POLISH TELECOMMUNICATION MARKET – 2007 - 2011

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ABSTRACT

The Polish telecommunication market (PTM) is very complex in terms of products offered, as well as the size and types of companies operating on it. Recent years, despite the global economic crisis, were relatively good for most segments of the telecommunication market, which was characterized by a positive trend in most of its segments. The only exception was a segment of fixed telephony, which has noticed decline in the number of active subscriptions ever since 2009. During the period of 2007 – 2010, the telecommunication market. Despite the prevailing economic stagnation, market events had a positive impact on PTM, which made it one of the fastest growing telecommunication markets in the European Union.

Keywords: Telecommunication market, Internet market, Telephony market

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INTRODUCTION

The Polish telecommunications market (PTM) has many segments, which offer a variety of products and services. Also operators of different segments PTM are diverse in the number and size. Recent years, despite the global economic crisis, were relatively good for most segments of PTM – it has witnessed mergers, acquisitions and new entrants. Those actions had a positive impact on the quality of services and a number of customers, which in the end, made Polish telecommunication market one of the fastest growing in the European Union.

The aim of the paper is to show changes in the market in both terms number of customers and the quality of services. The paper also characterizes the major players of Polish telecommunications market. Key data and market trends for the period of 2007 - 2010 are presented in the paper.

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THE TELECOMMUNICATIONS MARKET IN POLAND

Polish telecommunications market (PTM), along with the entire Polish economy, underwent profound changes in the 1990s. From market monopolised by Telekomunikacja Polska, PTM has become a competitive market, combining state and private capital, joining Polish with foreign investments (Biter, 2010). At the beginning of 1990s, the cost barriers for market entry were reduced by allowing operators to use the infrastructure of Telekomunikacja Polska. This was achieved through the introduction of third-party access rules (TPA). TPA provides an access to the network infrastructure of main telecommunication supplier to other companies in the industry, so that they can provide services to their customers (Schlottke, 1994). The principle of TPA is often used to demonopolize markets of high-tech or capital-intensive sectors of the economy such as energy, telecommunications and railway transport. Applying this principle strengthens the competition, which generally leads to lower prices and improvement of service quality (Queensland Competition Authority Act., 1997).

PTM is divided into four main segments: telephony, television, internet and data transmission. Each of those segments is divided into a number of subsegments. Detailed division of the segments and subsegments of the telecommunications market is shown on the Figure 1.

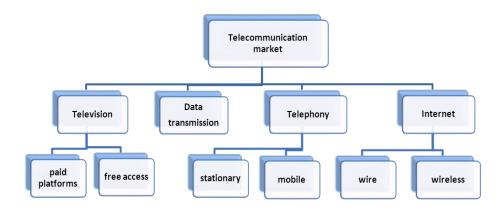
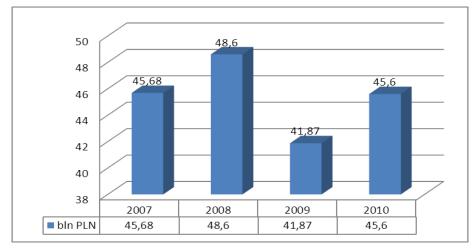


Figure 1: Segments and subsegments of Polish telecommunication market

Source: Author's elaboration based on Bernatek & Idrian, 2010

The various segments of PTM can be also regarded as the relevant regular markets. This division is determined by the regulations of state agencies. However, due to frequent changes in regulations, the division into subsegments is used more often in practice. The subsegment division is most important for fixed and mobile telephony services. The main subsegments of the telephone services are (Bernatek & Idrian, 2010):

- Fixed telephony:
 - the basic connections market (subscriptions),
 - the local calls market,
 - the long distance calls market,
 - the mobile calls market,
 - o the international calls market,
 - the IN network connections market,
 - the wholesale market;
- Mobile telephony:
 - the national calls market,
 - the non-voice services market,
 - the wholesale market,
 - the roaming (foreign calls) market.





