

**by Géza Husi**

**APPLICATION OF THE METHODS OF QUALITY MANAGEMENT SYSTEMS  
FOR ANALYSING OF THE POLICE OF THE REPUBLIC OF HUNGARY**

Author's synopsis and official report on the Ph.D. thesis

**Scientific Consultant:**  
**Prof. Dr. Károly Turesányi, CSc**

**- 2005, Budapest –**

# I. SUMMARY, OBJECTIVES AND METHODS OF THE RESEARCH TASK

The decision of the Council of European Ministers of 21 November 1994 relating to the industrial competitiveness of the European Union has approved the motion concerning the elaboration of the quality development policy [1]. According to the approved motion the importance and extension of the quality view should be recognised in the field of both private and state service. „*The competitiveness of Europe depends*” in increasing measure on quality. *The role of authorities is continuously decreasing. Simultaneously with the decrease of the role of regulation quality management strategies promote the development of the market self-regulation. Global quality management strategies contribute to the conformity between different industrial sectors and branches of state politics (e.g. safety, environment protection, work safety)*”. The European Union has treated the increase of the level of police activity as **an** advantaged project since 1996 by applying the European Quality Management Policy [2].

The objective of the government programme of the Republic of Hungary [3] is the creation of the liberty's order and security. The government interprets security in the possibly widest effect? i.e. regards its task the strengthening of livelihood, maintenance of legal security and improvement of public security like playing roles for addressing global challenges and pushing back of international terrorism. The government also assumes to make the police “visible” for improving citizens' feeling of security.

In 2002 the quality development programme of the Hungarian Police was issued, which practically means the summary of interior requirements of quality development and the main objectives of which are as follows [4]:

- elaboration of strategies, support of strategy planning;
- permanent development;
- computability, good arrangement;
- formation of its own police aspect;
- elaboration of a new development and evaluation system;
- reveal of the causes of failures and successes;
- involvement of the whole staff;
- conscious and documented (public) maintenance of quality;
- thinking of processes and complete organisation;

- providing necessary information;
- consequent and continuous translation of experiences into practice.

The Police of the Republic of Hungary needs quality management methods suitable for realising the quality development programme, which are suitable for quality development of police activity's processes and the practical applicability of which can be confirmed.

**Taking into account the above mentioned my research objectives are as follows:**

- research of quality management methods suitable for applying in the organisation of the police in specialist literature and practice;
- research of clients' expectations, determination of components influencing the increase of clients' satisfaction, examination and analysis of the connection between clients' expectation and satisfaction;
- on the basis of the different meaning of the word "quality" in special literature a meaning of the word "quality" should be determined which relates to a certain police unit and may be the quality policy of this unit;
- determination of components of the police's activity characteristically increasing the customers' satisfaction concerning the police's activity;
- examination of the applicability of quality management methods for improving the processes of the police's activity and support of results in practice;
- examination of possibility of information support and composition of quality requirement of the decision supporting system for promoting the organisational decision relating to the processes of the police's activity from the point of view of quality development;
- adapting a method for evaluating police workplaces, which has already been tried out in industry and offers basic data for evaluating the efficiency of the police staff's activity in the examined workplace;
- on the basis of the result of the research carried out between 2000 and 2005 composition of a supplementary and comprehensive treatise with scholarship which police units, police guard-rooms and district police stations can use in their daily practice.

## **Methods applied for achieving the research objectives enumerated in the treatise**

The establishment of the research lies in that the essence of the organisation (police) is determined by processes, decision concerning processes, connection between processes and (perhaps further) processes to be deduced from decisions, which corresponds to the frequent statements of A. Kieser and H. Simon [5] belonging to tendency “behaviourism decision theory”. My main point of view for choosing the subject-matter of the treatise was the choice of quality management methods which are suitable for connecting theoretical examinations and practical realisation with each other. My greatest ambition was that a certain theoretical idea concerning the quality development of the police can be tried out and verified through feed back and each practical realisation is traceable to the theory. For achieving this I have also leaned on the experimental results of the quality development activity of six district police stations and headquarters besides theoretical work.

