NATIONAL UNIVERSITY OF <u>PUBLIC SERVICE</u> Doctoral Council

AUTHOR'S DESCRIPTION OF DOCTORAL (PhD) DISSERTATION

Ferenc VARGA ff. brigadier general

author's description and official assessments of the doctoral (PhD) dissertation:

Researching organisational and technical development opportunities for national rescue and fire safety, with a particular view to the increasing role of volunteer fire departments

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Researching organisational and technical development opportunities for national rescue and fire safety, with a particular view to the increasing role of volunteer fire departments

Topic leaders:

Prof. em. János BLESZITY ret. ff. lieutenant general

Dr. László BÉRCZI ff. brigadier general, PhD

Budapest

IDENTIFICATION OF THE SCIENTIFIC PROBLEM

Since the beginning, all members of human communities have been expected to take part in countering imminent threats. Societal and technical advancement coerced vocational specialisation, setting up of vocational organisations, including the field of disaster management, nevertheless, wide-ranging involvement of citizens is still indispensable in modern societies.

According to Act CXXVIII of 2011 on Disaster management and on amendment of certain acts pertaining thereto (hereinafter referred to as the Disaster Management Act): Disaster management is a matter of national scale. Uniform control of prevention and counter measures are responsibilities of the Hungarian state. Nonetheless, each and every citizen is entitled and obliged to take part in disaster management.

Moreover, protective and relief measures must be ensured through coordination of designated agencies and various relief regimes ... involving and engaging volunteer organisations, associations and designated public bodies.

The unprecedented scale and significance of organisational changes in recent decades suggests, while codification legislative efforts establish an opportunity for legal settlement of the status of volunteers, volunteer specialist organisations and for elaboration of a uniform system of requirements and subsidies.

The importance of volunteer organisations is equally recognised by the managers of professional disaster management agencies and legislators, as attested by regulatory activities pursued constantly by the National Disaster Management Directorate General of the Ministry of the Interior (hereinafter referred to as BM OKF) since the entry into effect of the Disaster Management Act.

The principle of "volunteering" may also be found at municipal fire departments (hereinafter referred to as ÖTP) operated as public bodies and volunteer fire brigades (hereinafter referred to as ÖTE); however, only the later are characterised by the classic volunteer operation. My dissertation aims to deal with the position of volunteer fire brigades within fire safety and the researching of regulatory, organisational, procedural and technical possibilities of their future development.

When identifying current research problems (areas), I have kept the finding by János BLESZITY and his co-authors, whereby "technical researches in disaster management must aim at increasing society's resistance to disasters, reducing vulnerability thereto, and facilitating the returning to normal order of operations as soon as possible, and at improving flexibility."

In line with the aforementioned principle – based on my examinations conducted in the course of my PhD studies – I have focused my researches on resolving the scientific problems discussed below.

1. The core element of protection against fires is the ongoing improvement of the organisational, asset and procedural system of rescue and fire safety in line with societal demands arising, in which the research and development of the optimal territorial and organisational dislocation of fire safety play important roles. The optimal dislocation of rescue and fire safety, firefighting and technical rescue means in simpler terms that firefighting units performing interventions are capable of commencing their operations with the required manpower and equipment anywhere throughout the country while arriving on the scene within nearly identical timeframes in order to protect the lives and physical safety of citizens, their assets, and both their natural and constructed surroundings. The provision of the set of conditions required thereto raises intertwined matters of technical, organisational, public administration, societal and last but not least economic factors.

When resolving this scientific problem, I undertake to propose an organisational and territorial solution through investigating criteria determining optimal dislocation.

2. As the next research problem, I have identified the development of volunteer firefighting activities within the uniform organisational system of disaster management. In my opinion, advanced societies may not lack vocationally prepared organisations set up for protection against fire, i.e. fire departments. In addition to professional and full-time facility fire departments, however, volunteer fire departments are also present in almost every country. Their role and significance vary and influenced by numerous factors.

It is my firm belief that scientific methods need to be applied to investigate how present-day volunteering evolved in Hungary from the millennial traditions of fire and protection against fire. What organisational solutions preceded today's Hungarian volunteer fire brigades, and how they progressed in the turmoil of history?

