



PERFORMANCE OF FIRE FIGHTING FORCES IN REDUCING THE NUMBER OF FIRES AND FIRE DAMAGE

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SUMMARY

The Relevance of the Audit

In 2017–2020, there were 41.6 thousand fires in Lithuania, killing 354 people, destroying and damaging more than 200 thousand sq. m of residential and non-residential area. During the years 2017–2020, the funds allocated to fire safety from the State budget increased by 36% and in 2020 amounted to EUR 124 million.

Sound fire safety is one of the most important determinants of public security and it is therefore important that it is organised in such a way as to ensure the protection of people and property from fires. In Lithuania, the function of fire safety is performed by the State. The State has delegated part of this function to municipalities by the Law on Local Self-government.¹ Fire and rescue forces consist of the State Fire and Rescue Service and fire prevention services of 51 municipalities. These services employ approximately 5.5 thousand fire fighters. The implementation of fire prevention measures is organised by municipalities, ministries, and other State institutions. Thus, more than 100 institutions participate in ensuring fire safety in Lithuania.

In order to assess whether the organisation of fire safety ensures the protection of people and property from fires, we have conducted an audit.

¹ Law on Local Self-government, Article 7(4)

The Objective and Scope of the Audit

The objective of the audit is to assess whether fire safety is organised in such a way as to protect people and property from fires.

Key audit questions:

- whether the permanent standby of fire and rescue forces for fire-fighting and rescue of people and property during fires is ensured;
- whether the proper response by fire and rescue forces to fire reports is ensured;
- whether the risk of fire starts is effectively managed.

Audited entities:

- The Ministry of the Interior, which is responsible for shaping the State policy in the field of fire safety, organising, coordinating and controlling its implementation;²
- Fire and Rescue Department under the Ministry of the Interior, which, within the scope of its competence, organises and manages operations relating to fire-fighting, rescue of people and property and reduction of the consequences of fire; organises state fire supervision.³

During the audit, we also collected information from fire prevention services of all municipalities (51), Emergency Response Centre, ministries (14), municipal administrations (60). During the audit, we organised meetings with representatives of associations operating in the field of fire safety (National Association of Fire Chiefs, National Fire Safety Association, the Fire Safety Works and Services Association, Lithuanian Fire Safety Association), companies and the academic community.

The period audited: 2017– first half of 2020. Data of later periods was used to assess the changes related to the formation of fire brigades.

The audit has been performed in accordance with the Public Auditing Requirements and International Standards of Supreme Audit Institutions. The scope and methods of the audit are described in greater detail in Annex 2, Audit Scope and Methods (p. 48).

Key Results of the Audit:

Appropriate standby of fire and rescue forces to carry out fire-fighting and rescue operations is not always ensured, and the risk of fire starts is not managed effectively.

1. It is necessary to ensure an appropriate standby of fire and rescue forces

² Law on Fire Safety, Article 6.

³ Law on Fire Safety, Article 7(1) and Article 7(2)

Appropriateness of legal regulation of permanent standby of fire and rescue forces is not being assessed

- In implementing the Law on Fire Safety, in 2013, the Government approved the Standard for Ensuring Fire Safety,⁴ which establishes the criteria for the formation of fire and rescue forces and determination of the number of tools for fire-fighting and rescue, on the basis whereof the standby of these forces must be ensured. However, the content of the criteria is not detailed and does not determine how they are to be applied. Ministry of the Interior, which is responsible for shaping State policy in the field of fire safety, within 7 years from the approval of the standard has not evaluated whether the established criteria are appropriate to ensure the permanent standby of forces to carry out fire-fighting and rescue operations. Therefore, there is no assurance of legal preconditions for establishing a reasonable need for human resources of fire fighting forces and provision of fire-fighting and rescue tools, equipment, and personal protective equipment (Section 1.1, p. 16).
- Unlike the State Fire and Rescue Service, municipal fire prevention services have been tasked with carrying out not all, but only primary people and property rescue operations. As a result, these services have lower requirements for professional, physical training, and health requirements for fire fighters. Reduced requirements and provision of fire-fighting and rescue equipment, gear, and personal protective equipment. However, it does not detail what works are included in the primary operations of people and property rescue. It has been found that a part of municipal fire prevention service fire fighters performed fire-fighting and rescue operations that are not classified as primary by the Fire and Rescue Department: 69% (35 out of 51) of municipal fire prevention service fire fighters carried out people and property rescue operations in smoke-filled premises and not suitable for breathing, 41% (21 out of 51) performed rescue operations at height, 96% (49 out of 51) provided first aid. Without detailing primary people and property rescue operations, it is not ensured that municipal fire prevention services perform the State function assigned to them to the same extent, fire fighters are adequately trained to perform the assigned functions and are provided with the necessary gear and personal protective equipment (Section 1.1, p. 16).