The organisation and staff structure of the Police of the Republic of Hungary is rather similar both in the level of capital and counties and characteristics (main, supplementary, subsidiary and environmental processes) of the activity of units (guard-rooms, district police stations, headquarters) are also almost completely the same. Taking into account these I have basically chosen three methods for my research work:

- I have divided all problems into elements and parts and analysed in the Headquarter of County Hajdú-Bihar as well as district police stations and guard-rooms subordinated to it;
- I have applied different techniques for drafting of further ideas in teamwork (e.g.: brainstorming) for revealing the problems of processes, causes of deficiencies, analysing connections and collecting ideas for improvement and solution;
- I have analysed the analogies and differences between the activities of units slogging with different problems of other counties, determined the possibilities of quality development and verified the applicability of methods chosen before through feed back.

## II. SUMMARY OF RESULTS OF RESEARCH WORK AND CONCLUSIONS

### 1. Connections between the police clients' expectations and satisfaction

One of index numbers of processes of police activity is the measure of clients' satisfaction. Clients' satisfaction can be increased if the police meets several expectations of the client. I have elaborated a survey method for surveying clients' expectations. The method is characterised in that expectation of the population can be collected by using questionnaires (paper form or electronic). Questions always relate to the process of the police activity to be examined, expectations of the population concerning main requirements and satisfaction concerning these expectations. I have determined the circle of persons and composition of this circle to be questioned by using statistical data. Leaning on the evaluation of surveys **I have determined connections between clients' expectations and satisfaction as a result of my research work. According to my establishment clients' expectation is also influenced by experiences obtained sooner, information received from other persons, news published in media and the image of the police besides concrete requirements. The client's satisfaction depends on how the police has met the concrete requirements of the client and expectations connected with these requirements. The cause of the absence of satisfaction can lie in that the police does not completely understand the client or in advance there is not conformity between the objective of processes started before and requirements.**

The general satisfaction of the clients is also influenced by public safety besides expectations. Public safety is the collective result of the cooperation between the society and police. The „public safety” is not only the result of the activity of the police, but also the result of the activity of self-governments responsible for local public safety, public domain inspectors being active as administrative departments of self-governments and companies offering safety as service besides the activity of the border guards, Board Customs and Excise, penal authorities, disaster protection organs (fire brigade, civil defence), national security services, investigating prosecutor's offices. Thus I have come to the conclusion that **quality development, the objective of which is the improvement of public safety**, should touch all participants at the same time and the whole development is impossible **without the collaboration of the government** which can influence the whole development and public administration.

I have carried out a survey in 2 police headquarters and 14 district police stations by applying the method based on the use of the questionnaire elaborated before. On the basis of the results yielded by the evaluation of the survey the main goal of the majority of district police stations has become the best possible comprehension of clients' expectations and the improvement of the efficiency of procedures conducted by the police in conformity with clients' expectations for improving the quality.

## **2. Interpretation of the quality of the work of the police**

The meaning of the concept "quality" relating to the constitutional units (district police stations) of the police can be determined starting from the quality policy of the European Union [1], National Quality Development Programme [6] and the programme for developing the police of the Republic of Hungary [4]. Having studied specialist literature I have established that the activity of the police and effects of that jointly had a quality in the knowledge of the fact that not only the police was responsible for the maintenance of the public order.

**As a result of my survey I have determined the quality of the police's activity by taking the following points of view into account:**

**The quality of the police's activity means that the police units and organisations contribute to the strengthening of positive social and economic processes and formation of a more secure living space and life quality without fear of crime by involving co-workers in their operation area and operating all available resources as effectively as possible in such a manner that all declared and not declared expectations of the population are fulfilled without exceeding the allocations offered by the budget.**

**Polices of Europe address new challenges**, which all national polices will also have to address in some form or other:

- rendering integrate services, client-oriented administration;
- application of quality development means;
- networking with interested parties;
- transformation of the management and organisation direction;
- increase of efficiency;

- efficient temporal and spatial division – within the organisation – of the knowledge of police experts;
- minimising of bureaucracy; increase of arrangement and efficiency; elimination of corruption;
- besides the reconnaissance of crimes the treatment of basic social problems (mistrust, pollutions), which are not conventionally the tasks of the police ;
- addressing the challenges of then aging society;
- appropriate treatment and use of media;
- e-administration, information;
- cooperation between the direction levels of national polices.

