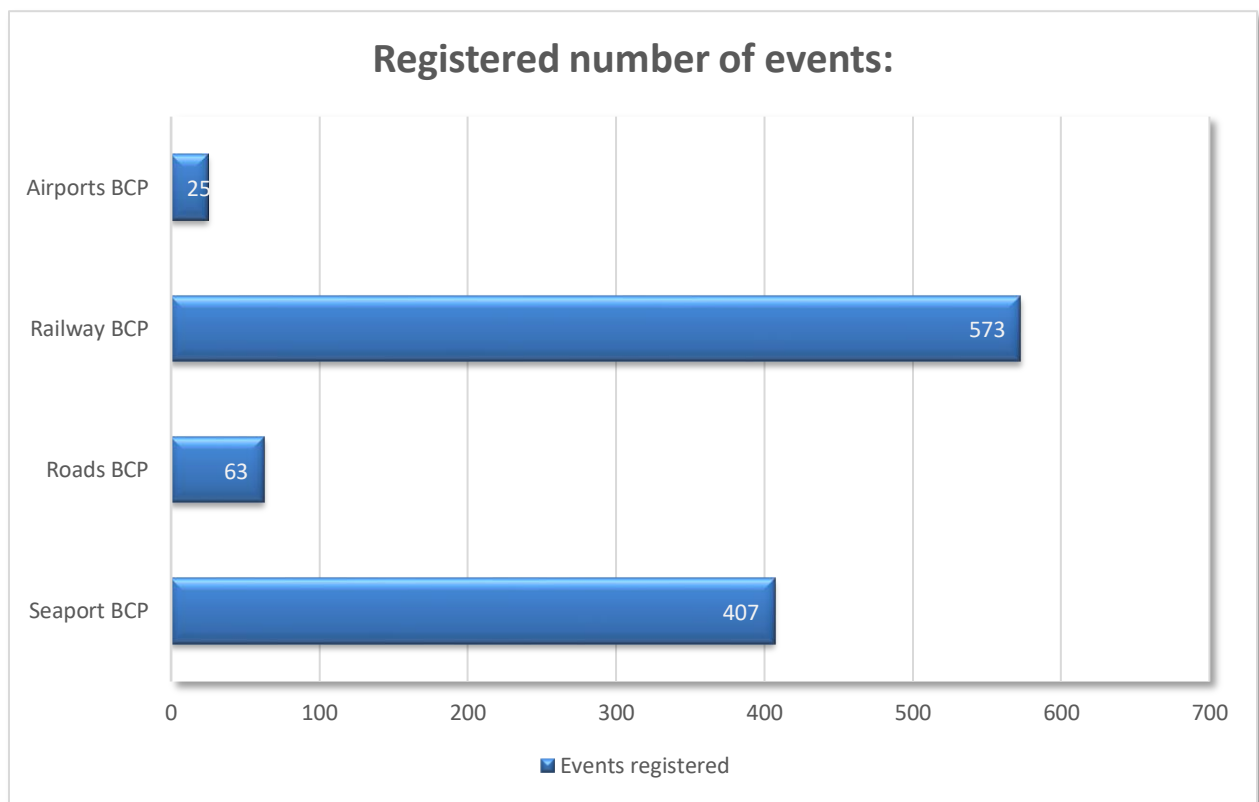


## NEWSLETTER FOR THE FIRST QUARTER OF 2020

### Results of border radiation control

The State Border Guard Service (SBGS) among the others important functions perform **border radiation control**, aiming at prevention of the illicit transfer of radioactive and nuclear materials across the state border and other prohibited activities related to the use, transportation and storage of such materials. The graph below provides for the statistics of radiation detection events<sup>1</sup> registered by the SBGS at different Lithuanian border control points (BCP) in the 1st quarter of 2020:



Here we can see that during the 1st quarter of 2020, a total of **1,068** radiation detection events were recorded. The SBGS assessed and responded to each of these events in accordance with valid protocols.