It should also be emphasised that the recently formulated new regulation of protection against disasters puts significant emphasis on a wide-ranging engagement of society; thus, the commitment of volunteer and charity organisations becomes highly valuable. It is a question how organisations having evolved in different ways and extents over recent decades with diverging histories, traditions, and last but not least expertise and preparedness of the volunteer movement may be engaged in various stages of counter measures.

When resolving this scientific problem, I aim to answers these questions through describing national achievements in addition to a legal and organisational national and international overview.

Such an investigation must cover a new substantial element of rescue and fire safety, the activities of volunteer fire brigades eligible for independent interventions.

3. The history of the Hungarian Firefighters' Association (hereinafter referred to as HFA) dates back one and a half century, of which, the volunteer firefighting movement had been a constant part. It was established simultaneously with the emergence of organised fire departments upon a volunteer initiative by the founders. The aims of association living up to the test of times are the representation of common interests, the sharing of experiences, standardisation, promotion of incorporating new elements, preservation of traditions, strengthening of inter-personal and inter-organisational relations. The history, functioning and presence of the Association – and its predecessor organisation the Hungarian National Firefighters' Association – are inseparable from the Hungarian firefighting cause. Its past filled with struggles abridges political eras, then current state and fire safety organisational regimes, while initial objectives thereof have not changed but have indeed gained new timeliness. Thus, my third scientific problem deals with identifying the role of firefighters' associations played in developing volunteer firefighting organisational activities.

4. Rescue and fire safety, i.e. firefighting and technical rescue is a complex task that may solely be operated with sufficient efficiency through an adequate vocational background. The set of conditions encompass both firefighting personnel with relevant expertise and assets and equipment required for interventions. Fulfilment of firefighting tasks calls for special assets in line with the king of the particular incident, which volunteer firefighters taking part in interventions must also possess. Improvement of the system of technical and technological assets of rescue and fire safety technical is a permanent scientific research area of disaster management scientific workshops. Thus, the progress of volunteer firefighting organisational movement observed in recent decades call for the specific elaboration of firefighting and technical rescue assets and activities.

RESEARCH OBJECTIVES

1. It is my objective to examine the notional interpretation, organisational development history and legal regulation of rescue and fire safety, after which, I shall *analyse and assess* the territorial and organisational dislocation of rescue and fire safety based on the set of criteria and methodology I have set up, relying on which, I plan to propose the introduction of measures ensuring an optimal dislocation.

2. I regard it as my objective to *identify* the set of conditions and possible forms of engaging volunteer firefighting activities in firefighting and rescue tasks, in connection with which I wish

to *examine* the role and significance of volunteering played in Hungary's fire safety based on international comparative analyses and an assessment of Hungary's organisational development history, moreover, the legal and organisational conditions and solutions of establishing intervening volunteer fire brigades.

3. In order to increase successful task fulfilment by volunteer fire brigades, I regard it as my research task to *analyse* the role undertaken by the Hungarian Firefighters' Association utilising the results of *assessing* international experiences, to put forward specific methodological proposals for modernising procedures based on my analysing-assessing findings.

4. A pre-requisite of engaging volunteer fire brigades in rescue and fire safety is the application of task-specific technical and technological assets required for the fulfilment of specialist tasks, for the provision of which I plan to *examine* potential improvements and technical scope thereof.

RESEARCH HYPOTHESIS

1. According to my presumption, an increased optimal territorial coverage of rescue and fire safety may be implemented at a territorial and an organisational level through identification and evaluation of intertwined criteria establishing optimal dislocation. Accordingly, with a view to the applied regulatory, organisational, procedural and asset regime, development opportunities may be identified.

2. According to my suggestion, the conditions of engaging volunteer fire brigades in firefighting and technical rescue tasks, and regulatory and implementing principles and rules of procedures affecting intervening volunteer fire brigades may be explored by keeping international trends and Hungarian societal demands in mind.

3. I presume that the involvement of the firefighters' association within the area of protection against fires – in addition to ensuring the primacy of state task fulfilment – efficiently supports the operation of volunteer fire brigades and improves their successful fulfilment of vocational tasks.