These requirements only complete, but not substitute the conventional claims concerning public safety laid on the police. **New claims also require new characteristics of the police's activity. On the basis of my researches I regard the quality characteristics of the police's activity the most important characteristics:**

- **policeman's competence;**
- **accessibility of police services and availability of the policeman;**
- **visible circumstances (dressing of the policeman, formation of the police room, etc.);**
- **reliability of the policeman;**
- **level of the communication between the policeman and client;**
- **how does the policeman understand the client;**
- **contact between the policeman and client in which the client feels safety;**
- **authenticity of the policeman;**
- **adaptability of the policeman;**
- **politeness of the policeman.**

The quality policy of police units can be determined by using the appropriate meaning of the word "quality". The achievement of quality objectives of the police unit is much easier if components of police activity influencing clients' satisfaction are presented to the members of the staff. On the occasion of the survey of clients' satisfaction the existence of the above mentioned characteristics and the opinion of clients concerning these characteristics can be surveyed, valuated and on the basis of these development objectives can also be determined.

### **3. A possible method for improving the processes of the activity of the police**

All the quality management systems includes a method for improving processes. The quality development conception of polices of the EU [2] is the objective relating to development, the most important step of which is the **improvement of processes of the police activity** [7]. Police activities, processes and their effects jointly have a quality and so these jointly meet clients' claims.

**I have elaborated a method for improving processes of the activity of the police, the basis of which is the organisational self-estimation based on the quality prize model. I have elaborated a method for improving processes of the activity of the police[8], the characteristics are that the method**

- **is adaptable to the processes determined by the Law No. XIX of 19987 modified in 2003;**
- **is based primarily on precise knowledge and effectuation of processes;**
- **can be suitably applied for improving and evaluating processes, because well-known self-estimation method are also used;**
- **by means of this method the strategy developing excellence can also be determined;**
- **claims for the improvement of processes are based on concrete opinions of the population;**
- **uses quality management systems for improving processes and operates on PDCA principle;**
- **as well as applies and adapts the results available in the police or a research carried out by other persons and recommendation.**

For elaborating the strategy for developing excellence results can be surveyed according to modules. With this knowledge of results fields can be determined, in which the organisation would like to carry out improvements in the future. Since the modules obtainable on the side of conditions have the greatest effect to the results, which condition is missing or is in a low level, which causes the lack or low level of missing results. It is worth drafting the strategy for developing excellence with the knowledge of this.

**I have also tried out the method for the improvement and evaluation of processes of the police's activity based on strategy for developing excellence.** The organisation of the police

is characterised by the concentration of all the police services (criminal department, law and order protection department, traffic police department, administration police department as well as units attending these services) in a similar organisation structure. **Claims of clients against processes** - taking place in these departments – **are completely different and so clients' satisfaction should be separately surveyed and evaluated in different departments and then improved by applying a regulation based on differences.**

**According to my experiences obtained in my research work it is suitable to survey changes of improved processes of different departments with the method of Balanced Scorecard besides statistical data, the overall evaluation of the whole department for several years with the self-estimation model “Strategy for improving excellence” elaborated on the basis of the EFQM model, while the whole organisation should also suitably surveyed in a period of several years according to the CAF model redrafted to police characteristics.**

As a result of the development of processes the successfulness and efficiency of examined district police stations have also improved, which is due to that district police stations have obtained the support of the population for achieving their quality management objectives and this process development has had a positive effect to the contact between the district police station and population, so policemen have got more support from the population to their activity.

**In district police stations, where my process development method had been applied for improving processes, the conventional statistical indexes concerning efficiency have also got excellent.**

#### **4. Criteria of information systems supporting the police's organisational decisions**

The essence of an organisation is determined by processes, decisions connected to processes and alternatives of planned processes. As I mean organisational decisions, these are all the decision taken by the member of the organisation concerning the operation of the organisation. These decisions, which I call **elementary decisions**, determine the operation of the organisation. Elementary decisions for a structure, promote the achievement of any objective as a complex – liked decisions – and are necessary for a certain activity.

On the occasion of the research I established that the quality of decisions of leaders and subordinated working in different departments of the police relating to the organisation influenced in the greatest measure by their individual knowledge bases. This knowledge base consists of the data base of the police, law regulating the police's activity, commands and instructions, echoes about different activities and individual knowledge base. Since the risk of the decision is in inverse ratio to the availability of necessary information on time and its completeness, the risk of the decision can be most efficiently decreased and so the quality of the decision in the possible greatest measure improved, if the decision can be more efficiently prepared with available information.