Human resources of fire and rescue forces have not been formed

- At the State level, there is no systematic assessment of the number and variety of fire brigades to be formed in order to ensure proper response to fire reports. The number of fire brigades is determined by different entities: the number of brigades of State fire and rescue services is determined by the Fire and Rescue Department, and the number of brigades of municipal fire prevention services is determined by municipal councils. In 2020, only 22% (78 out of 360) of all fire brigades consisted of brigades tasked with carrying out all people and property rescue operations. About half (52%) of all fire fighters worked in these brigades. Without a systematic assessment of the need for fire brigades, it is not possible to ascertain whether the existing structure is optimal to respond appropriately to fire reports (Section 1.2, p. 17).

⁴ Standard for Ensuring Fire Safety approved by the Government Decision No. 354 of 17/04/2013.

- It is not ensured that on-duty brigades meeting the minimum requirements for the composition of on-duty fire brigade⁵ would be formed in all fire brigades. During the days selected in 2019–2020, 41% (147 out of 360) of brigades on duty had fewer fire fighters than established by standards. Almost half of the cases (47%) analysed, when the brigades of municipal fire prevention services arrived at the fire site first, the brigade on duty was left with only one fire fighter. Brigades on duty lack fire fighters, however, in 2017–2019, more than two-thirds of voluntary fire fighters were not called for fire-fighting. In the absence of adequate human resources to carry out fire-fighting and rescue operations, the permanent standby of fire and rescue forces is not always ensured (Section 1.2, p. 17).

Fire and rescue forces are not provided with appropriate fire fighting and rescue equipment, gear, and personal protective equipment

- The Ministry of the Interior, which is responsible for shaping State policy in the field of fire safety, does not have a long-term strategy for providing fire and rescue forces with fire-fighting and rescue equipment. The issue of the provision of municipal fire prevention services with equipment is not clarified: no funds are allocated to purchase equipment necessary for the performance of the functions assigned to them by the State and it is not established which entity has to provide these services and by what funds. The Fire and Rescue Department and municipalities provide the services with tankers by transferring old equipment. The tankers transferred during the audited period were approximately 30 years old. The Fire and Rescue Department did not carry out evaluations for three years (2017–2019) whether the provision of fire-fighting and rescue equipment to fire and rescue forces complied with the minimum requirements set forth in the Standard for Ensuring Fire Safety, therefore it did not have reliable data necessary for planning the purchase of equipment (Section 1.3, p. 21).
- According to the assessment carried out by the Fire and Rescue Department in 2020, the provision of the State Fire and Rescue Service with equipment in 2017–2019 did not comply with the minimum requirements set by the Standard for Ensuring Fire Safety, the shortage of equipment increased year on year: in 2017 the lack amounted to 31%; in 2018 – 32%, and in 2019 – 38%. In 2019, almost half of the municipal fire prevention services (23 out of 51) lacked 29% (49 out of 171) of tankers. Tankers must be complete, i.e. with fire-fighting and rescue operation gear, however, the tankers of 80% of State fire and rescue services and 25% of municipal fire prevention services did not have all the necessary gear for these operations. Fire-fighting and rescue equipment can be used safely for about 15 years, however, 42% (124) of this equipment of State fire and rescue services were older than 15 years, and 69% (282 out of 409) of equipment of municipal fire prevention services were older than 20 years.
- Not all fire fighters are provided with the same level of personal protection equipment. The Fire and Rescue Department, which is in charge of⁶ supervision of the provision of special clothing for fire fighters of municipal fire prevention services, does not manage the data whether such provision complies with the set requirements. It was found that in 2019, for 44% (222 out of 509) of fire-fighters parts of special clothing were not renewed.

⁵ Annex to the Standard for Ensuring Fire Safety approved by the Government Decision No. 354 of 17/04/2013.

