

## INVESTIGATING THE LEVEL OF FIRE SAFETY AT PRISONS IN HUNGARY

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**ABSTRACT.** In Hungary fire-fighting duties are generally fulfilled by fire services operating within the framework of the unified organization of disaster management. To increase efficiency this might change in specific cases, furthermore other organisations can also fulfill fire-fighting duties. The reason behind this is that sometimes fire-fighters arrive at the scene with a considerable delay therefore people located in the area have to start fire-fighting with the utilization of special equipment to minimize damage. Such occasions are when disasters or fires are to be managed during mass events, affrays or inside prisons. Method: The author applied the current legislation of Hungary, interviewed some of the managers working in the Prison Service as well as utilized his previous experience in fire-fighting. The study describes the current state of the Hungarian prisons, depicts the characteristics and the current changes of the fire safety training received by the prison personnel. Are shown examples regarding cases where the arrival of fire-fighters cannot be achieved under the professionally accepted time limit of 15 minutes. A cell fire with a fatal outcome is also described in the paper. The complicated situation faced by the prison personnel in case of fire is also addressed. The author tries to assist in the improvement of the educational syllabus as well as in the perfecting of the knowledge of the personnel.

**Key words:** *fire-fighting, fire, mass event, affray, prison*

## INTRODUCTION

Nowadays the education of fire-fighting teams in correctional centres can be regarded as rather deficient. The staff working in different numbers and with different level of competence in the different type of penal institutions is responsible for carrying out the evacuation and the first steps of fire-fighting in case of fire. Those institutions that cannot be reached by fire engines in 15 minutes in every case are in a difficult situation. Since the beginning of 2014 fireman major Attila Kirov and correctional major Antal Ladányi began to develop the education material for the personnel, the transfer of basic knowledge necessary to carry out their duties and they began their instruction. Unfortunately, no similar central educational syllabus was developed up till that time. The importance of education was also justified by the prison fire in Zalaegerszeg in 2003, which caused the loss of human life.

The fire safety of penitentiaries functioning on the area of Hungary is in a special situation. In addition to the first, second and third grade prisons there are two special institutions, the Institute of Psychiatry and Judicial Observation and the Central Hospital of the Detention Centre of Tököl where the installation of fire alarm systems and the tactics of fire-fighting entail specific requirements and safety rules resulting from the detention. On the area of Hungary 1 regional organizations with special priority, 8 regional organizations and 12 local ones operate. Nowadays 20000 people are kept under detention, which means that the prisons are 135 % full.

Most of the institutions of the Hungarian prison system was established at the turn of the 20th century or earlier, (Állampuszta in 1886, Kecskemét in 1904, Balassagyarmat in 1847, Pécs in 1884), and the 'new' prisons founded at the time of the classical communism were built in the middle of the country because of national security, for example Baracska founded in 1953, Tököl in 1963, Kalocsa in 1950 or Pálhalma in 1951. According to the rules of the placement of convicts every prisoner should be put in a separate cell. However the old prisons are characterized by cells for many people, so it is insolvable. In the penal institution of Pálhalma there are even cells for 30 persons, meanwhile the other prisons contain four-person cells.

### ***Actual situation of penal execution institutes***

The fire protection system of prisons in terms of disaster management coverage is limited because of the so-called "white spots"<sup>1</sup>.

The Constitution, under Article II, in Hungary every human being has the inherent right to life and basic human dignity, which means it can be specified level of emergency fire protection, regardless of whether that person's resulting penalty is deprivation of liberty or pre-trial detention. There are 4 penal execution institutes in the area of the country, which due to distance would be achieved after the alert by the first firefighter units in fifteen minutes or more. The four institutions mentioned are: Állampuszta Penal Execution Institution, Közép-Dunántúli National Penal Execution Institution in Baracska, Márianosztra Jail and Prison, and Tiszalök National Penal Execution Institution (Lőrincz and Nagy, 1997).

