Essence and Purpose of Implementing the Public Sector Electricity Consumption Management System

Previous global approaches to managing electricity consumption in public buildings, infrastructure, and public lighting have revealed serious systemic weaknesses.

The core reason lies in the fact that, until now, no one has developed or implemented Wi-Fi meters with two-way communication (input/output), as electricity meters worldwide have been used exclusively for billing, not for consumption management.

At the same time, the public sector in most countries is subject to political interests, which is why rationalization of budgetary energy expenditures has never been a real priority. Managing a large number of consumers without automation is not feasible — human oversight is neither sustainable, nor accurate, nor economical.

This initiative is revolutionary because, for the first time, it combines:

- specially developed Wi-Fi meters with consumption control capabilities, and
- artificial intelligence that monitors, analyzes, and optimizes consumption in real time.

Such a system was not previously possible due to the absence of suitable tools — both technical and political. Today, with technological advancement and increasing budgetary pressure, the time has come for implementation.

The purpose of this project is to provide the public sector with a tool that will manage electricity consumption **automatically**, **objectively**, **and transparently** — reducing waste, costs, and misuse.

This is not just a technological project — it is a fundamental shift in the approach to managing public resources.

Prepared by: Drago Projekt – System Integrator for Public Sector Electricity Consumption Management

Energy Consumption Management in the Public Sector

Dear reader,

- Thank you for the opportunity to present a concept aimed at bringing electricity the most expensive and sensitive public expenditure resource under complete, continuous, and intelligent control.
- In all public buildings and infrastructure systems from schools and municipal buildings to street lighting and waterworks electricity consumption is still treated as a passive obligation, instead of as a strategic part of public asset management. This approach results in:
 - Unplanned high costs,
 - Consumption unrelated to the actual needs of the building,
 - And a complete lack of timely control.
- Drago Projekt d.o.o. from Belgrade has developed a system that overcomes these challenges, relying on decades of experience in designing and building public buildings, infrastructure, and public lighting systems throughout the region. This experience has shown that without precise monitoring of electricity – no public building is fully functional or sustainable.

;- Key innovation: Artificial Intelligence as a tireless manager

- Unlike traditional measurement systems, our system uses AI as a constant and tireless consumption supervisor. AI functions as a digital manager who:
- Monitors consumption 24/7, records every deviation, performs comparisons and analyses,
- Controls public lighting, adjusts operating modes by the hour, by day, and according to actual needs,
- Switches off consumers outside of working hours, eliminates unnecessary consumption while preserving the building's function,
- Clearly alarms attempts at "electricity theft" or unauthorized system manipulations,
- Reports to management structures with clear suggestions for correction automatically and without delay.

The "ECG" of each building's energy behavior

- After installing a smart meter, each public building enters the so-called energy ECG recording phase:
- All consumption patterns during the day, night, weekends, and holidays are recorded.
- Based on the data, the algorithm defines optimal consumption one that meets all functional needs without waste.
 - The system does not jeopardize employee work or user comfort; on the contrary it enhances operational efficiency.

Correctionalization as an obligation, not an option

By introducing this system, we achieve:

- 1. Precise budgeting per building, zone, and consumer, instead of on a flat-rate basis.
- 2. Continuous cost control, with immediate responses in case of deviations.
- 3. Objective planning of public lighting and infrastructure according to actual needs.

Conclusion

This is not just a meter. This is an integrated digital system for managing public electricity consumption that:

- Saves budget money,
- Increases operational control and efficiency,
- Introduces automated and responsible consumption management,
- Detects energy losses and abuses,

• And for the first time uses artificial intelligence as the standard for energy management in the public sector.

Drago Projekt d.o.o. is ready to present this system – through a pilot project, strategic - ³cooperation, or institutional plan – in partnership with a government body, fully aligned with local laws and development goals.

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