

Product name: ARISTA

Name in brief: Street lighting control and management system

Company: ADD-Bulgaria (<https://add-bg.com/en/>)

Year 2020

INNOVATION	APPLICABILITY & SUSTAINABILITY	RESULTS	
<p>The innovation is a street lighting management system. The core are the individual light controllers that are integrated into or mounted externally on the lamps. They communicate on the radio with each other and send data to the street cassette, where a data concentrator and a power controller is installed. Via GSM / GPRS the hub sends and receives data from the control center. The system makes it possible to turn the external lamp on and off in a timely manner, to adjust the light emitted by each lamp and to provide real-time monitoring and verification of the entire electrical infrastructure.</p>	<p>Remote and accurate measurement of electricity consumption from each street lamp and each outlet of the electrical panels is applied. The controllers automatically send data on the status of the lamp and the status of the electrical infrastructure with all its equipment, according to a set schedule or upon request - various parameters are monitored. This makes it possible to locate and diagnose remotely and on time damaged street lights and/or other equipment, component or element of the infrastructure, as well as to determine any other outage on the infrastructure, which reduces time, labour and costs.</p>	<p>The company is a leader in the provision of smart systems for remote management of electricity meters with number of installed devices - over 1.4 million. Thanks to devices EDC have reduced non-technical losses from 17% to 8%. The results for one city from ARISTA are reduced energy consumption and operating and maintenance costs; improved quality of street lighting; increased security on streets and public areas; reduced CO2 emissions and improved the planning process of the city's budgeting.</p>	
<p>Three key DRIVERS</p>	<p>1. Proper funding ADD has built a completely new factory equipped with high-tech machines for electronic and plastic production, certified to all international standards. The funding was properly and timely co-financed with 70% by the EU Operational programs.</p>	<p>2. Staff qualification The company team has proven experience in providing quality and timely production at a competitive price. Highly qualified specialists design the production stages of each product, determine parameters, repeatability, environment, consumables, tests, and additional accessories.</p>	<p>3. Production process High level of production and quality systems. The tracking system enables fast analysis, decision making, and continuous information to the customer about the status of his product. The quality is ensured by the implemented ISO 9001, MID-Module D, and well equipped lab.</p>
<p>Three key BARRIERS</p>	<p>1. Limited human capital Overcame by the own training center and various apprentice schemes, and establishment of agreements with the proper schools. Currently over 50 well qualified developers and operators are involved in the product development and production processes.</p>	<p>2. Size of domestic market Small & competitive local market that operates through public procurements of EDC and municipalities, mainly. The solution was export to other European countries. The fairs, meetings and exhibitions are instruments but also digital marketing was implemented.</p>	<p>3. Innovation brand To overcome the brand of a country as a moderate innovator and bad quality industrial market ADD is successfully focused on the uniqueness of the innovations and excellent customer service.</p>
<p>Three key ENABLERS</p>	<p>1. Excellent market position for smart meters The gained position and experience with installations of smart electricity meters increases ADD's credibility and opens doors for all other smart technologies.</p>	<p>2. Investing in R&D ADD invests heavily in R&D initiatives, in order to keep its innovations constantly evolving and always in line with the top technological tendencies.</p>	<p>3. Industrial cooperation Networking and cooperation are actively been used. Examples of successful partnerships are those with Energy Effect - BG, Fornetix - USA and Protasis - Greece.</p>
<p>Three key IMPACTS</p>	<p>1. New opportunities The innovation was realized in several BG cities - Dragoman, Roman, Sozopol. This creates a new business opportunity, since it is a good practice for other municipalities.</p>	<p>2. Better efficiency for cities It brings better efficiency in the process of maintenance and energy consumption, which ultimately results in higher levels of energy efficiency and expenditure cuts for the municipality.</p>	<p>3. Multiplication Once embedded every smart city technology generates a need for others. ADD uses the network of Arista to integrate the smart lighting & metering and infrastructure monitoring.</p>
<p>What's next</p>	<p>The company is planning further use of the already established communication network to develop and implement new smart city solutions. The purpose is to diversify the solutions, but to integrate them into a single smart city platform. This will raise the smart city's needs to look for an integrated approach to selling the hardware and software of the company for the cities' governments. As a result, this and the excellent quality of the products will enlarge the company's geographical markets and its sales.</p>		