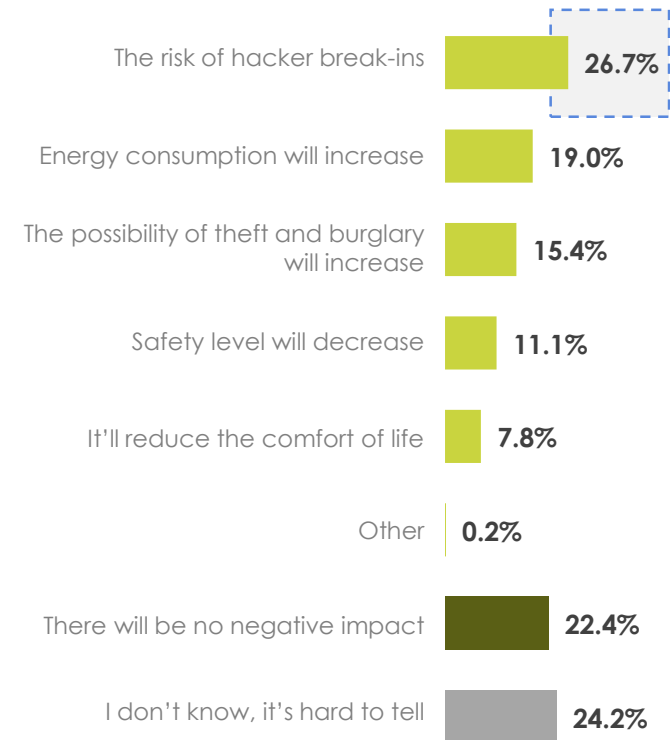
What positive impact on life in society will popularisation of Smart Home solutions have, in your opinion ?



NEGATIVES



What negative impact on life in society will popularisation of Smart Home solutions have, in your opinion ?



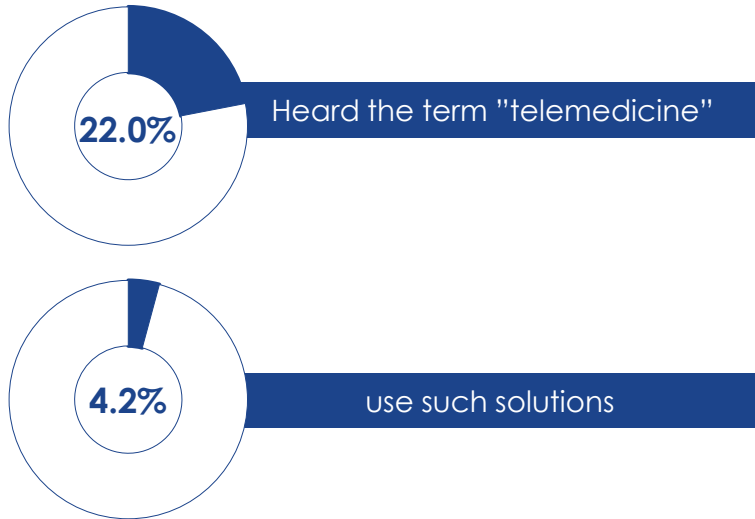
Basis: All respondents, N=1600



TELEMEDICINE



USE

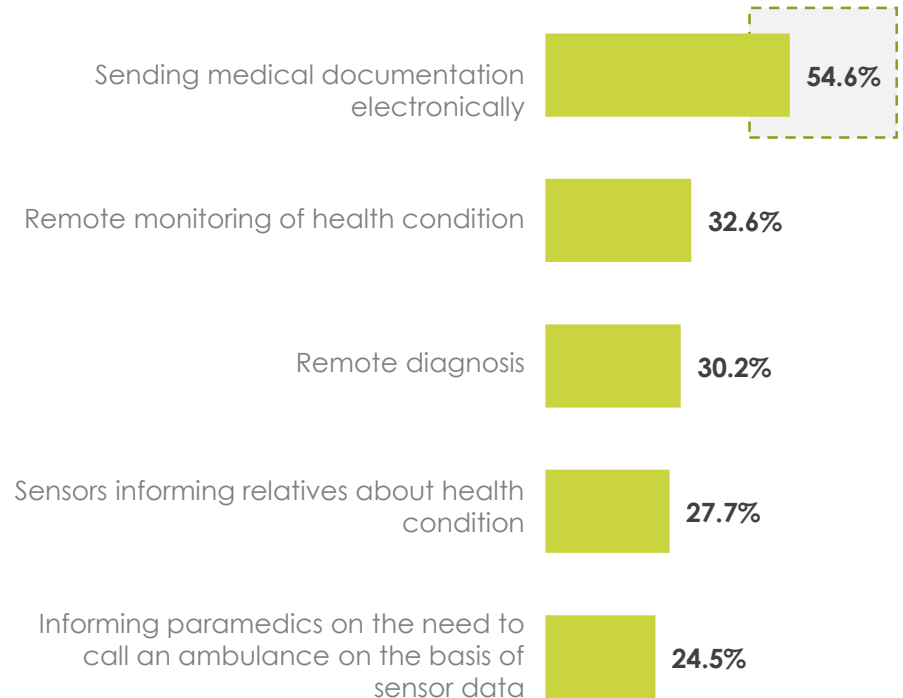


22% of participants surveyed heard the term "telemedicine", including 4.2% of them that used such solutions.

Those respondents who are familiar with telemedicine solutions mainly benefit from the possibility to send medical documentation through the Internet, remote monitoring of medical condition and remote diagnosis.

Which of those solutions in the scope of telemedicine would you like to implement, if needed?

TOP 5

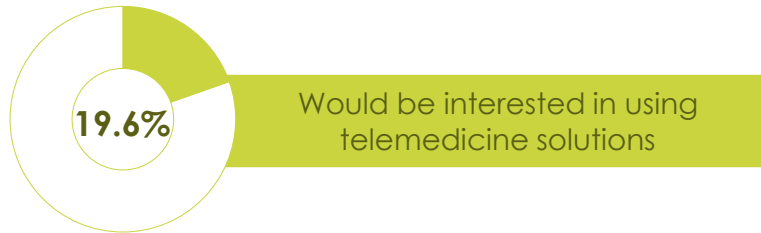


Basis: All respondents, N=1600

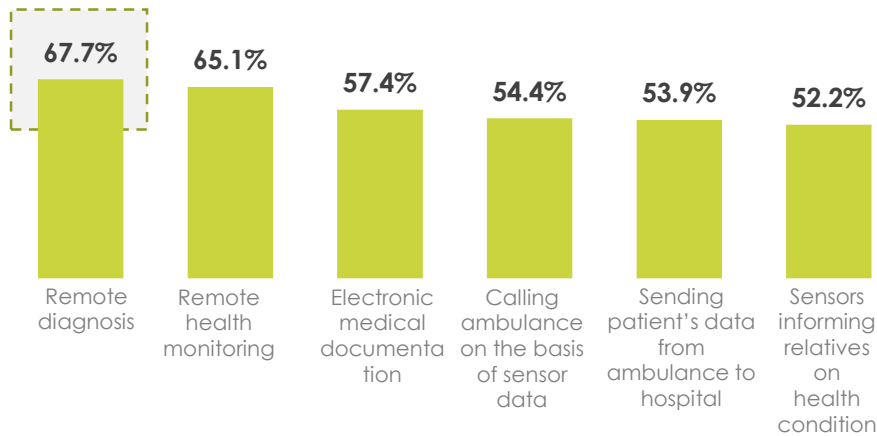
Basis: Respondents who implement telemedicine solutions, N=65