⁶ Order of the Minister of the Interior No. 1V-601 of 06/08/2015, Clause 2

- Without the provision of fire and rescue forces with fire-fighting and rescue equipment and gear, the proper permanent standby to perform fire-fighting and rescue operations is not ensured, and the lack of personal protective equipment exposes to factors that may cause harm to health, and the conditions to properly perform fire-fighting and rescue operations are not ensured (Section 1.3 and Section 1.4, p.p. 21–27).

2. Actions are needed to ensure an adequate response of fire and rescue forces to fire reports

The Standard for Ensuring Fire Safety establishes the maximum time to respond to fire reports at each stage of response: the maximum time for receiving and transferring fire reports by Emergency Response Centre to the forces, for the forces to leave the fire station and arrive at the site of incident (fire site). We have found that not in all cases the response to reports meets the requirements set by the Standard:

- In 2019, more than 5 thousand of reports were sent by twice exceeding the maximum time limit (2 minutes) set in the Standard. One of the reasons preventing the prompt response to requests for rescue is the outdated information system of the Emergency Response Centre which has no automatic address search function;
- In 2019, in more than 6 thousand cases, fire and rescue forces left the fire station by exceeding the maximum time (1 minute) set in the Standard. For what reasons and to what extent this maximum time was exceeded, the Fire and Rescue Department does not analyse and has no systematised data;
- In 2017–2019, three out of 10 counties have not reached the indicators established in the Standard that the arrival time to the site of the incident of 80% of first forces cannot exceed 8 minutes in urban residential areas and 18 minutes in rural areas. On average, the forces arrived at the site of the incident in urban residential areas (in Vilnius, Kaunas, and Šiauliai counties) exceeding the maximum time set in the Standard by 3 minutes, and on average 8 minutes late in rural areas in Vilnius county. This was influenced by the old tanker fleet and inadequate location of fire stations. Fire brigades are located in such a way that none of the closest brigades is able to reach part of the areas within the maximum time specified in the Standard.

Without the assurance of compliance with the requirements laid down in the Standard for Ensuring Fire Safety at each stage of response to fire reports, the time for the start of fire-fighting and rescue operations and assistance provision extends. According to the Standard, data is systematised only on the time of dispatch and arrival of the first incident response forces, regardless of whether these forces were able to carry out all fire-fighting and rescue operations or only primary operations; therefore, there is no data on the timing of the arrival of the forces ready to carry out all the operations. The longer their arrival, the higher the losses caused by fires (Section 2.1 and Section 2.2, p.p. 28–32).

3. The management of fire risks needs to be strengthened

The control of compliance of facilities with fire safety requirements lacks effectiveness

- Deficiencies in the organisation of inspections of the compliance of facilities with fire safety requirements do not ensure that facilities are inspected at a specified frequency as:
 - it is not ensured that the Fire and Rescue Department receives all the data necessary to draw up plans of inspections of facilities, as it is not regulated which entity and how should inform the Department about the economic activities started at the older facilities and recognised as suitable for the use which substantially changes the purpose of facilities, and the State Fire Supervision Administration Information System, managed by the Department, is not connected to registers and information systems (the State Enterprise Centre of Registers, *Infostatyba*);
 - In 2017–2019, part of inspections of facilities was not performed: in 2017 – 6% (472); in 2018 – 17% (1216); in 2019 – 2% (159). On average, inspections of facilities were delayed by almost one year. As a result, part of the facilities was not inspected at the specified intervals and the absence of violations of fire safety requirements that could cause fires was not verified (Section 3.1, p. 34).
- The Fire and Rescue Department does not take advantage of all existing measures to ensure that holders of the facilities comply with the fire safety requirements as:
 - upon detection of violations of these requirements, holders of the facilities are imposed with minimum fines (on average EUR 18) which do not prevent the violations;
 - there are long deadlines for the elimination of violations: in all the cases analysed, for the elimination of the violations was set a maximum deadline – till the next inspection (in some cases 3 years). In the analysed cases, 11% of the facilities' holders did not eliminate the violations before the next inspection (Section 3.1, p. 34).

