



**ORDER OF THE DIRECTOR OF THE GAMING CONTROL AUTHORITY UNDER THE
MINISTRY OF FINANCE OF THE REPUBLIC OF LITHUANIA**

**APPROVING
THE SOFTWARE REQUIREMENTS FOR LOTTERY EQUIPMENT**

No DIE-319 of 30 April 2020

Vilnius

Pursuant to Article 24(2) of the Law on lotteries of the Republic of Lithuania (as amended by Law No XIII-2598 of 3 December 2019):

1. I hereby approve the software requirements for lottery equipment (attached).
2. This Order shall take effect on 1 May 2020.

Director

Virginijus Daukšys

ADOPTED
by Order No DIE-319 of 30 April 2020
of the Director of the Gaming Control
Authority
under the Ministry of Finance of the Republic
of Lithuania

SOFTWARE REQUIREMENTS FOR LOTTERY EQUIPMENT

CHAPTER I GENERAL PROVISIONS

1. The software requirements for lottery equipment (hereinafter - the Requirements) lay down the general and technical requirements for the lottery equipment software used for the random selection of winning lottery numbers and/or characters.

2. These Requirements are compliant with the requirements of Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services (codification).

3. The following terms are used in these Requirements:

3.1. **Random Number Generator (RNG)** – a program that generates a sequence of supposedly random numbers according to a given distribution law.

3.2. Other terms used in the Requirements correspond to the terms used in the Law on lotteries of the Republic of Lithuania (hereinafter - the LL).

CHAPTER II GENERAL REQUIREMENTS FOR LOTTERY EQUIPMENT SOFTWARE

4. The lottery equipment software shall automatically verify the authenticity of its components and other components that affect the winning lottery numbers and/or characters. Such verification shall be performed using a digital signature (such as SHA checksums) or other equivalent methods when the lottery equipment software is turned on and at least every 24 hours after turning it on.

5. The results of the verification checks performed by the lottery equipment software shall be stored in the lottery equipment software database for at least 90 calendar days.

6. The lottery equipment software shall suspend its operation if it detects an verification mismatch (error) between its components.

7. The lottery equipment software shall be designed in such a way that it could be safely verified locally and remotely by performing the system-level identification of the software installed, including the components of the lottery equipment software itself, and versions thereof using an external, trusted third party verification tool (hereinafter – external verification tool). The reliability of the external verification tool shall be assessed by the certification body.

8. The software architecture of the lottery equipment shall be such that it can be verified by using an external verification tool.

9. The lottery equipment software shall have an internal clock that keeps track of the current date and time or a built-in timestamp server that is used to:

9.1. Create timestamps of lottery runs where the lottery equipment software randomly selects the winning lottery numbers and/or characters;

9.2. Prepare reports.

10. Lottery equipment software shall not contain the logic that generates winning lottery numbers and/or characters.

11. Other features in the lottery equipment software that influence the selection of winning lottery numbers and/or characters shall be executed by the lottery equipment software, and the execution itself shall be independent of any external factors and devices.

12. The lottery equipment software shall display each selected winning lottery number and/or character result after the lottery runs, and cannot change this result.

13. The random number generator used in the lottery equipment software shall be statistically independent and evenly distributed and have a credibility level (confidence level) of at least 99%.

14. Any sorting or distribution method used in the lottery equipment software shall ensure that all described results of lottery number and/or character selection are feasible and were generated in accordance with the prevailing probabilities. Sorting and identification algorithms shall be free from bias.

15. The random number generator shall continuously generate random numbers regardless of whether they are used to select the result of the lottery numbers and/or characters.

CHAPTER III FINAL PROVISIONS

16. It is prohibited to operate lottery software that does not have a certificate of conformity issued by a certification body, certifying that the lottery equipment software complies with the LL and these Requirements.