INTEREST

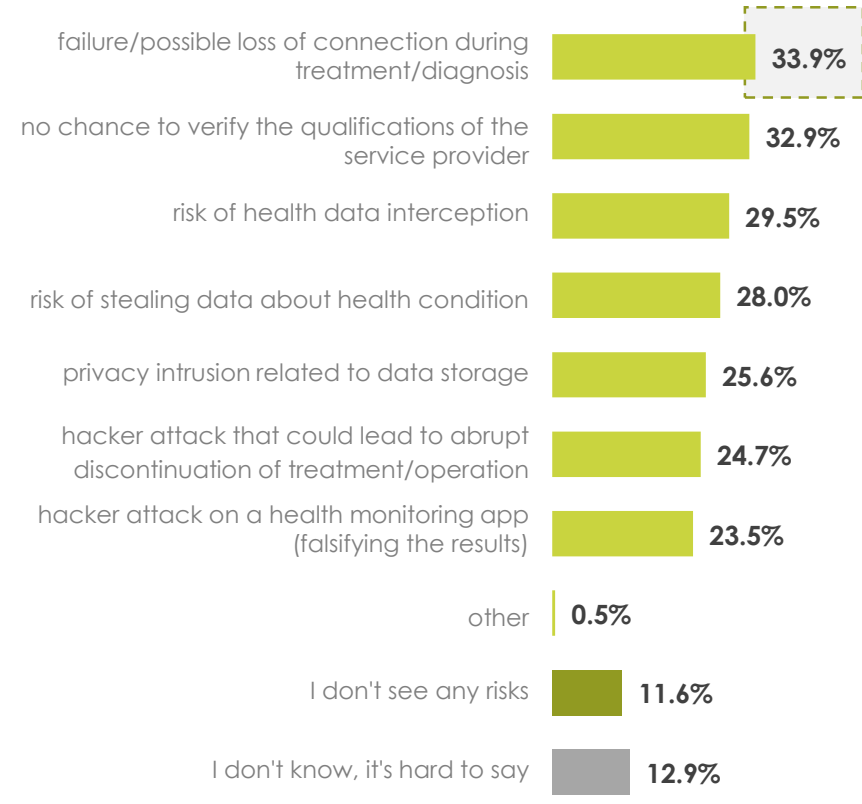


What solutions in the scope of telemedicine would you like to use if needed?



RISKS

What risks related to telemedicine do you notice?



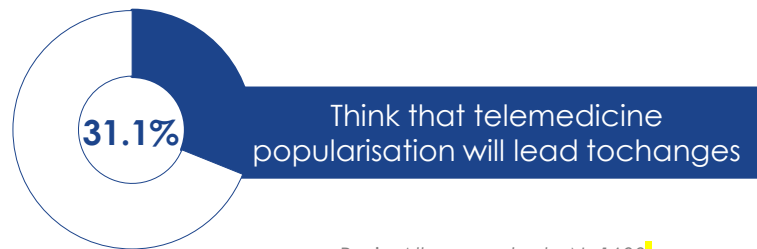
Basis: Individuals who don't use such solutions (N=1483);
 Basis: Individuals who want to use such solutions (N=290)

Basis: All respondents, N=1600

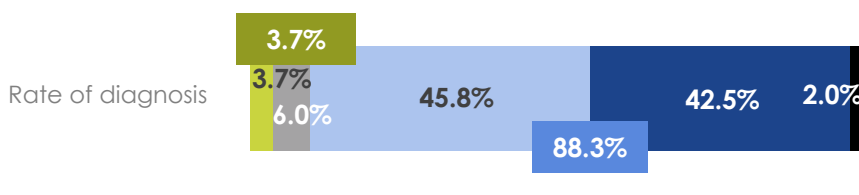
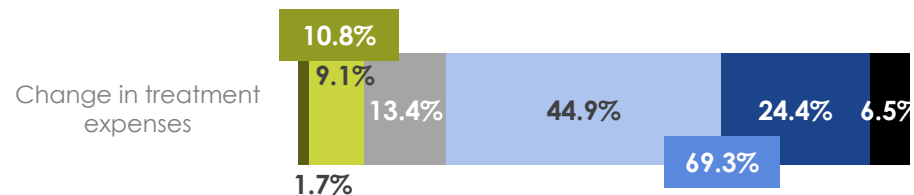
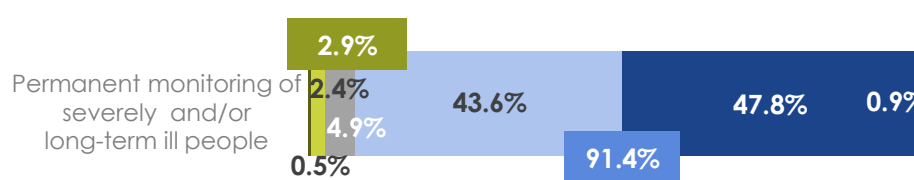
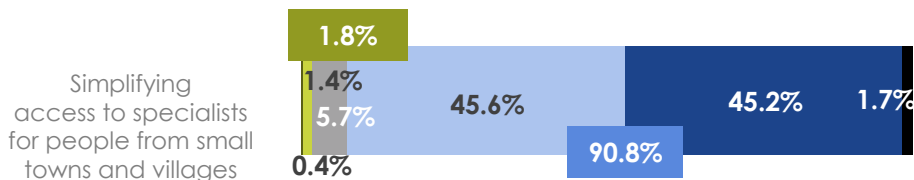
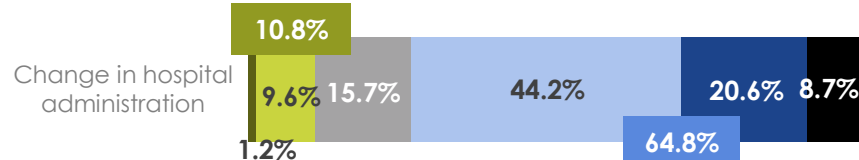
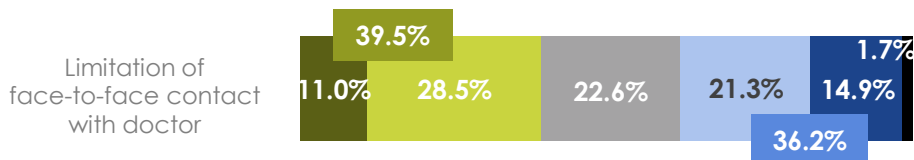


IMPACT ON LIFE

How popularisation of telemedicine will influence human life?