5/2014 NDGDM Tactical Fire Regulations (*BM OKF, 2014*). VI. section describes that the time for locking process is 10 minutes. If you add the time of arrival to this, we can say that there is an institution, which after the events fire alarm a firefighter units start the action after 40 minutes (minimum) (<http://bv.gov.hu/bv-intezetek>).

## **CASE STUDIES**

**Állampuszta Penal Execution Institution.** The institute's basic mission is related task of the pre-trial detention, as well as the adult male prison inmates and prison imprisonment. The capacity of the institute is 814 people, mainly men with final judgment and adult prisoners spend in their sentence. The institute is semi-open nature, which means that the inmates work in agricultural units located next to the institute, which is carried out within cooperation with Állampuszta Agriculture and Commerce Ltd. The Ltd. deals of agricultural production, livestock and crops in storage. These activities are classified low risk rating in terms of disaster management.

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<sup>1</sup> white spots: The term white spots implies that reaching the areas of firefighter units cannot be solved within 15 minutes.

**Közép-Dunántúli National Penal Execution Institution.** The Közép-Dunántúli National Penal Execution Institution is national sphere of penal institution, seat in the Baracska Annamajor and Székesfehérvár and Martonvasar sites.

The Baracska facility is located in Fejér County, between Baracska and Pettend settlements, 3 km away from the main road 7. The tasks of the facility are implementation of adult men under penitentiary, prison and detention center stage, as well as implementing rules more lenient punishment of imprisonment, furthermore the implementation of adult men residing in Budapest, Pest County and Komárom-Esztergom County strangulation. The facility provides placement for over 1,000 inmates. The Annamajor Agriculture Ltd. deals crop production, animal husbandry and bakeries. These activities in terms of disaster risk classification are in medium-risk level.

The facility in Székesfehérvár is located in the same building with the city police, the district court, the tribunal, as well as the county and city prosecutor's office. The basic task of the facility is implementing the pre-trial detention in Fejér and Komárom-Esztergom County, furthermore regarding the implementation of incarceration in Fejér County. The object ensures the placement of nearly 200 people.

The Martonvásár facility in Martonvásár territory, is located separately from the occupied area, approx. 200 meters from the M7 motorway. After standing idle for more than 10 years and after the renovations of facility there was a ceremony on 23<sup>rd</sup> March 2015. The facility allows 126 low security-risk detained placement, who work outside.

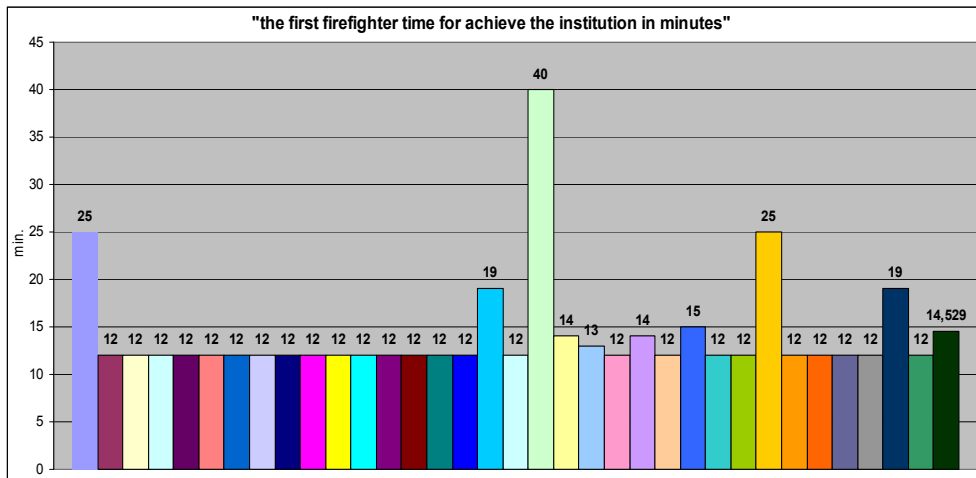
**Márianosztra Jail and Prison.** The institute's core business is state task. The scope determined by special appointment with the tasks of the pre-trial detention, the statutory imprisonment, and tasks of the adult male prison inmates and prison-grade execution of imprisonment. Within these tasks, of course, the activities related to especially in the detention security, employment and provision of healthcare. For the inmates housed at the institute it gives priority to engage in successful integration into society, promoting employment, education, vocational training and work regularly. A business organization in the field of the institute Ltd. NOSTRA employs the majority of convicts. The products manufactured here (eg.: a variety of