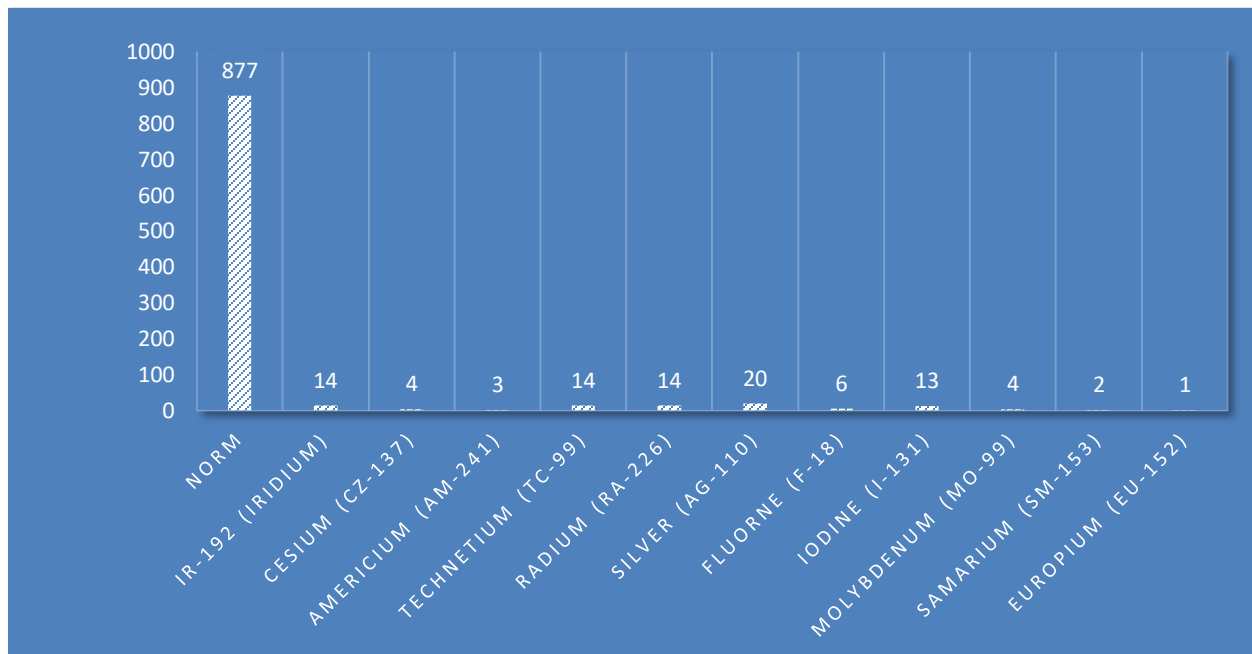
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<sup>1</sup> Event - an alarm signal generated by specialized equipment deployed at the border crossing point informing that a certain object (person, vehicle or object, cargo) in the BCP emits ionizing radiation higher than the natural background.

**Comment from the Nuclear Security Centre of Excellence (NSCOE):** *Evaluation of all detection events have shown that, in most cases, the transport, cargos, objects or persons with increased radiation dose rates crossed the state border legally.*

SBGS officials found that the waste majority of detection alarms were caused by transported cargos of construction materials such as granite, ceramics and other of that type as well as fertilizers. It is known, that these materials usually contain naturally occurred radioactive materials (NORM) that emit a higher amount of ionizing radiation. There were **877** such cases in total.

However, in **95** cases the radioactive materials used in industry and medicine were identified:



**NSCOE comment:** *When radiation safety rules and principles are neglected and/or specific requirements for transportation of hazardous materials are not met, the radioactive materials for industrial and medical purposes are extremely dangerous. Therefore, the circulation and utilization of these kinds of radioactive materials are strictly controlled and regulated.*

For example, there were 3 cases when asphalt moisture and density meters equipped with radioactive sources were imported to Lithuania. Due to high radioactivity, these radioactive materials are particularly dangerous and, under certain conditions, can even be utilized for malicious purposes.

In the cases described, the shipments were legal, and the drivers provided the necessary permits and licenses to transport the radioactive materials.

The information provided in this newsletter is generic and depersonalized; all related documents, detailed information has been collected and analyzed by the NSCOE.

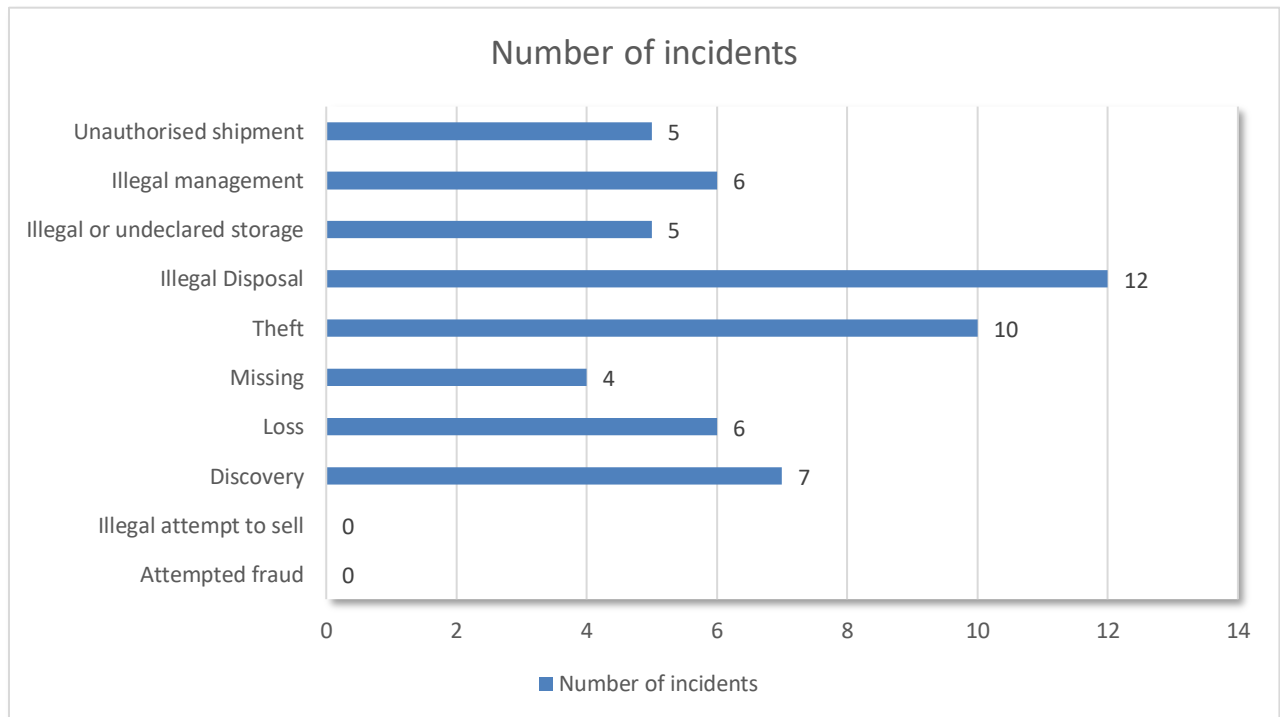
### **To the world about Lithuania and Lithuania about the world**