Basis: All respondents, N=1600



■ Certainly negative

■ Neither negative nor positive (neutral attitude)

■ Certainly positive

■ Possibly negative

■ Possibly positive

■ I don't know, it's hard to tell

Basis: Respondents who think telemedicine will lead to changes, N=503



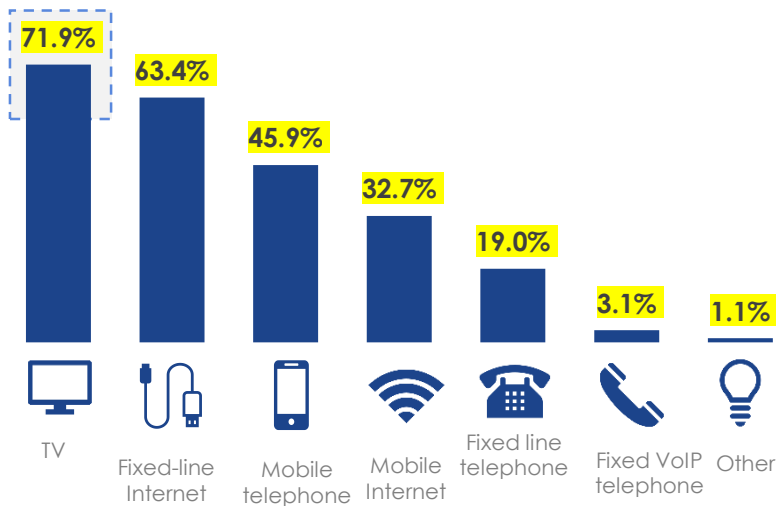
BUNDLED SERVICES



BUNDLED SERVICES



What services do you have as a part of a bundled offer?



EXPENDITURE

What is the average amount of a monthly bill for bundled services?



AVERAGE MONTHLY COST OF BUNDLED SERVICES

17.9% of respondents are users of bundled services. The bundle most often includes TV and fixed-line Internet, slightly less common – mobile phone.

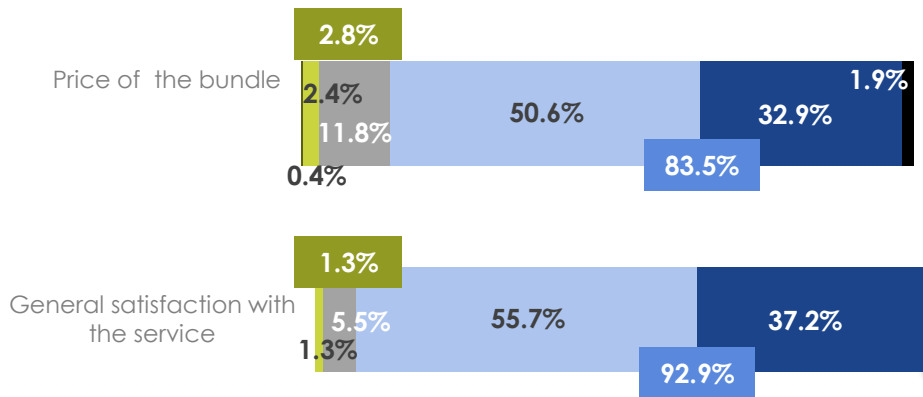
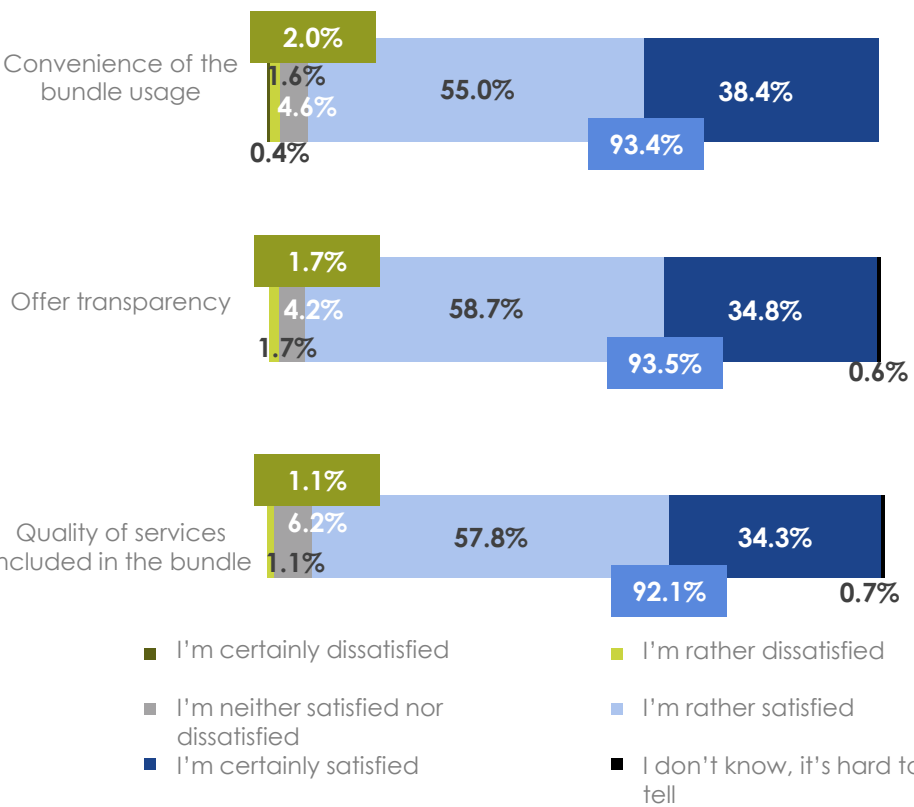
Individuals who participated in this survey pay 103.1 pln on a monthly basis for bundled services.

Basis: All respondents, N=1600



SATISFACTION

Please rate your satisfaction with the aspects regarding functioning of bundled services



The majority of surveyed people express their satisfaction concerning the functioning of bundled services. Such aspects as convenience, offer transparency, service quality and price contribute to this assessment.

92.9% of participants express general satisfaction with bundled services.

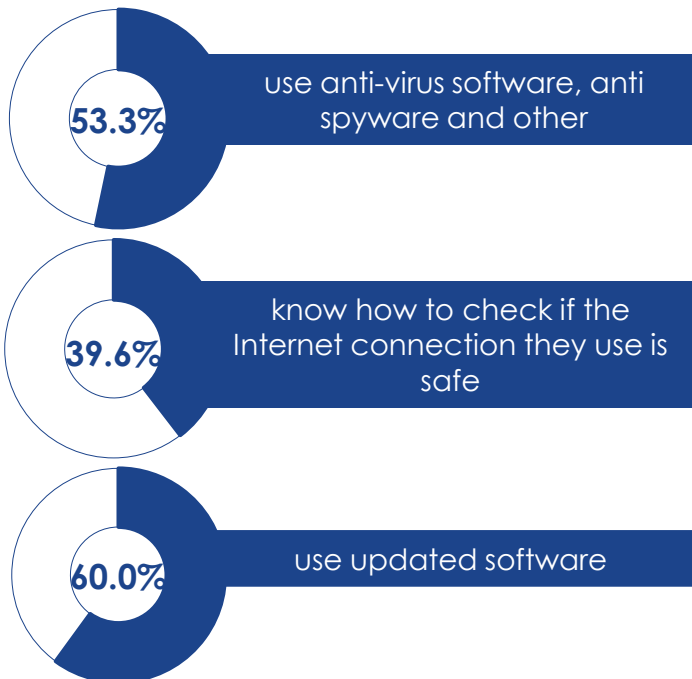
Basis: Users of bundled services, N=289



SAFETY ON THE WEB



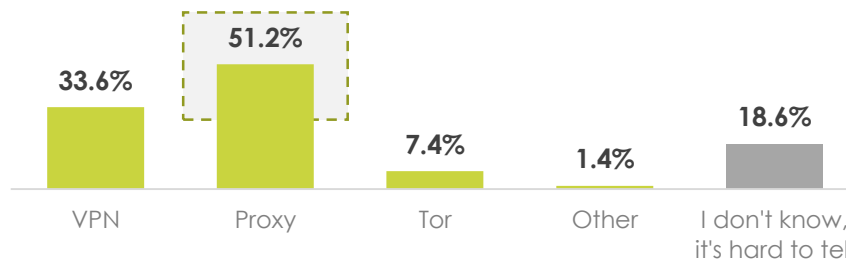
SAFETY ON THE WEB



PRIVACY



Which of those solutions improving the level of safety do you use?