4. According to my presumption, it is indispensable for engaging volunteer fire brigades in the fulfilment of firefighting and technical rescue tasks – as happening to an increasing extent in recent years – to establish a system of task-specific technical and technological assets applicable for the fulfilment of specialist tasks.

Accordingly, the technical development of volunteer fire brigades currently possessing a heterogeneous technical asset portfolio must be implemented in a planned fashion to increase their intervention capabilities.

I believe that the improvement of the technical background of volunteer firefighters along a uniform concept may serve the establishment of optimal dislocation in the long run, while facilitating the involvement of volunteer fire brigades. Introduction of state-of-the-art assets and equipment is expected to have positive impacts on cost efficiency, economic viability and operating expenses in addition to improving successful specialist efforts.

I have set up the following hypotheses relying on the scientific problems identified in the course of elaborating my dissertation:

RESEARCH METHODS

In order to implement my research objectives, I have studied international and national legislation in force and relevant technical literature in case of all research problems. In the course of researching and elaborating the subject and of processing technical literature, I have applied the general research methods of analysis, synthesis, induction and deduction.

I have applied the following research methods in elaborating the content chapters in a manner suiting my research objectives:

- a) Interpreting notions and producing systemic analyses relevant to research components.
- b) Conducting research examining organisational development history in the areas of rescue and fire safety, volunteer firefighting activity, and firefighters' association movement.
- c) Producing a summary study analysing the legal, institutional and asset system of rescue and fire safety.
- d) Overview assessment of documents on national and international technical literature, legal regulation, and law application, drawing of conclusions.
- e) Producing international and national comparative analyses with a view to optimal dislocation and engagement of volunteer fire brigades.
- f) Producing correlation analyses through elaboration of a set of criteria applied for determining optimal rescue and fire safety.
- g) Elaborating an IT software application with a view to determining the rescue and fire safety levels and categories of settlements using a joint set of logical functions.
- h) Implementing an empiric research using a self-compiled questionnaire in English and in German to survey the international situation of the volunteer firefighting movement and to analyse and assess the international operating models of volunteer fire brigades.
- i) Examining foreign regulatory, organisational and organising examples and assessing potential adaptability thereof.

I have conducted ongoing consultations with specialist within the strength of the National Firefighting Superintendence of the Disaster Management Directorate General of the Ministry of the Interior (hereinafter referred to as BM OKF OTF) and its territorial agencies, and with lecturers at the Disaster Management Institute of the National University of Public Service (hereinafter referred to as NKE) and at NKE's Military Technical Doctoral School.

My research work was facilitated to a large extent by the opportunity to participate in the Győző Concha Doctoral Program announced within the project of the National University of Public Service under the priority project KÖFOP-2.1.2-VEKOP-15-2016-00001 titled "*Public Service Development Establishing Good Governance, impact study and research establishing fact-based public service development aimed at good governance*".

BRIEF DESCRIPTION OF CONDUCTED EXAMINATION BY CHAPTER

Based on my scientific objectives, *I have elaborated my doctoral dissertation broken down into four chapters closely interrelated as regards their contents*.

In the **first chapter**, I deal with the issue of optimal dislocation of rescue and fire safety, firefighting and technical. Within the scope thereof, I examine whether firefighting units performing interventions are capable of commencing their operations with the required manpower and equipment anywhere throughout the country while arriving on the scene within nearly identical timeframes in order to protect the lives and physical safety of citizens, their assets, and both their natural and constructed surroundings. The provision of the set of conditions required thereto raises intertwined matters of technical, organisational, public administration, societal and last but not least economic factors. Thereafter, I propose an organisational and territorial solution for criteria determining optimal dislocation. Following the aforementioned investigations, I perform the interpretation of the notion of rescue and fire safety operations.

In the **second chapter,** in addition to interpreting the notion of volunteering and discussing the organisational development history of fire departments, I take an outlook on the operation of volunteer firefighting organisations in the neighbouring countries.

