

15 QUALITY ASSESSMENT OF MUNICIPAL SERVICES IN THE SELECTED MUNICIPALITY OF THE SILESIAN PROVINCE

15.1 Introduction

The municipal services include, in particular, the public utility tasks to satisfy the collective needs of inhabitants on an on-going and continuous basis by providing commonly available services [1]. The municipal services include those services which are the specific branch of economy and of existential nature – satisfying the basic needs of inhabitants. The specific character of these services consists in their marginal market orientation. Usually an inhabitant has no chance to choose a provider of these services. Most frequently it is because of very expensive infrastructure which is so-called barrier to entry for potential providers. It should be considered as axiom that the quality is competition-conditioned. Lack of competition does not influence the offered quality positively. The quality was defined in this article as fulfilment of the customers' expectations by a product/service.

The results of the survey carried out in 2010 among 140 randomly selected inhabitants of Zbrostawice municipality – customers of the Public Utilities and Housing Establishment (Zakład Gospodarki Komunalnej I Mieszkaniowej) are presented in this article. The purpose of this survey was to assess quality of municipal services performed by the said establishment for the benefit of the inhabitants.

15.2 Public services – municipal services

The public services (public interest services or public utility services, such as electric energy, gas and water supply services, transport services, mail and telecommunication services) – are public utility business activities initiated by the public authorities and carried out by them or commissioned to separate entities (public or private) [2]. The public services can be defined as public utilities in relation to which nobody may be prevented from using them. They include utilities which, regardless of number of users, have a specific value which is not disturbed by subsequent users [3].

The term “municipal” means urban, i.e. subject to municipal self-government (e.g. municipal establishment, municipal infrastructure, municipal sector). The municipal services are the branch of the national economy managed by a local self-government (provincial, district, municipal) and its purpose is to satisfy the material and housing needs of inhabitants in the urban areas through providing tangible and intangible services [4].

The fig. 15.1 below presents the general classification of the municipal services and their location in the national economy structure.

Activities of the municipal services sectors in Poland are carried out according to the regulations included in several legal acts. The basic legal act in this regard is the act as of 20th December 1996 on municipal services on the basis of which the self-governmental entities operate.

This document concerns a budgetary entity which provides certain services within the following scope: [4]:

- Water and wastewater management. These services include all issues related to water resources, preparation of balances, intake, treatment and distribution of water as well as wastewater discharge and treatment and waste management.
- Waste management. These services include all issues related to waste disposal, storage and utilisation. Municipal waste – households' waste as well as waste not containing dangerous waste from other waste producers which, because of their character or composition, are similar to waste produced by the households.
- Housing management. Municipal flats – flats owned by a municipality or a district (local self-governmental community) as well as flats handed over to a municipality used by public service entities, such as: health care institutions, social care centres, education system units, cultural institutions.

Depending on a legal form of a given establishment, various sources of financing activity connected with a property maintenance are possible. The municipal services companies are managed by the local self-government's units in the following forms [1]:

- A budgetary establishment (as in case of the examined establishment),
- The commercial law companies.