The organisation of fire prevention lacks coordination

- The Ministry of the Interior does not coordinate fire prevention at the national level. From 2017 to 2020, the Ministry did not take decisions on the organisation of fire prevention at the national level; it did not provide state and municipal institutions with methodological recommendations regarding its organisation. 31% (16 out of 51) of municipal administrations that participated in the survey lacked methodological assistance in organising fire prevention. During the mentioned period, municipal fire prevention services implemented over 3.5 thousand fire prevention measures; however, 99% of their impact was not assessed on the grounds that municipalities were not instructed to evaluate it and the instructions for the performance of the assessment were not provided. Without an impact assessment, there is no assurance that the measures were appropriate and beneficial to manage the fire risks (Section 3.2, p. 38).
- The functions of institutions carrying out fire prevention are not defined in legal acts. Ministries and municipal institutions must participate in the implementation of fire

prevention programmes⁷, however, it is not established which entity must prepare and approve the programmes. No Ministry (in the areas of public administration delegated to them) and 76% (39⁸ out of 51) of municipal administrations did not have fire prevention programmes. This leads to insufficient management of fire risks (Section 3.2, p. 38).

Recommendations

To the Ministry of Interior

1. In order to form the appropriate human resources of fire and rescue forces, we recommend (key audit results 1 and 2):
 - 1.1. to assess whether the provisions of the Standard for Ensuring Fire Safety approved by the Government Decision No. 354 of 17/04/2013 ensure that adequate human resources of fire and rescue forces are formed;
 - 1.2. to assess the need for fire and rescue forces at the national level and determine the number and variety of fire brigades to be formed and define primary people and property rescue operations;
 - 1.3. to review the location of forces so that the forces capable of carrying out all fire-fighting and rescue operations would arrive at the site of the incident at the time specified in the Standard for Ensuring Fire Safety approved by the Government Decision No. 354 of 17/04/2013.
2. In order to provide adequate fire-fighting and rescue equipment, gear, and personal protective equipment, we recommend (key audit result 1):
 - 2.1. to assess whether the provisions of the Standard for Ensuring Fire Safety ensure that fire-fighting and rescue equipment is provided for the fire and rescue forces;
 - 2.2. to develop a long-term strategy for joint provision of fire-fighting and rescue equipment, gear, and personal protective equipment for all forces, providing for purchase priorities and sources of funds.
3. In order to increase the effectiveness of fire prevention, we recommend (key audit result 3):
 - 3.1. to improve the organisation of fire prevention by establishing the functions and responsibilities of authorities responsible for fire prevention and ensuring coordination of fire prevention;
 - 3.2. to draft a methodology for assessing the impact of fire prevention measures and ensure that the impact of prevention measures is assessed.

⁷ Law on Fire Safety, Article 8(5), Article 9(1)(2).

⁸ Municipal administrations of Skuodas district, Jonava district, Varėna district, Šiauliai city, Akmenė district, Kelmė district, Lazdijai district, Kupiškis district, Jurbarkas district, Panevėžys city, Šiauliai district, Marijampolė, Tauragė district, Druskininkai, Birštonas, Kalvarija, Joniškis district, Ignalina district, Pagėgiai, Širvintos, Elektrėnai, Anykščiai, Biržai district, Zarasai district, Šilutė district, Utena district, Raseiniai district, Vilkaviškis district, Palanga city, Kazlų Rūda, Pasvalys district, Rokiškis district, Plungė district, Molėtai district, Kaišiadorys district, Kaunas city, Kaunas district, Šakiai district, and Mažeikiai district.

To the Fire and Rescue Department

4. In order to ensure adequate response to fires, we recommend (key audit results 1 and 2):
 - 4.1. to modernise the information system of the Emergency Response Centre in such a way as to enable the rapid transmission of information to fire forces on the need for emergency assistance;
 - 4.2. to ensure that fire brigades on duty are formed in accordance with the requirements of the Standard for Ensuring Fire Safety.
5. In order to make an effective advantage of volunteer fire forces, we recommend improving the procedure by using them to help fight fires and carry out rescue operations (key audit result 1).
6. In order to increase the effectiveness of fire prevention, we recommend (key audit result 3):
 - 6.1. to provide for measures to ensure that the data necessary for the proper planning of inspections of facilities are obtained;
 - 6.2. to ensure inspection of facilities at established intervals;
 - 6.3. to provide for measures to ensure the prompt elimination of violations of fire safety requirements.

The measures and deadlines for the implementation of recommendations are set out in the “Recommendations Implementation Plan” section of the Report, p. 41).