Based on the questionnaire research I have conducted, I compare the practices of certain European countries in respect of the volunteer firefighting movement and the situation of volunteer fire brigades. I deal, in particular, with the examination of legal regulations and internal policies affecting volunteer fire brigades, and the experiences from the practical implementation of regulations affecting intervening volunteer fire brigades and the examination of further development directions.

In the **third chapter** of my dissertation, in addition to discussing the history of the Hungarian Firefighters' Association (hereinafter referred to as MTSZ), I take an outlook on the operation of firefighters' associations in the neighbouring countries, in the course of which I briefly describe the main features of CTIF relevant to my dissertation. My most important task, however, is to examine the current and even more so the future role of MTSZ in Hungary's firefighting society, with a particular view to supporting the strengthening volunteer firefighting movement and to increasing successful task fulfilment by volunteer fire brigades.

And finally, in the **fourth chapter** of my dissertation, following a historical development overview of the set of technical assets applied by volunteer fire departments in firefighting and technical rescue, I evaluate the applicability of firefighting vehicles and specialist equipment employed today. Based on my prior researches, I have examined the development opportunities of the set of technical conditions of volunteer fire brigades.

SUMMARISED CONCLUSIONS

In line with my research objectives, I have made the findings and reached the conclusion below by research area:

I. In the area of the territorial and organisational analysis and evaluation of optimal rescue and fire safety dislocation

1. I clearly see the solution to improving rescue and fire safety dislocation in developing volunteer fire departments. Instead of a spontaneous emergence of volunteer fire departments, targeted and controlled establishment thereof should be supported through engagement of central funds.

2. I suggested the calling into life of a new fire department category, the *volunteer fire department*, which would comprise today's municipal fire departments (ÖTP) and current "intervening" volunteer fire brigades (ÖTE). I find it necessary to strengthen the legal and organisational relations between volunteer fire departments and municipalities of settlements.

3. Using a detailed statistical analysis, I have elaborated the criteria relevant to the relationship between performance indicators of all actors of rescue and fire safety and the features of the area covered.

4. I have elaborated the core principles of an IT-based application according to criteria determining dislocation that is capable of identifying the fire departmental organisation required for the necessary and sufficient level of safety when examining each and every settlement in Hungary.

II. In the area of developing volunteer firefighting activity within the uniform disaster management organisation

1. By conducting an international questionnaire research, I have verified that the volunteer firefighting movement is regarded in every country as a value, resource and area for development, which in addition to its economic efficiency and beyond its activity's practical use plays an important community formation role.

2. I have demonstrated that volunteer firefighting activity is integrally aligned with the disaster management organisation through a processing of legal and sectoral specialist regulators in Hungary.

3. By analysing the activity indicators of volunteer fire brigades (ÖTE), I have demonstrated their significant role in fulfilling rescue and fire safety tasks, that their number and activity have increased recently. In the areas covered by intervening volunteer fire brigades (ÖTE), the time until commencement of damage elimination has reduced significantly thus improving dislocation.

4. I have pinpointed that the operation of volunteer fire brigades (ÖTE) is cost efficient and their specialist activity represent quantifiable cost savings for disaster management. Therefore, a review of the system of subsidies to volunteer fire brigades (ÖTE) and the engagement of additional central funds are justified, which may be regarded as expenses well utilised and at the same time returning.

III. In the area of the role of the Firefighters' Association in increasing successful task fulfilment by volunteer fire brigades

1. By presenting the history of the Hungarian Firefighters' Association, I have discussed the key role played by the Association in various eras in the life and development of firefighting movement in Hungary.

I have verified it through international examples that a well-functioning association form creates strong cohesion and represents significant organising power within the volunteer firefighting movement.

2. By analysing the current situation of the Hungarian Firefighters' Association, I have pinpointed that in spite of the activity of stakeholders, in the absence of required conditions, in its current form, MTSZ is not capable of fulfilling a leading, integrating role in Hungary's firefighting society.

3. Based on an assessment of the situation, I have proposed the legal, organisational and financing solution required to create the vocational weight and interest enforcing and supporting role of MTSZ in order to improve the successfulness of the volunteer firefighting movement.

