Regulation without a Regulator: The Tariff Policy in Poland

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Abstract
The purpose of this paper is to discuss and assess the tariff policy that *TPSA* has been pursuing while the regulatory agencies have been remaining entirely indifferent. The most important provisions of the imperfect regulatory framework and market structure are described. The evolution of tariffs, which has not contributed towards the rebalancing during last several years, and their international comparison are presented. The last part of the paper describes the *AMO*'s actions aimed at regulating the telecommunications prices in Poland.

1. Introduction

In 1989, the telephone penetration was 8.2 per 100 inhabitants. Poland then had the poorest network in all of Europe excluding Albania. The network mainly offered the basic telephony service at an unacceptable quality level, and people sometimes had to wait for more than 10 years to obtain a telephone line.
The economic boom that may be noticed in Poland after 1989 requires that the telecommunications infrastructure adapt to the current demands of the economy and to the potential of its development. The new governments have realized this to the fullest extent. Along with the unsatisfactory operation of the banking system, the extremely bad condition of telecommunications was one of the principal impediments of the country's economy. The subsequent governments decided to reconstruct the sector and increase its efficiency through massive investment programs, fast network development and by attracting investors. In November 1990 a telecommunications law was adopted, which provided for a certain degree of liberalization of the telecommunications sector, and the national telecommunications operator, *TPSA*, was established as a joint stock company with all its shares initially held by the government.
After more than ten years of the implementation of reforms in the Polish telecommunications, certain general conclusions may be ventured. While the idea of rebuilding the telecommunications network "from the top" has turned out to be logical, the attempt at producing a liberal telecommunications market "from the bottom" must be considered a failure of the successive administrations and a costly lesson to the nation.
All of the strategy applied so far in this area may be summarized as getting the highest possible price of the sale of the incumbent operator. Actually, even this aim has not been achieved entirely, as the privatization has been delayed and as the global condition of this branch of industry has deteriorated. The cost of a continued monopoly and its impact on society and the economy have been overlooked as well. Poland still has one of the lowest penetration rates in the region and the telecommunications services available to the Poles are now among the most expensive in these countries.
The purpose of this paper is to discuss and assess the tariff policy that *TPSA* has been pursuing during the last ten years while the regulatory agencies have been remaining entirely indifferent. Chapter 2 reviews the current regulations and the organization of the Polish telecommunications market, which they have produced. Chapter 3 is devoted to the evolution of tariffs in Poland, and Chapter 4, to a comparison of the Polish telephone tariffs with those of the

incumbent operators in the member states of the European Union and in several Central-European countries, supplemented by an assessment of the process of the rebalancing of tariffs and of the monopolist practices of *TPSA*. The offer of the independent operators is discussed in Chapter 6. One of the administrative agencies which have assumed the duty of settling controversies arising from the imperfections of the telecommunications law and of protecting consumers, is the Anti-Monopoly Office. The next part of the paper describes its actions aimed at regulating the telecommunications prices in Poland.

2. The Regulatory environment and the market players

Until 1989, the telecommunications in Poland was a State monopoly. In December 1989, the regulatory authority over the post and telecommunications was transferred to the re-created Ministry of Post and Telecommunications (*MPT*). That event was the first sign confirming that the state administration had started to realize the strategic significance of telecommunications in contemporary economies. Very important decisions were taken in November 1990, when the Polish Parliament adopted the liberal Communications Act (CA), which was amended in 1995 [3], [5], [6].

Under the Act, the former *PPTT* (Polish Post, Telegraph and Telephone) was split into two state-owned companies, *Poczta Polska* (Polish Post), a public utility company, controlling the unprofitable postal operations, and ***Telekomunikacja Polska S.A.*** (***TPSA*** – The Polish Telecommunications, Joint Stock Company), a company which until 1998 was fully owned by the State Treasury. The State Treasury was represented as a shareholder in the company by the *MPT* (later by the Minister of Treasury), who appoints the President of the Executive Board. *TPSA* started its operations on January 1, 1992. The current breakdown of the shareholders of *TPSA* is presented in Figure 1.

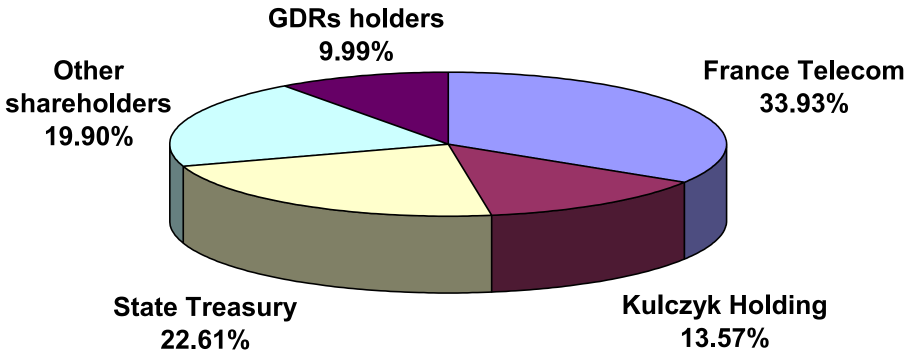

Figure 1. TPSA's shareholders as of May 15, 2002

The Act of 1990 ended the State's monopoly on the domestic services, although it retained the State's monopoly on the international services and its control over the domestic long-distance services. The *TPSA* monopoly was limited by officially allowing other public operators, acting as independent economic entities, to enter the market. The Act's main provisions in this matter were as follows:

- only the *TPSA* may operate the international network and provide international universal services,
- other Polish and foreign companies are allowed to operate the long-distance network, provided that Polish capital holds a majority of shares in such companies,
- local networks are completely demonopolized, without limiting the participation of foreign capital or the number of operators within a geographical area,

- the number of corporations allowed to provide the value-added services is not limited.

According to the Act and to its amendments of 1995, activities in the telecommunication field can be therefore performed by the incumbent (which does not require a concession) and entities which have been issued telecommunications concessions or permits (licenses). Permits are given for the installation and use of telecommunications facilities, lines and networks, and concessions, for the provision of services. While the Act of 1990 lacked the instruments to evaluate the actual use of the licenses and did not provide the grounds for refusal of licenses, beginning with 1995, new concessionaires, having the requisite capital and know-how, were to be chosen in a tender process organized by the Ministry, in order to limit the number of new entrants and to make the decision process more transparent.

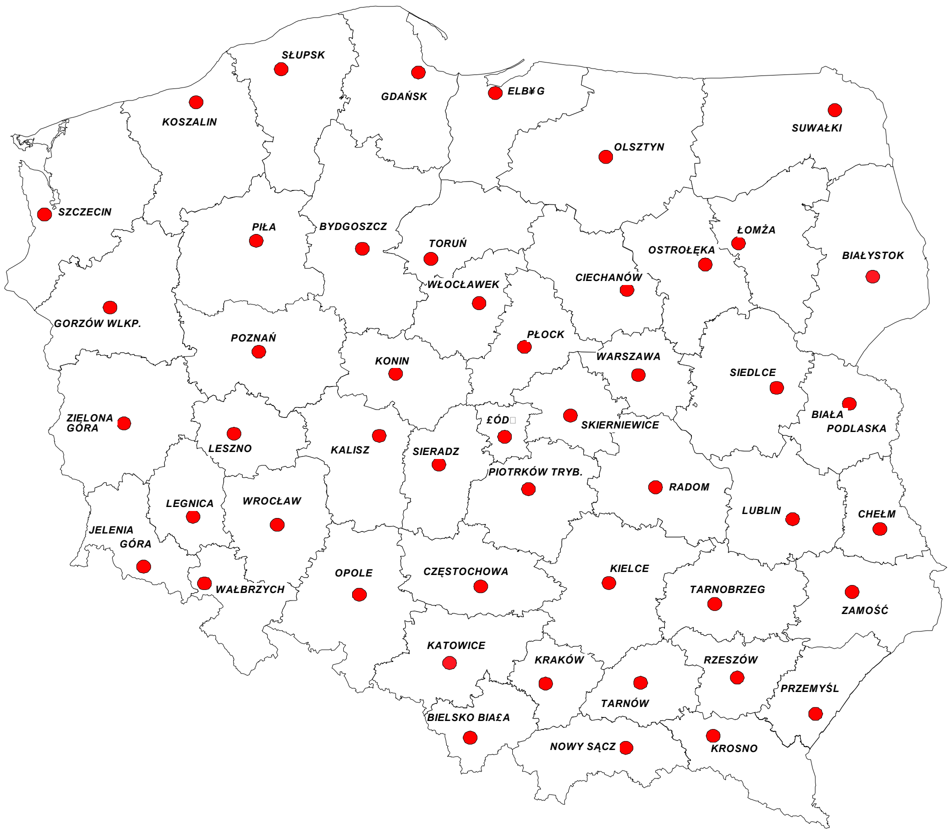

Figure 2. Numbering Zones in Poland

Licenses were initially issued to all companies that had applied for them. Several operators serving very small rural areas launched their activity in this way. Later, following a suggestion by *TPSA*, only less attractive areas were allocated for the available licenses. These did not cover the largest cities. Eventually it was decided that the territory of a license shall cover the area of a numbering zone (identical with a province under the previous administrative division of the country, effective until the end of 1998 – Figure 2), and that two operators (including *TPSA*) shall be allowed to serve each area (three in the area of Warsaw).

