

MĚŘENÍ KVALITY POŠTOVNÍCH SLUŽEB NA TRHU V EU A ČESKÉ REPUBLICCE

QUALITY MEASUREMENT IN EU AND CZECH POSTAL SERVICES MARKET

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Anotace: Tento článek se zabývá měřením kvality v poštovním sektoru. Parametry kvality poskytování poštovní služby jsou v tomto sektoru celosvětově monitorovány prostřednictvím projektu UNEX iniciovaného Mezinárodní poštovní korporací (IPC). IPC vydává každoročně výsledky „end-to-end“ doručování mezinárodních prioritních listovních zásilek. První část tohoto článku zahrnuje všechna důležitá fakta o systému pro měření kvality UNEX – jeho cíl, zaměření, metodologii a výsledky. Druhá část je věnována monitorování kvality poštovních služeb na českém trhu. Principy tohoto měření vycházejí z principů měření systému UNEX. V českých podmínkách je měření prováděno soukromou agenturou a vlastní analýzou České pošty, s.p. a též prostřednictvím parametrů korespondujících s evropskou metodikou. Celosvětové a domácí výsledky měření kvality ukazují vysokou úroveň poskytování poštovních služeb.

Klíčová slova: kvalita, doručení, třídění, sběr, indikátor rychlosti, indikátor spolehlivosti, pošta, tok zásilek, schránka, panel, testovací zásilka

Summary: This paper deals with quality measurement in postal sector. Quality parameters of postal services provision are monitored all over the world in this sector by UNEX project initialized by International Postal Corporation. IPC publishes the UNEX end-to-end results annually, reporting on international priority letter mail. The first part of this paper comprises all important facts about UNEX measurement system – its goal, focusion, methodology and results. The second part is devoted to quality monitoring of Czech postal services. Principles of this measurement are the same as basic UNEX principles. This measurement is processed by private agency and by Czech Post own analysis and also the parameters corresponding to European methodology. Worldwide and domestic results of quality measurement reflect high level of postal services provision.

Key words: quality, posting, sorting, collection, speed indicator, reliability indicator, post office, mail flow, mail box, panel, test letter.

1. INTRODUCTION

High level of quality of service provision is one of the most important factor for satisfied customer, ensured profit an increasing of competitiveness on market. Postal sector has efficient instrument for quality monitoring – UNEX quality measurement system initiated

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by International Postal Corporation. The UNEX system for measuring letter service performance was introduced by IPC in 1994. Its aim is to provide the measurements, through which the international mail pipeline could be managed in accordance with customer delivery commitments. Every day thousands of “test letters” pass through the world’s postal networks. These letters alert postal managers to exactly where bottlenecks may occur.

2. UNEX QUALITY MEASUREMENT SYSTEM

The system is based on a network of “panellists” – 4,000 individuals, both in businesses and homes – who agree to regularly send and receive the test letters, and enter the posting or delivery time on a central computer system.

Over 500,000 priority mail test letters are sent each year between 43 countries. Each one contains a small radio transmitter, (RFID) tag. At specific reading points, the RFID tag transmits its identity then each reading is sent to IPC’s system in Brussels, which tracked for the progress of the test letter from sender to receiver. The measured transit time is end-to-end, from posting to delivery to the final addressee, including the time for collection, sorting and transportation.

2.1 Unex Measurement System in Europe

The UNEX system uses test letters to sample the performance of the end-to-end cross-border mail flows. The test letters are posted and received by people selected by a contractor, on the basis of specified criteria. The characteristics of the test letters and of the panel are specified to ensure that they are representative of the formats and sizes, posting method, payment, and location of posting and receipt of the real mail stream.

In 2007, about 400,000 test letters representative of real mail, were sent in 749 country-to-country mail streams, covering both urban and rural areas in 29 European countries.

The design is in compliance with the CEN standard EN13850 Postal services - Quality of service - Measurement of the transit time of end-to-end services for single piece priority and first class mail which specifies the methodology for monitoring of quality of service in the European Union. Conformance to this standard is mandatory for the 27 Posts in the European Union.