IV. In the area of developing the set of rescue and fire safety assets in line with the responsibilities of volunteer fire brigades

1. By presenting the development history of firefighting vehicles and specialist equipment, I have illustrated the impact of technical features on successful rescue and fire safety task fulfilment and at the same time have verified that firefighting specialist activities call for substantial and costly technical background and set of assets.

2. I have presented and at the same time evaluated the vehicle and asset portfolio of volunteer firefighters and current technical standards thereof. I have concluded that in the present situation, central measures implemented along a comprehensive concept are required to improve the technical portfolio of volunteer fire brigades showing intensifying activities with a view to the significant cost demands unaffordable by volunteer fire brigades themselves.

3. I have discussed the concept of national firefighting vehicle production in respect of a firefighting vehicle designed specifically for volunteer fire brigades to ensure successful task fulfilment. I have presented state-of-the-art fire-extinguishing equipment, machinery and specialist tools that may constitute the basis for designing a light-category multi-purpose fire engine.

4. I have proposed the introduction of a so-called "firefighter driving licence" in Hungary upon examples in Austria and Germany, which would in practice mean that Category B driving licences would allow for the driving of firefighting vehicles up to a gross weight of 7.5 tons upon fulfilment of certain prerequisites.

Introduction of such firefighter driving licence would resolve on duty staff organisational issued arising due to the lack of Category C driving licences and would substantially increase the intervention capabilities of volunteer fire brigades in the short run while would give the green light to national firefighting vehicle production in designing a uniform vehicle type optimal for volunteers.

NEW SCIENTIFIC FINDINGS

Based on my research work conducted in line with my dissertation's hypotheses and objectives, **I** am suggesting the acceptance of the following <u>new scientific findings</u>:

- Summarising the organisational development history and legal regulation of fire safety, I have elaborated a new set of correlation assessment criteria, methodology and software application in order to improve territorial and organisational dislocation of rescue and fire safety, by using which, I have put forward specific proposals for introducing organisational measures ensuring optimal dislocation.
- Relying on international comparative analyses and national organisational development history assessment, I have *defined* the role of volunteering in Hungary's fire safety and have furthermore *identified* the set of conditions and implementation opportunities for engaging volunteer firefighting activities in firefighting and technical rescue tasks.
- Upon a critical assessment and comparison of firefighters' associations relying on national and international experiences, I have *identified* the forms, scope and modernisation opportunities of the involvement of the Hungarian Firefighters' Association in increasing successful task fulfilment by volunteer fire brigades.
- 4. Following a comprehensive examination of the set of technical assets in rescue and fire safety focusing on volunteer fire brigades, I have *elaborated specific proposals* for engaging volunteer fire brigades in rescue and fire safety and for further development solutions of the set of task-specific technical and technological assets required for the fulfilment of specialist tasks related thereto, and for the introduction of a firefighter driving licence.

RECOMMENDATIONS OF THE DISSERTATION

I have made the following recommendations to legislators and law applicants in utilising the conclusions and scientific findings of my dissertation:

1. Proposals of my dissertation may be utilised in shaping optimal rescue and fire safety dislocation, in reducing white spots.

- 2. Volunteer fire brigades, the Hungarian Firefighters' Association may be given a key role in improving rescue and fire safety, in which proposals featured in my dissertation may be applied.
- 3. My research findings dealing with the fire investigation system and the set of technical assets of volunteer fire brigades are recommended to be utilised in improving fire safety specialist management and executive activities further.

PRACTICAL APPLICABILITY OF RESEARCH FINDINGS

I propose to use the research findings of my research work as follows:

- 1. Conclusions and findings of my dissertation may be used in elaborating legal regulations, polices, directives and rules of procedures determining the organisation and organising of and fulfilment of specialist activities by volunteer fire departments.
- 2. Various parts of my dissertation may be used in compiling fire safety notes, supplements and vocational descriptions in higher educational institutions and within the training system of professional disaster management agencies.
- 3. Upon re-editing, my dissertation may be suitable for use as educational supplement at the National University of Public Service Disaster Management Institute, the Fire and Disaster Management Institute of St. Stephen University's Ybl Miklós Faculty of Architectural Science, the Disaster Management Training Centre and other higher educational institutions, and within vocational institutions offering professional disaster management education.