**As a result of my research I have elaborated a system of criteria for promoting decision making in the organisation of the police. Most important establishments of my system of criteria are as follows:**

- **the system has to support several processes at the same time, which can be separated from each other;**
- **the system has to enable data concerning any means to be available for policemen;**
- **claim of information should be put in the centre;**
- **the system has to make data of the data base simply and quickly accessible through different definitions within the activities of the police;**
- **all the documents should be safely treated;**
- **documents of crucial importance and report procedures should be simply divided;**
- **it is necessary that data of reports originating from different sources can be combined;**
- **the systems has to have a homogeneous surface for polling;**
- **the system has to also allow user who are not at home in formation science can also poll, analyse and make reports by themselves; an important criterion is pro-user characteristic of the system and the user's surface should be fit to the person of the user;**
- **feed back should be realisable so that comments can be made or messages can be transmitted in connection with documents available in the system;**
- **the system has to also prepare standard reports by fitting previously;**

- **the system has to make possible analyses "What would be if";**
- **It is worth introducing the system if it is comprehensive.**

As a result of the research the note of organisational elementary decisions of the District Police station of Hajdúszoboszló is available. This note can be the base of reinstallation of decision points so that decision are made where all necessary information is available on time. The system of criteria concerning the information system supporting organisational decisions of the police can be used as the principle of informatic development.

## **5. Evaluation of homogeneous police workplaces**

**I have elaborate a procedure for determining the requirements of police workplaces against employees**

The homogeneous workplace is the complex of police workplaces, which make the same requirements against their employees. The homogeneous workplaces and different positions make different requirements against the employee.

**As a result of my research I have established that the efficiency of a certain police activity can also be surveyed by determining what requirements are made by the workplace and how the policeman meets these requirements and in what a level the policeman meets these requirements. For this I have elaborated a procedure for determining requirements against employees made by homogeneous police workplaces.**

**I have elaborated the following procedures, the characteristics of which are as follows:**

- **in the procedure is surveyed what requirements are surveyed against employee by the workplace (position);**
- **the organisation determines the points of view of evaluation for itself;**
- **points of view are weighted on a 100-degree value scale by the organisation (the sum of all the points of view of evaluations can be 100);**
- **general and professional knowledge necessary for the work are evaluated;**
- **physical fitness, other conditions as well as special suitability and ability required by the workplace are surveyed;**
- **responsibility for means, resources, quality of activities, work and safety of the others as well as data is surveyed;**

- **burden causing a serious loss of energy and provoked information-mental working is evaluated;**
- **environmental effect are evaluated;**
- **the procedure enables the organisation to introduce a new evaluation criterion.**

In the Headquarter of County Hajdú Bihar the method is used for evaluating requirements made by workplaces against employees. As a result of the survey could also be determined how the organisation regards homogeneous workplaces, their requirements and the activity in those workplaces regards valuable and important for the organisation. On the basis of this the concrete achievement of a certain employee could be evaluated by determining the level, in which the employee met these criteria and which are the fields to be developed in his/her activity. In addition different works done in different positions and spheres of activity could also be compared with each other.

### **III. SCIENTIFIC RESULTS AND RECOMENDATIONS**

All the research results have been tried out in practice. With the knowledge of results of practical applications these results can immediately be used for the accomplishment of the quality development programme and enlargement of quality development methodology of the Hungarian police. Based on several critics' opinions I recommend the consideration if the treatise should enlarge the professional training programme and scope of knowledge of the police in form of a redrafted schoolbook, resp. case study.

#### **As new scientific results the following things are suggested:**

1. Results and establishments of examination for surveying connections between the police clients' expectations and satisfaction.
2. Determination of the meaning of the word "quality" in the activity of the police. Determination of quality characteristics of the police's activity meeting new claims of the society.
3. A possible process improvement method tested in practice elaborated for improving processes of the police's activity.
4. Determination of criteria made against the information system supporting organisational decisions of the police.
5. Procedure applied in homogeneous police workplaces and positions for evaluation, main points of view of evaluation, method for determining these points of view.

