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FIRE SERVICE RESPONSES AND THE NEED FOR FOREIGN LANGUAGE KNOWLEDGE

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ABSTRACT
In the majority of the countries, fire departments are responsible for a wide variety of interventions, including fire incidents and technical rescue. The widerange of skills and knowledge that these interventions demand are expanding due to newly emerging challenges, a potential one being the higher number of foreign visitors who do not speak the language of the country. By taking a look at Hungary, the paper specifies certain features of countries that increase the likelihood of non-natives getting involved in incidents. In response, theauthors highlight foreign language knowledge as an asset during interventions and specify those positions within the fire service who might get in contact with foreigners, resulting in a situation when the knowledge of a foreign language can support the effectiveness of their work.

KEY WORDS: *disaster management, fire service, interventions, internationalism, foreign languages*

1 Introduction

Increased tourism and international transport place additional demands on countries, such as the need for a higher percentage of foreign language speakers, not only to be able to reap the economic benefits, but also to guarantee the safety of both citizens and visitors. One aspect of safety is protecting them from natural and man-made disasters and fires, for whichdisaster management is responsible for in Hungary, similarly to the majority of countries. Efforts to increase the effectiveness of interventions mainly focus on the training of intervention units to develop their skills and on advanced equipment and protective clothing, but due emphasis has to be placed ona further significant factor, that is, collecting as much information as possible to support decision-making. Information may come from the emergency callers, eyewitnesses and surviving victims,so in incidents involving non-natives, foreign languages might be the key to asource of information. After describing the broad spectrum of interventions and the way tourism and international transport may influence them, the authors attempt to identify the positions in fire service that may involve using a foreign language in interventions.

2 Activities of Fire Departments

In the field of fire and rescue services, fire brigades are responsible for first response. The two main groups of their activities are fire incidents and technical rescue.Technical rescue includes a wide range of incidents, such as structural collapse, storm damage or traffic accidents often in the presence of dangerous materials whether on the road or railways, just to give a few examples and illustrate the broad nature of the term “technical rescue” and the wide range of interventions fire service is involved in.
Figure 1showsthe distribution of fire calls in Hungary to which fire fighters responded in 2011-2015. [1]Almost half of the interventionsinvolved technical rescue,outnumberingfire incidents, which is an activity most commonly associated with fire brigades.

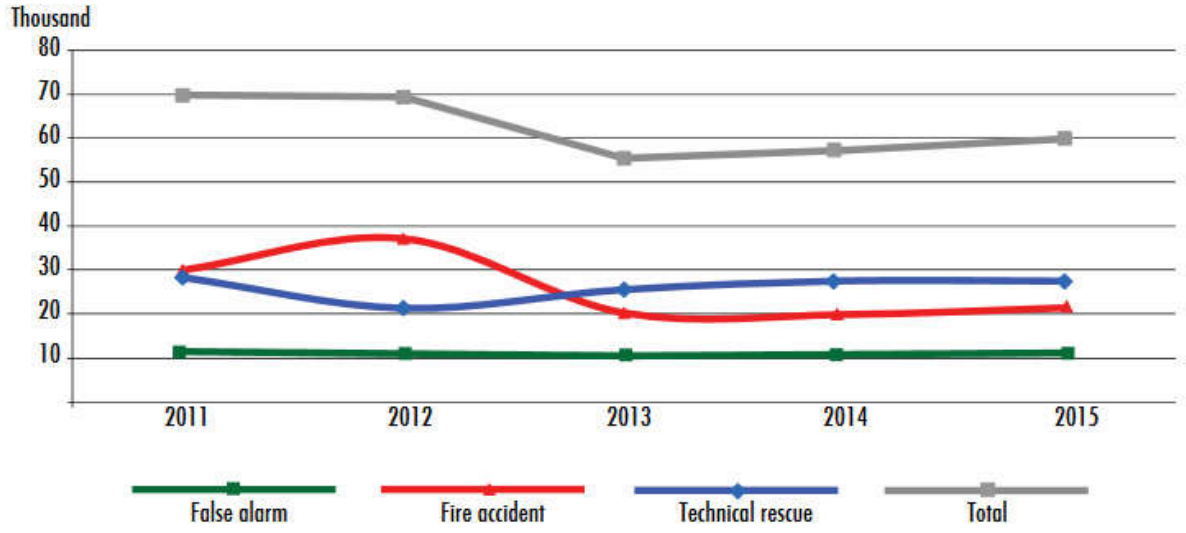

Figure 1 The distribution of fire callsin 2011-2015 in Hungary [1]