The International Atomic Energy Agency (IAEA) collects, analyzes and provides alerts to the Member States on incidents involving illicit transfers of nuclear and other radioactive materials, shares information on the circumstances of detection, seizures and investigations of these cases, as well as on the modus operandi and general trends of offenders. The data is stored and processed by the IAEA Incident and Transport Database (ITDB). The competent authorities of 171 countries around the world use this data to develop, enhance and assess their capabilities in the field of nuclear security.

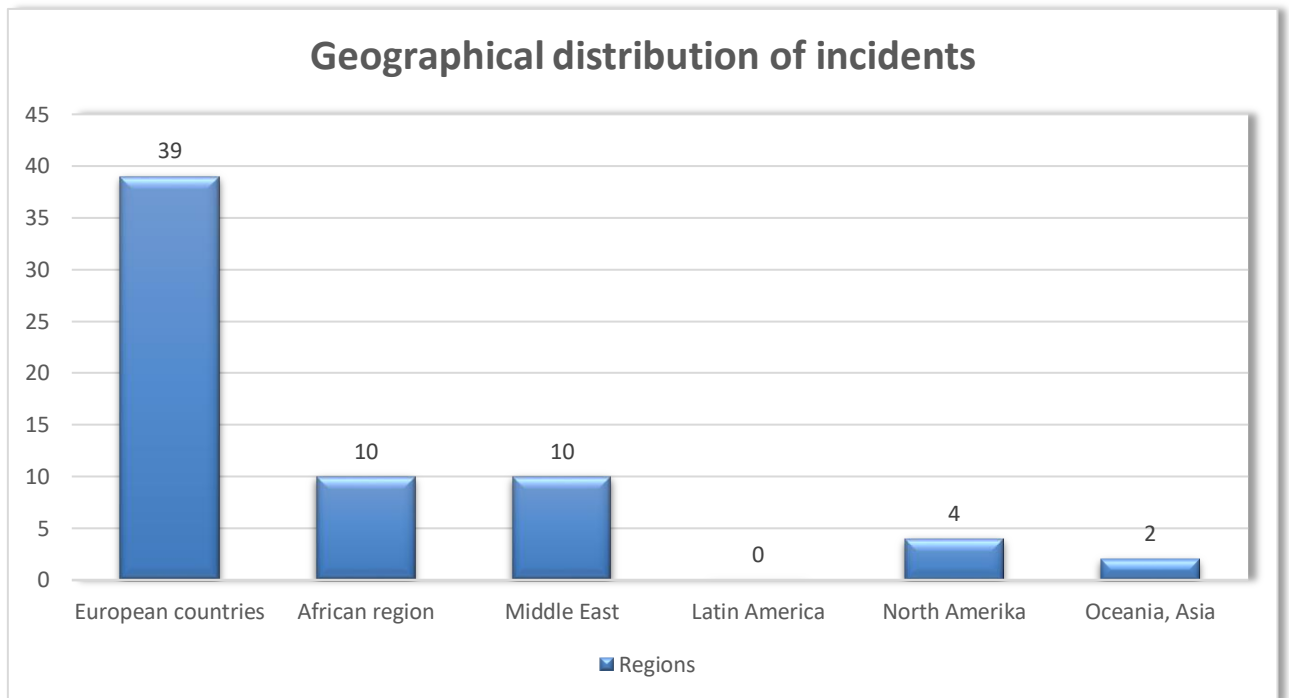
During the 1st quarter of 2020 information on **55** global incidents related to illicit trafficking in nuclear or other radioactive materials had been recorded by the ITDB:

- of which 10 incidents involving nuclear materials;
- of which 10 cases of theft of radioactive materials.

#### **Distribution of incidents by type of event:**



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**Geographical distribution of incidents:**

The security of nuclear and other radioactive materials remains a matter of serious concern, as these materials may become illegally traded or be used for criminal and malicious activities.

The Lithuanian State Border Guard Service and other authorized institutions implement their functions and enhance cooperation in preventing and response to the illicit circulation of nuclear and other radioactive materials out of regulatory control.

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**Thank you for your attention!**