Source: Straszewski, 2012

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Parallel to the mentioned divisions, telephony segment can be divided by the type of the consumer service offered. Thus, the fixed-line telephony subsegment is divided into 'business' and 'residential' subscribers, and the subsegment of mobile telephony into 'post – paid' and 'prepaid' users.

Table 1: Number of customers of companies operating in the telecommunications market

Television					
	Paid platforms	9,09 million (subscriptions)			
	Free access	4,7 million (satellite and terrestrial)			

Telephone						
	fixed	11,08 million (lines)				
	mobile	45,75 million (activated SIM cards)				

Internet						
	wire	6,12 million (subscriptions)				
	wireless	1,9 million (subscriptions)				

Source: Straszewski, 2011

The market for telecommunications services ranged between PLN 41 and 48.6 billion (the exact value is shown in Figure 2) in the years 2007 – 2010. After more than a 6% increase of market value in 2008, there was a significant 13.85% decline in 2009, which was caused by fluctuations in the global economy. The global crisis affected the decisions of operators in the telecommunications market, who did not decide to undertake new high-capital investments. Instead, they decided to start small cost-saving projects. In 2010 high-volume investment projects appeared again, carried out by both the private and public sector. As a result of the investments, the value of telecommunications market increased by 8.91% (Staszewski, 2010).

In 2010 Poland recorded 6 500 telecommunications companies in total. In the same year, all operators of the telecommunications market serviced to more than 78.5 million customers. The largest sector, in terms of number of

clients, was mobile telephony, which took advantage of nearly 46 million customers in 2010. At the same time, the whole telephony segment handled a total of 56.83 million customers, the television segment - 13.79 million and the Internet sector - 8.02 million (Bernatek & Idrian, 2010). Precise data is presented in Table 1.

THE MARKET OF TELEVISION SERVICES IN 2007 - 2010

The importance of satellite television gradually increased - from 16.5% in 2006 to 32.2% in 2010. At the same time, the importance of terrestrial TV reception was significantly reduced (down by 14.1%). Between 2006 - 2010, the market share of CATV1 (with IPTV2) decreased by 1.7%. However, the participation of the cable television in the telecom market continued to cover more than 33%. Note, that in this period the market share of three basic ways television reception was equalized. Only the satellite TV subsegment showed an upward trend in the discussed period (Bernatek & Idran, 2010). Detailed data for the years 2006 to 2010 is shown in Figure 3.

In 2010, the television benefited 15.16 million customers, 31% of which were the recipients of free terrestrial and free satellite. The remaining 69% of customers used paid platforms. Television market was fragmented – it had about 630 entities operating in 2010, most of which were CATV operators (with a competition of nearly 600 small operators). Still, the great majority of customers of the TV market used the services provided by eight major operators.

² IPTV – Television provided on IP



¹ CATV – Cable Television

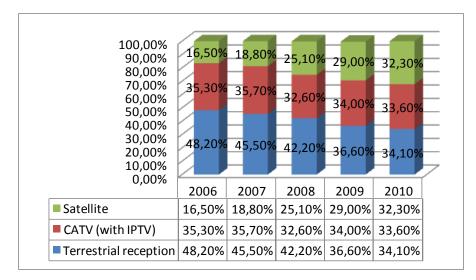


Figure 3: Ways of TV reception - market share in 2006 – 2010, market share in %

Source: Straszewski, 2011

In 2010, the segment of satellite television had four main actors: Digital Poland (21.43% market share), Canal + (10.18% market share), N (4.76% market share) and TP SA (2.07% market share). The largest CATV market players were UPC (7.16% market share), Vectra (5.06% market share), Multimedia (4.43% market share) and Aster (2.5% market share). The other, small CATV market operators had 11.53% of market share in 2010 (Turek, 2011).