Basis: All respondents who use solutions that improve the level of safety on the web, N=201

More than half of respondents (53.3%) use anti-virus software and up-to-date versions of available software (60%). 39.6% of questioned individuals know how to check if the Internet connection they use is safe.

20.2% of survey participants implement solutions that improve the level of safety on the web. Over half of that number confirmed the use of Proxy.

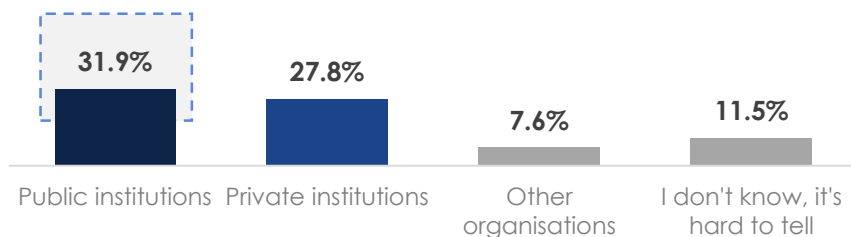
Basis: Respondents who use fixed or mobile Internet, N=997



DATA PROVISION

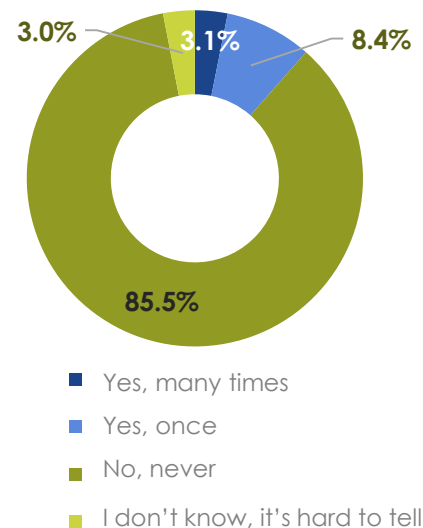


Komu w okresie ostatniego roku udostępnił(a) Pan/Pani swoje dane osobowe w sieci?



Basis: Respondents who are aware of the data they provide, N=364

Have you ever become a victim of abuse related to the use of data provided by you?



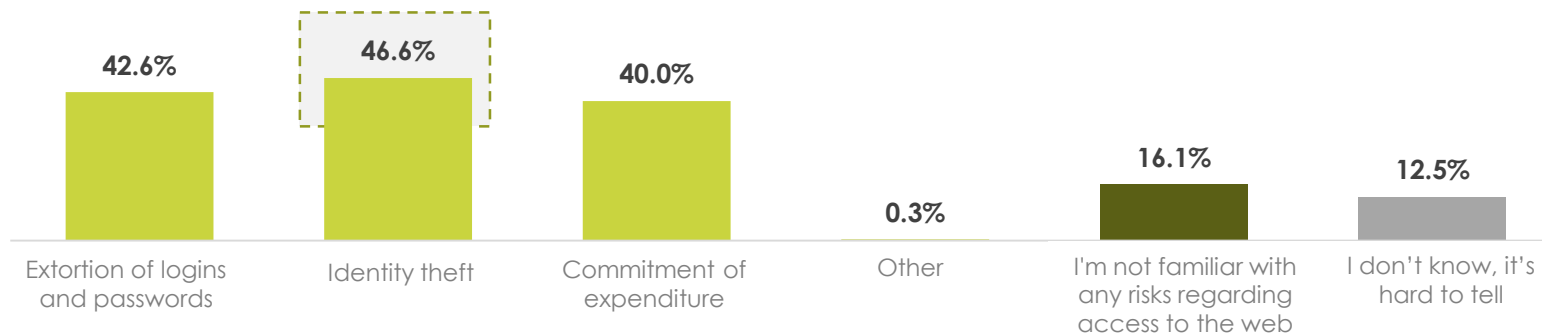
Basis: Respondents who are aware of the data they provide, N=364

35.8% of surveyed individuals declared that they don't publish any of their data in the Internet, while 56.7% of those people who provide their data online, are fully aware of their actions. Nearly every third person provides public institutions with their data (31.9%), and 27.8% - private institutions.

The majority of respondents (85.5%) have never become a victim of abuse related to the use of the data they provided.



RISKS ON THE WEB



Basis: All respondents,, N=1600

Surveyed individuals notice all mentioned risks on a similar level: logins and passwords extortion, identity theft, commitment of expenditure.

Only 16.1% of the people said that there were no risks involved related to the use of the Internet.

