We light up your city

DATmo LUX

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All of our technology is based upon smart, cleverly designed, quality engineering that is easily used and managed. The project and the service that we offer through to the maintenance and operation is based upon this smart ethos.

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Company Introduction

We are a modern, dynamic Czech company that has been operating in the market for over 20 years. We specialize in the development and production of lighting and its intelligent control for both indoor and outdoor use. Our products are developed as part of our Smart City concept which are associated with exceptional quality and a comprehensive solution in a user-friendly environment.

In the field of public lighting we are not only progressive but a reliable partner. We specialise in state administrative authorities for large and medium sized cities which can utilise all of the DATMO RVO control software with maximum efficiency.

We design public lighting systems from A – Z, ie the design to implementation, software and hardware according to the specific client requirements.

Public lighting systems under our leadership are implemented not only in the Czech Republic but also for our partners around the world.

When lighting cities and smaller communities we take into consideration developing the SW and HV controls required.

Specific requirements for the lighting of important historical, cultural monuments and sacred objects which is completely independent of public lighting are also part of our design.

We illuminate the important objects using RGB technology in the colours required by our customers.

All of our operating staff are fully trained to ensure the flawless operation of the systém using all functions.

Once the hand-over of the order and training of on-site staff is complete we will also provide our clients with remote supervision via our dedicated helpline.

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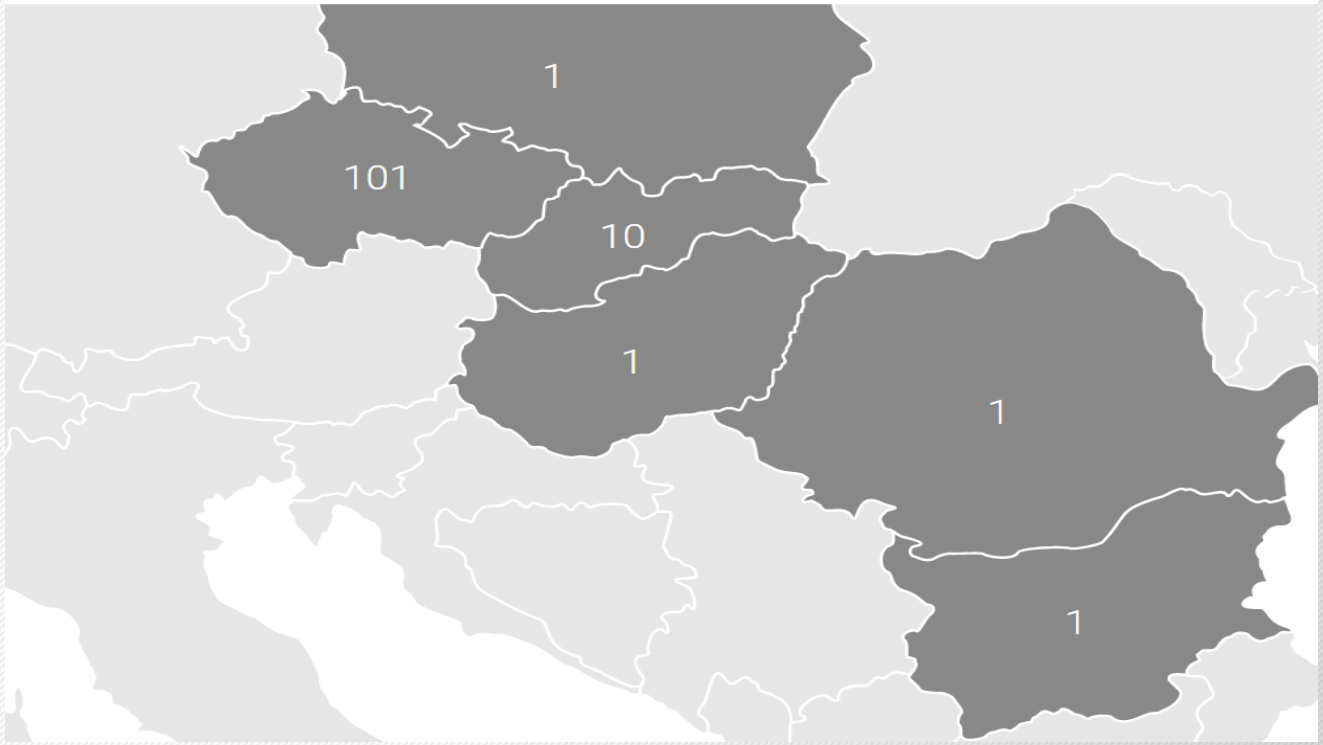
References



