HUNGARIAN CENTRAL STATISTICAL OFFICE

STATISTICAL REFLECTIONS

22 March 2016

Telecommunications, Internet, Quarter 4, 2015

Contents

Introduction 1
Sales and headcount data of the information and communication sector 1
Telecommunications 1
Internet 3
Methodological notes 4

Introduction

In the fourth quarter of 2015, the number of registered mobile phone subscriptions exceeded 11.8 million. Within this, the proportion of post-paid subscriptions increased to 58%. Calls initiated from mobile networks (2.0 billion calls) decreased by 2.4% in number and grew by 6.0% (to 5.3 billion minutes) in duration. Calls initiated from mobile phones accounted for more than four fifths of the total time spent on the phone. Mobile data traffic rose year-on-year by 40%. The number of internet subscriptions continued to increase: at the end of the fourth quarter of 2015, it was more than 8.1 million, 67% of which were mobile internet subscriptions.

Sales and headcount data of the information and communication sector

According to preliminary data, in the fourth quarter of 2015, according to the statistical main activity, the sales revenues at current prices of operating businesses – employing at least 5 persons – included in the section of information and communication[1] were HUF 791 billion, which was 12% higher than in the fourth quarter of the previous year. Among the various sectors, businesses in telecommunications, representing a share of 35%, had revenues of HUF 275 billion, this was 2.6% less than in the previous year. Enterprises classified into the divisions of information technology and other information service activities saw the fastest growth of 26% in their combined revenues (HUF 364 billion). In terms of sales revenue, we observed a significant increase in the data of economic organizations operating in the divisions of publishing (6.5%) and film, video, television program production, audio release, program compilation and broadcasting (21%).

In the fourth quarter of 2015, according to the data of institutional labour statistics, the number of full-time employees in enterprises employing at least 5 persons in the section of information and communication was 71.3 thousand, which was 1.3% higher than a year earlier. Within this, in the largest proportion (62%), economic organizations operating in the divisions of information technology and other information service activities provided full-time employment for 44.1 thousand employees, which was 5.9% higher than a year earlier. Compared to the same period of the previous year, in the other divisions of the information and communication section, the numbers of employees decreased by between 3.4% and 8.1%. Publishing activities saw the largest reduction in the number of employees.

In the fourth quarter of 2015, the average monthly gross earnings per person (HUF 472 thousand) increased by 5.0% in the whole of the section. (In terms of the national economy as a whole - without public workers - average monthly gross earnings were HUF 277 thousand). Within the division of telecommunications, where the average monthly gross earnings per person were the highest per capita (HUF 501 thousand), monthly gross earnings increased by 1.3% (HUF 6 thousand) compared to the fourth quarter of 2014. The gross average earnings of employees were the lowest in the branch of publishing activities (HUF 359 thousand), amounting to 76% of the average of the section of information and communication.

Telecommunications

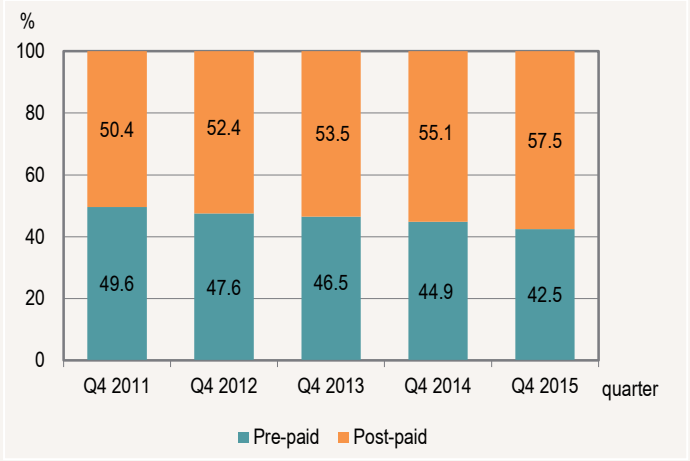
In 2015 as a whole, the number of subscribers grew despite the increasingly saturated mobile market. The fierce competition between service providers is demonstrated by the fact that service providers seek to acquire not only new customers but the subscribers of their competitors. At the end of the fourth quarter of 2015, the **number of mobile phone subscriptions** was 11.9 million, the stock expanded by 69 thousand (0.6%) over a year.

Within the total stock, the number of post-paid subscriptions continued to rise, at the end of the fourth quarter of 2015 it was more than 6.8 million, this was 4.9% more than in the same period of 2014. By contrast, the number of prepaid subscriptions decreased by 250 thousand and their proportion was 2.4 percentage points lower.