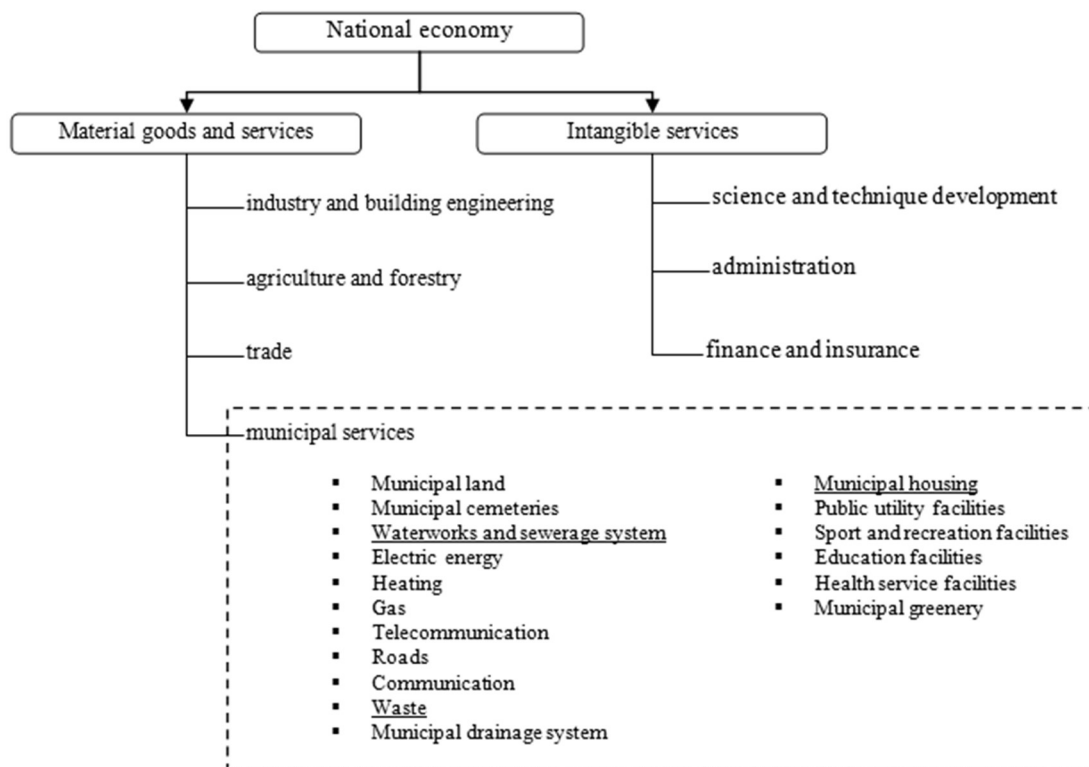


Fig. 15.1 The Exemplary Diagram of the National Economy with the Indication of Economy's Areas Connected with Services Provided by the Studied Establishment
The branches related to this article are underlined. Source: [4]

The budgetary establishments are dependent, to a large measure, on the municipal offices, whereas, if a municipal enterprise operates in a form of commercial law company, it receives much more freedom as far as a company management.

15.3 Municipal services quality

The quality means fulfilment of requirements by a product or a service. The requirements are defined on many planes, *inter alia*, legal, technical and market planes. The most important market requirements are the requirements of a final recipient of a product or a service – the customer's requirements. A customer is an person who pays for purchasing goods or services provided by the organisations [5]. According to the ISO 9000 standard, a customer is an organisation or a person who receives goods [6] – whereby goods include both products and services according to this standard.

Quality of a customer service is the basic challenge for a service company operating on a competitive market. Companies or establishments providing municipal services are not always operated in such conditions. It may be a factor which reduces the customers' satisfaction which is a state noticed by an individual and connected with comparison of a product features perceived with the individual's expectations concerning these features [7]. The companies which want to survive on a competitive market must have a customer-oriented program of organisation management [8] to win their satisfaction. It should be similarly in case of municipal services, even despite of a lack of competitive surroundings. The fact that these services have a certain political surroundings should not be ignored by any means. The inhabitants' satisfaction with the municipal services will be reflected in larger support for the local authorities responsible for providing these services.

The municipal services are classified as the tangible services which include, beside a product, also surroundings which accompany their execution, they also cover customer services and deliveries [9]. The municipal services are multipronged, multiform, therefore it is difficult to assess their value. Beside the tangible goods supplied, e.g. water having certain properties, they are accompanied by intangible values, e.g. waste disposal or wastewater discharge. However, regardless of their form, the most important thing is that they are to meet the customer expectations. It is worth underlining that one of the most important requirements for most of municipal services is providing their continuity.

15.4 Survey subject – the Zbrośławice municipality

The municipal services in the studied Zbrośławice municipality are provided by one of the specially established entities – Public Utilities and Housing Establishment. This establishment performs the following functions: solid waste disposal, cesspit liquid waste disposal, wastewater treatment plant and sewerage system exploitation, water extraction and distribution basing on the water supply system. Moreover, the municipal authorities entrusted administration of the municipal buildings owned by the municipality to the establishment. Presently, the establishment administers, among others, 31 residential buildings and 18 housing and utilities buildings. Number of occupants amounts to 664 persons in total (as of May 2010). The establishment manages 248 housing units. The works executed for the municipal flats are, as follows: preparation of premises for occupancy, e.g.: exchange of water and wastewater systems, exchange of electrical systems, repair and exchange of the flats' components, such as: doors, windows, floors, heating furnaces, etc., repair of roofing and tin works, repair of insulation as well as façades, overhauls and repairs of chimneys, cesspits, fencing

and any other works connected with maintenance of the facilities administered by the establishment.