You can find a list of references at: http://www.datmolux.cz/references

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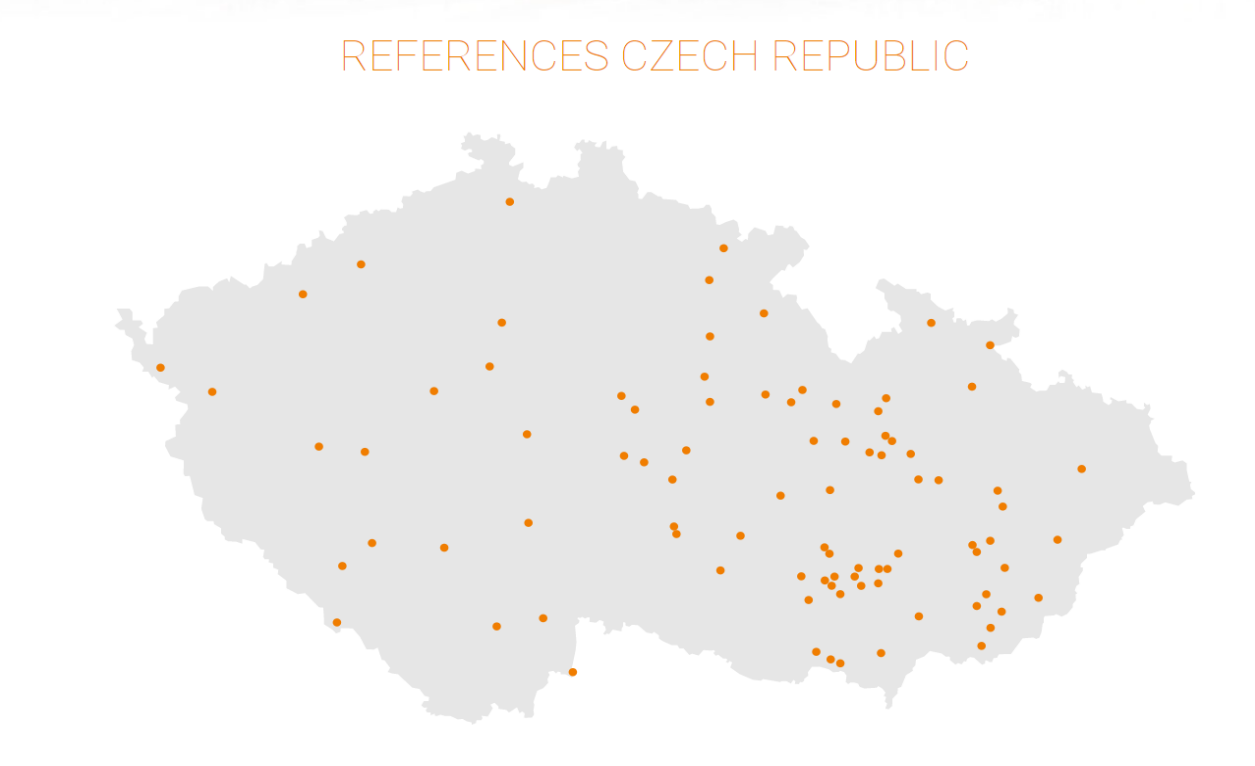

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Intelligent public lighting and the associated principals of the concept

Safety

Dynamic control of public lighting for the needs of a given location is the main consideration for the safe movement of traffic through the main routes of a city and its remote locations.

The safety of the inhabitants is one of the most important tasks for any city.

Effective management and planning

Consumption data together with data on the technical condition of the system and the operational activities of the ongoing maintenance of the public lighting system, can be utilised for effective planning of further urban development.

Global Responsibility – Saving the Environment

An important aspect of using intelligent lighting control is the saving of electricity and therefore the reduction in greenhouse gas emissions. Properly selected luminaires for public lighting systems lead to a dramatic reduction in light smog.

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Architecture of Public Lighting System

We will prepare a solution for both basic variants of the architecture of the public lighting system according to the standards of the given country

Model using public lighting switchboards where the luminaires are not permanently live (European Model)

The system consists of two parts: The MSB-K WL dataconcentrator which is located in the control unit of the switchboard for public lighting and The MSB-C WL element which is located in the luminaire.

The MSB-C WL element has several variants which are based upon the requirements for the different types of ballast control or the function of the luminaire.

Model where the luminaires are under constant voltage

This system operates without public lighting switchboards, as they are replaced by an element of data collection from luminaires. This element can beplaced anywhere in the street lighting network.

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DATMO System – the foundation pillar of the public lighting management system

We name the DATMO Kit as all of the elements that are developed by DATmoLUX Inc. for public lighting. The individual elements enable mutual communication and cooperation so that the technology can be assembled modularly for both small and large communities.