Under these regulations, forty-six operators of public telephone networks (including twelve member companies of the *Netia* group, all of them applying the same tariffs) began their activity. By the end of the year 2000, they owned a little over 700,000 lines, which accounted for a mere 6.5% of the total number of trunk lines in Poland (Table 1). *TPSA*'s strongest competitors on the local markets are the member companies of the *Netia* group, *Telefonia Dialog* and *El-Net*. All of them are facing financial problems caused, among other factors, by the enormous license fees, whose declared amount was a criterion in the bidding procedure.

The long-distance market was liberalized only in the year 2000, when the *MPT* issued licenses to three operators: *Netia 1*, *Energis Polska* (a partnership with the participation of the Polish State Railroads – *PKP*) and *NOM* (a partnership between the *Polish National Grid* and the petroleum concern *PKN Orlen*). All the three launched their operations in the second half of 2001, and by end of that year their share of the market amounted to 27% (including 24% controlled by *NOM*). This is probably only a temporary success, and *TPSA* will soon regain its lost leadership. The reasons of this situation are discussed in Chapter 6.

Table 1. Most important competitors in PSTN

Operator	Number of areas served	Mainlines (Dec. 31, 2000)	Mainlines share
Netia Group (12 companies)	15	318,280	2.94%
Telefonia Dialog	9	86,544	0.80%
El-Net	6	38,192	0.35%
Telefonia Polska-Zachód	2	36,865	0.34%
Pilicka Telefonia	3	27,350	0.25%
Szeptel	1	20,046	0.18%
Telekomunikacja Dębicka	1	19,381	0.18%
Telefony Brzeskie	2	19,213	0.18%
Cuprum 2000 (*now* Telefonia Dialog)	1	19,186	0.18%
PT Retel	4	16,618	0.15%
Elektrim TV-Tel	1	13,968	0.13%
Telefony Rzeszowskie Teler	4	13,949	0.13%
Telefony Podlaskie	1	12,192	0.11%
Petrotel	1	9,691	0.09%
Środkowo-Zachodnie Telefony Polskie	1	8,333	0.08%
Spółdzielnia w Tyczynie	1	7,543	0.07%
Spółdzielnia WIST	1	6,290	0.06%
PT Centrala	1	5,704	0.05%
Telefony Opalenickie	1	5,242	0.05%

Source: *URT, 2001.*

Notes: *"Number of areas served" is the number of numbering zones (out of 49) in which the operator provides telephone services (not necessary in the whole territory of the zone).*

As of the beginning of 2001, the Polish telecommunications market is regulated by the new Telecommunications Law of 2000 (TL). The provisions of the new law include the definition of a universal service, the specifications of the rights and duties of the dominant operators and of operators with a significant market power (SMP), and the establishment of the *Urząd Regulacji Telekomunikacji* (*URT*, the Office of the Regulation of Telecommunications), a national regulatory authority[1].

The first eighteen months of the application of the TL do not warrant optimistic opinions. Most of the forty-three executive acts, including 26 that are obligatory, have not been issued yet. Both this and the vague provisions of the Law itself make it possible for *TPSA* to follow a policy of "resistance" which strengthens its dominant position very efficiently. Thus, e.g. it was only in April 2001, or nine months after the passing of the TL and in the fourth month of its effective force, that a regulation specifying the manner of ascertaining the "dominant"

1 Now called the *Urząd Regulacji Telekomunikacji i Poczty* (URTiP, the Office of the Regulation of Telecommunications and the Post).

status of an operator was issued. *TPSA* appealed against self-evident decisions handed down pursuant to this regulation. It did not withdraw all of its objections until late April 2002, and it is only since that moment that it may be considered a dominant corporation in the market of universal services and the leasing of lines. Still, due to its previous attitude, it had been managing for fifteen months to avoid the additional duties assigned by the TL to operators with such status, including the procedures and limitations of the setting of tariffs.

The EU directives recommend that the regulatory authority be independent of the administration, and have efficient means of the exercising of its regulatory rights and steady sources of financing. These three factors determine the proper operation of such an agency. As it is, the *URT* or *URTiP* is a central administrative agency directly subordinated to the Prime Minister[2], who appoints the Presidents of the *URT* for terms of five years and dismisses them. Moreover, the possibilities that the TL provides for the dismissal of the President of the *URTiP* are very small, practically limited to cases of scandal. The alleged purpose of such provisions is to ensure a stable functioning of and independent decision-making by the agency.

The implemented regulations have already raised serious doubts. Above all, it is doubtful whether the regulatory authority is indeed independent of the national administration and the ruling political forces if its President is appointed by agencies of the current administration. Practice has confirmed such doubts. The seemingly "irremovable" Presidents of the *URT* have already been replaced on two occasions: The first one handed in a "voluntary" resignation, and the second was ousted after a parliamentary election and the alteration of the provisions of the TL which abolished the *URT* replacing it by the new regulatory authority, the *URTiP*.

Doubts concern the financing of the operation of the regulatory authority as well. The *URTiP* is financed from the national budget, by an amount specified in the annual Budget Laws. Theoretically it may also collect small independent revenue generated by the low fees for certain administrative proceedings which it conducts.

Dozens of new local operators have been registered under the new regulations, their operation covering small areas, mainly in downtown large cities (licenses are not required any more for this type of activity). The *URT* and *URTiP* have also issued several nationwide licenses to PSTN operators and one to an MVNO.

UMTS licenses were issued to all the three existing operators of mobile networks at earlier dates. The terms of the licenses have been changed now, and the operators may begin the operation of their UMTS networks during the year 2004.

TPSA's monopoly on the international telephone market is legally ensured until the end of 2002. Although this segment of the market will be liberalized within a few months only, the preparations to adopt the necessary regulations are not at a significantly advanced stage. Meanwhile *TPSA* is maintaining a very high level of the prices of international calls, e.g. charging more than US$ 0.85 per minute for connections with the USA. Numerous companies offering the much cheaper VoIP connections are trying to reduce the former corporation's market position. In 2001, *TPSA*'s income generated by outgoing traffic was more than 5% lower than a year earlier. In incoming traffic, its losses may be even higher.

Beside the generally applicable provisions of the law, other administrative acts, whose regulatory impact has been arousing much controversy, have been affecting the prices of *TPSA*'s telecommunications services. These are:

- The Telecommunications Agreement concluded between the *MPT* and *TPSA* on September 17, 1997, and replacing a license pending the adoption of a new TL (under the CA of 1990, *TPSA* did not need to obtain a license); this imposes on the corporation a

[2] Under the subsequent alterations of the provisions of the TL, *URTiP* is subordinated to the Minister of Infrastructure, who is now in charge of telecommunications.

number of duties concerning capital expenditure, tariffs, interconnection, the quality of services, etc.

- The Resolution of the Council of Ministers from March 21, 2000, specifying the policies for the regulation of the Polish telecommunications market in the context of the continuing negotiations with the potential strategic shareholders of *TPSA*.
- The "secret" regulatory agreement concluded between the *MPT* and the strategic shareholders of *TPSA* (principally the *France Télécom*), which incorporates the policies adopted by the government into the latter's obligations to the purchasers of the stock in *TPSA*.

The government's obligations concerning the privatization of *TPSA* have slowed down and under certain respects stopped the process of the liberalization and demonopolization of the Polish telecommunications market for several years. Among other provisions, the obligations stipulate:

- that the process of the rebalancing of tariffs shall be postponed until the end of 2003, and until that time the *MPT* shall not be allowed to specify maximum prices, and *TPSA* shall be authorized to collect the ADC,
- the date of the liberalization of the international services (January 1, 2003),
- that only three competitors of *TPSA* shall be licensed to operate until the complete liberalization of the long-distance market (January 1, 2002),
- that not more than one competitor of *TPSA* (two in the area of Warsaw) shall be licensed to operate in a territory until the complete liberalization of the local (January 1, 2002),
- that no new licenses shall be issued to operators of GSM/DCS mobile networks (January 1, 2002).