wood and paper products, etc.) are made to order. Some of the convicts are participating in financial form in the provision of the institutions, maintenance and operation of the work. Some of them perform custom work outside the institution, of course, keep in mind the security of the detention. Great emphasis is placed on continued to expand of the employment opportunities for inmates housed in the institute, create new jobs, the internal reserves by exploring, or developing external relations. The capacity of the institute is 481 people. The Ltd. based on the mid-range of activities classified disaster risk rating.

**Tiszalök National Penal Execution Institution.** The institute's main task is the implementation of 700 persons, a man convicted of imprisonment imposed in adult prison, jail and prison gear punishment. The Tiszalök National Penal Execution Institution often received the name "fortress", referring to its monumental nature. The 113 638 m<sup>2</sup> plot situated complex of buildings along next to the main road, the aerial photographs are rather outlined it from the landscape. The floor area of housing parts is 5540 m<sup>2</sup>. The living areas are two and three-storey buildings in which has cells for one, two and three-person placement. A total of living space is 14 380 m<sup>2</sup>, with a building of jail together. The main pillar of the employment in the institute is film-selection which takes place in the production halls. This part of the area is 1191 m<sup>2</sup>.

In accordance with the legal provisions in the penal institutions fires extinguished when the expected arrival 10-20 minutes at the scene after the alarm the alert level need to be III priority, which means 3,5-4 fire swarm (figure 1). If the expected arrival on the scene beyond 20 minutes, so in the case of 4,5-6 fire swarm alarm should be imposed. In these alert levels based on the national averages to achieve these institutions in III. priority event can be 34, 43 minutes, while the IV. priority event 56 minutes. Already difficult to reach the institutions by the four fire department a high possibility of the formation of special situations, the cooperating closely with them a limited company. If only taken the average time to arrive based on what almost quarter of an hour, feel free to say that even a short-circuit caused a fire can surely will cause major damage in a paper, cloth or wooden materials manufacturing and processing plant (Restás et al., 2015).

The speed and the sudden position of the fire spread is not only means a loss of production in the near future, but also result the possibility to give a chance inmates to escape also. If like a disaster management patrol duty to fulfil in the area, or the Ltd. or the institute has facility fire department personnel assigned from its own facility, you can reach the legislators are anxious that all distressed people in the territory of the country would receive help within 25 minutes, after the formation of the fire as soon as possible would curb the flames (Szepesi et al., 2003). However, while there is a jail or prison, which the intervention in the first stage is 40 minutes, and a Ltd. operates in the field with further risk factors, then not safe to stay in the area. The specified time of arrive with regard to conclude that there is a high responsibility working in the field of institute, as tens of minutes only themselves to rely on curbing harmful flames, and the preservation of human life and physical integrity.



**Fig. 1.** *The first firefighter time for achieve the institution in minutes.*  
 Source: Péter Horváth 2017.

At present, for the penitentiary institutions in these areas facility firefighter help or fire protection car are not available, what would include other insurance and options. Nowadays in prisons the provided education

for staff include only the back up from the cells, and life saving (Bleszity et al., 2014). Only laic way, to prevent the further spread of fire wall fire hydrants and dry powder fire extinguishers can be used, witch based on the regulations not allowed to use for inmates about security reasons. The possibility of escape of prisoners during the occurring event, fire, transfer or technical rescue need to be taken into account. You often hear about riots and escape attempts in other countries around the world, where tried to use the harmful effects of the fire (Sachs, 2012). If you do not intent to take highest risk of developing of the fire, it will also be counted the commercial companies operating in the prisons, where apparel, industrial, agricultural and other products manufacturing, warehousing is going on, which is not negligible in terms of fire hazard. At one occurring event the institute staff and prisoners in the area shall carry out the first steps of controlling the fire. Taking into account the entry delay time caused by the fire departments distance from the institution, thus the arrival of the primary responding fire units and the locks, concluded that there is not properly trained and equipped staff, the fire may have serious financial and personal sacrifice.