It should be noted that in 2010 the value of satellite TV services sold exceeded PLN 412 million. The greatest gains were achieved by Cyfra +. The total value of CATV services in 2010 exceeded PLN 593 million. The largest revenue for cable television market in 2010 was reached by UPC company - over PLN223 million. Table 2 shows the detailed data on the participation of individual operators in TV market (Turek, 2011).

	ACCESS TOTAL	OPERATORS	NUMBER OF SUBSCRIPTIONS	MARKET (%)	INFRASTRUCUTRE	HOUSEHOLDS	MARKET (%)
MARKET TOTAL	15.2 million		10 529 000	100,00%		15.2 million	100%
		TP SA	315,000	2.07%	TP S.A.	0.315 million	2.07%
	10.53	n	730,000	4.79%			
1s	million	CYFRA + 1,550,000 10		10.18%	PAID TV	5.54	36.40
PAID PLATFORMS		CYFROWY Polsat	3,264,000	21.43%	(TOTAL)	million	%
I O DI		Pozostali	1,756,000	11.53%		4.60	
PAI		Aster	380,000	2.50%	CATV		20.67
		Multimedia	imedia 674,000		(TOTAL)	4.60 million	30.67 %
	Vectr		770,000 5.06%			million	70
		UPC	1,090,000	7.16%			
FREE ACCESS	4.7 million	MANY MINOR OPERATOR	4,700,000	30.86%	0.86% DIVERSED		30.86 %
		S					

Table 2: TV market - market segmentation in 2010

Source: Author's calculations based on Straszewski, 2011

TELEPHONY MARKET IN 2007 - 2010

Fixed-line (fixed-telephony) market has seen falling trend since 2004. For example, the overall density of fixed-lines fell from 31% in 2005 to 21.9% in 2010. The survey provided by GUS³ shows a decrease in the number of fixed telephone lines - according to GUS, number of main lines per 100 inhabitants decreased from 21.7 % in 2009 to 20.7% in 2010 (Turek, 2011).

In 2010, the fixed-telephony market was operated mostly by three large operators, who served over 90% of customers. More than 73% of the customers, (8.1 million fixed-telephone lines) were served by TP SA. Netia had 11.68% of the market share (1.295 million fixed telephone lines), and Dialogue - 6.77% (750 000 fixed-telephone lines).

It should be noted that, despite a general decline in the number of lines of fixed telephones, the television operators offering fixed-telephony services and Internet access have reinforced their position in the fixed-telephony market. In the years 2006 - 2010, the number of CATV subscribers, using telephone from the same service provider, has more than doubled (from 300,000 clients in 2006 to 650,000 clients in 2010). In 2010 250,000 telephone fixed-line connections were provided by small local operators (Turek, 2011). Detailed data on the distribution of the fixed telephony market in 2010 is shown in Figure 4.

In contrast to fixed-line market, mobile telephony services enjoyed great success. The number of mobile phone users rose from 17.4 million in 2003 to 41.5 million in 2007, when P4 - a new mobile operator joined the market. The market has risen by another 5 million users by 2010. The main operators of the mobile market in 2010 were (Bernarek & Idrian, 2010):

- PKT Centertel (Orange) 14.214 million subscribers,
- Polkomtel (Plus) 13.668 million subscribers,
- PTC (Era) 13.34 million subscribers,
- P4 (Play) 5 million subscribers.

Apart from the largest operators in the market there were also smaller competitors –CATV and MVNOs⁴ operators offering mobile phone services.

³ GUS is a Polish governmental bureau for statistics.

⁴ MVNO – Mobile Virtual Networ Operator

³⁴

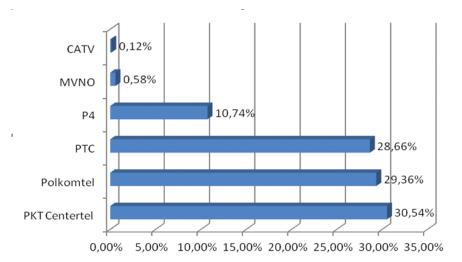


Figure 4: Distribution of services in the mobile telephony market in the second quarter of 2010

Source: Author's calculations based on Bernatek & Idrian, 2010

INTERNET MARKET IN 2007 – 2010

In 2007 – 2010, Internet services grew as fast as the mobile telephony services. During those 4 years, the market observed a 130% increase in the number of subscribers. In the same period, the share of the fastest developing lines: $LAN^5 + BSA^6$ noted an average of 82% year-to-year growth (see Figure 5).