LIST OF DOCTORAL CANDIDATE'S PUBLICATIONS IN THE SUBJECT MATTER

REVISED SPECIALIST PERIODICAL ARTICLES (INCLUDING ON-LINE) Periodicals in a foreign language published in Hungary

[1] Cimer Zsolt; Varga Ferenc: Application of Special Risk Reduction Protective Measures in Combiterminals for Dangerous Goods. Academic and Applied Research in Public Management Science 14:(2) pp. 209-218. (2015) ISSN 1588-8789

Published in a foreign language published in a benchmark Hungarian periodical

- [2] Varga Ferenc: Internationale Erfahrungen der freiwilligen Feuerwehren HADMÉRNÖK Vol. XIII. Special Issue I (KÖFOP) pp. 160-176. (2018)
- [3] Varga Ferenc: Structural and Operational Model for the Voluntary Fire Protection Associations. HADMÉRNÖK Vol. XIII. Issue 2 pp. 345-359. (2018)

 [4] Varga Ferenc: Assessment of the procedural and technical conditions for the Hungarian fire investigation system in line with international experiences. HADMÉRNÖK Vol. XIII.
 Issue 4. pp. 1-17 (2018) under publication

Published in Hungarian in a benchmark Hungarian periodical

- [5] Varga Ferenc: Önkéntes Tűzoltó egyesületek napjainkig. VÉDELEM KATASZTRÓFA-TŰZ- ÉS POLGÁRI VÉDELMI SZEMLE 22:(6) pp. 13-15. (2015) ISSN: 1218-2958
 (Volunteer fire brigades until the present day)
- [6] Kanyó Ferenc, Varga Ferenc: Sportcsarnoktűz a Testnevelési Egyetemen. VÉDELEM KATASZTRÓFAVÉDELMI SZEMLE 23.(1): pp. 48-50. (2016) ISSN: 1218-2958 (Sports Hall fire at the University of Physical Education)
- [7] Varga Ferenc, Nagy László Zoltán: Sportcsarnoktűz vizsgálata a Testnevelési Egyetemen.
 VÉDELEM KATASZTRÓFAVÉDELMI SZEMLE 23:(3) pp. 46-49. (2016)
 (Investigation of the Sports Hall fire at the University of Physical Education)
- [8] Fentor László Varga Ferenc: Magyarországi tűzvizsgálati rendszer és fejlesztési lehetőségeinek értékelése. MŰSZAKI KATONAI KÖZLÖNY XXVI.:(3) pp. 66-73. (2016) ISSN 2063-4986 (An assessment of the Hungarian fire investigation system and development opportunities thereof)
- [9] Varga Ferenc Bérczi László: Nemzetközi tűzvizsgálati gyakorlat elemzése. VÉDELEM TUDOMÁNY: KATASZTRÓFAVÉDELMI ONLINE TUDOMÁNYOS FOLYÓIRAT 1:(3) pp. 28-45. (2016) ISSN 2498-6194 (An analysis of international fire investigation practices)
- [10] Bérczi László Varga Ferenc: Az önkéntes tűzoltó egyesületek tűzoltási és műszaki mentési feladatai. BOLYAI SZEMLE XXV.:(2) pp. 78-89. (2016) ISSN 1416-1443 (Firefighting and technical rescue tasks of volunteer fire brigades)
- [11] Varga Ferenc: A hazai mentő tűzvédelem szervezeti és technikai fejlesztési lehetőségeinek kutatása, különös tekintettel az önkéntes tűzoltóságok növekvő szerepére. MŰSZAKI KATONAI KÖZLÖNY XXVII.:(2) pp. 157-186. (2017) ISSN 2063-4986 (Researching organisational and technical development opportunities of rescue and fire safety in Hungary, with a particular view to the increasing role of volunteer fire brigades)
- [12] Varga Ferenc: Az önkéntes közreműködés a katasztrófavédelemben. VÉDELEM TUDOMÁNY: KATASZTRÓFAVÉDELMI ONLINE TUDOMÁNYOS FOLYÓIRAT 2:(2) pp. 199-207. (2017) ISSN 2498-6194 (Volunteering in disaster management)