15.5 Model of municipal services quality assessment

The quality assessment model of municipal services provided by the establishment in Zbrosławice was built basing on 3 types of services:

- Water supply,
- Waste disposal,
- Housing conditions maintenance.

The fig. 15.2 presents the model of municipal services quality assessment.



Fig. 15.2 Model of Municipal Services Quality Assessment

Source: Own study

The randomly selected customers of the establishment, the inhabitants of Zbrosławice municipality, were asked to express their opinions concerning the selected aspects of the municipal services in a survey questionnaire. It included several questions split into 3 parts concerning different scopes of services.

After having collected the data, the respondents' opinions were assigned numerical numbers in a scale from 1 to 5. Where rating 1 meant low quality level – low satisfaction, and rating meant 5 high quality level – high satisfaction. The data obtained in this way were averaged for all respondents and the partial ratings were obtained for each aspect.

The averaging of partial ratings enabled to obtain quality rating for each of three scope of services. In turn, the averaging of quality ratings from 3 scopes of services enabled to obtain overall quality rating of services provided by the establishment.

It should be stressed that the tested group of inhabitants – customers of the municipal establishment – were a randomly selected group. Their representativeness was not determined. The survey results should be referred to the tested group of respondents only.

15.6 Municipal services quality assessment – survey results

In the first instance the analysis of individual service aspects was presented, successively for each of 3 aspects. Next, the survey results were presented synthetically according to the adopted municipal services quality assessment model. It enabled to evaluate the total quality assessment of services rendered for the benefit of the inhabitants of the tested municipality.

15.6.1 Quality Assessment of Water Supply Services

The fig. 15.3 presents partial ratings - quality assessment of water supply services.

The parameter related to water supply services which was rated by the Zbrosławice inhabitants as the worst was water taste. The mean value of water taste assessment was 3.39. However, one should remember that water taste is a subjective, non-measurable feeling. Therefore, it is not possible to determine and provide the unified standard as far as taste is concerned. Nevertheless, this rating is not the best evidence of meeting the customers' requirements in this regard.

The overall water quality – general feelings related to water – was not evaluated (3.49) much better by the interviewees.