2.2 Methodology of UNEX Quality Measurement

The UNEX measurement is carried out continuously over the year and covers both urban and rural areas in Europe. It mirrors the patterns and the characteristics of real international letter mail such as methods of induction (mail box, post office, pick-up), methods of payment (stamp, meter, PP), weight (20g, 50g, 100g), size (C6, C5, C4), and addressing (machine-typed or hand-written). The statistical accuracy of 74 percent of the country-to-country results ranges between 1% and 5%, within a 95 percent level of confidence, while 26 percent reach an accuracy above 5%, mainly on small volume real mail flows.

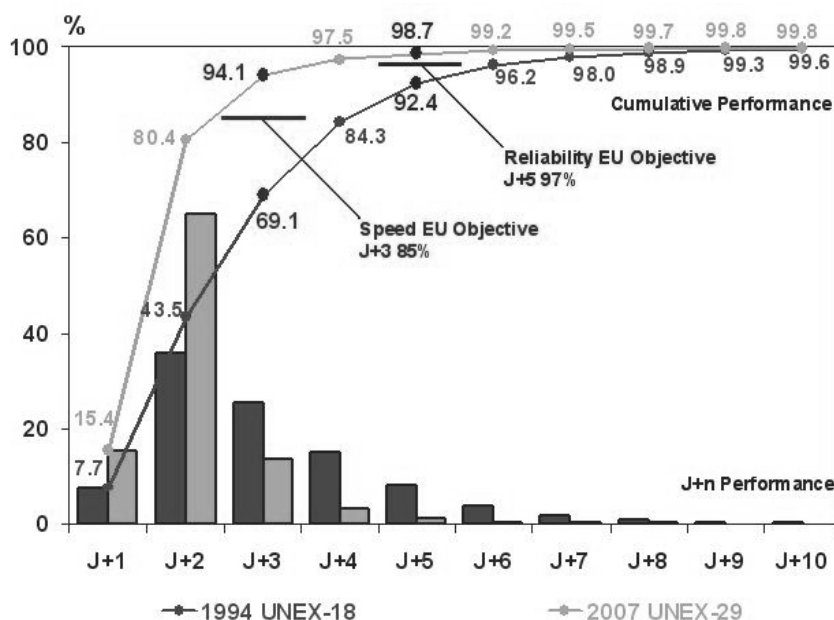
UNEX analysis works with three key performance indicators - the percentage of test mail items delivered within three days (J+3), i.e. the speed indicator, within five days (J+5),

i.e. the reliability indicator, and the average number of delivery days taken to deliver mail. J (Jour, for Day) is the day of posting and so, for example, J+3 expresses the number of days before final delivery to the addressee during which time collection, sorting, national and international transport, and delivery take place.

Method of calculation is based on the posting date for a 5-day business week; that is to exclude Saturdays and Sundays, and to exclude national and regional postal holidays in the destination country.

2.3 Important Results of UNEX Measurement

In 2007, European letter mail for the UNEX-18 continued to have a very high service performance, with average performance 94.9% of European cross-border first class/priority letter mail delivered within three days of posting, J+3 the speed indicator, and 98.9% within five days, J+5 the service reliability indicator. The results for the full UNEX-29 (all European Union countries, except Bulgaria, Iceland, Norway and Switzerland) are 94.1% J+3 and 98.7% J+5. This far exceeds the objectives set in the European Union (EU) Postal Directives of 85% in three days and 97% in five days. The average delivery time in Europe was 2.2 days, an improvement of half of a day since 1998, and of one full day since 1994, when the UNEX measurement started. The objectives set by the 1997 European Union Directive on Postal Services (97/67/EC Directive) are to be met on a country to-country basis. For J+3, the speed indicator, the measure in the UNEX-18 group shows that 92 percent of 306 country-to-country flows met the 85% J+3 EU objective. In the UNEX-29 measure, 66 percent of all 749 flows met the objective. For J+5, the reliability indicator, the measure in the UNEX-18 group shows that 93 percent of 306 country-to-country flows met the 97% J+5 EU objective. In the UNEX-29 measure, 72 percent of all 749 flows met the objective.



Source: International Post Corporation [3]

Fig. 1. - Cumulative performance of speed and reliability factor.