- [13] Varga Ferenc: A beavatkozó önkéntes tűzoltó egyesületek szervezeti és működési modelljének kialakítása. MŰSZAKI KATONAI KÖZLÖNY XXVIII.:(1.) pp. 175-208. (2018) ISSN 2063-4986 (Elaborating the organisational and operational model for volunteer fire brigades)
- [14] Varga Ferenc: "A Magyar Tűzoltó Szövetség helyének and szerepének meghatározása az ÖTE-k eredményes feladatellátásának növelésében. BOLYAI SZEMLE XXVI.:(3) pp. 47-71. (2017) ISSN 1416-1443 (Identifying the place and role of the Hungarian Firefighters' Association in increasing the successful fulfilment of the role of volunteer fire brigades)
- [15] Varga Ferenc: Az Önkéntes Tűzoltó Egyesületek tűzoltási és mentési feladatai végrehajtásának értékelése. BOLYAI SZEMLE XXV. (2): pp. 1-10. (2018) ISSN 1416-1443. under publication (An assessment of the implementation of firefighting and rescue tasks by Volunteer Fire Brigades)
- Varga Ferenc: A mentő tűzvédelem optimális diszlokációjának területi és szervezeti szintű [16] MŰSZAKI a meghatározó szempontok elemzése KATONAL kidolgozása, KÖZLÖNY XXVIII:(3.) pp. 15-40. (2018) ISSN 2063-4986 (Territorial and organisational elaboration of the optimal dislocation of firefighting and technical rescue units, an analysis of key factors)
- [17] Varga Ferenc: Az önkéntes tűzoltóságok beavatkozó műszaki eszközrendszere fejlesztési lehetőségeinek vizsgálata MŰSZAKI KATONAI KÖZLÖNY XXVIII.:(3.) pp. 80-101. (2018) ISSN 2063-4986 (Investigating development opportunities for technical intervention gear and equipment of volunteer fire brigades)

NON-REVISED SPECIALIST PERIODICAL ARTICLES (INCLUDING ON-LINE) Articles in Hungarian

- [18] Bérczi László, Varga Ferenc: Az önkéntes tűzoltó egyesületek 2013. évi pályázatai.
 VÉDELEM KATASZTRÓFA- TŰZ- ÉS POLGÁRI VÉDELMI SZEMLE 20:(6) pp. 19-20. (2013) ISSN: 1218-2958 (Applications by volunteer fire brigades in the Year 2013)
- [19] Bérczi László, Varga Ferenc: Önkéntes tűzoltó egyesületek: támogatás, kategóriák, önálló szaktevékenység. VÉDELEM KATASZTRÓFA- TŰZ- ÉS POLGÁRI VÉDELMI SZEMLE 21:(4) pp. 27-28. (2014) ISSN: 1218-2958
 (Volunteer fire brigades: subsidies, categories, independent specialist activities)
- [20] Varga Ferenc, Fülep Zoltán: Magyarország mentő tűzvédelme javult a területi lefedettség. VÉDELEM KATASZTRÓFA- TŰZ- ÉS POLGÁRI VÉDELMI SZEMLE

21:(2) pp. 41-42. (2015) ISSN: 1218-2958

(Hungary's rescue and fire safety - improved territorial coverage)

[21] Varga Ferenc, Fülep Zoltán: 2014. mentő tűzvédelme a számok tükrében. VÉDELEM - KATASZTRÓFA- TŰZ- ÉS POLGÁRI VÉDELMI SZEMLE 21:(2) pp. 43-44. (2015)
 ISSN: 1218-2958 (Rescue and fire safety in 2014 by the numbers)

PUBLISHED IN A PUBLICATION OF A SPECIALIST CONFERENCE (INCLUDING ON-LINE) Presentation in Hungarian