All respondents, N=1600



OVER-THE-TOP SERVICES

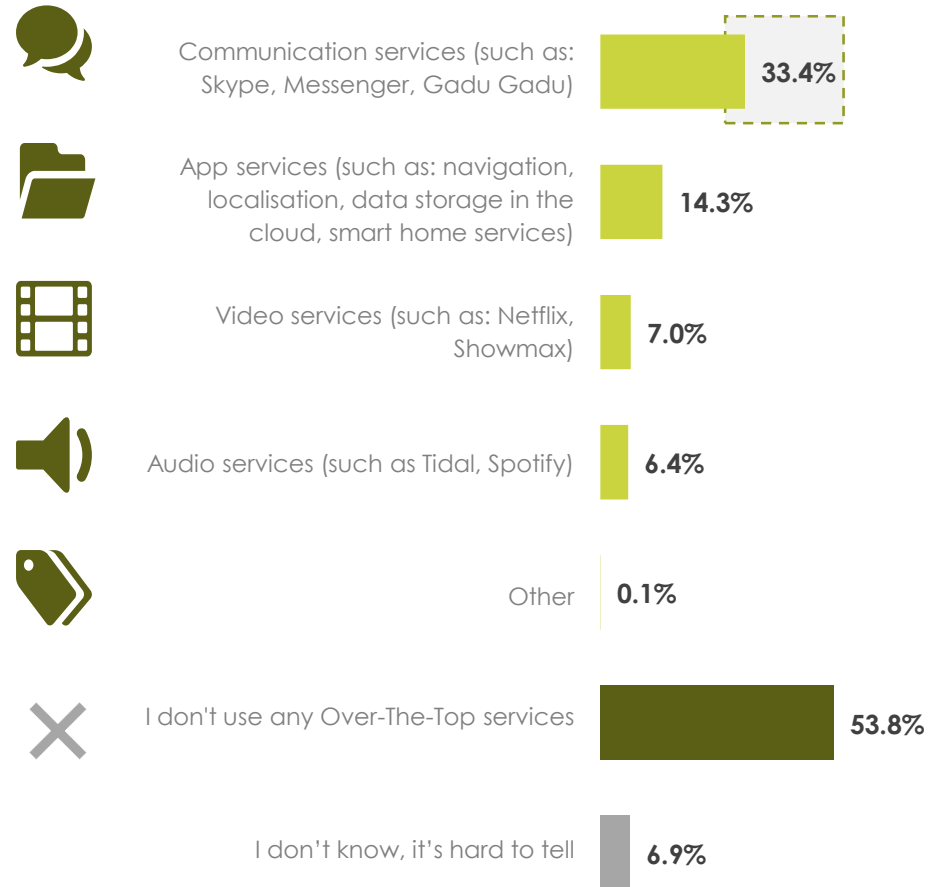


OVER-THE-TOP SERVICES



6.8% of survey participants heard the term Over-The-Top services. More than half of respondents don't use any Over-The-Top services. Every third person pointed at communication services (such as Skype, Messenger, Gadu-Gadu). 14.3% among questioned individuals use app services (such as navigation, location, data storage in the cloud, smart home services). The use of video services is declared by 7.0% of respondents, while audio services by 6.4%. In addition, 6.9% of respondents selected the "I don't know, it's hard to say" option.

What Over-the-Top-Services do you use?

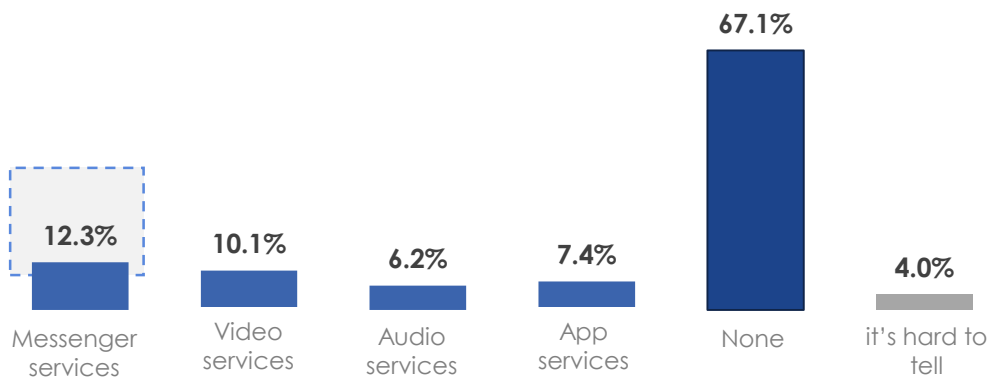


Basis: All respondents, , N=1600



OVER-THE-TOP SERVICES

Which of the Over-The-Top services you use are subject to payment?



What traditional services would you replace with Over-The-Top services?



Telephone services

14.7%



TV services

8.8%



Radio services

4.5%



I would like to use both simultaneously

18.9%



I don't plan to change traditional services for Over-The-Top services

21.9%

Two-thirds of those who use Over-The-Top services declare that none of the services they use are subject to payment. Among Over-The-Top services that are additionally charged most commonly mentioned (12,3%) by respondents were communication and video services (10,1%). In addition, 7,4% pointed at app services, and 6,2% - audio services.

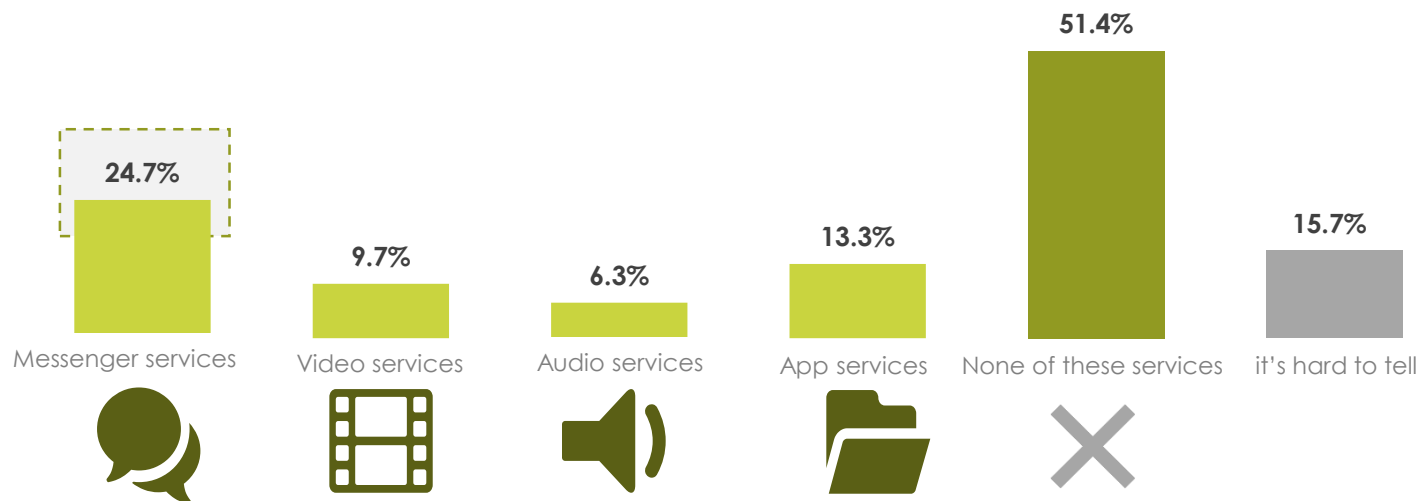
Respondents who use Over-The-Top services were asked what traditional services they would replace with Over-the-Top services. 14,7% of them indicated telephone services, 8,8% - TV, while 4,5% selected radio services. In addition, 18,9% of asked individuals would like to use both types of services simultaneously, and 21,9% declared that they wouldn't change traditional services for Over-The-Top Services.

Basis: Users of Over-The-Top services, N=614



OVER-THE-TOP SERVICES

The use of which of the following services would you consider in the future?



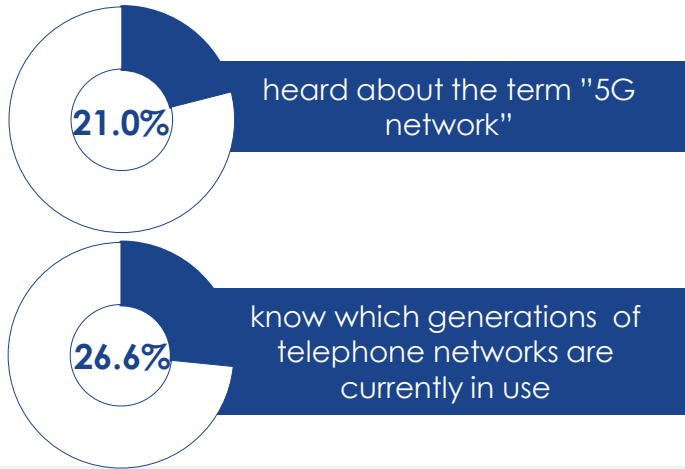
Half of respondents don't consider using any Over-The-Top services. The biggest number – one-fourth of respondents admitted that they take into consideration the use of communication services. The use of app services of that type was considered by 13.3%. Every tenth respondent pointed at video services, and 6.3% at audio services. In addition, 15.7% of participants, responded "I don't know, it's hard to say".