The increasing proportion of post-paid subscriptions can be explained by the fact that in addition to the new customers some of the pre-paid subscribers switch to a contractual package because the minute charges of post-paid subscriptions are lower in many cases and also provide data traffic for the customers.

Figure 1

Distribution of mobile-subscriptions



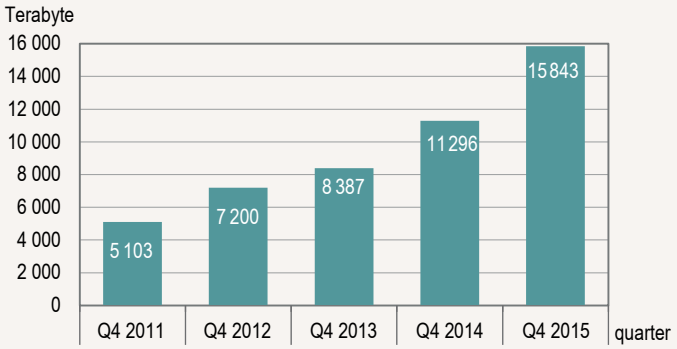
Along with the spread of combined service packages and post-paid subscriptions the number of **mobile data subscriptions** also continues

[1] According to NACE Rev. 2, the following areas are classified into the section of information and communication (J): the division of telecommunications (61 according to NACE Rev. 2), divisions of information technology and other information service activities (62 and 63 according to NACE Rev. 2), divisions of publishing (58 according to NACE Rev. 2) and film, video, television program production, audio release, program compilation and broadcasting (59-60 according to NACE Rev. 2)..

to rise. Compared to the fourth quarter of 2014, data traffic increased by 40% to over 15.8 thousand terabytes. 47% of total data traffic came from internet usage on the 3G / UMTS[2] system. In 2015, data traffic was 55.9 thousand terabytes in mobile networks, which was 48% higher than a year earlier. The continuous growth of data traffic is the result of the development of network infrastructure and the proliferation of portable internet-enabled technological instruments.

Figure 2

Changes in mobile data traffic



In quarter 4 2015, the number of SMS messages sent decreased by 2.1% and that of MMS fell by 12% compared to the same period a year ago. (In 2015 as a whole, the former fell by 3.7% and the latter by 11% compared to a year earlier.) The ongoing decline was mainly related to the appearance of replacement applications of smart phone mobile internet.

In October-December 2015, 2 billion calls were initiated from mobile networks, which was 2.4% lower than a year ago. In 2015 as a whole, 8.1 billion calls were initiated, their number was virtually unchanged year-on-year (+0.1%).

In the fourth quarter of 2015, the duration of calls made from mobile networks grew by 6.0% (to 5.3 billion minutes). Compared to the previous year, the duration of calls to own network representing the largest share (59%) increased by 1.8%. Among the minute time periods of calls initiated from mobile networks, the minute time period of international calls increased the most (by 25%) relating to a decrease in roaming charges. In 2015, the duration of calls initiated from mobile networks exceeded 20 billion minutes, which was 7.1% higher than a year ago.

The quarterly number (169 pieces) of calls per mobile subscription slightly decreased compared to the fourth quarter of the previous year. There was an average of 444 minutes of phone calls per subscription, this was 4.8-minutes of phone calls per day.

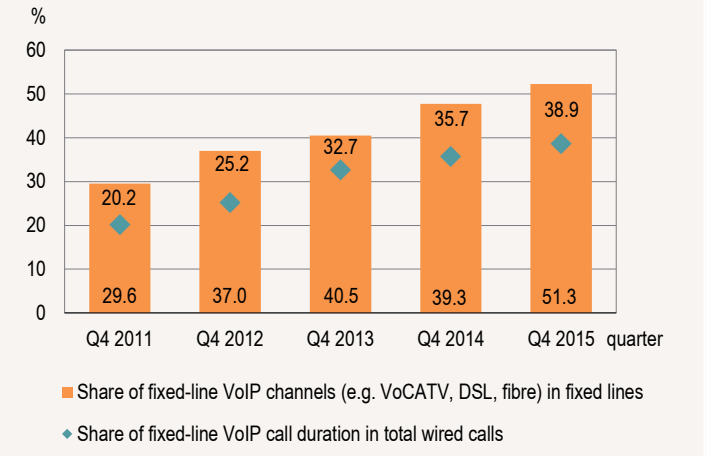
At the end of the fourth quarter of 2015, **the number of fixed lines** was 3 million 86 thousand, 2.5% more than in the same period of the previous year. The number of ISDN lines (343 thousand) decreased by 6.5% in one year. The share of VoIP audio channels (cable television and broadband fixed telephone services) within the number of fixed lines increased to 52%, which was an increase of 4.6 percentage points compared to the year before. At the end of the fourth quarter, the number of fixed lines per 100 inhabitants was 31.