[22] Bérczi László, Varga Ferenc: Az önkéntes tűzoltóegyesületek tűzoltási és műszaki mentési feladatai. In: Önkéntesség a katasztrófavédelemben. Place and time of conferencia: Budapest, Magyarország, 2014.11.13 (NKE Szolgáltató Kft.) BM OKF (National Disaster Management General Directorate of the Ministry of the Interior), pp. 125-140. ISBN 978-615-5527-11-1 (Firefighting and technical rescue tasks of volunteer fire brigades. In: Volunteering in disaster management)

Abstract in a foreign language

[23] Varga Ferenc: A tűzvizsgálat gyakorlata Magyarországon. In: Tűzvizsgálat Európában és a tengerentúlon. 2016. május 25-26. Budapest. (Fire investigation in Hungary) URL.: http://www.vedelemtudomany.hu/?pageid=article_abstract&szerzo=Varga Ferenc&cim=A tűzvizsgálat gyakorlata magyarországon

Extract in Hungarian

 [24] Varga Ferenc: A tűzvédelem szervezeti fejlődése. In: Tűzvédelmi Konferencia a 120 éves fővárosi tűzoltólaktanyában. Place and date of conference: Budapest, Magyarország, 2015.11.17 Budapest: BM OKF, 2015. pp. 1-35.

(Varga Ferenc: Organisational development of fire safety)

URL.: http://www.vedelem.hu/files/UserFiles/File/aktualis/20151126/varga.pdf

DOCTORAL CANDIDATE'S VOCATIONAL-SCIENTIFIC RESUMÉ

Name: Ferenc VARGA ff. brigadier general

Service Post: Budapest Disaster Management Directorate

Position: Director

1986: enlisted as subordinated firefighter by the Fire Department in District III of Budapest, 22 years in various commanding posts at the Budapest Disaster Management Directorate and its legal predecessor, the Fire Department of Budapest.

Vocational career

1 August 1989 – 31 December 1990: Desk officer at the Fire Prevention Division of the National Command for Fire Departments at the Ministry of the Interior (BM TOP)

1 January 1991. – 31 July 1992: Fire Department in District III of Budapest, Fire prevention desk officer, chief desk officer, special chief desk officer

1 August 1992 – 31 March 1995: Fire Department in District XXII of Budapest, head of fire prevention division, deputy commander

1 April 1995 - 31 August 1996: District III Fire Department of the Fire Department of Budapest, head of fire prevention division, deputy commander

1 September 1996 – 30 June 2003: District III Fire Department of the Fire Department of Budapest, commander

1 July 2003 - 30 November 2010: North Buda Firefighting and Rescue Command of the Fire Department of Budapest, commander

1 December 2010 – 25 January 2011: Fire Department of Budapest, commander, deputy commander for rescue

26 January 2011 - 31 December 2011: Fire Department of Budapest, appointed commander

1 January 2012: Budapest Disaster Management Directorate, director

Academic career:

1986-1989 Ybl Miklós Construction Industry Technical College, Fire Safety major, fire safety engineer

1993-1996 State Administration College, degree in administration organisation

2002 Security Management Training Centre

2011-2013 National University of Public Service, MSc in Defence Administration, certified defence administration manager (disaster management specialisation)

2014-t National University of Public Service, Military Technical Doctoral School, scientific doctoral studies

2008- Architectural fire safety expert registered by the National Disaster Management Directorate General of the Ministry of the Interior (BM OKF)

Educational activities:

1994-1996 BM TPVI, fire safety administration, fire prevention, contracted lecturer

2002- 2007 Pollack Mihály College, fire safety of buildings, contracted lecturer

2003-2011 BME OMKT, Fire prevention, fire safety of buildings, lecturer

2008- 2009 Police Officers' College, fire safety of buildings, contracted lecturer

2017- NKE, management knowledge, contracted lecturer

Award and recognitions:

Recognition for "Budapest's Fire Safety" - 2005

Fire department's counsellor title - 2007

Fire department's chief counsellor title - 2011

Dr. Barna Sándor Medal for Public Security in Budapest - 2012

Pro Urbe Award for Budapest - 2013

12 December 2018 in Budapest

Ferenc VARGA ff. brigadier general