Factors affecting the effectiveness of remediation and save lives:

- the elapsed time between the formation of the incident and the intervention,
- availability of appropriate staff and tools (devices),
- the qualification level of intervention and skill of participants.

## **DISCUSSIONS**

„FIRES WITHIN THE GRIDS”. Fires caused by detained persons can happen several times during the period of deprivation of liberty. The resulting fires formed by the smoke burden of burn the cloth, mattresses and blankets posed a major threat. The modular training system that is required to staff to contain a basic intervention skills of fire events, and the possibilities of rescue of an unconscious person. Teaching of this knowledge is very important, since 2003 in Zalaegerszeg, Zala County Prison a prison fire was demanded human life. The stock of Zalaegerszeg Municipal Fire Department has been contained the fire in the cell.

The service's commander and the first team arrived at the burning cell to rescue an indoors stayed prisoner. The prison guards could not reach the cell due to the high temperature of the heat so that the detainee died before the arrival of firefighters. Due to the firefighter's report informed me about the situation, after the opening of the door backdraft phenomenon also occurred, which would have endangered the lives of untrained prison guards who opened the cell door (Restás, 2015). The burning of the thick leather-covered rubber room generated health damaging dense smoke. The flames and the mass volume of smoke of burning materials in the cell was justified the evacuation of prisoners from that level and higher levels. In total 141 prisoners escape had been implemented during the vaccination (Fejes, 2003).

This special intervention in such places, the question is the safety of fire brigades as well. The new Professional Firefighters Tactical Command require due to the reduction of threats, that the fire units in all cases accompanied by a penitentiary person who is equipped with coercive means to maintain security (Restás, 2014a). However, the guards also need to wear respiratory protection apparatus against poisonous gases and vapours (Pántya, 2011). The penitentiary institutions are usually equipped with a small amount of AGA SPIROMATIC 316 (steel bottle) devices, which is practiced to wear and use just in a few places in the country. In case of an occurring fire in the application of rapid and skill level use of respiratory protection will greatly help in the safety of the intervention, as well as to the rescue of prisoners from the cells.

**TRAINING OF PRISON STAFF.** In the first half of 2014 the Prison Service Headquarters and the Disaster Management Training Centre has developed a common training syllabus for the prison employees. So far, four classes acquainted with the new training syllabus, which has been designed in the spirit of collective thinking. The main theme of the current education was the rescue from the cells, as well as the instructors deal generated during transportation of detainees and the difficulties of fire accidents. In March 2015 was the first rescue simulation in the area of Hatvan-Nagygyombos (a captive carrier car accident), which until then was unknown for fire and rescue personnel (Restás, 2014b).



At Prison Service use circle delivery like a routine operation, which the detainees are moved between different institutions. All this, in many different types and capacity of the vehicle used to get up to fifty people at same time can be transported. Due to the special design of transport equipment, there are few and small rescue apertures. In the last 20 years, near Budapest had two roll-over, one was an accident, the second time the vehicle slanted the side because of the strong wind. Such an accident the behavior of inmates is unpredictable, there is a collaborative person, but there are people who immediately take advantage of this excellent opportunity and trying to escape (K.G.H.N., 2015).

A special vehicle suffered a road accident in Budapest, at Budaörsi-Alkotás- Hegyalja crossroads, that supports the legitimacy and necessity of training.

## CONCLUSIONS

Between law enforcement agencies other institutions few and more can be found, which has extremely difficult fire situation, due to the geographical location and of production manufacturers and warehousing tasks in the field. I recommend the purchase of fire-fighting cars to the fields, as well as a continued training of prison staff, as far as possible a basic firefighter skills training for the greater number of service achievers. For more options I see the installation disaster sentinel posts (patrols) in the environment of the affected areas, which solution would be to reduce the country's "white spots".

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