82% of connected fixed lines were individual main lines and 17% were business main lines. Just over 1.0% of all connected main lines were public and other main lines.[3]

The number and duration of fixed-line calls decreased by 11 and 5.6% respectively compared with quarter 4 2014. The ratio of VoIP type calls to all calls (35%) grew by 4.2 percentage points over a year. Fixed VoIP[4] accounted for 39% of the total call duration. In 2015, calls initiated from fixed line networks decreased by 10% in number and by 4.7% in duration compared to the previous year.

Figure 3

Proportion of fixed VoIP channels and call duration

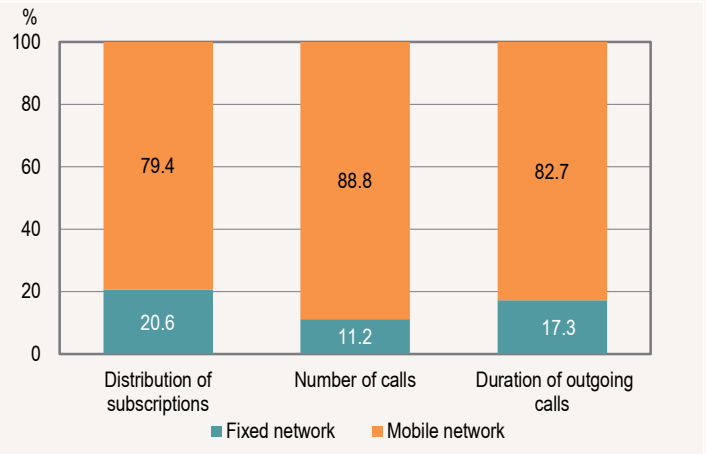


73% of fixed line calls were initiated from individual main lines and 26% by business subscribers. Individual and business calls accounted for 88% and 12% respectively of the minute time of fixed-line phone calls. The average duration (5.3 minutes) of calls initiated by individual subscribers was 3.4 minutes higher than the duration of phone calls initiated from business main lines.[5]

Due to the spreading discount packages, which frequently include considerable time periods and on-net calls free of charge, subscribers had fewer but longer fixed-line calls (4.4 minutes) than mobile calls (2.6 minutes). In the fourth quarter of 2015, the number of calls per line (without internet calls) was 82, which was a decrease of 13 compared to a year earlier. Calls initiated from fixed lines accounted for more than one sixth of the total time spent on the phone.

Figure 4

The distribution of the more important data of fixed and mobile phone calls, quarter 4 2015



Based on preliminary data, in the fourth quarter of 2015, the net revenues of the observed telecommunication service providers (internet, cable TV, telephone) from telecommunication activities (HUF 209 billion) were 2.2% higher at current prices than in the same period last year (HUF 204 billion). The rise in the net revenues from fixed line services can be mainly attributed to network developments and combined packages becoming more popular. Compared to the previous year, revenues from mobile telecommunication services rose, which - in addition to the low base - were related to the emergence of new market players.

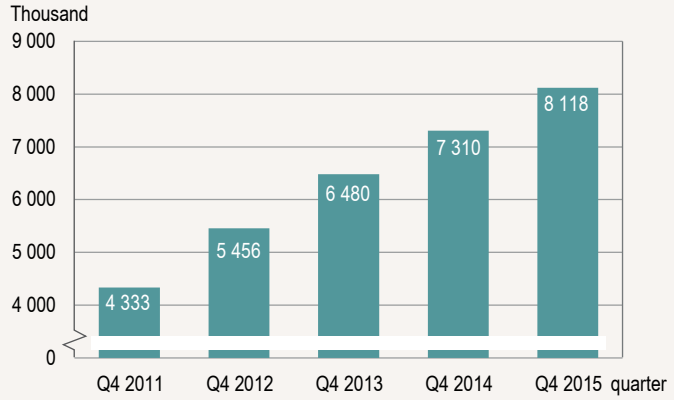
[2] 3G/UMTS (Universal Mobile Telephone Service): third generation mobile communications, it is a procedure for data transmission through extensive, bidirectional radio communication
[3] *Source:* National Statistical Data Collection Programme (OSAP), Ministry of National Development (MND) based on data collection No. 1707 titled 'Interim data of telecommunication services'
[4] Fully or partially VoIP technology (voice services that are transported via the Internet or other IP-based networks) based fixed calls.
[5] *Source:* National Statistical Data Collection Programme (OSAP), Ministry of National Development (MND) based on data collection No. 1707 titled 'Interim data of telecommunication services'