Therefore *TPSA* enjoyed a *de iure* or *de facto* monopoly in the most profitable market segments in order to develop the national network with cross subsidies within the sector and to recoup the huge investments made in the telecommunications infrastructure. *TPSA* has so far been carrying the main burden of developing the national network. The costs of the rural network development are met by cross-subsidization from the more profitable long-distance and international calls. That reason, together with the costs of further extensions of the basic voice service and the government warranties for loans involved in funding investments and in the development of the long-distance network, was a strong argument for the government to maintain the monopolistic status in the "upper levels" of the network. The *MPT* claims that an additional reason to grant to *TPSA* a *de facto* monopoly for providing the international and long-distance services, is to enable it to become strong enough to face the international competition and to make its future privatization profitable. In short, the competitive market entry was limited to areas identified as "commercially less attractive".

3. Tariff regulation in Poland

Very little research on tariff policy in Poland has been conducted since the 1960s and the structure, though not the level, of tariffs has remained largely unchanged since that period. So little attention has been paid to tariffs because prices were fixed by the State according to specific social objectives: rental changes and local call charges were kept artificially low. Furthermore, there has been no attempt to relate tariffs with the demand, which greatly exceeds the supply.

Until the 1980s, the tariff policy was the responsibility of the *MPT*. This has changed under the 1990 CA. The *PPTT*, and later *TPSA*, took over responsibility for setting its own tariffs. The Minister had the right to set a ceiling for domestic voice services tariffs and to approve of international tariffs before they came into force. Otherwise, *TPSA* was free to set its own tariffs. In practice, no maximum price has ever been set. In that situation *TPSA* has became the

de facto regulator of prices for the entire market. In other words, there were no safeguards against predatory pricing by the former monopolist and no attempt to make tariffs reflect costs. Neither was there a formal mechanism for setting price caps on tariffs which might keep a rein on the ability of *TPSA* to charge what it likes where it faced no competition.
So far, the *MPT* attempted to control *TPSA*'s aggressive tariff policy on one occasion only, in 1998. In terms of tariff regulation, *TPSA* undertook under the Telecommunications Agreement to:

- notify the *MPT* of contemplated changes in the prices of the universal services and the rent for the leased lines for a coming year by October 31 of the current year, and of its planned tariff policy for the period of the next three years,
- implement within a year accounting records which allow to establish the cost and profit of each service, and to submit to the *MPT* within another year the formulae for the prices of services based on such records,
- modify on an ongoing basis the relationships between the prices of its telecommunications services, aspiring to arrive at the relationships which are applied in the OECD member countries.

So far, the only effect of these regulations has been correspondence between the parties. Subsequent decisions of the administration and the provisions of the "secret" regulatory agreement have turned out to deprive the *MPT* of all of its prerogatives in this matter. Although the new TL regulates many issues in a detailed manner, it has also contributed to maintaining the price monopoly of *TPSA*.
Under the new TL, the prices of telecommunications services are set by the operator, taking into account the cost of their provision and based on clear and objective criteria which ensure the equal treatment of all users. A stricter regulation applies to the prices for the provision of universal services by operators with a SMP, who are obliged to submit the price lists of their services or the modifications thereof to the regulatory authority a month before a contemplated change. The regulator has the right to object to individual items or entire price lists, in which event the objectionable items shall not be implemented. The adoption of the most significant provision, which requires that an operator with a SMP (in practice, only *TPSA* has such status) apply cost-based prices, has been postponed by a Law until the end of 2003, which confirms the Polish administration's obligations to the foreign shareholder which are related to privatization. Cost formulae for regulation purposes will be specified by the Minister of Public Finance. As no results of studies with a view to issuing such an act have been published yet, the implementation of this regulation may be considerably delayed. Other operators are only obliged to submit their current price lists to the regulatory agency.
Another provision of the TL, stipulating that universal services shall be provided to all users at a reasonable price in the entire territory of the country, seems to have no practical value whatsoever since it does not define a "reasonable price."
As *TPSA* was delaying the ascertaining of its dominant status in a legally effective manner, the regulatory agency was unable to take any action in order to regulate the tariffs. It only managed to issue two rather insignificant decisions concerning the prices of a new type of phone cards (the cards were not put into circulation) and offers of reduced prices for business users (which were implemented with a delay, following adjustments). On the other hand, the *URT* did not respond in any way to the raise of the subscription charge by 40% in May 2001.

4. TPSA's tariff evolution (1992–2001)

Since 1992, the Board of *TPSA* has introduced several dozens of decisions related to changes of tariffs for telecommunication services. The most important of them, strongly influencing the tariff structure, are presented in the Tables 2 and 3. Real changes (giving into account the inflation) of charges for services provided by *PPTT* and *TPSA* in the years 1990-2001 (in De-

cember 2001 constant prices) are presented in Figures 3–6.
The connection (installation) charge was changed only three times. Meanwhile, *TPSA* introduced a policy aimed at improving the effectiveness of connecting new lines and maximizing the number of new customers. In order to achieve these aims, *TPSA* allowed the customers on one hand to pay the installation fee in two, and later in four and eight installments, and on the other hand arranged with some prospective customers a sort of a non-interest credit, and financed selected investments in cooperation with so called "contracting party groups".

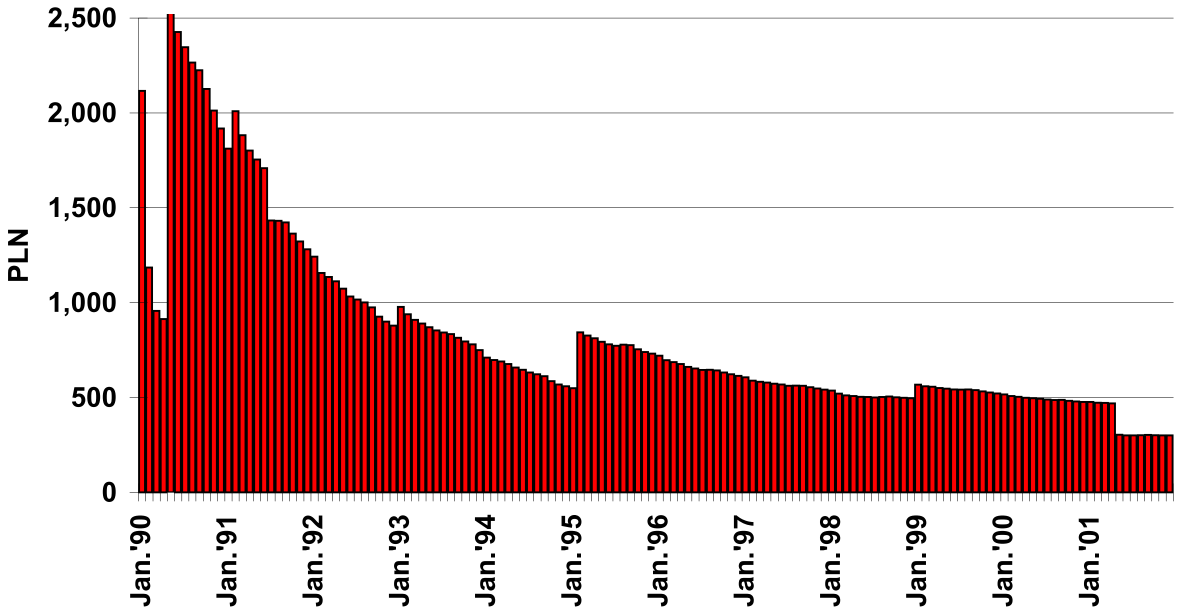

Figure 3. Installation charges in real terms, December 2001 prices

Table 2. Major changes in the TPSA tariffs (fixed charges), 1992-2001

Date of the change	Description
Connection/installation charge	
Feb. 1, 1995	increase from PLN 250 to 400 (by 60%), payment in two installments
March 1, 1996	payment in four installments
Jan. 1, 1999	increase to PLN 460 (by 15%)
May 1, 2001	decrease to PLN 300 (by 35%), payment in eight installments
Monthly rental charge	
May 1, 1992	increase from PLN 3 to 5 (by 67%)
Jan. 1, 1993	increase to PLN 9 (by 80%)
March 1, 1994	increase to PLN 10 (by 11%)
Apr. 1, 1996	the number of "free" meter units included in the rental charge lowered from 20 to 10, i.e. increase of the "pure" monthly charge by 21%
July 1, 1996	"free" meter units abolished – increase of the "pure" monthly charge by next 18%
Feb. 1, 1998	increase to PLN 11 (by 10%)
Apr. 1, 1999	increase to PLN 15 (by 36%)
Jan. 1, 2000	increase to PLN 20 (by 33%)
July 1, 2000	increase to PLN 25 (by 25%)
May 1, 2001	increase to PLN 35 (by 40%), low user scheme introduced
July 1, 2001	three tariffs plans introduced in 22 out of 49 numbering zones
Sept. 1, 2001	four basic tariffs plans introduced, standard renal charge remains at PLN 35

