**Annex 3 to Appendix 4 to the tender documentation**

**SPECIFICATION OF REQUIREMENTS**

**FOR THE DESIGN OF A WEIGHING SYSTEM**

**Project** “**Construction of area for passenger vehicles and buses in the checkpoint for road traffic “Krakivets” and reconstruction of the infrastructure of the Ukrainian part of the existing checkpoint “Krakivets” on the Ukrainian-Polish border**”

**Address:** 54-61, Krakovets, Yavoriv District, Lviv Region

**Basic specifications of the weight measuring device:**

1. Limits of permissible error of scales when weighing in motion to determine the total mass of a vehicle according to DSTU OIML R 134-1:2010 for accuracy class 0.5.
2. The smallest weighing limit, Min (single axle), shall be no more than 500 kg.
3. Limits of permissible error of scales when weighing in motion to determine loads on a single axle according to DSTU OIML R 134-1 for accuracy class B.
4. Readability of scales, kg, shall be no more than 10.
5. Power supply:

* voltage ~ 187 - 242 V;
* frequency 48 - 52 Hz.

1. Operating temperature range:

* for the load-receiving device and weighing sensors -20 - +50 C° shall be determined according to climatic zoning;
* for the secondary converter +10 - +30 C°.

1. Relative air humidity no more than 80%
2. The level of protection against environmental exposure:

* for the load-receiving device and weighing sensors: at least ІР67;
* for the secondary converter (if the converter is installed outside the room) shall be at least IP54 (IP67).

1. The motion during weighing shall be unidirectional.
2. The warranty period of operation shall be no less than 12 months.

**Technical requirements for the software**

**1.**Automatic fixation, storage of data and maintenance of a database on each weighing of up to 15 axles of the vehicle:

- Date and time of the vehicle's travel;

- Serial number of weighing;

- Vehicle number;

- Trailer number;

- Travel speed (it should be from 3-5 km/h)

- The weight of each axle of the vehicle;

- Gross weight of the vehicle;

- Photo of the front and rear license plate of the vehicle.

2. Search for weighing data: by date/time, car number**.**

3. Ability to access the weighing database to upload weighing results to the software of the automated customs clearance system**.**

4. Automatic control of cameras with recognition function**.**

5. Automatic weight management**.**

6. Automatic control of the duplicate scoreboard**.**

**7.**The ability to generate data for transfer to software and information complexes in the format of XML files or to have an SDK necessary for the development of appropriate software for the implementation of the possibility of entering the results of weighing vehicles into the information modules of ASMO "Inspector" and databases of the State Customs Service in automatic mode (integration with information systems of customs design).

**Technical requirements for the arrangement of weighing complexes:**

1. Driveways to and after the weighing device shall be arranged in accordance with Annexes B, C to DSTU OIML R 134-1:2010 and subject to the requirements of DBN V.2.3-4:2007 "Automobile Roads".
2. The "STOP" line on the driveway shall be marked at the beginning and at the end of the driveway.
3. Mandatory sealing of joints to prevent water, snow, sand, dirt and debris from entering the weighing platform structure, and installation of a built-in system for automatic heating of gaps at low temperatures and a drainage system for draining water from under the platform shall be provided.
4. Driving through the weighing complex shall be regulated by the operator using entry-exit permission facilities (traffic lights) and road signs (markings).
5. Provide cable communications to the operator's workstation from load cells of the weighing device and entry-exit permission facilities (traffic lights), and lightning protection and grounding facilities. The operator's room shall be located at a distance of no more than 5 meters from the weighing device and ensure visual reading of the vehicle number plate by the operator and visual monitoring of the motion of a vehicle through the weighing device.