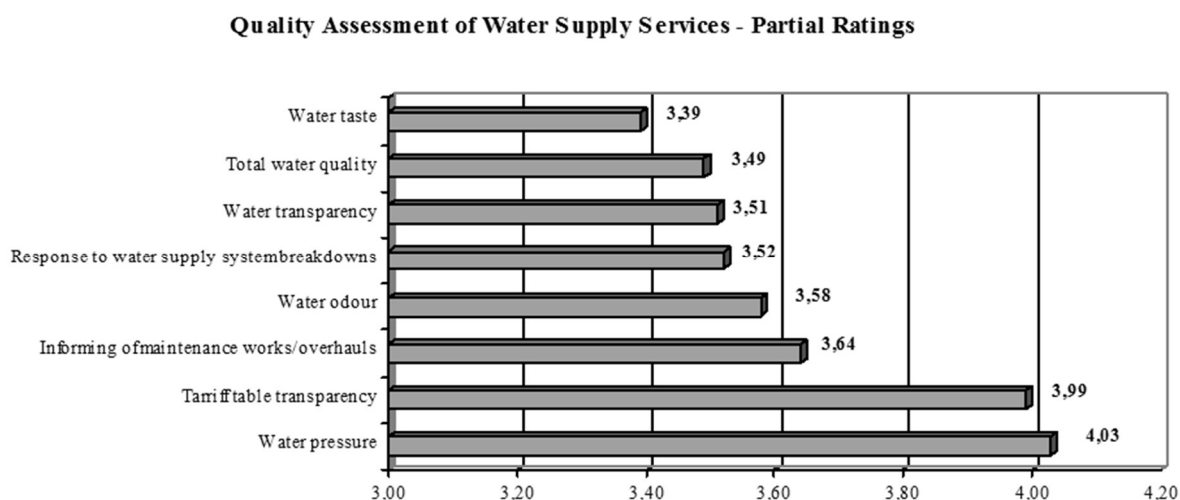


Fig. 15.3 Quality Assessment of Water Supply Services - Partial Ratings

Source: Own study

The mean rating of water transparency was 3.51. Water transparency depends on several factors. It is related to location of a source from which water is extracted for inhabitants of a given locality. Also water supply system condition and application of water treatment chemicals influence water transparency. Nevertheless, water transparency, according to the inhabitants' opinion, differs from expectations.

The establishment's responses to water supply system breakdowns and any stoppages related to lack of possibility to extract water were rated at the level of 3.52. The expectations of most of inhabitants within this scope are higher than the level of services provided.

Water odour is also one of the most important parameters of water quality. The expectations of inhabitants in this regard seem to be higher as well. The inhabitant's rating of odour which was 3.58 on average gives an evidence of it.

Informing the inhabitants of possible difficulties connected with providing continuity or water supply quality seems to be the fundamental job of a supplier. The respondents rated quality of these services at 3.64. Taking into consideration that these activities are easy and not expensive, this rating should be considered as unsatisfactory.

Full and simple availability of information concerning fees and rates for water supplies and waste disposal may be classified as the basic requirements of the customers. The mean rating of availability and transparency of tariff tables was 3.99. Because of its simplicity, like in the previous case, these tasks should not cause any problems for the service provider.

Water pressure was rated at the level of 4.03 on average. It is the best result for this type of services. More than 74% of respondents found pressure of supplied water appropriate. It should be noted that pressure is a parameter which has a certain expected value. It cannot be too low or too high. Assurance of appropriate water pressure is connected with maintaining water supply system infrastructure, including use of pressure reducing valves has an impact on the final water pressure. Despite of technical limiting conditions for this parameters, the inhabitants stated that water pressure may, in principle, be regarded as meeting their expectations.

15.6.2 Quality Assessment of Waste and Wastewater Disposal Services

The fig. 15.4 presents partial ratings - quality assessment of waste and wastewater disposal services. It should be stressed that both solid and liquid – household cesspit wastewater – waste disposal services are market-oriented. The inhabitants of the municipality (not occupying the municipal units) may commission these jobs to other competitive entities. Presumably it will have a positive impact on quality of these services.

The sanitary sewerage systems has, as of the survey date, only 3 localities in the Zbrosławice municipality. In other localities waste is stored in cesspits and next disposed by gully emptiers.

Response time to gully emptier ordering was rated at 3.64. It is the worst result in this rating. The rate of cesspit emptying service is of particular importance in case of dead end cesspits where late performance of the service contributes to overflow which is dangerous for the natural environment and difficult to be removed. The survey demonstrates that the requirements of inhabitants within this scope are higher than the establishment performance.

Only almost 25% of respondents found definitely that they may count on competence of the establishments' staff during a cesspit emptying. The average rating of this aspect of services reaches 3.75. The professional execution of this service is connected with adequate preparation of a cesspit for disposal as well as with leaving everything in order after performing the service. As the survey showed the expectations of the inhabitants in this regard are considerably higher.