Source: *Own representation based on data from TPSA.*

Taking into account the real value of the installation charge, it is now much lower than at the end of the eighties and over eight times lower than at the beginning of 1990's, when the consecutive increases were almost immediately consumed by a very high inflation.
TPSA changed the absolute value of the monthly rental charge eight times in three waves (altogether by 1,067%!)[3]. First changes were introduced shortly after the foundation of *TPSA* and they were much bigger than the inflation rate. Such big changes did not have a negative influence on the demand, as the latter is characterized by low price elasticity. This wave could have been also one of the elements of the recommended tariff restructuring. Unfortunately the lack of other changes in fees, and the failure to increase the rental charge and the call charges in next couple of years completely nullified the effects of this process.

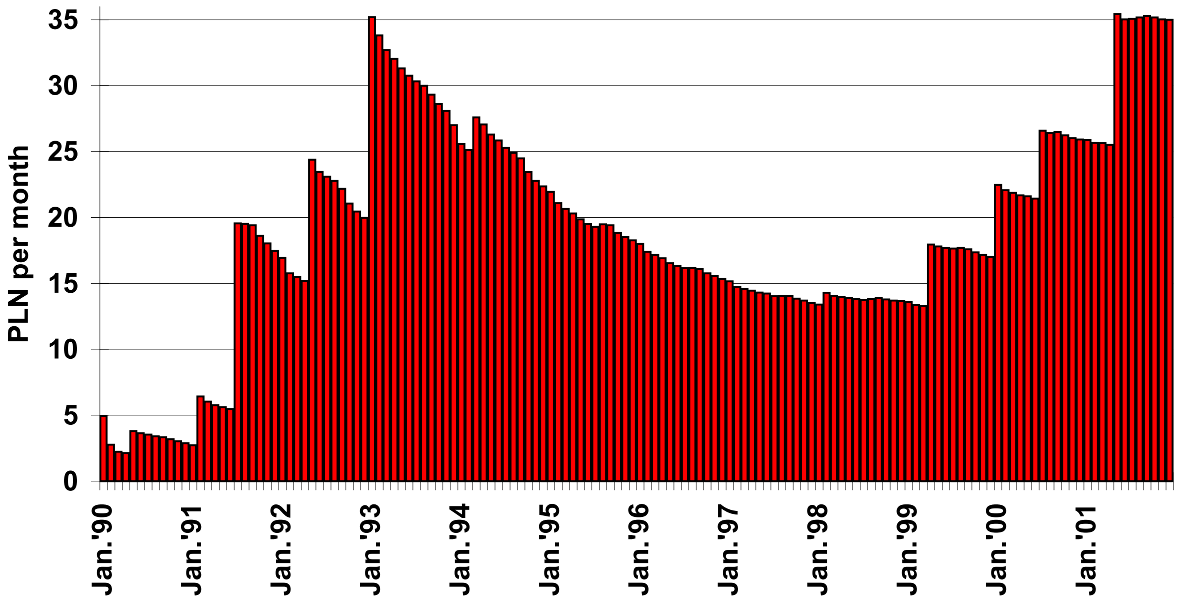

Figure 4. Monthly rental charges in real terms, December 2001 prices

As a result of these increases, the real value of the rental charge at the beginning of 1993 was almost twice as high as that just after founding *TPSA*, and at the end of 1998 it was below this reference level. It means that *TPSA* has designed an "adverse" tariff balancing policy, which is against the recommendations of the EU and OECD.
It should be noted that till April 1996 the rental charge included 20 free meter units which could be used by the customer during the month. Therefore the real value of the so-called "pure" monthly rental charge was even lower. Moreover the increase of the charge for the call unit in years 1993-1996 led to a further decrease of the real value of the rental charge.
The third wave of price raises, obviously goaded by the provisions of the Telecommunications Agreement and the decisions of the *Urząd Antymonopolowy* (*AMO* – the Anti-Monopoly Office[4]) from 1998, took place between 1999 and 2001. The amount of the standard telephone subscription charge was increased more than three times in four steps, now approaching the prices in the EU countries. The response of the customers of *TPSA* to these radical changes was that the net churn rate of the *TPSA* network amounted in 2001 to 5.4% of the average annual number of lines, and the income from telephone calls diminished by more than US$ 67

3 Inflation between December 1991 and December 2001 is estimated as 482%.

4 Now *Urząd Ochrony Konkurencji i Konsumentów* (The Office for Competition and Consumer Protection).

million (12%).

Table 3. Major changes in the TPSA's call charges, 1992-2001

Date of change	Description	Date of change	Description
Local call charges (3 min.)			
Aug. 1, 1993	increase from PLN 0.06 to 0.08 (by 33%)	June 1, 1997	increase to PLN 0.18 (by 6%)
March 1, 1994	increase to PLN 0.10 (by 25%)	July 14, 1998	increase to PLN 0.19 (by 6%)
July 1, 1994	increase to PLN 0.11 (by 10%)	Jan. 1, 1999	increase to PLN 0.21 (by 10.5%)
Oct. 1, 1994	increase to PLN 0.12 (by 9%)	July 1, 1999	increase to PLN 0.24 (by 14%), 50% night rates introduced
Feb. 1, 1995	increase to PLN 0.13 (by 8%)	Jan. 1, 2000	increase to PLN 0.27 (by 12.5%)
June 1, 1995	increase to PLN 0.14 (by 8%)	July 1, 2000	increase to PLN 0.29 (by 7%) night rates in extended periods for 2 months
Feb. 1, 1996	increase to PLN 0.15 (by 7%)	May 1, 2001	two rates related to rental charge (tariff plan)
July 1, 1996	increase to PLN 0.16 (by 7%)	Sept. 1, 2001	four rates related to rental charge (tariff plan)
Feb. 1, 1997	increase to PLN 0.17 (by 6%)		
Long-distance calls (1 min.)			
Aug. 14, 1993	increase by 33% related to the increase of the meter unit charge	Nov. 1, 1997	weekend tariff introduced for 1 month as "special offer"
March 1, 1994	peak rate for calls over 100 km decrease from PLN 0.96 to 0.60 per 1 min. (by 38%), the long-distance to local call charge ratio changed from 36:1 to 18:1	July 14, 1998	increase by 6% related to the increase of the meter unit charge
July 1, 1994	increase by 10% related to the increase of the meter unit charge	Sept. 1, 1998	peak rate over 100 km decreased from PLN 0.95 to 0.76 per 1 min. (by 20%), the charge ratio changed to 12:1
Oct. 1, 1994	increase by 9% related to the increase of the meter unit charge	Jan. 1, 1999	no rate changes, the charge ratio changed to 10.9:1 because to the local rate increase
Feb. 1, 1995	increase by 8% related to the increase of the meter unit charge; three different rates intro-duced for different time of the day replacing former two	July 1, 1999	peak rate over 100 km decreased from PLN 0.76 to 0.64 per 1 min. (by 16%), the charge ratio changed to 8:1
June 1, 1995	increase by 8% related to the increase of the meter unit charge	Jan. 1, 2000	no rate changes, the charge ratio changed to 7.1:1 because to the local rate increase
Sept. 1, 1995	unification of local charges and long-distance charges in the I zone (within numbering zone)	July 1, 2000	cheapest off peak rate from 18:00 instead of 22:00
Feb. 1, 1996	increase by 7% related to the increase of the meter unit charge	July 1, 2000	peak rate over 100 km decreased from PLN 0.64 to 0.56 per 1 min. (by 12.5%), the charge ratio changed to 5.8:1
March 1, 1996	weekend discount introduced	Feb. 1, 2001	one unified long-distance rate introduced, peak rate over 100 km decreased from PLN 0.56 to 0.48 per 1 min. (by 14%), the charge ratio changed to 5.8:1
July 1, 1996	increase by 7% related to the increase of the meter unit charge	May 1, 2001	peak rate decreased from PLN 0.48 to 0.44 per 1 min. (by 8%), the charge ratio changed to 4.6:1
Sept. 1, 1996	peak rate over 100 km decrease from PLN 0.96 to 0.80 per 1 min. (by 17%), the charge ratio changed to 15:1	July 1, 2001	peak rate decreased from PLN 0.44 to 0.40 per 1 min. in 22 out of 49 regions
Feb. 1, 1997	increase by 6% related to the increase of the meter unit charge	Sept. 1, 2001	peak rate decreased from PLN 0.44 to 0.40 per 1 min. (by 9%), the charge ratio changed to 4.1:1 (in whole country)
June 1, 1997	increase by 6% related to the increase of the meter unit charge		
International call charges			
June 1, 1992	change of the international tariffs based on the exchange rate SDR = PLN 1.4986	March 1, 1994	change of the international tariffs based on the exchange rate SDR = PLN 2.9145
June 1, 1993	change of the international tariffs based on the exchange rate SDR = PLN 2.3239	June 1, 2002	***no changes during last 8 years*** *current exchange rate SDR = PLN 5.2291*