3. QUALITY MEASUREMENT IN CZECH POSTAL SERVICES MARKET

The quality standard of postal services provision in CR is set by act nr. 29/2000 Sb. of postal services, on its basis Czech Telecommunication Office set so called basic quality requirements. In compliance with these requirements, holder of postal licence has to ensure so called basic postal services defined by act nr. 29/2000 Sb., respectively by Postal Bulletin nr. 7/2008) in necessary quality for public interest. Quality requirements comprises the speed and reliability indicator, periodicity of basic services, sufficient density of service points ensuring posting, open hours of offices, the way of delivery and complaints, convenient providing of information about basic services and the way of their usage and speed and efficient discussion of complaints. This is legal ensurement of postal service quality, technical ensurement is comprised in norm CSN EN 13850:2002.

3.1 Methodology of Quality Measurement

Technical standard is set by methods for measurement of transit time of domestic and cross-border items of correspondence picked, processed and distributed by postal operators. Quality measurement according to this norm was applied by usage of test letters system within Czech Post provision in Czech republic. It was necessary to create sophisticated system of test letters, distribution and assessment system. Quality measurement by norm CSN EN 13850:2002 also requires analysis of real mail streams with their parameters and characters. Solution of this objective was focused on analytic activities in matrix of operation flows and selection and creation of test letters flows matrix in particular geographical stratum.

The term “stratum” determines relations of particular streams regarding to various areas (e.g. urban, rural etc.) and distance categories according to direct distance of relevant sorting centres. The main parametres of this analysis are numbers of percentage of letters delivered in defined transit time) and correlation coefficients between variables of timeliness for determination of selection variability. Mutually were processed matrixes of flows for letters up to 20 g and from 21 g to 50 g. Letters flows (figures of letters) within stratum must be strictly determined and must correspond to their real percentage distribution considering each day of week, p.m. or a.m. (in locations with more than two collections per day), households or companies and mail boxes or post offices etc. Panellist (sender and addressee of test letter) should give test letters to all mail boxes or all post offices within the whole his assigned area (not to only one same mail box or post office).

Quality measurement of transit time of letters was set for “simple writing standard”. It was realized in quartal periods with minimal number of posting letters (7100 – 8250 pcs). Each test letter is created by form to get needed information about it. Required informations of posting are e.g. locality of posting, size type of municipality, post code, number of mail box, proper time of posting, proper time of previous and next collection of mail box, delivery informations are analogical to posting. This research was made by independent agency PhDr. Jungova, which win tender announced by Czech Post.

In addition Czech Post has own quality methodology – transit time survey for ordinary letters sended through mail boxes and survey for ordinary standard letters – checking

transport – delivery process. The first survey is processed monthly, analyzed and assessed by each region itself and acquired outputs are send in prescribed structure to headquarters. Control survey is processed by control letters (common standard letters up to 20 g) with usage of control cards. Control letters are send in envelopes of size C6 of 50% machine-typed addressing and 50% hand-written. Only one control letter is put to mail box to check one concrete collection. The main principles are similar to survey provided by private subject above-mentioned, but this methodology does not work with “stratum”, total number of letters must be in each region distributed in rate 70 percent-urban area and 30 percent rural area. Other survey proves postal areas, where control letters were delivered with delay and it was not evident, in which phase of transport - delivery process delay occurred. Survey is processed monthly by regions as well and follows from previous surveys. Control letters are posted:

- at sorting centres directly for particular post offices (survey within region),
 - at sorting centres according to postcode (out of region),
 - at posting office,
 - at post office counters,
- and then delivered within own region (the second case out of region).

One control letter is addressed for one addressee by one way of proving, and all ways of proving must be done within each monitoring to prove all particular phases of transportation process.

4. CONCLUSION

Basic quality requirements (in Postal Bulletin nr. 7/2008) set, that transit period measurement according to CSN EN 13850 must be equal to obligate tasks, which are given to Czech Post by Czech Telecommunication Office. Czech Post from 2000 markedly exceeded acquired J+1 delivery minimum (88%-90%), in 2005 there was delivered over 96 % of letters, but in next years quality rapidly decreased. Consequently new standards for next years were set in Postal Bulletin to re-reach acquired minimum and reach satisfactory values again.

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