Quality Assessment of Waste and Wastewater Disposal Services - Partial Ratings

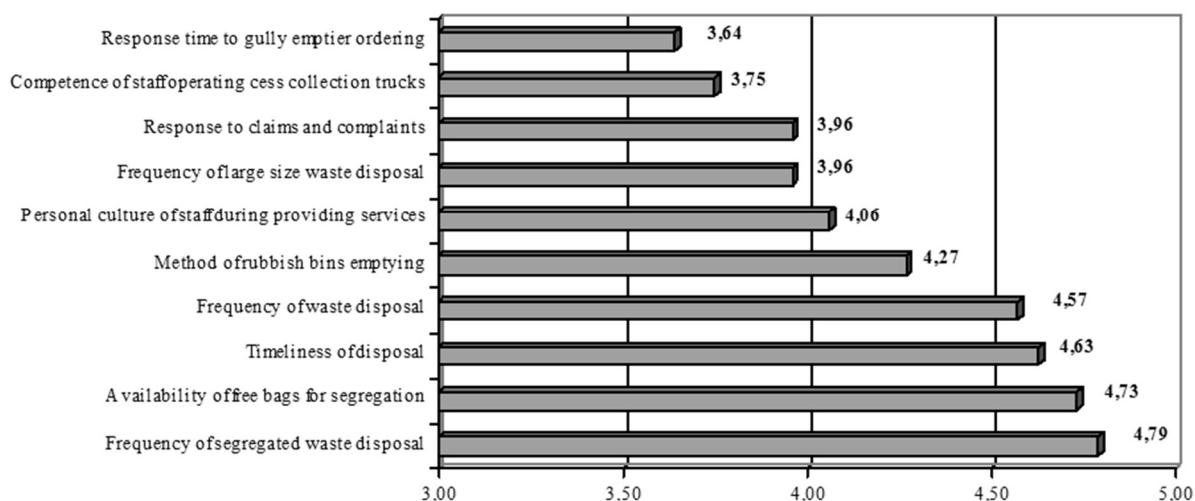


Fig. 15.4 Quality Assessment of Waste and Wastewater Disposal Services – Partial Ratings
Source: Own study

Customers' claims and complaints handling was rated at the level of 3.96. The rating of quality assessment of services connected with large size waste disposal is alike. For almost 73% of interviewees the disposal frequency is satisfactory.

The establishment's staff culture of customer service was rated at 4.06 by the customers. This rating concerned not only the office employees, but also the workers who provide field services. Most of questioned evaluated the staff culture of customer service as good.

The interviewees assessed rubbish bin emptying practices at 4.27. The customers require the establishment's staff to empty the rubbish bins in whole and to leave the empty rubbish bins in a proper place. This relatively high rating shows that the staff knows its duties and it performs them properly.

The waste disposal schedule determined and followed by the establishment, serves its purpose. The frequency of waste disposal was evaluated at relatively high level – 4.57. It demonstrates that for most of interviewees the waste disposal frequency is satisfactory. Good results follows the flexible waste disposal policy applied by the establishment. For the customers for whom collection of waste according to the schedule is not satisfactory, it is possible to offer additional disposal or increase number of rubbish bins.

The timeliness of waste disposal was rated at 4.63. It is one of the highest ratings in the survey. Over 85% of questioned considered that waste was collected according to the schedule. Timeliness in this case is one of the decisive criteria influencing the perception of a service provider by the customers and it is a condition of creating a positive image.

More than 82% of inhabitants who segregated waste regarded that they received a sufficient number of waste segregation bags. The average rating was 4.73.

The inhabitants are provided with bags intended for waste segregation during segregated waste removal. As a rule one bag of each type of waste (plastic, glass, paper) falls on one household. A relatively positive assessment allows to state that the requirements of the inhabitants in this regard can be considered as fulfilled. Like in case of frequency of segregated

waste disposal. The average rating at 4.79 give an evidence of good quality of this service aspect.

15.6.3 Quality of Services Concerning Housing Conditions Maintenance

The fig. 15.5 below presents partial ratings – quality assessment of services concerning housing conditions maintenance. The attention should be drawn to a fact that this scope of services was evaluated by only 30 inhabitants out of 664 persons who occupy the municipal units administered by the establishment.