Internet

A dynamic growth continued in the internet market, at the end of the fourth quarter of 2015 the number of subscriptions exceeded 8.1 million, which was 11% more than in the same period of 2014. The market concentration was high: 10 companies accounted for more than 96% of subscriptions. In the period under review, personal subscriptions and business subscriptions accounted for 81% and 19% respectively of all subscriptions. It was unchanged compared to the same period of the previous year.

Figure 5

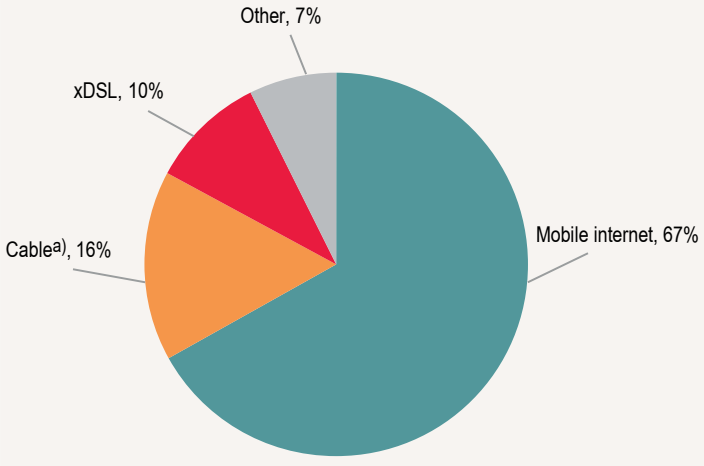
Changes in the number of internet subscriptions



The dynamic development of the past quarters is explained by the rapid adjustment of service providers to technological changes as well as the ongoing fierce price competition. In the fourth quarter of 2015, the wireless segment – within this the increasingly affordable mobile internet which forms the largest part – increased by 14% compared to the same period of the previous year. Mobile internet accounted for 67% of subscriptions; its proportion grew by 1.8 percentage points over a year.

Figure 6

Distribution of internet subscriptions by type of technology, at the end of quarter 4 2015



a) Modems fitted to the cable television network are suitable to start and receive digital signals.

At the end of quarter 4 2015, out of the two most significant technologies of fixed internet, the number of cable network subscriptions - having a 16% share - increased by 5.8% (70.8 thousand) year-on-year, while the group of xDSL subscriptions rose by 1.4% (11.3 thousand). Over a year, there was a 1.7 percentage point reduction in the proportion of subscriptions (26%) of broadband services (cable and xDSL). The number of subscriptions in the other category - which includes LAN internet and next-generation optical networks – was 13% (52.7 thousand) higher than in the fourth quarter of 2014. 5.8% of subscriptions belonged to other categories (LAN, leased lines), their proportion was practically stagnant compared to the fourth quarter of 2014. The number of switched-line (modem) and ISDN subscriptions continued to decline by 38% (3.3 thousand) compared to the same period of the previous year.

In the fourth quarter of 2015, through wired internet, subscribers had download traffic of 343 thousand terabytes (increased by 24% year–on-year) and upload traffic of 154 thousand terabytes (increased by 4.8% year-on-year). The mobile internet data traffic was 12.0 thousand terabytes, 31% more than a year ago. In 2015 as a whole, wired download traffic grew year-on-year by 33% to 1204 thousand terabytes. The upload traffic generated by subscribers through the wired internet was 12% more, nearly 577 thousand terabytes. In the course of 2015, data traffic via the mobile internet increased by 35% (+11 thousand terabytes).

In the period under review, 28% of subscriptions belonged to the range of guaranteed bandwidth of less than 2 Mbit / s, and 27% of them to the guaranteed bandwidth[6] of between 10 and 30 Mbit / s. 18% of subscriptions were included in ranges providing extremely fast speed (above 30 Mbit / s).

