**Technical Assignment**

For the procurement of video analytic software and integration with the existing video surveillance system of the shopping center "Tbilisi Mall".

Objective: I. To get the most modern offers from interested companies on the software of the existing video surveillance system of the shopping center "Tbilisi Mall".

II. We are ready to consider (choose) any ideas proposed by you, rational, long-term concepts of existing video surveillance system software and, in this regard, possibly its further reorganization (reengineering) and development of the structure and services such as:

- video analytics installed on the camera;

- Built-in Analytics to the camera or other devices

- Built-in video analytics to the DVR;

- video analytics combined with video surveillance software;

- server analytics;

- service analytics;

- complex video analytics (simultaneous use of different software systems).

The main criterion for submitting a corresponding software proposal is the existing hardware.

The second criterion is the certain functionality. Most modern interactive complexes should be allowing you to successfully perform operations for the collection, processing, and storage of incoming information.

III. We also want to receive proposals on the cost of analytical programs from official representatives of development companies that could ensure the receipt of an alarm signal to the monitoring operator using the following functionality:

1. Crossing of virtual lines, or detection of intrusion into the zone, unauthorized entry into the protected object (evacuation vestibules, stairwells, warehouses, server rooms, transformer substations, cable shafts) - 150 cameras.
2. Motion detection in the zone (frame), motion detection in forbidden areas (4th floor, all four levels of parking at night, the outer perimeter of the shopping center building at night) - 300 cameras.
3. Detection of missing or abandoned items:

- Detection (or appearance) of the abandoned object in the evacuation vestibules, at the main entrances to the shopping center, in the server rooms, on the escalators - 150 cameras.

- Disappearance of the object from the controlled area (evacuation vestibules - disinfection barriers, the outer perimeter of the building-stored materials, equipment) - 50 cameras.

1. Smoke and fire detection (desired but not mandatory). Detection of fire or smoke in the parking lot – 150 cameras.
2. Changing the position (vision zone ) of the camera, i.e. detecting the change of the shooting scene, detecting defocusing, detecting illumination / obscuration, loss of signal (video), – 600 cameras.
3. Recognition of license plates, automatic counting, registration of incoming vehicles, recording, safety (memory) for at least 30 days, - 1 camera (module at the entrance to the parking ).

IV. The proposal should contain the following information:

- How will the existing equipment, the current software of the video surveillance system, the location of the cameras already installed on the territory of the shopping center affect the work and quality of the analytics offered by you?

- Features (advantages) and limitations (disadvantages) that your software offers for our video surveillance system and video archive storage device;

- how much will be false rate of the system?

- the ability to integrate your software with other modern security systems;

- You should be ready to conduct your own test study - on the compatibility of your proposed software with the existing equipment of the CCTV system of the shopping center. Yes, it will take a long time. But the reality is that this is the only way to see if this or that system (type) of video analytics offered by you will suit us.

-cost of implementation (integration) of the software

V. It is necessary to pay attention to personal data protection including biometric data and picture of the person. All services should be in compliance with Georgian legislation.

**The supplier must ensure the construction of the security system and follow the steps recommended by us:**

- Build a separate local network, which will not be a public (available) network;

- Calculate the required and sufficient bandwidth for each section of the received local network;

- Configure the hardware and software platform and DVR to implement the selected security system configuration;

- Prepare (train) personnel to work with the software (complex).

As you have already noticed, we have indicated the basic algorithms necessary for us, included, as a rule, in the basic package of analytical programs offered for sale.

The analytic software should be presented with basic functions, with a list of possible-additional (payable options) functions/analytics. Have a guarantee of at least 5 years.

**Object of purchase and subject of contract.**

Analytical program, video management of the system in the form of additional physical equipment DVR - recorders that will convert the analog signal coming from the analog cameras existing in the shopping center into digital for the correct operation of the software with the video surveillance system.

The analytical program must be protected by an author's certificate (right) and be licensed, with the right to transfer it for life and the possibility of automatic updating (at no additional cost).

The supplier must provide us with a Manufacturer's Authorization Form - this is a free-form document from the manufacturer of the goods (equipment, software) purchased through the competition. This letter confirms that the applicant is the official representative (dealer) of the manufacturer and has the opportunity to fulfill the conditions of the tender in terms of volumes, delivery times of products, installation, adjustment, maintenance and provision of an appropriate guarantee, etc.

Authorization (from English authorization - permission, authorization) - granting a certain person or group of persons the rights to perform certain actions. The authorization letter is issued by one person - the manufacturer.

**Certification.**

The supplier must have locally certified specialists (engineers) in the relevant areas of the proposed video management of the system for its implementation and the subsequent support of the CCTV system on a long-term basis (at least 10 years).

The company - the supplier of the analytical software, should ensure a compatibility of its analytics with the existing equipment and the CCTV system of the shopping center within a month, after this tender placement.

The supplier of the analytical program must provide the Customer with formats for saving the video, considering its quality, size or volume of information.

We are interested in the analytical program to provide:

- information storage period is not less than 1 month;

- search for the necessary information from the archive;

The video surveillance system of a shopping center must be scalable (that is, it must be expandable);

It is necessary to provide that the load on the existing equipment of the video surveillance system of the shopping center should be no more than 80% in the case of an increase in the number of video cameras by 50%.

 **Note:** The results of the tender will have to be approved by the owner of the Tbilisi Mall shopping center.

**Prepared by N.**  **Komelev, H&S/S Manager ,**

**20.09.2021**