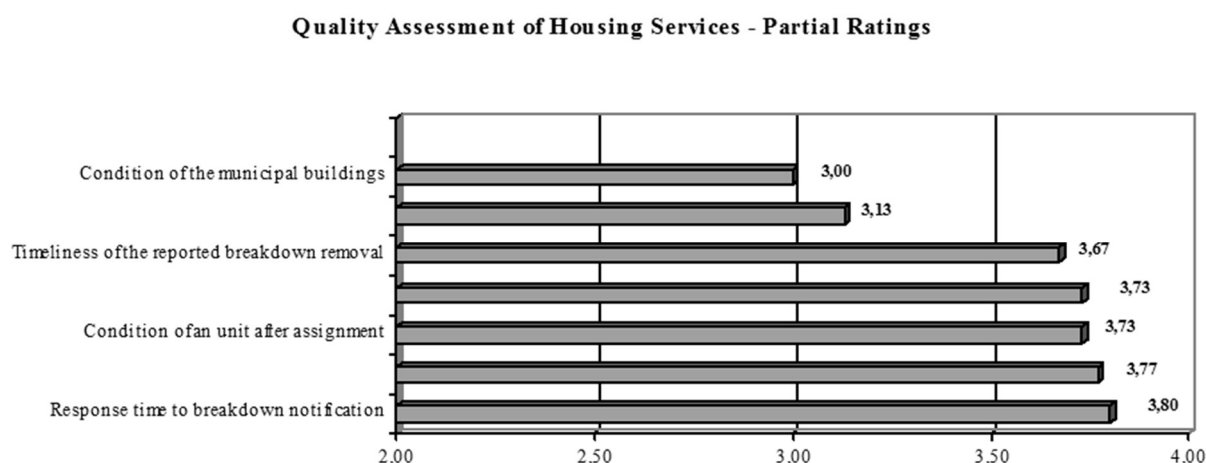


Fig. 15.5 Quality Assessment of Housing Services - Partial Ratings

Source: Own study

The lowest rating (3.0) in this comparison was obtained by the condition of the occupied buildings. The condition is often assessed basing on the aesthetically pleasing appearance which is of a fundamental importance for the occupants. The buildings condition depends on the available funds intended for maintaining them at a proper level to meet the legal and technical requirements. It is no wonder that the administrators, pay special attention to fulfil the building requirements which assure safety of their occupants.

Timeliness of the execution of planned renovations of municipal buildings and flats was not rated much better. The rating of 3.13 gives grounds to say that the expectations of the occupants as far as planning of the renovation works determined by the establishment are much higher than their actual realisation.

The timeliness of the reported breakdown removals was assessed better at the level of 3.67. However, this result does not give grounds to state that the establishment fulfils the requirements concerning keeping the set dates in full.

The occupants of the municipal units evaluated the condition of flats which are made available to them – before registration. This rating reaches 3.73.

The administrator of the municipal buildings should respond to current occupants' suggestions and proposal related to the building condition improvement. The average rating was 4.73 in this case.

If the occupants encounter problems with punctual settlement of their payments they expect the establishment to be understanding and to allow them to repay their debts in instalments. This possibility was assessed by the occupants at 3.77.

The response time to notification of a breakdown or necessity of repairs in the municipal flats was rated at the level of 3.80. It is the best rated aspect of services connected with municipal flats servicing, although in comparison to the previous aspects this figure does not seem to be satisfactory. The rate of executing current repairs depends on the present availability of financial funds, technical resources and the staff. The difficulties to execute the reported repairs are often related to complexity of a breakdown or necessity to cooperate with the external entities.

15.6.4 Overall Assessment of Municipal Services Quality

The fig. 15.6 presents more synthetic comparison of the collected results. It includes the quality assessments of services for each of 3 studied scopes of services and the overall assessment – which is an arithmetical mean of the mentioned three ratings.