Source: Own representation based on data from TPSA.

In the years 1992-2001, *TPSA* increased on fifteen occasions the charge for the call meter unit, i.e. for each started 3-minute interval of a daytime local call or 6 minutes at night-time (until mid-1999, regardless of the time of the day and the day of the week). In current prices, the charge was increased by 383%. The dramatic increase of the charge for the meter unit in July 1991 caused a rapid decrease of the traffic. which took several months to return to the previous level. In real terms, these charges were about 73% higher than those in the middle of 1998 and 35% higher than now. As a result, the charge for the call unit remained unchanged for 2 years. Further changes of this charge corresponded more or less to the inflation rate, however its increase was slightly slower. This tendency is contrary to the recommendations of OECD and the economy of telecommunication services.

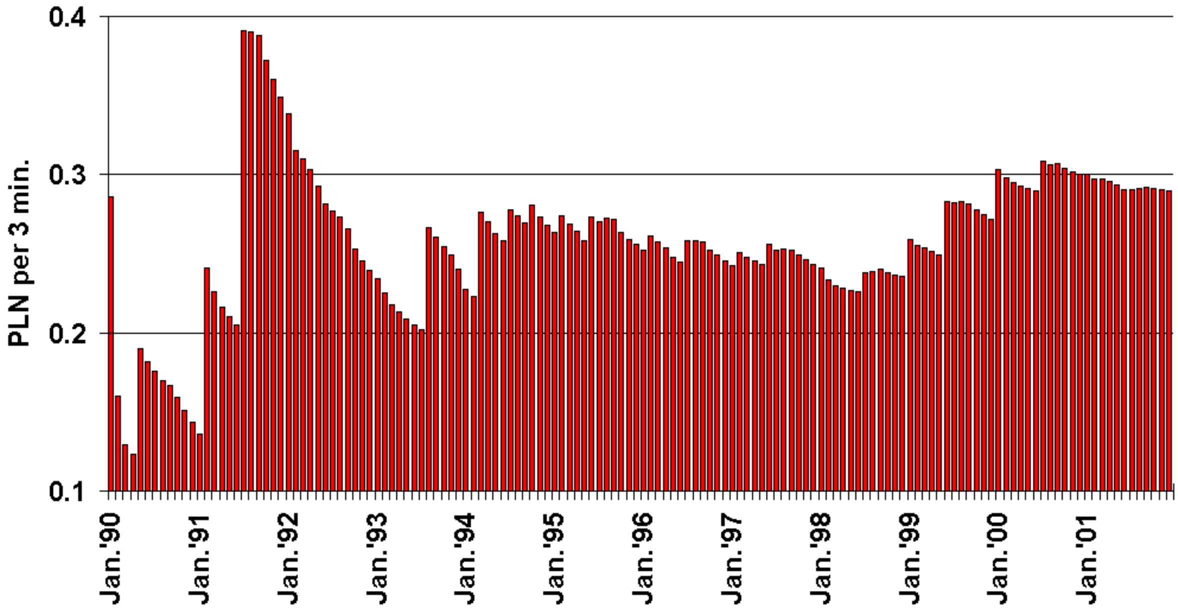

Figure 5. Local call charges in real terms, December 2001 prices

The actual process of the rebalancing of the Polish tariffs started in 1998, following vigorous action by the *MPT* and the *AMO* and the beginning of the privatization of *TPSA*. Over the following two years, the real price of a meter unit rose by 36%. After that, there have been no further changes in the prices, except for applying different unit prices in the several tariff plans implemented in mid-2001. The price of a local call in Poland is now the same as in Greece or Spain, while the per capita income is much lower in our country.

TPSA is one of the last European telecom operators to apply the archaic **unit-based charging system**, which uses a fixed price unit. Unit based charging systems may lead to call charges being not proportional to the duration of the call, while per second based charging generally gives call charges which are proportional to call duration. Unit charge has the same effect as the initial charge. A full unit is charged at the beginning of the call, and includes a number of seconds of call time until the next unit is charged. Depending on the principle used by the operator (synchronous or asynchronous), the number of seconds of call time in the first unit may be less than the specified unit duration. The duration of the unit varies according to the destination of the call and time of day. Call duration is always rounded up to a multiple of whole units, so the user will nearly always pay for more time than the time used. A call set-up charge may apply, but is relatively rare.

Among the EU countries, currently only the incumbents in Austria and Germany (for local and international calls only) still use a unit-based charging system.

Most operators currently use **real time charging** (also known as per-second pricing – PSP) in which the duration charge is directly proportional to the exact duration of the call (normally to the nearest second). A call set-up charge or minimum charge may also apply.

The real time charging method can be perceived as more convenient for the users, as it is the most transparent method (users only pay for what is actually used). However, there is no guarantee that this method will result in the lowest call charges. Most incumbent operators have switched from a unit-based system to real time charging, keeping the same average duration charge, but adding a (new) call set-up charge, resulting in a higher overall cost per call. This especially affects medium-length calls, depending on the price structure before and after the change.
The third possible method is **fixed period charging,** which uses a variable price, but a fixed duration unit. The call is normally charged on a per-minute or per 6-seconds basis. The price for the period will vary according to destination and time of day. The charged duration of the call is rounded up to a multiple of whole periods. A call set-up or initial charge is often applied in the form of a higher charge for the first period. This initial charge may vary according to destination and time of day. [9]

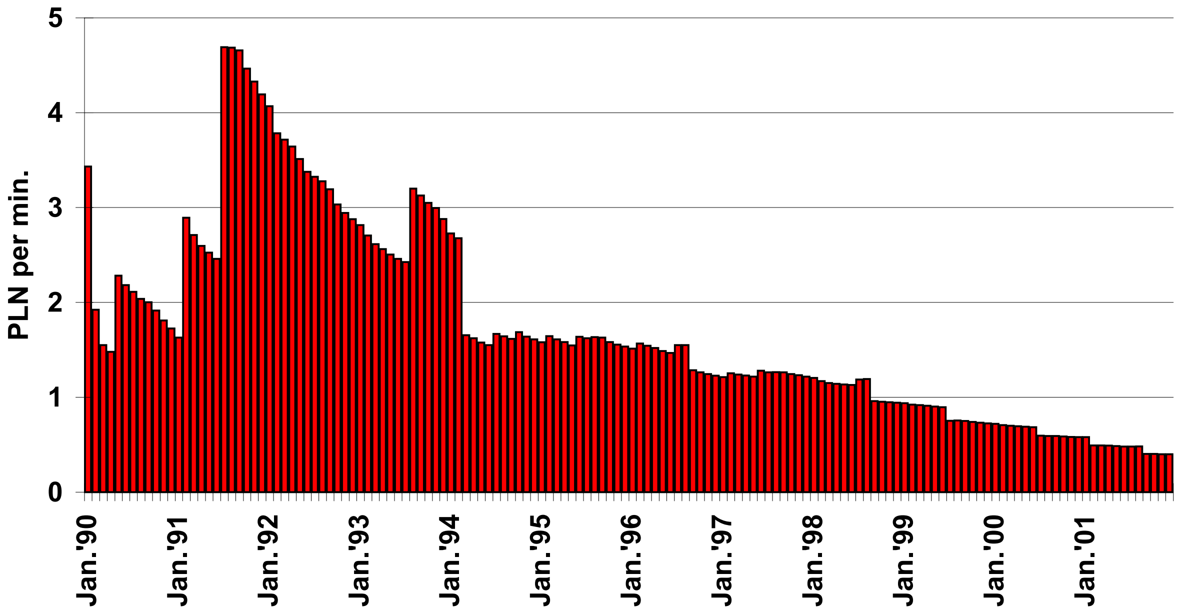

Figure 6. Long-distance call charges in real terms, over 100 km peak rate, December 2001 prices