Figure 7

Distribution of fixed internet subscriptions by guaranteed bandwidth, quarter 4 2015

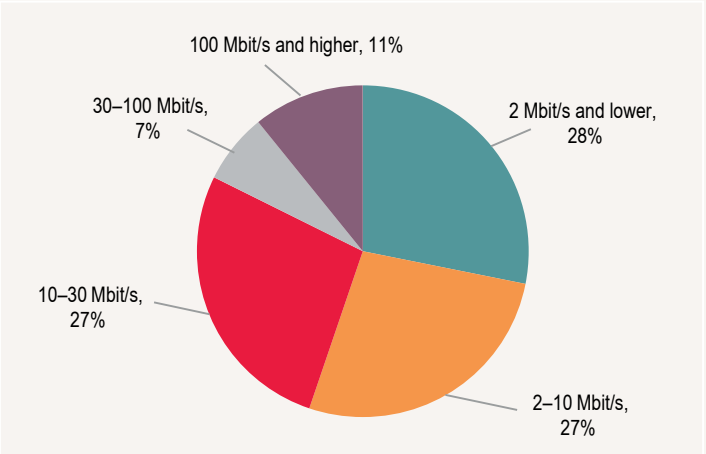
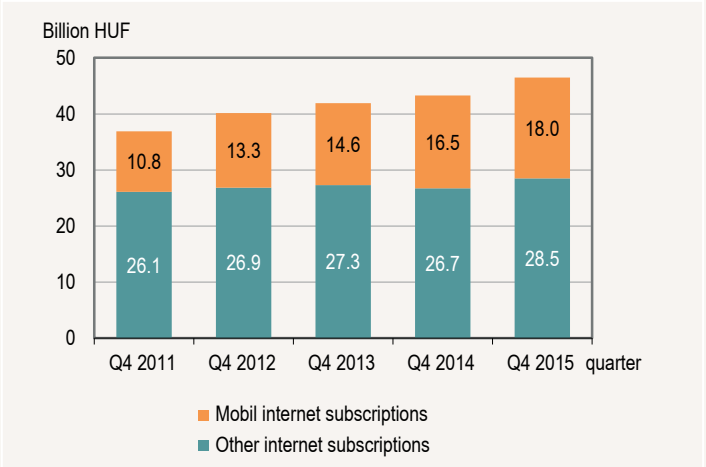


Figure 8

Changes in net sales from internet subscriptions



In the fourth quarter of 2015, net sales from internet subscriptions rose year-on-year by 7.5% to 46.5 billion HUF at current prices. Because of discount packages (for example, in case of online ordering, the first few

6 *Source:* National Statistical Data Collection Programme (OSAP), Ministry of National Development (MND), based on data collection No. 1994 titled 'Intra-year data of internet services.

months may include discounts as well as the mobile phone subscriptions may include internet use as well) and decreasing prices the changes in net sales do not reflect the more dynamic increase in the number of subscriptions. 39% of the revenue from internet services derived from mobile internet subscriptions, it was 8.8% more than in the year before. In 2015, net sales from internet subscriptions rose year-on-year by 7.1% to 182 billion HUF at current prices.

Methodological notes

The Standard Industrial Classification of All Economic Activities (TEÁOR) does not include internet services as a separate activity. However, these must be reported, therefore a registry of telecommunication service providers published on the homepage of the National Media- and Infocommunications Authority constitutes the basis of our data provider list. Data providers for the reference year are determined by using the registry recorded in September of the previous year. Data on fixed-line telecommunications differ slightly (below 1.0%), because they come from different data sources. (OSAP 1639 Telecommunications and broadcasting performances, OSAP NFM 1707 Intra-year data of telecommunication activities). The comparability of quarterly figures from 2014 and 2015 deriving from data collection (OSAP 1707 NFM) titled 'Intra-year data of telecommunication activities' is limited due to the expansion of the reporting population. Compared to the previous period, first quarter indices of 2014 on fixed-line and mobile internet data traffic only have a limited comparability due to changes in the reporting population.

Further information, data (links):

Tables

Tables (Stadat)

Methodology

Contact details:

kommunikacio@ksh.hu

Information services

Telephone: +36 1 345 6789

www.ksh.hu

© HUNGARIAN CENTRAL STATISTICAL OFFICE, 2016

All rights concerning the layout, graphics and design work of this publication are reserved for HCSO. Any kind of reproduction of them has to be approved by HCSO.

Any secondary publication is allowed only by the indication of source.