Basis: All Respondents, N=1600



5G NETWORK

5G NETWORK



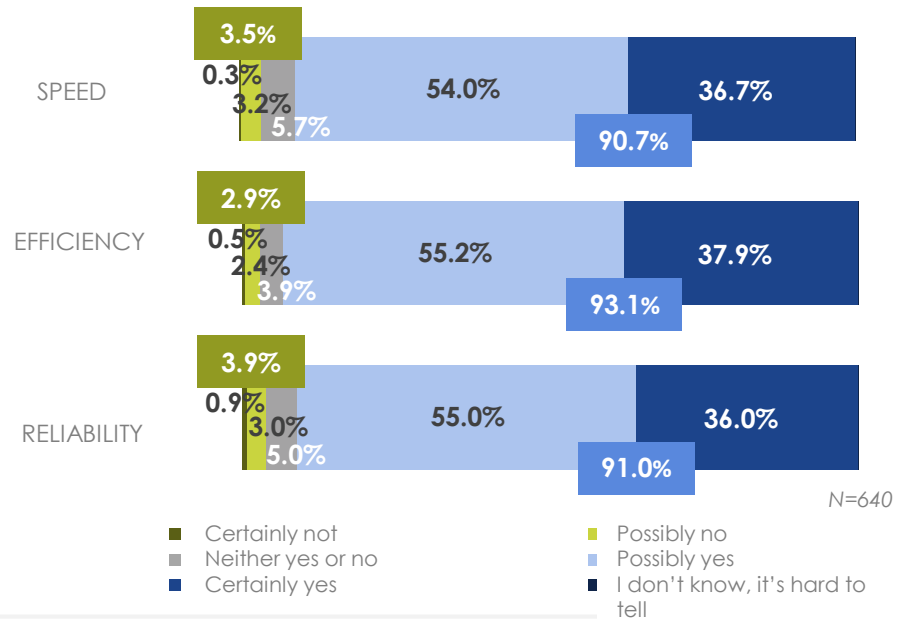
21.0% of respondents are familiar with the term „5G Network“. Slightly more than one fourth of surveyed individuals know which generations of telephone networks are currently in use.

A great majority of respondents who have fixed Internet connection at home declare using it (90.7%). Those people were asked to rate the parameters of the Internet in their possession. Respondents rated its speed (90.7% - total amount of "rather yes" and "certainly yes"), efficiency (93.1%) and reliability (91.0%) as sufficient.

FIXED INTERNET CONNECTION AT HOME



In your opinion, are the parameters concerning access to the internet that are currently in your possession at home sufficient?



Basis: All respondents , N=1600

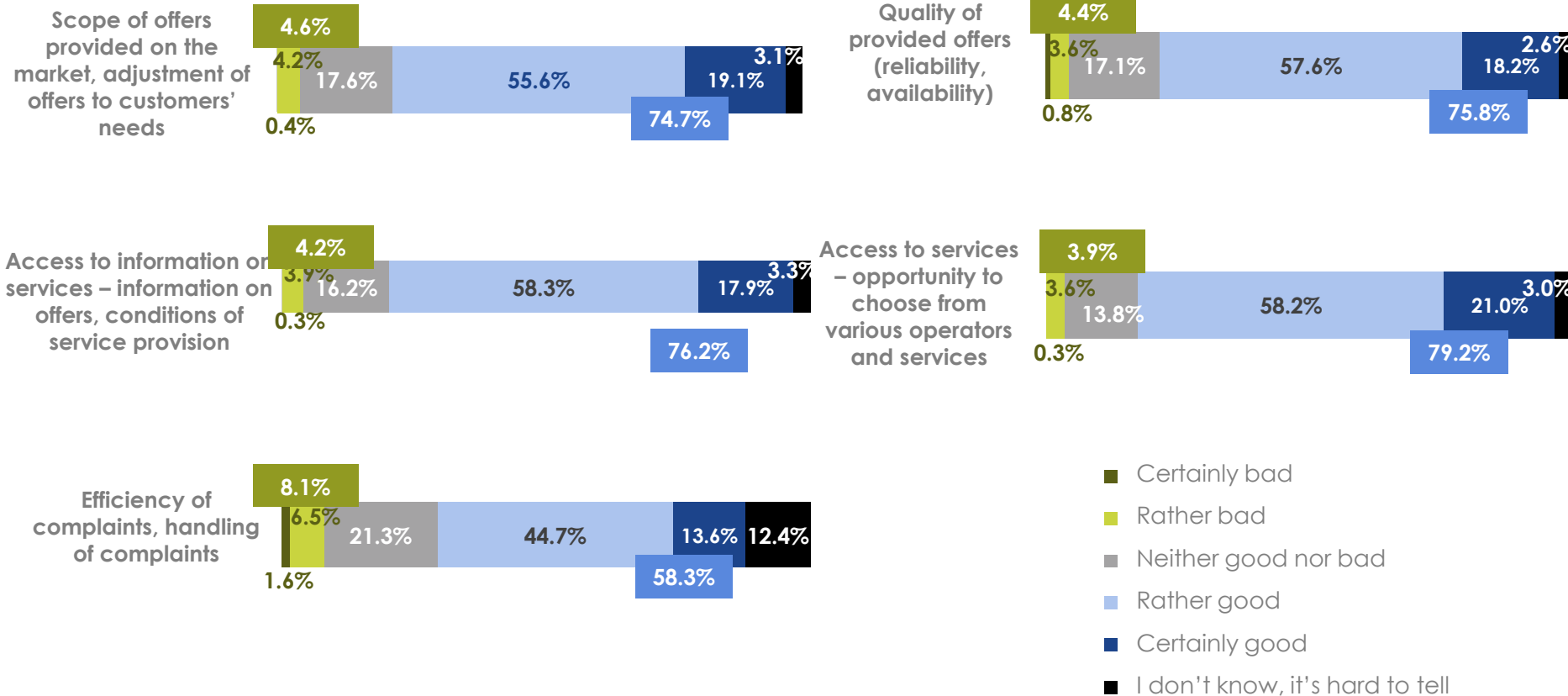


ASSESSMENT OF THE TELECOMMUNICATIONS MARKET



ASSESSMENT OF VARIOUS ASPECTS OF THE TELECOMMUNICATIONS MARKET IN POLAND

Please rate various aspects as regards the functioning of the telecommunications market in Poland