Therefore, the recruitment process of fire fighters takes into accountseveral skills. They need to pass rigorous examinations where their medical suitability, physical fitness and psychological readiness are under scrutiny. The selected applicants then have to acquire highly specialised and extensive skills and knowledge. [2] Currently foreign language knowledge is not on the list of skills needed to perform firefighting interventions, and obviously it will never deserve to be among the core skills. Nevertheless, if we havea look at the environment in which the interventions happen, it becomes apparent that in certain cases foreign language knowledge may contribute to effective interventions. The success of the intervention, which means that there is no casualty and financial loss is minimised, is heavily dependent on the information the intervention team has on the nature and circumstances of the incident. The more is known, the more reliable decisions can be made.

3 Effects of Tourism and Transport on Fire Service Interventions

Technical rescue is most often performed following road accidents, where there is a high risk of injuries. In accordance with the topic of the paper, it is reasonable to consider the fact that on the roads – especially within the European Union – there is a significant number of people of various nationalities travelling by road.
European Union statistics tell that 61.1% of its population took part in tourism for personal purposes, 25% of which travelled abroad [3]. According to the figures of the Hungarian Central Statistical Office, the annual number of foreign visitors to Hungary was close to 46 millionin 2014 [4]. The number of foreign residents residing in Hungary was between 139,700 and 206,909 in the past ten years[5]. Although no relevant figures are available, the considerable amount of tourists and foreign residents in Hungary suggest that it is highly probable that incidents involve non-natives as well, either as victims or as eyewitnesses, who can provide valuable information on the circumstances. It can be stated that they are most likely to be able to speak one of the main international languages, such as English or German.
In addition to the considerable number of foreigners, another predisposing factor for interventions involving non-nativesis the fact that Europe is woven by railway and road networks, where a considerable part of international traffic and dangerous goods transport take place, which is a potential source of accidents. Hungary can be considered a transit country for freight transportation due to various characteristics. Located in Central and Eastern Europe, it serves as a connecting link between Western and Eastern Europe, or by widening our perspective, between Europe and Asia. In addition to its location, its terrain is also well-suited for transportation with the predominantly plain areas as opposed to the mountainous regions of the neighbouring countries. Moreover, Hungary boasts an extensive transport network that basically covers the whole country and provides connections to international networks. Among these networks, our road and railway networks are worth mentioning.

3.1 Transport network of Hungary

Hungary is a member of severalinternational organisations that set outto facilitate, advance and coordinate international freight transportation by rail, the most important ones being Coordinating Council on Trans-Siberian Transportation (CCTT) International Association, Organisation for Cooperation between Railways (OSJD) and RailNetEurope (RNE). [6] The two former organisations deal with intercontinental railway transportation involving Asia and Europe, while the latter one attempts to harmonise it within Europe. Hungary participates in the European railway transport with two of the rail freight corridors running through the country of the altogether nine RNE corridors. One is the Orient Corridor that starts from the Czech Republic and ends in Greece, while the other is the Mediterranean Corridor that starts in Spain and ends in Záhony, at the Eastern border of Hungary. [7]
As regards our road network, the European Conference of Ministers of Transport (ECMT), whose goal is to establish and develop the integrated European transport system, evaluated Hungary in a National Peer Review before our EU accession. They were satisfied with the density of the railway network, which was well above the average in OECD countries (Organisation for Economic Co-operation and Development). However, they surpassed the Hungarian network in terms of quality. The same applied to our road network, as in the total length of paved roads Hungary ranked high, yet if we narrow down the range to focus only on motorways, Hungary was well below the average in Western Europe. [8] Since then, over the last decade, the length of motorways has almost tripled [9].
To sum up, a country'slocation and transportation facilities are assets that might make it more attractive to freight companies. It results in an increased volume of traffic, which may give rise to a higher number of accidents potentially involving hazardous materials. Fortunately, it has been long recognised that the transportation of hazardous materials needs to be internationally regulated and harmonised. For this purpose, various European agreements were signed concerning the international carriage of dangerous goods by different transportation methods, namely ADR[1] by road, RID[2] by rail, ADN[3] by inland waterways and ICAO TI[4] or IATA DGR[5] by air.Standardised pictograms and UN numbers help identify