Till March 1994, the charges for long-distance calls were closely related to charges for local calls. The relationship between prices for local and long-distance call has been kept for many years at an unreasonably high level (36:1). In July 1991 the peak long-distance call charge (over 100 km during the peak hours) was in real terms almost twelve times higher than the one in December 2001. In current prices, 1 minute of the long-distance call decreased from PLN 0.72 in 1992 to PLN 0.40 in September 2001, what means by 44% only. In the meantime its cost occasionally rose to as much as PLN 0.96.
The process of the adaptation of long-distance tariff to the OECD recommendations, which started in March 1994, was initially very slow. The value of the charge ratio (of the most expensive long-distance call to a local call) was changed to the level of 18:1, then in 1996 to 15:1 and in 1998 to 12:1, which equals the average value in the OECD countries in 1991. Moreover, these changes were achieved only by lowering the long-distance call charges without a simultaneous increase of real charges for local calls.
The process of rebalancing was accelerated after 1998, and particularly in 2001, on the eve of the market entry of the competitive long-distance operators. The charge ratio eventually fell down to 4.1 : 1, the charges for the calls ceased to depend on the distance, and a "Friends &

Family"-like option was introduced, offering prices for connections with three selected numbers which were 20% lower than the standard ones. Nevertheless, telephone calls in Poland are still among the most expensive in Europe.
Since the beginning of its activity, *TPSA* has introduced three changes in international tariffs. The last one was in March 1994, i.e. more than 8 years ago. From this time the basic charges have remained the same while the rate of inflation has amounted to over 280%. The constant level of charges for international calls can be explained by the following:

- the charges introduced in 1994 were so high that the only way to bring them back to the proper level was to keep them unchanged for several years,
- "call-back" services and VoIP telephony were offered by numerous companies, as a form of a technologically advanced response to too high charges for international outgoing calls.

During the last year only, outgoing international traffic carried by *TPSA* dropped by 15%.

Table 4. TPSA's traffic structure (millions of minutes)

Calls	1Q2001	2Q2001	3Q2001	4Q2001	1Q2002
Local	5,460	4,973	4,523	5,045	4,922
To mobile networks	469	488	502	482	438
Long-distance	880	927	747	728	708
International	111	109	108	101	94
Dial-up Internet	1,568	1,435	1,334	1,691	1,900
Audiotex and IN	37	49	42	48	46
TOTAL	**8,525**	**7,981**	**7,256**	**8,095**	**8,108**

Source: TPSA.

Neither has *TPSA* modified the prices of connections with cellular networks over the last six years. As the nominal value of these charges has not changed, their real value has in fact decreased by the rate of inflation. The prices are now quite exorbitant, e.g. 3.5 times higher than the prices of long-distance calls. Since prices of mobile-to-mobile connections are lower and the numbers of fixed and mobile phones are virtually identical, the volume of fixed-to-mobile traffic is diminishing (Table 4).

5. International tariffs comparisons

In the early nineties, Poland was transformed from one of the cheapest countries in the world for telecommunications services to one of the most expensive. While acknowledging the price rises as a step in the right direction, it is nevertheless clear that the structure of tariffs has remained fundamentally unaltered. There has been no relationship between the charges for telecommunications services and the costs of their provision, and no balance in the price structures. The most visible symptoms of the unbalanced tariff structure were [2], [4]:

- the high connection charge,
- the relatively cheap rental charge (but still expensive in terms of the average salary),
- relatively cheap local calls,
- the prohibitively expensive long-distance calls and the high value of the ratio of charges for long-distance calls to those for local calls,
- relatively expensive international calls,
- an inflexible approach to such modern elements of tariffs as off-peak discounts and optional tariff plans.

Currently, several tariff elements are very expensive in comparison with similar charges in other countries, and some of them are also high in absolute terms (e.g. prices expressed in

EUR exchange rates). Below the current *TPSA* tariffs are compared with the tariffs used by incumbent operators from 15 EU countries and 3 Central European countries. According to the OECD recommendations, such benchmarking exercise could serve as a reference for an operator which is not able to estimate the costs of providing the services [4].

Table 5. Prices and OECD fixed charges baskets (EUR, VAT excluded).

Country	Connection charge	Rental charge	Fixed charges basket	Connection charge	Rental charge	Fixed charges basket
	Residential			Business		
Austria	109.00	174.36	196.16	109.00	340.08	361.88
Belgium	54.54	160.68	171.59	54.54	160.68	171.59
Denmark	102.26	146.38	166.83	102.26	146.38	166.83
Finland	103.28	122.40	143.06	103.28	122.40	143.06
France	38.56	125.88	133.59	38.56	195.74	203.46
Germany	44.45	131.16	140.05	44.45	131.16	140.05
Greece	29.34	119.76	125.63	29.34	119.76	125.63
Ireland	103.88	180.84	201.62	103.88	180.84	201.62
Italy	103.29	163.56	184.22	103.29	175.44	196.10
Luxembourg	50.00	192.00	202.00	50.00	192.00	202.00
Netherlands	37.82	165.72	173.28	37.82	188.76	196.32
Portugal	71.83	142.20	156.57	71.83	142.20	156.57
Spain	95.00	140.11	159.11	95.00	140.11	159.11
Sweden	68.52	131.77	145.47	85.65	458.55	475.68
UK	99.64	130.59	150.51	154.57	254.43	285.34
EU average	**74.09**	**148.49**	**163.31**	**78.90**	**196.57**	**212.35**
Czech Republic	109.58	65.75	87.67	109.58	84.54	106.45
Hungary	111.29	118.63	140.89	247.32	159.47	208.94
Poland	**79.40**	**111.16**	**127.04**	**79.40**	**111.16**	**127.04**
Slovak Republic	22.88	54.68	59.26	22.88	54.68	59.26
CEC average	**80.79**	**87.56**	**103.72**	**114.80**	**102.46**	**125.42**
EU+CEC average	**75.50**	**135.66**	**150.77**	**86.46**	**176.76**	**194.05**

Source: Tarifica on CD-ROM (May 2002), PTO's pricelists, own calculations based on OECD methodology [7].

The value of the fixed charge basket for residential customers still represents only 78% of the EU average (Table 5) and has remained lower than in any EU country (except for Greece) or in Hungary. It has risen by almost 129% since 1998 (in the EU, by a little over 14%). *TPSA*'s connection charge has ceased to be among the highest in Europe, and now it exceeds the EU average by 7% only. Converted to EUR, the charge has fallen down by 24% in Poland and by 19% in the EU countries. *TPSA*'s subscription charge amounts now to as much as 75% of the EU average but continues to be lower than in any EU country; it is, however, twice more than the subscription charge in the Czech Republic or Slovakia. It has increased more than three times since 1998 (in the EU countries, by a mere 19%). Similar developments are observed in the tariffs for business subscribers.

More important differences persist between the local and long-distance calls (Table 6). The *TPSA* prices of local calls represent only 67% of the EU average while the maximum long-distance charge is still 40% higher than the average maximum charges in the EU countries. Only in three EU countries (in Italy, Portugal and Spain) are these charges higher than in Poland.

The prices of local calls have risen by 54% in Poland, while the average raise in the EU has been as little as 15%. During the same period, the prices of long-distance calls have fallen down by 47% in Poland and by 52% on the average in the EU countries. Thus, the difference between *TPSA*'s long-distance tariffs and the average EU tariffs has grown again.
It must be remembered that in EU countries, the average ratio of the most expensive long-distance calls to the local calls has fallen in the last few years to the level of about 2:1. In 4 countries, including the extensive territory of Sweden, there is no distinction between local and long-distance calls. Given the advances in modern switching and transmission technology, distance is becoming much less significant as a component in the overall tariff structure. Other Central-European countries have been fairly successful in rebalancing these components of the tariffs, lowering this ratio to make it approach the EU average. It Poland it has remained relatively high, amounting now to almost 4.14 : 1.