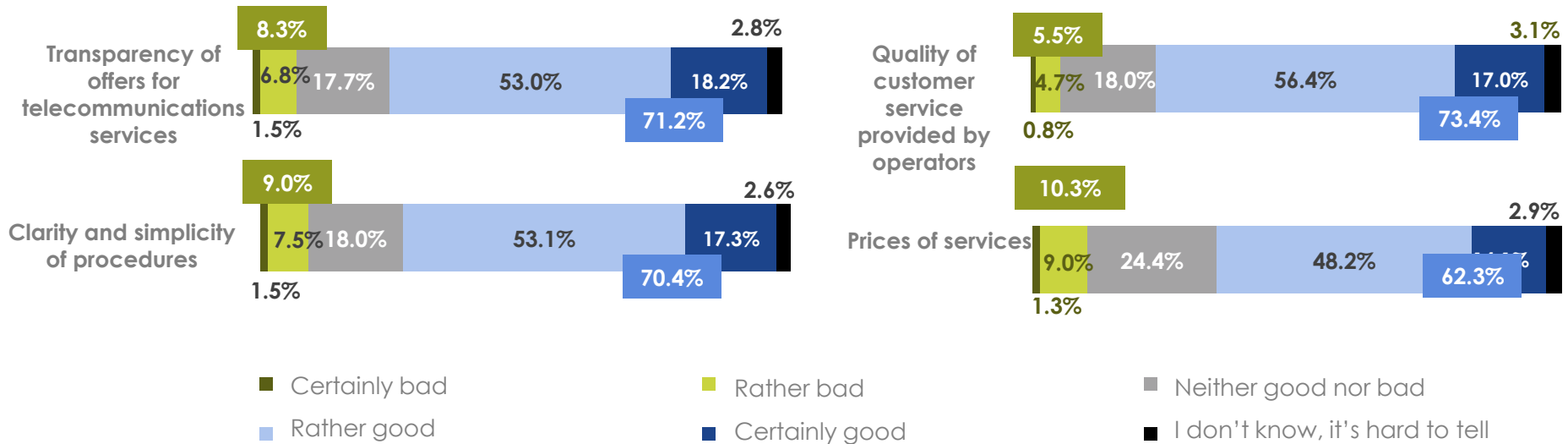


Basis: All respondents, N=1600



ASSESSMENT OF VARIOUS ASPECTS OF THE TELECOMMUNICATIONS MARKET IN POLAND

Please rate various aspects as regards the functioning of the telecommunications market in Poland



Individuals involved in this survey gave the most positive reviews concerning access to services – opportunity to choose from various operators and services (79.2% - rated "rather good" and "certainly good"). They are most unhappy about the prices related to services (10.3%) and efficiency of complaints as well as handling of complaints – 8.1%.

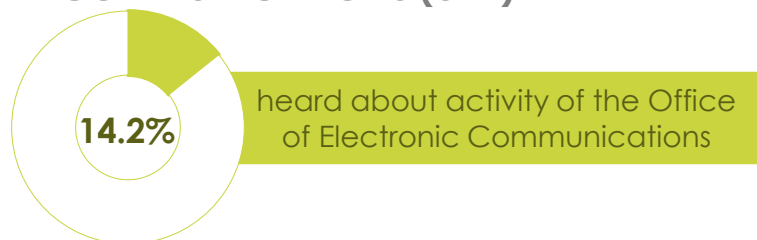
Basis: All respondents, N=1600



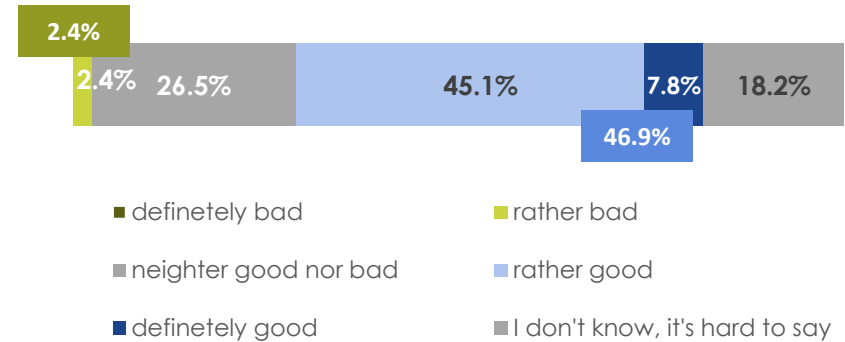
TELECOMMUNICATIONS MARKET



THE OFFICE OF ELECTRONIC COMMUNICATIONS (UKE)



How would you rate the activity of the Office of Electronic Communications?



18% of respondents notice positive changes that have occurred in the previous years on the telecommunications market. Only 4.3% of questioned individuals are aware of negative changes.

14.2% of respondents heard about the Office of Electronic Communications. This institution received positive rates from 46.9% of surveyed individuals (total amount of "rather good" and "certainly good" responses). 2.4% of participants are unhappy with actions of this authority (total amount of "rather bad" and "definitely bad" responses).

Basis: All respondents, N=1600

Basis: Those who know UKE, N=236



POSITIVES



What positive changes have you noticed on the telecommunications market in the previous year?

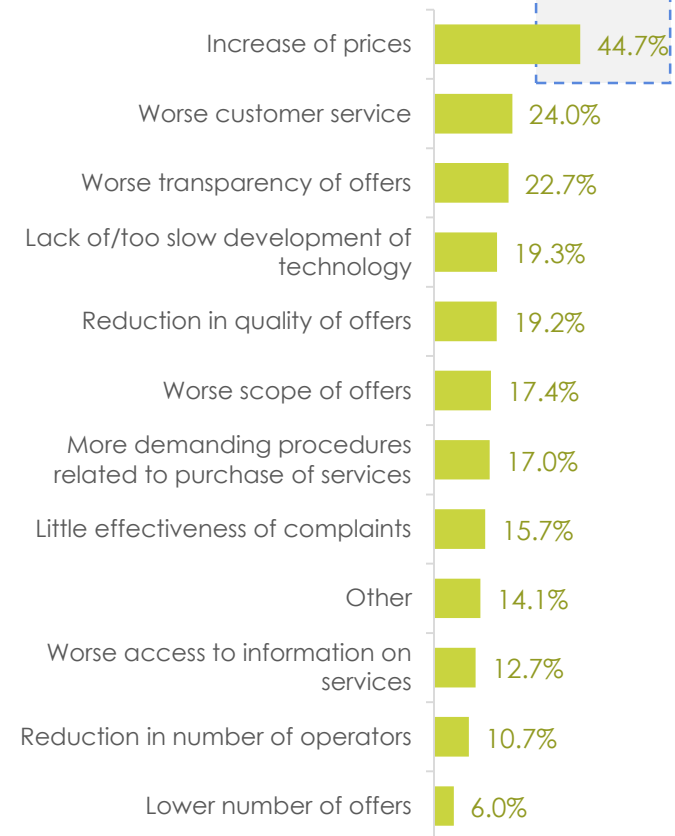


Basis: All respondents who notice the positives N=286

NEGATIVES



What negative changes have you noticed on the telecommunications market in the previous year?



Basis: All respondents who notices the negatives ,N=67



CONCLUSION



MOBILE TELEPHONY



MOBILE TELEPHONY

91.9% of questioned individuals have a mobile telephone, while a great majority of people have one active telephone number.

A business phone is owned by only around 5% of respondents.

4.6% of surveyed people have both a private and a business phone, but the phone is much more frequently used for private purposes (80.7%).

A smartphone is the most popular type of a mobile telephone used by seven out of ten individuals involved in this survey.

Participants on average spend 48.7 pln per month for mobile telephony services.

Post-paid is the most commonly selected form of subscription, used by 58.6% of respondents.