[1]European Agreement concerning the International Carriage of Dangerous Goods by Road
[2]Regulations concerning the International Railway Transport of Dangerous Goods
[3]European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
[4]The International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air
[5]Provisions concerning Transport of Dangerous Goods in the International Air Transport

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dangerous materials without having to be completely relied on the driver who may or may not be in a state to provide information on the circumstances and who may or may not speak the intervention unit's mother tongue.

4 Positions at the Fire Service Requiring Foreign Language Skills

All the above factors prove the increasing likelihood that not only the native languageis used in an intervention, whether it is a fire incident or technical rescue, to gather information or to communicate with the victims. Intervention units are aware that they may encounter circumstances on the scene which are unexpected and they need to make quick decisions accordingly. However, foreign languages may be a tool to gatheras much information as possible to support decision making.
Therefore, it is necessary to identify those segments of the organisation of fire servicewhichare in frequent contact with victims – who might not be native speakers. Figure 4 below is a compilation of officers in the Fire Service of Hungary, categorised according to the level where their workplace is situated in the organisation of disaster management, yielding two groups for the purposes of the paper, local and county levels.

Local level	**County level**
squad leader	*fire operations clerks* perform basic tasks related to operations and their administration, but a high school diploma is sufficient for this position, a degree (thus, a language certificate) is not required
shift commander	*on-duty fire operations officers* and *chief communications officer*, who receive fire emergency calls or the calls are redirected to them
fire chief and *his deputy* in case of a major fire (2nd-alarm fire at least) or perhaps a *technical safety officer*	*leader of the Disaster Management Operations Unit* and *his deputy* (who respond to 2nd or higher-alarm fires)
*head of the disaster management branch office*in case of a 3rd-alarm fire	
county management takes over the operationin case of 4th or 5th-alarm fire	

Figure 2 Positions at the Fire Service of Hungary that might require foreign language skills in interventions (Source: Authors' compilation)

As the jobs above the thick line in Figure 4 require shifts, it is essential that foreign language speakers are available in each shift. Altogether, there are three teams or platoons of firefighters, A, B and C, which work on a rotating shift schedule. One platoon is on-duty for 24 hours and off-duty for 48 hours. This system guarantees that fire fighters with similar preparedness and qualifications can be deployed at all times. Each unit includes a shift commander with higher education qualification, which means that three such officers are required to continuously fulfil this position. In case of absence (training, vacation, sick leave) they are always replaced by a subordinate, for example the squad leader, who is an officer as well. At fire stations there are considerably fewer officers with higher education qualification, resulting in a lower number of foreign language speakers.

2015 Act XLII of Hungary on the Service Status of Professional Members of Law Enforcement [10] – similarly to the previous act – sets out that a degree is required to advance to an officer rank (from second lieutenant), whose prerequisite is, in turn, a language exam certificate. This act applies not only to the fire service – who actually perform the activities described in the paper– but to other law enforcement organs as well. [11].

The new challenges related to foreign language skills must be addressed during trainings and education.At the Institute of Disaster Management, National University of Public Service, Budapest, Hungary students acquire specialist knowledge in the field of fire services, or more broadly, disaster management. [12] [13] In addition, due emphasis is placed on foreign language acquisition. During the three-year bachelor programme, the foreign language course lasts for five terms with 300 lessons, whose goal is to prepare students for the language exam and also to equip them with the terminology of disaster management so that foreign language will not hinder them from widening their perspectives in their profession.Within the Institute, the Department of Fire Protection and Rescue Control offers the possibility to its firefighter students to participate in practical trainings abroad via the Erasmus+ programme or other grants, thus combining improving professional skills with foreign language learning. In this sense, the system of teaching foreign languages for military purposes sets an example worth following. As human interoperability is at the core of NATO needs, the common training systems are preceded by the national military education and training as well as the language training, which may be later supplemented by the NATO Staff Officers' Military Terminology Course. [14]