## LIST OF PUBLICATIONS AND OTHER SCIENTIFIC PUBLIC ACTIVITIES RELATED TO THE DISSERTATION

- H-1. *Husi Géza - Baksa László - Varga Edit- Sutka Sándor*: Tanulmány a Teljes körű Minőségmenedzsment (TQM) bevezethetéséről a Magyar Köztársaság Rendőrségén, HBMRFK, Debrecen, 2001.
- H-2. *Husi Géza – Varga Edit*: Önértékelési útmutató a Hajdú-Bihar Megyei Rendőr-főkapitányság részére, HBMRFK, Debrecen 2000.
- H-3. *Husi Géza - Varga Edit*: Néhány konkrétum a Hajdúszoboszlói Rendőrkapitányságon folyó TQM ( Total Quality Management) bevezetés jelenlegi helyzetéről, HBMRFK, 2001.
- H-4. *Husi Géza*: Tanulmány a TQM bevezetésének holland tapasztalatai alapján HBMRFK, 2001.
- H-5. *Husi Géza*: Gyorsértékelés a Borsod-Abaúj-Zemplén Megyei Rendőr-főkapitányság EFQM felmérése alapján, (vizsgálati jelentés) BAZM RFK, 2003.
- H-6. *Husi Géza*: Gyorsértékelés a Szegedi Rendőrkapitányság EFQM felmérése alapján, CSMRFK, 2003.
- H-7. *Husi Géza – Varga Emilné*: Gyorsértékelés a Hajdú-Bihar Megyei Rendőr-főkapitányság EFQM felmérése alapján, HBMRFK, 2002.
- H-8. *Husi Géza*: Gyorsértékelés a Nyírbátori Rendőrkapitányság EFQM felmérése alapján, SZSZBRFK, 2003.
- H-9. *Husi Géza*: A projekt menedzselési módszerek alkalmazásának lehetőségei a rendőrkapitányságokon, ORFK, 2001.
- H-10. *Husi Géza*: A munkaérték felmérés gyakorlati megvalósításának lehetősége a Magyar Rendőrsége homogén munkahelyein, HBMRFK, 2002.
- H-11. *Husi Géza*: Rendőri munka értékének meghatározása a Hajdú-Bihar Megyei Rendőr-főkapitányságon, beadva a Belügyi Szemle c. folyóirat tudományos tanulmányíró pályázatán, 50 oldal (megjelenés alatt Belügyi szemle).
- H-12. *Husi Géza*: A rendőri munka értékének meghatározása a Hajdú-Bihar Megyei Rendőr-főkapitányságon, Debreceni Egyetem Műszaki Főiskolai Kar, Tudományos közlemények, II/1 szám 101-108.old. Debrecen, 2003.
- H-13. *Husi Géza – Kiss Bacsó László – Mikula Gyula*: A munkaértékfel mérés gyakorlata az általunk kidolgozott BAHUMI módszerrel, Debreceni Egyetem Műszaki Főiskolai Kar, Tudományos közlemények III/1 szám, Debrecen, 2004.

- H-14. *Husi Géza*: Informatika II. (Vezetői információs rendszerek), Debrecen, Ybl Miklós Műszaki Főiskola 1995. (1. kiadás), Debreceni Egyetem MFK, 2000. (2.kiadás).
- H-15. *Husi Géza*: Informatika I. (Az informatika alapjai) Debrecen, Ybl Miklós Műszaki Főiskola 1995 (1. kiadás), Debreceni Egyetem MFK 2000 (2.kiadás).
- H-16. *Husi Géza – Krauszné Princz Mária*: A WEB-es keresők használatának tanítása. Informatika a felsőoktatásban, Debrecen 2002. 570-577 o. ISBN 963472691 7.
- H-17. Szemantikus réteg technológia a rendőrségi munkában Magyar Rendészet 2005/1 128-136. old.
- H-18. *Husi Géza*: Rendőrségi vezetők szervezeti döntéseinek támogatása, üzleti intelligenciával rendelkező, szemantikus réteg technológia elvén működő információrendszerrel, Bolyai Szemle 2005. XIV. évfolyam 4. szám.
- H-19. *Husi Géza – Kántor Péter – Kovácsné Ferenczi Anikó*: A minőségfejlesztés két éve a Balmazújvárosi Rendőrkapitányságon avagy minőségi munka a végeken. (megjelenés alatt Belügyi szemle).
- H-20. *Géza Husi – Edit Varga*: One way street for the Hajdú-Bihar County Police Department: TQM, Debreceni Műszaki Közlemények I/1 125-131 old. Debrecen 2002.
- H-21. *Géza Husi – Sándor Sutka* : TQM at the Hajdú-Bihar County Police Department- The first step, University of Miskolc, MicroCAD '2001 International Computer Sciences Conference quality management sections p.36 2001.
- H-22. *Husi Géza – Bacsó László – Mikula Gyula*: Munkaérték felmérés gyakorlati megvalósítása a GE Lighting Tungstam RT. Vákuumtechnikai Alkatrész és Gépgyárában, Debrecen Kossuth Lajos Tudományegyetem Műszaki Főiskolai Kar, Tudományos közlemények 23.szám. 4-13.old. 1997.