71.1% of individuals decide to have access to the Internet on their phone as part of a post-paid or pre-paid offer.

A telephone is mainly used to browse websites (75.5%), receive/send e-mail messages (63.4%) and visit social networks (61.9%).

30.0% of respondents installed a banking app on their phone, one-fourth of which make contactless payments through their phone.

PREMIUM RATE SERVICES

3.6% of respondents use Premium Rate services. If they decide to send a premium rate message, they do it to participate in a contest, voting or a charity event.

UNIVERSAL SERVICE

Reaching out to the Nationwide Directory Enquiry Service and the Nationwide Directory is rather unpopular among participants of this survey. Most of them are also not interested in using such services on the Internet (62.4%).

8.1% of them used fax in the previous year (including 75.1% who did it at their workplace).



ACCESS TO THE INTERNET



FIXED INTERNET CONNECTION

70.2% of surveyed individuals say that they have access to fixed-line internet. 51.2% of them have an opinion that nothing could convince them to switch to mobile Internet.

Respondents' average monthly expenditure on fixed-line Internet amounts to 52.7 pln.

Maximum speed of fixed-line Internet connection is 83.2 Mb/s on average.

Respondents decide to choose this speed due to its price. Such an answer was given by 36.7% of surveyed people.

MOBILE INTERNET

Poles use mobile access primarily on their mobile phones. 59% of them express an opinion that nothing would convince them to start using fixed-line Internet instead. As the biggest advantage of mobile Internet, most often they name improved mobility and the need to use the Internet outside their house (46.6%).

Respondents' monthly bills related to mobile Internet amounted to 43.3 pln on average. One-third of them declare that they have no limit for data transmission. The maximum speed of mobile Internet is 74.5 Mb/s on average, even though most respondents are unable to provide a precise answer. Respondents' decide to choose this speed mostly due to price (43.3%).

LTE TECHNOLOGY

68.5% of participants are familiar with LTE technology. 73.1% of those who have access to the Internet use LTE technology.

Smartphone is a device on which LTE technology is most often used (90.7%).

An overwhelming majority of respondents gave positive reviews on the quality of mobile Internet in LTE technology (93.1%).

NO ACCESS TO THE INTERNET

Nearly half of respondents (45.9%) have no access to the Internet due to lack of such need. 36.2% of participants blame their incompetence in this regard.

USE OF INTERNET SERVICES

49.2% of respondents browse websites on a daily basis, 35.9% of respondents visit social networks everyday.



THE INTERNET OF THINGS



22.7% of questioned individuals heard the term the internet of things (Machine to Machine), while only 10.8% of respondents use these solutions - mainly at home (72.8%). Every fourth person uses them in a workplace.

Tested individuals who subscribe to the Internet of things services usually use a package of text messages (23.5%).

According to 30% of respondents, Orange is the leading operator providing such services.

Respondents who use machine to machine solutions, most often decided to use Smart TV (59.9%). Respondents who consider using these solutions, mainly would be interested in smart home solutions (55.8%), followed by Smart TV (52.8%).

Saving of time is among most commonly mentioned benefits of M2M (42.8%). Risks usually involved a reduced sense of privacy (22.5%) and unauthorised access to data.

AUTONOMOUS VEHICLES



23.4% of respondents heard about autonomous vehicles. 18.7% of them know that they could buy a vehicle with an autopilot.

8.4% of respondents would provide access to their sensitive data in order to use an autonomous vehicle.

30.2% of those who were tested have an opinion that autonomous vehicles are safer than traditional vehicles.

Respondents think that autonomous cars will have an impact on the life of society and will lead to reduction in the number of accidents (23.1%) and improve safety on the roads (18.9%). 18.4% of participants fail to notice their positive impact.

30.8% of surveyed people claim that autonomous vehicles might have a negative impact on drivers' competence and result in increase of purchase and upkeep expenses.

11.8% of respondents don't notice any negative influence of autonomous vehicles on social life.



SMART HOME



35.5% of tested individuals heard about the term "Smart Home". However, only a negligible percentage (5.4%) benefit from those solutions.

Smart TV is a device with access to the Internet most commonly used by the respondents (73.7%).

Nearly half of questioned people (43.6%) have an opinion that popularisation of Smart Home solutions may improve the comfort of life. 26.7% of participants of this survey are afraid of hacker-break-ins.

TELEMEDICINE



22.0% of tested individuals heard about telemedicine, and 4.2% used such solutions.

People who were familiar with telemedicine, most often used it to send medical documentation electronically (54.6%).

19.6% of respondents are interested in using telemedicine solutions. Remote diagnosis was usually mentioned.

Most respondents (33.9%) are afraid of a failure or a loss of connection during treatment or examination.

31.1% of surveyed individuals think that popularisation of telemedicine will lead to changes.

SMART CITY

11.4% of participants heard about Smart City.

Similar percentage of people think that Smart City might lead to increase in costs of everyday life so it won't bring any significant changes in city life.

39.1% of those who were surveyed would like to see smart lighting to be implemented .

Respondents provide positive reviews on solutions related to smart city development. They think that first and foremost they will improve safety on the roads (43.3%), increase residents safety on city streets (47.4%) and reduce traffic jams 32.7%).

BUNDLED SERVICES



17.9% of respondents use bundles, which most often include TV and fixed-line Internet.

Respondents on average spend 103.1 pln on bundled services on a monthly basis.

An overwhelming majority of surveyed individuals (92.9%) express their satisfaction with bundled services.



5G

SAFETY ON THE WEB



More than half of respondents (53.3%) take care of their safety on the web and use both anti-virus software and up-to-date software (60.0%).

35.8% of tested people declare that they provide no data online, while those who do it (56.7%), are aware of it.

Most respondents (85.5%) never became a victim of abuse related to the use of provided data.

Those questioned, on a comparable level notice the following risks: logins extortion, identity theft and commitment of expenditure. Only 16.1% of them claim that they are unable to name any risks related to the use of the Internet.

OVER-THE-TOP SERVICES



Only 6.8% of surveyed individuals heard about Over-The-Top services.

Over half of respondents don't benefit from Over-The-Top services. Every third person points at the use of communication services.

People who use Over-The-Top services, say that none of the services they use are subject to payment (67.1%).

51.4% of respondents don't consider using any Over-The-Top services.

5G NETWORK

21.0% of respondents heard about 5G network. Slightly more than one-fourth of tested individuals know the generation of mobile networks that are currently in use.

An overwhelming majority of respondents (90.7%) use fixed-line Internet at home.

The parameters of access to the Internet, such as speed, efficiency and reliability received positive reviews from the majority of tested individuals .

ASSESSMENT OF THE MARKET



The worst rated aspect as regards the functioning of the telecommunications market is related to existing prices, while the best rated include access to services - opportunity to choose from various operators and services.

18% of respondents noticed positive changes that took place in the previous year. Both negative and positive aspects, mentioned by respondents were related to pricing. Also the change in the number of offers available got positive reviews.

The Office of Electronic Communications sounds familiar to 14.2% of tested individuals, and nearly half of respondents provided positive reviews on actions of this institution.

THANK YOU FOR ATTENTION

REPORT ON SURVEY OF INDIVIDUAL CUSTOMERS

Warsaw, Gdańsk, 22 December 2017