A development of Internet provided by cable network was similarly quick - in the years 2007 - 2010 a subsegment growth averaged at 41%, and year-to-year increase remained above 15%. Despite the crisis of 2009, a number of services provided by CATV increased from 618,000 in 2007 to 1700,000 in 2010. Only the services provided by DSL⁷ were characterized by a decrease in the number of subscribers. Detailed data for the years 2004 - 2010 is shown in Figure 6 and Table 3.

⁵ LAN – Local Access Net

⁶ BSA – Bit Stream Access

⁷ DSL - Digital Subscriber Line

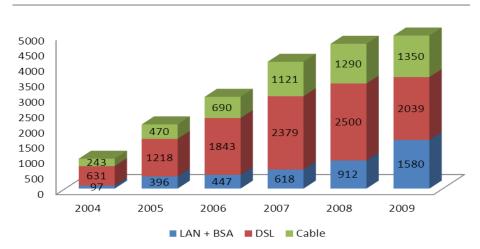


Figure 5: The division of fixed-line Internet market in 2004 – 2009 (by the technology used),a thousand connections/ clients

Source: Straszewski, 2011

Table 3: Division of fixed-line Internet market in 2004 – 2009 (by the type of technology used)

	2004	2005	2006	2007	2008	2009	2010	% of growth (2010 to 2007)
LAN + BSA (in thousands of subscriptions)	97	396	447	618	912	1580	1800	291.26
% of LAN+BSA growth (<u>yty</u>)		308.3	12.9	38.3	47.57	73.3	13.9	
DSL (in thousands of subscriptions)	631	1218	1843	2379	2500	2039	2000	84.07
% DSL (xty)		93.0	51.3	29.1	5.1	-18.4	-1.9	
Cable TV ((in thousands of subscriptions)	243	470	690	1121	1290	1350	1700	151.65
% of Cable TV growth (vtv)		93.4	46.8	62.4	15.08	4.7%	25.9	
Market total	971	2084	2980	4118	4702	4969	5500	133.56
% of total market growth (yty)		115	43	38	14	6	11	

Source: Author's calculations based on Bernatek & Idrian, 2010

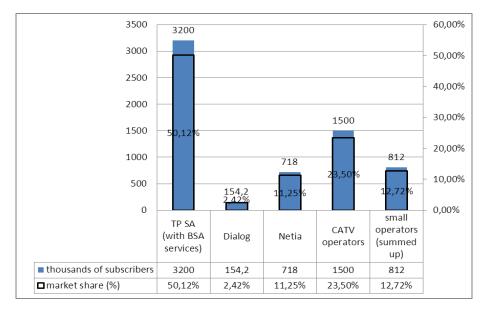


Figure 6: Major Internet operators in 2010

Source: Author's calculations based on Straszewski, 2011

In 2010 the fixed Internet market had three large operators - TP SA, Netia and Dialog. Over 10% of the market remained in the hands of small regional operators, and a further 23.5% in the CATV service providers. Over the last 5 years, TP SA remained the undisputed market leader, which covered over 50% of the market in 2010. The second, in terms of market power, Netia had provided services to over 11% of customers, and the third - Dialog to 2.5% (see Figure 6) (Staraszewski, 2010).

In 2011 Netia overtook the smaller operators - Crowley and Dialog. A cumulative number of customers of these three companies will exceed 875 thousand. Netia's Chairman, Mirosław Godlewski, expected that synergy of accompanying network integration of all the companies will reach PLN 106 million (Maślan, 2012).