5 Conclusion

The paper has shown that a country's location, terrain and transport system facilitate tourism and international transport, which raises the number of non-native speakers present in the country. By demonstrating it through the example of Hungary, the authors elaborate on the influences these features have on fire service interventions and in response to these needs, the positions are collected which might need foreign language knowledge to contribute to the effectiveness of interventions by ensuring access to more information on intervention circumstances.Lastly, it is demonstratedhow these demands can be addressed in the curriculum of a higher education institution to prepare future officers for the challenges they might face in their profession.

References

[1] 2015 Annual of the National Directorate General for Disaster Managementhttp://www.katasztrofavedelem.hu/letoltes/kiadvanyok/2015_Katasztrofavedelmi_kalendarium_angol.pdf (11/01/2017)
[2] RESTÁS Ágoston: Special Decision Making Method of Internal Security Managers at Tactical Level;*NISPAcee Government vs. Governance in Central and Eastern Europe: From Pre-Weberianism to Neo-Weberianism? Presented Papers from the 22nd NISPAcee Annual Conference,* Budapest, 2014ISBN:978-80-89013-72-2
[3] Eurostat: Tourism statistics http://ec.europa.eu/eurostat/statistics-explained/index.php/Tourism_statistics (21/01/2017)
[4] HungarianCentralStatistical Office: Number and expenditure of foreignvisitorsin Hungary http://www.ksh.hu/docs/hun/xstadat/xstadat_evkozi/e_ogt002c.html?down=95(11/01/2017)
[5] HungarianCentralStatistical Office:Number of foreignnationalsin Hungary http://www.ksh.hu/docs/hun/xstadat/xstadat_eves/i_wnvn001b.html?down=525(11/01/2017)
[6] MÁV Zrt.:Memberships, partnershipshttp://www.mavcsoport.hu/mav/tagsagok-egyuttmukodesek(12/01/2017)
[7] Rail Net Europe: RailFreightCorridorshttp://www.rne.eu/rail-freight-corridors-rfcs.html(12/01/2017)
[8] European Conference of Ministers of Transport: National Peer Review Hungary http://internationaltransportforum.org/pub/pdf/04UrbHungary.pdf(12/01/2017)
[9] HungarianCentralStatistical Office: The Length of Motorwayshttp://www.ksh.hu/docs/hun/eurostat_tablak/tabl/ttr00002.html(11/01/2017)
[10] ActXLII of 2015 on the Service Status of Professional Members of Law Enforcement
[11] Pántya Péter: Whatcouldhelpforthefirefighting, technicalrescues?,In: Stefan Galla, Andrea Majlingova, Boris Toman, AdvancesinFire, Safety and Security Research 2015. Bratislava: Fire Research Institute of theMinistry of InteriorSlovakRepublic, 2015. p. 60.
[12] RESTÁS Ágoston–BLESZITY János–GRÓSZ Zoltán– KRIZSÁN Zoltán: New Training for Disaster Management at University Level in Hungary: Presentation of the multi-cycle system on the field of public administration, law enforcement and military training concerning the faculty of disaster management;*NISPAcee Government vs. Governance in Central and Eastern Europe: From Pre-Weberianism to Neo-Weberianism? Presented Papers from the 22nd NISPAcee Annual Conference*, Budapest, 2014 ISBN:978-80-89013-72-2
[13] KÓRÓDIGyula: The role of the Institute of Disaster Management of National University of Public Service in the system of the Hungarian voluntary rescue organizations: searching, rescue and first aid;*NISPAcee Government vs. Governance in Central and Eastern Europe: From Pre-Weberianism to Neo-Weberianism? Presented Papers from the 22nd NISPAcee Annual Conference*, Budapest, 2014 ISBN:978-80-89013-72-2
[14] UJHÁZY László: Allied Joint Force Command Headquarters Brunssum's Deployed Joint Forces Headquarters Training. AARMS, 2008/3, pp. 445–451ISSN: 1588-8789

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