Table 6. Local and long-distance tariffs in EU and CEC (EUR, VAT excluded)

Country	Average rate for 3 min. call		Ratio
	local	long-distance	
Austria	0.160	0.192	1.200
Belgium	0.164	0.164	1.000
Denmark	0.117	0.117	1.000
Finland	0.116	0.296	2.559
France	0.132	0.273	2.062
Germany	0.106	0.317	3.003
Greece	0.078	0.189	2.423
Ireland	0.126	0.232	1.847
Italy	0.099	0.352	3.557
Luxembourg	0.081	0.081	1.000
Netherlands	0.100	0.107	1.066
Portugal	0.120	0.334	2.790
Spain	0.077	0.336	4.387
Sweden	0.099	0.099	1.000
UK	0.157	0.315	2.003
EU average	0.115	0.227	2.060
Czech Republic	0.136	0.328	2.413
Hungary	0.105	0.312	2.984
Poland	**0.077**	**0.318**	**4.138**
Slovak Republic	0.082	0.247	3.000
CEC average	0.100	0.301	3.134
EU+CEC average	0.112	0.243	2.286

Source: Tarifica on CD-ROM (May 2002), PTO's pricelists, own calculations.

A tentative comparison of the prices of fixed-to-mobile calls shows that in late 2000, they were higher in Poland by up to more than 40% than the average for the EU countries (Table 7).
The international tariffs of *TPSA* are among the most expensive ones in Europe. In certain directions, the prices are even more than four times higher than the EU average and more than fourteen times higher than the lowest ones available in the member states of the Union (Table 8).
As a result, *TPSA* seems to have missed the chance to harmonize its telecommunications tariffs with the EU standards during the ten years of its existence. Small quantitative changes do

not recompense for the lack of qualitative and structural changes. The current tariff structure still makes long-distance calls prohibitively expensive while failing to address the problem of local call charges and subscriber rental charges, which are relatively low. This tariff structure does little to shape the traffic load.

Table 7. Fixed-to-mobile tariffs in EU countries and Poland (EUR, VAT excluded, December 2000)

Tariff	Call duration	EU average	TPSA	Difference
Peak-rate (weekdays 11:00)	180 s	0.79	1.12	+41.8%
	300 s	1.31	1.87	+42.7%
	600 s	2.59	3.66	+41.3%
Off-peak rate (weekdays 20:00)	180 s	0.63	0.82	+30.2%
	300 s	1.04	1.42	+36.5%
	600 s	2.07	2.77	+33.8%
Cheapest possible rate	180 s	0.50	0.60	+20.0%
	300 s	0.83	0.97	+16.9%
	600 s	1.62	1.87	+15.4%

Source: Teligen [8], TPSA pricelist, own presentation.

Table 8. International tariffs in EU countries and Poland (10 minutes, peak rate, EUR, VAT included)

Calls to	Cheapest EU country	Most expensive EU country	EU simple average	Poland
Near EU country	0.73 (NL)	4.63 (UK)	2.20	5.02
Distant EU country	2.43 (LU)	5.79 (UK)	3.61	6.79
USA	0.78 (NL)	4.79 (FI)	2.65	11.16
Japan	2.43 (LU)	12.15 (PO)	7.13	20.00

Source: European Commission [9], TPSA pricelist, own presentation.

6. Independent operator's tariffs

The impact of *TPSA* is so enormous that the corporation must be considered the *de facto* regulator of tariffs in the entire market. This is tantamount to saying that no operator is able to offer prices which are significantly more reasonable than the incumbent's. While the mobile operators are capable of applying independent price formulae due to the somehow different nature of their services (e.g. their mobility), the corporations operating on the fixed telephony market have no such possibility.

The general strategy of the local operators has been consisting in copying *TPSA*'s pricing decisions and imitating each change in the dominant corporation's price lists with a shorter or longer delay. This continuing adaptation of their tariffs to the price leader's movements does not imply that the smaller operators do not have their own concepts of a pricing policy. The explanation is simply that operating under the sway of the strong dominant corporation, they practically cannot afford to implement independent tariff policies. Accordingly, they apply maximum prices, i.e. ones that do not exceed *TPSA*'s. A new local operator could venture to ask prices slightly higher than *TPSA* only if it offered a better quality of its services, of which the customers would not approve anyway. In the present situation it is very difficult for them to keep their prices below *TPSA*'s level, since they cannot subsidize the prices of the local services with revenue from other, much more expensive products.

Right now the various operators of fixed telephony are applying very similar tariffs. Certain

published price lists resemble those of *TPSA* even in terms of their graphic layout. Most local operators base their billing on price units. This concept, borrowed from *TPSA*, is of historical rather than practical significance, and cannot be justified by their equipment, which is modern. The only exception is *Telefonia Dialog*, which as early as in 1998 offered to its customers a tariff plan featuring PSP with a setup charge.
In order to facilitate the implementation of their own pricing policies by the independent operators, *TPSA* is now (under the rather inefficient pressure from the national regulatory and anti-monopoly agencies) undergoing the process of the rebalancing of tariffs, consisting in basing the price of each service on the actual cost of its provision, and in practice in relinquishing the cross-financing of the cost of local connections and of subscription with revenue from long-distance and international calls. Bringing the usage charges to a realistic level shall stimulate competition in all the segments of the market.
The rebalancing of tariffs is a long-term process applied in markets which are being liberalized. Unfortunately, the period 1992–98 must be considered completely wasted under this respect, and the following years brought only minor changes in the relationships of prices in the Polish tariffs. The process of rebalancing was markedly accelerated during the last year, which, combined with the very limited financial resources of Polish society, made customers give up their access to fixed telephony: More than 400,000 of *TPSA*'s customers canceled their subscriptions, and at the same time the general volume of traffic fell down (Table 4), which resulted in a decrease of the revenue from telephone calls by 12%.

Table 9. Basic long-distance tariffs in Poland (PLN, excluding VAT)

Carrier Access code	TPSA 1033		NOM 1044	Netia 1 1055		Energis Polska 1066	Telefonia Dialog 1041
Tariff plan	**Active**	**others**	–	**Economy**	**Enterprising**	**'Konekt'**	–
Valid from	Sept. 1, 2001		Sept. 1, 2001	Aug. 1, 2001	June 1, 2002	Nov. 19, 2001	June 1, 2002
Contract	within local subscription		required after Aug. 1, 2002	required (1)	required	required	(2)
Minimum bill per month	–	–	–	20.00 (1)	60.00	100.00	–
Peak rate	0.37	0.40	0.38	0.35	0.31	0.40	0.36
Off-peak rate	0.19	0.20	0.19	0.21	0.31	0.40	0.18
Weekend peak rate	0.28	0.30	0.29	0.21	0.31	0.40	0.29
Charging method	meter unit 0.27	meter unit 0.29	meter unit 0.29	per minute	PSP with set-up 0.10	PSP after first minute	per minute
Volume discounts	as for local subscription		yes not published	yes not published		5-25 %	as for local subscription
Options	Friends&Family-like: -10% for 3 numbers fee: 1.00 / month / number		–	–	–	–	–

Source: Operators pricelists, own presentation.

Notes: (1) Except for Netia local subscribers.
(2) Available without additional contract for Dialog subscribers only.

The alternative long-distance operators who launched their activity in Poland during 2001 did not manage to offer significantly competitive tariffs (Table 9).[5] *NOM* merely copied the tariff formulae of *TPSA*, lowering its prices by a mere 5%. *Netia 1* adopted a different charging method (fixed period charging) and applied additionally lowered prices in the peak periods, targeting its offer at subscribers who need more long-distance connections (with a monthly minimum fee). *Energis* was practically unavailable for residential customers and even for the

5 In Germany, the most attractive prices of the independent operators are up to ten times lower than the standard offer of the *Deutsche Telekom AG*.

SOHO segment due to its high minimum charge. It was the first long-distance operator to implement PSP with a minimum charge. Six months later the similar product was offered by *Netia 1*.

In order to undercut the competition, *TPSA* applies not only its tariff policy featuring the maximum delaying and limiting of the rebalancing of tariffs, but also other methods of "resistance," some of them verging on the illegal. Certain practices of this type are discussed in [3] and [5].

Another instance of such practices is the story of the market entry of *NOM*, Ltd., the first independent long-distance operator in Poland. The scenario of its market entry followed the German pattern of successful liberalization.