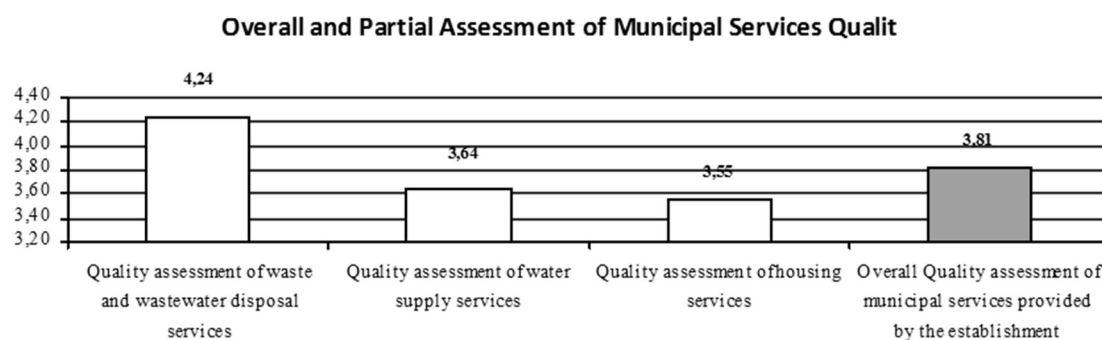


Fig. 15.6 Overall and Partial Assessment of Municipal Services Quality

Source: Own study

After averaging the partial ratings, the quality rating for each of three scope of services was obtained. Quality assessment of waste and wastewater disposal services was 4.24. It is the best type of services included in the analysed comparison. The customers appreciate, first of all, the timeliness and frequency of solid waste removal as well as frequency of segregated waste disposal. The market-orientation of these services in comparison to other analysed services has also an impact on the goods results. In this case a customer has a possibility to choose a service provider. It should be also underlined that the assessment in this type of services is raised by persons who segregate waste. There are relatively a lot of such inhabitants and the assessment of these services is very high among them.

Quality of water supply services was rated at the level of 3.64. It considerably differs from the assessment of the previously analysed scope of services. Undoubtedly the quality of these services depends on water intakes and the infrastructure state and this, in turn, depends on the state of the municipal finance and funds intended for its modernisation and exploitation. The fact that these services are not market-oriented also matters.

The quality of housing services looks the worst in comparison to other services – the mean rating was 3.55. In this case it should be stressed that there were only 30 inhabitants who

evaluated the venue. The rest of interviewees did not occupy the municipal units. In this case, like in the previous case, the attention should be drawn to the high cost-consumption of maintaining appropriate housing conditions in the administered units. It is no wonder that with small and limited funds the occupants are not satisfied with the municipal buildings condition. The fact that these services has in principle no competition for a certain group of inhabitants is also of a great importance for quality of these services.

Assuming identical weights for each quality ratings of a municipal service, after averaging a conventional overall assessment – overall assessment of municipal services quality – is obtained. It reaches 3.81 in a scale 1-5.

15.7 Summary

On the basis of results of the survey performed among the inhabitants of one of the Silesian municipalities, the level of municipal services may in general be assessed as satisfactory. The overall assessment of municipal services quality amounted to 3.81 in scale 1-5. The best quality was offered within the scope of waste and wastewater disposal services, the rating was 4.24. It is worth underlining that they were the only services where the recipients were given a possibility to choose a service provider. The aspects which require improvement within this scope of services are improvement of response time to gully emptiers ordering and the competence of staff which operate them.

The ratings of services connected with water supplies and housing services came off worse. It is quality of these services which should be improved first. Within the available funds and possibilities one should work on the improvement of the municipal buildings condition and the timeliness of the planned renovations execution as well as on supply system infrastructure connected with such properties of the supplied water as taste and transparency.

REFERENCES

- [1] Ustawa o gospodarce komunalnej - Polish Municipal Services Act.
- [2] http://circa.europa.eu/irc/opoce/fact_sheets/info/data/market/rules/article_7197_pl.htm.
- [3] Kożuch B., Kożuch A.: Usługi Publiczne - Organizacja i Zarządzanie; Monografie i Studia Instytutu Spraw Publicznych Uniwersytetu Jagiellońskiego; Kraków; 2011.
- [4] Denczew S.: Podstawy gospodarki komunalnej – Współczesne zagadnienia sektorów inżynierskich, Politechnika Białostocka; Białystok; 2004.
- [5] Griffin R. W.: Podstawy zarządzania organizacjami; PWN; Warszawa; 2002.
- [6] ISO 9000:2005 Systemy zarządzania jakością – Podstawy i terminologia.
- [7] Kotler P.: Marketing. Analiza, planowanie, wdrożenie i kontrola, Gebethner i Ska, Warszawa; 1994.
- [8] Maderthaner W.: „Jak zdobyć klienta”, PWE, Warszawa 1992.
- [9] Bruchart-Korol D., Furman J.: Zarządzanie produkcją i usługami. Wydawnictwo Politechniki Śląskiej 2007.