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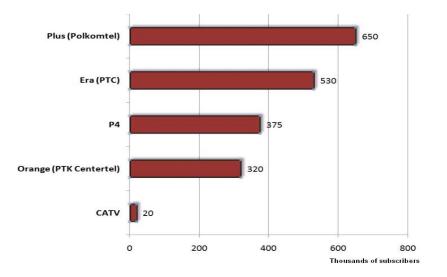


Figure 7: Division of mobile Internet market by the operators, a number of subscribers in thousands

Source: Author's calculations based on Straszewski, 2011

In 2010 mobile Internet market included the 1895 thousand subscriptions. The largest suppliers of mobile internet were (Maślan, 2012):

- Pomkomtel (market share: approx. 34%),
- PTC (market share: approx. 30%),
- P4 (market share: approx. 20%),
- PTK (market share: approx. 17%).

Other operators (mainly suppliers of CATV) controlled only 1% of the market, which summed to about 20 thousand subscribers in 2010 (detailed data in Figure 7).

CONCLUSIONS

The Polish telecommunication market is complex - in the terms of products offered, as well as the size and types of entities operating on it. Recent years, despite the global economic crisis, have been relatively good for most of the segments of the telecommunications market. Most of the

segments were characterized by a positive trend, the exception is a subsegment of fixed telephony, and which ever since 2009 have been noting the decline in the number of active subscriptions.

An increasingly important role in a modern PTM played operators with services provided through a cable. They, thanks to intensive investments in wire infrastructure, expanded their range of Internet services and telephony.

Each of the markets was characterized by high fragmentation of the market – there were around 650 companies in the market. In each segment of PTM, 4 to 9 market leaders could have been distinguished, leaving a small, regional operator no more than 15% of the entire market.

In recent years, PTM has seen a few acquisitions (for example the acquisition of Dialog and Crowley by Netia) and the birth of new operators (e.g. P4 entered the telecommunications market in 2007). Those changes had a positive impact on the level of services provided by operators, as well as on the price of services.

It is anticipated that PTM will be saturated within the next 5 years. In coming years, the competition will rely mainly on the upgrading of the technology used. The increase in number of customers of individual operators will be generated by the subscriptions' flow between operators. It is also envisaged, that over next 5 years, the number of services available in the new technologies will increase - for example, most households will be connected to the Internet and television via wire.

REFERENCES

- Bernatek, G., & Idrian, Ł. (2010). 10 lat po internetowej bańce: Internet wyciąga branżę z kryzysu. Warszawa: Audytel.
- Biter, F. (2010). Historia mediów i telekomunikacji w Polsce. Retrieved February 25, 2012 from the World Wide Web: poland.gov.pl/historia_mediow_i_telekomuniakcji.html
- Borkowski, F. (2001). Skutki liberalizacji rynków usług telekomunikacyjnych w Unii Europejskiej. Working Papaers - the University of Gdańsk Ośrodek Badań Integracji Europejskie. Sopot: Wydawnictwo Uniwersytetu Gdańskiego.
- Queensland Competition Authority Act 1997. Retrieved: February 25, 2012 from the World Wide Web: www.qca.org.au.
- Jaślan, M., (2012). Nowe priorytety Netii po przejęciu Dialogu i Crowleya, Retrieved February 25, 2012 from the World Wide Web: www.polskaszerokopasmowa.pl

- Schlottke, M. (1994). The development of the telecommunications sector in Europe and possible transfer of Western experience to Poland. Working Papers of University of Gdańsk.
- Straszewski, J. (2011). Obraz polskiego rynku telekomunikacyjnego. Polska Izba Komunikacji Elektronicznej, Retrieved February 25, 2012 from the World Wide Web: www.kts.vector.com.pl.
- Turek, D. (2011). Łączność wyniki działalności w 2010 r. Warszawa: GUS. Retrieved February 25. 2012 from the World Wide Web: www/stat.gov.pl/lacznosc_wyniki2010.pdf.