NOM was granted a license in May 2000, along with two other corporations. When the interconnection negotiations with *TPSA* had turned out to be fruitless, *NOM* applied for a decision first to the *MPT* and then also to the *URT*. As the decision of the President of the *URT* statutorily replaced the interconnection agreement, *NOM* began to provide services as of July 1, 2001, pursuant to this agreement. The services were provided without any prior marketing preparation, since until the last moment *NOM* was not certain if *TPSA* was going to make POI available to it.

NOM's original plan was to gain 8% of the market in two years. The reality, however, surpassed the expectations. After six months, a quarter of long-distance traffic took place by means of *NOM*'s network. *NOM* owes its apparent success to its concept of providing the services on the "open call-by-call" basis. Under this system, a user may access *NOM*'s network without having entered into a special agreement, merely by dialing the access code; payments are made to the local operator, who includes the calls connected by *NOM* as a separate item in the invoices issued to its subscribers. *TPSA* objected to this system as a violation of the Polish tax regulations. In December 2001, the Anti-Monopoly Court repealed the decision of the President of the *URT* in view of formal considerations, without commenting on its content.

After another three months, an agreement was concluded on terms required by *TPSA*. The "open call-by-call" system was abandoned. A user must enter into an agreement with *NOM* before being billed, as it is the case with the other alternative long-distance operators. Overdue invoices for the previous year's connections shall be issued by *NOM* based on data provided by *TPSA*. *NOM* may be unable to recover the amounts of such invoices, since some customers object to this form of billing as contrary to the bylaws of *NOM* from July 2001, drawn up in good faith based on the decision of the *URT* which was subsequently repealed. The fact that special agreements must now be concluded will probably reduce the number of the users of *NOM*'s network dramatically.

The controversial television commercials advertising *TPSA*'s access code (styled as a message from the *MPT* announcing that this code shall be used) and thus cunningly coercing the unaware consumers to select this operator must be considered another action undermining the competition on the long-distance market. The regulator did not counterweigh it with any activity or information campaign of its own.

This incident is one of the many evidencing that the process of the liberalization of the Polish telecommunications market has so far been a fiasco due to the parliament's and the administration's lack of determination, legislative ability and imagination. *TPSA* has been eagerly taking advantage of this situation to profit from its privileged market position for as long as possible.

7. The AMO as a Regulatory Agency

As we have mentioned earlier, *TPSA*, which operated in the years 1992–2000 solely pursuant to its statutory rights (without having to apply for a license), has been given a considerably amount of liberty in matters of setting the prices of its services, as regards both retail and wholesale prices (the latter including interconnection charges). The experience of the markets where competition is more developed (e.g. UK or USA) shows that such issues require a strict regulatory supervision to prevent the monopolist from abusing its market power. The most common forms of regulation are price ceilings (specified *ex ante*) or admissible rates of profitability. The cost calculations of the dominant corporation, which provide the basis for specifying the terms of interconnection, must be carefully examined as well.

The only regulatory means granted to the *MPT* were the discretionary authority to specify maximum prices of universal services and the obligatory agreements on the prices of international universal services. As the *MPT* had no powers of supervising the matters of interconnection, the parties to such agreements were given complete freedom of settling both the technical and the economic aspects of the interfacing between operators. The lack of a supervision over *TPSA* soon produced its effects on the market as prices of services were growing, negotiations with new operators were being stalled and attempts to force them to accept discriminating methods of the settlement of accounts were made. Prices were raised every few months, usually by amounts exceeding the rates of inflation. In spite of all this, the *MPT* never exercised its authority as the regulator of retail prices or took any action to develop the formulae (parameters) which were to be specified prior to the operators' decisions. In view of the *MPT*'s passive attitude, which had been expected by the public, the Anti-Monopoly Office assumed the role of the regulatory agency pursuant to the Law on Counteracting Monopolistic Practices.

Its first major decision of this nature was handed down in July 1993. It prohibited the setting of exorbitant charges for connections and the collecting of such prices in a manner which favors certain groups of subscribers. At the time, *TPSA* was intending to raise the price of a meter unit, thereby increasing the prices of all domestic services. The *AMO*'s opinion was that this would bring the prices of long-distance services up to an excessively exorbitant level. Neither did the *AMO* agree to a partial alleviation of the price raise by making off-peak discounts available to one third of the subscribers only, i.e. to those to whom who this offer could be made because of the technical characteristics of the network.

The *AMO* recommended to *TPSA* on many occasions that the relationships between the prices in its tariffs be modified. The maintaining of the existing structure of the tariffs and *TPSA*'s imposition of its preferred methods of the settlement of accounts hindered the entry of independent operators into the local market. When *TPSA* attempted to raise the prices of its services again, a decision of the *AMO* from January 1994 ordered it to relinquish its monopolist practice of reinforcing a telecommunications tariff in which the relationships between the prices limited competitive corporations' access to the market. Following this decision and the subsequent negotiations with the *AMO*, *TPSA* modified the ratio of the prices of local calls to those of long-distance connections for the first time.

The recent decisions of the *AMO* on the prices of services gained the most publicity because of the amounts of the fines. Based on studies by the author of the present paper, in July 1998 the *AMO* rendered a decision which, among other provisions, ordered *TPSA* to relinquish its monopolist practice of charging exorbitant prices for long-distance calls. To justify its decision, the *AMO* quoted the fact that these prices were more than 30% higher than the average prices charged by the leading operators in the EU countries. Although information on the cost of the provision of individual services was not available, an earlier ruling of the Anti-Monopoly Court substantiated such an interpretation of "an exorbitant price."

Two years later, also based on a similar comparative study conducted by the present author, the *AMO* assessed the execution of its decision. It concluded that instead of diminishing, the differences between the long-distance tariffs of *TPSA* and EU operators had grown.[6] The *AMO* accused *TPSA* of implementing the process of the rebalancing of tariffs in a selective and biased manner, dramatically raising the charges for the local services while lowering the prices of long-distance calls only slightly and maintaining high prices of other connections. This time the *AMO* fined *TPSA* with an amount of as much as US$ 13.5 million for not complying with its decision from 1998. *TPSA* appealed against this decision, and eventually, in May 2002, the Anti-Monopoly Court repealed it, ruling that there had been procedural errors in the *AMO*'s action. Still, the Court did not express an opinion on the content of the contested decision, i.e. it did not state whether *TPSA*'s prices were indeed excessively exorbitant. Some other interventions of the *AMO* are discussed, among other publications, in [1] and [5].

8. Conclusions

The prices of telecommunications services in Poland, set by *TPSA* or under its influence, are among the numerous evidence that the process of the liberalization of Polish telecommunications has been a fiasco. The policy which the administration has been pursuing in this matter until now may be summarized as aiming at obtaining the highest possible price from the sale of the incumbent. The strategy of the government has in fact consisted in repeated assurances that the subsequent stages of the liberalization of the market will not take place prematurely. *TPSA* has adopted a policy of "resistance," consisting in appealing against all the decisions of the administration to all the competent courts. *TPSA* takes each opportunity of procrastination, since this ensures to it handsome financial rewards. To justify this behavior, it explains that the shareholders expect the management not to waste any chance of earning a profit. The corporation is able to procrastinate because of the shortcomings of the current legal system. At the same time, it incurs no cost—other than the lawyers' fees—by appealing in cases which are obviously lost in advance. A refusal to comply with a decision may entail a fine, but the process of establishing whether a decision has indeed been disobeyed is a lengthy one, and a verdict which imposes a fine on the culprit may be appealed against as well. The maximum level of the fine specified in the TL (3% of the income) is too low to discourage *TPSA* from this risk.

When the decision to grant so much liberty to the nationwide operator was made, the cost of a continued monopoly and its impact on society and the economy were not taken into consideration. Each member of the nation is now paying for this negligence whenever making a phone call. The prices of telephone connections in Poland are now among the highest in Europe and in some cases much above those paid by members of much more affluent nations. Consequently, the volume of the traffic generated by the Poles is substantially lower, which obviously produces a civilizational gap in the present information society and economy of knowledge and information.

It is because of the high cost of dial-up Internet access in Poland (based on the prices of local calls) and the lack of generally available and cheap alternative broadband offers that only 15% of the nation are using the Internet. ISDN channels, which may provide a convenient medium of Internet access, account for less than 4% of trunk lines. In a nation of more than 38 million people, some 65,000 use broadband access over telephone lines.

This situation cannot fail to disturb, especially in the context of the approaching conclusion of the access negotiations with the EU. Beside vague declarations, no signs of change are noticeable either in the state's telecommunications policy or in the regulatory agency's supervision of the enforcement of the law.

6 This is also evidenced by the results of the studies discussed in this paper (Chapter 5).

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