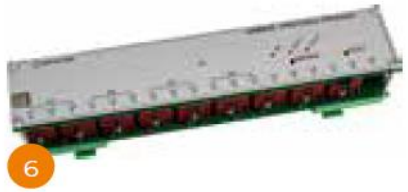
CPU DATMO RVO
Control Unit CPU

OVZ DATMO
Power Supply

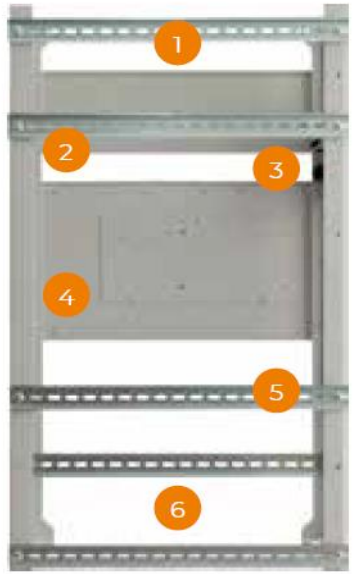
Communication Control Unit
Communication Control Unit

DC-2 DATMO
Control Unit

CPU DATMO KN
Municipal Superstructure Unit



SPP DATMO USB
Control Flow Sensor

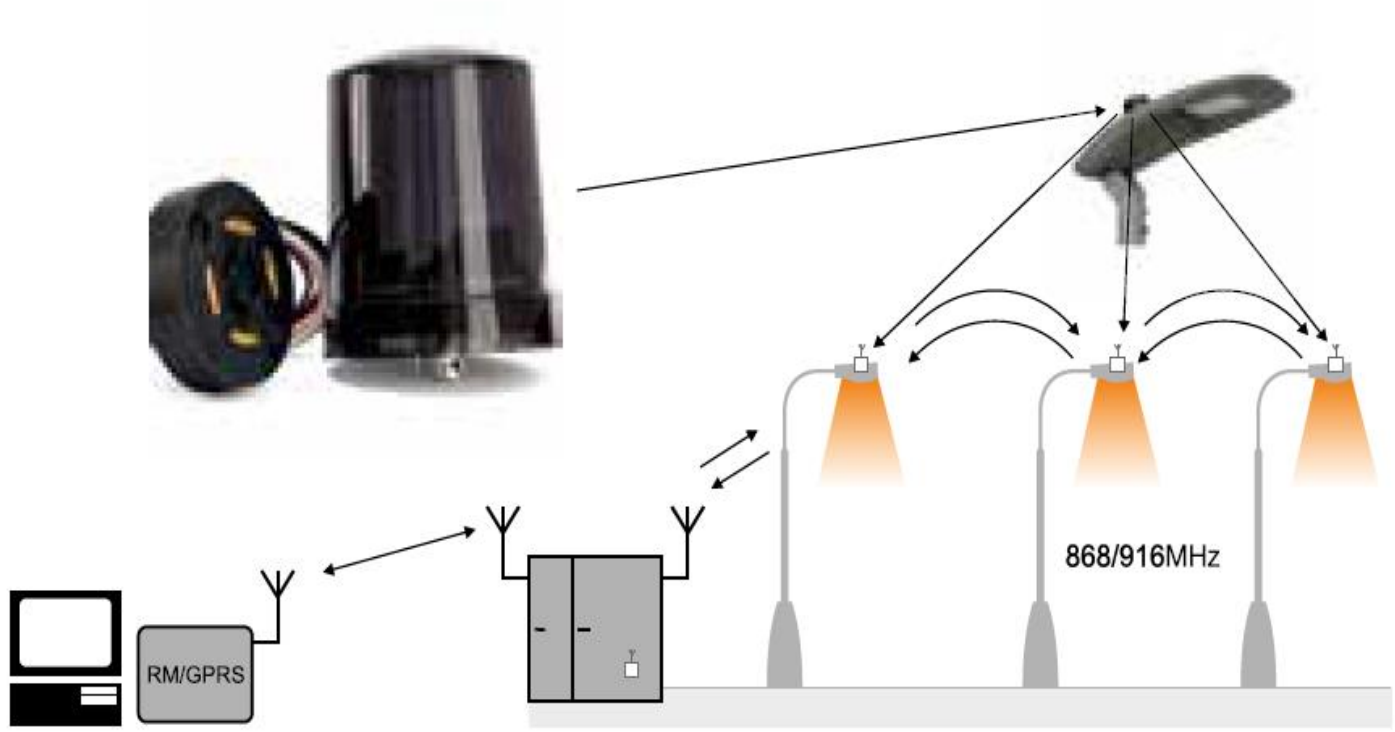


Rack

RADIOControl System – wireless luminaire control and data collection

The RADIOControl system is developed for monitoring the operating status of individual luminaires. It is designed for all types of luminaires for indoor and outdoor usage. The luminaires can be both with an electronic ballast and or a conventional electromagnetic ballast. **The main advantage of this system is when it comes to communication - the user is not limited by the state of the cable network.**

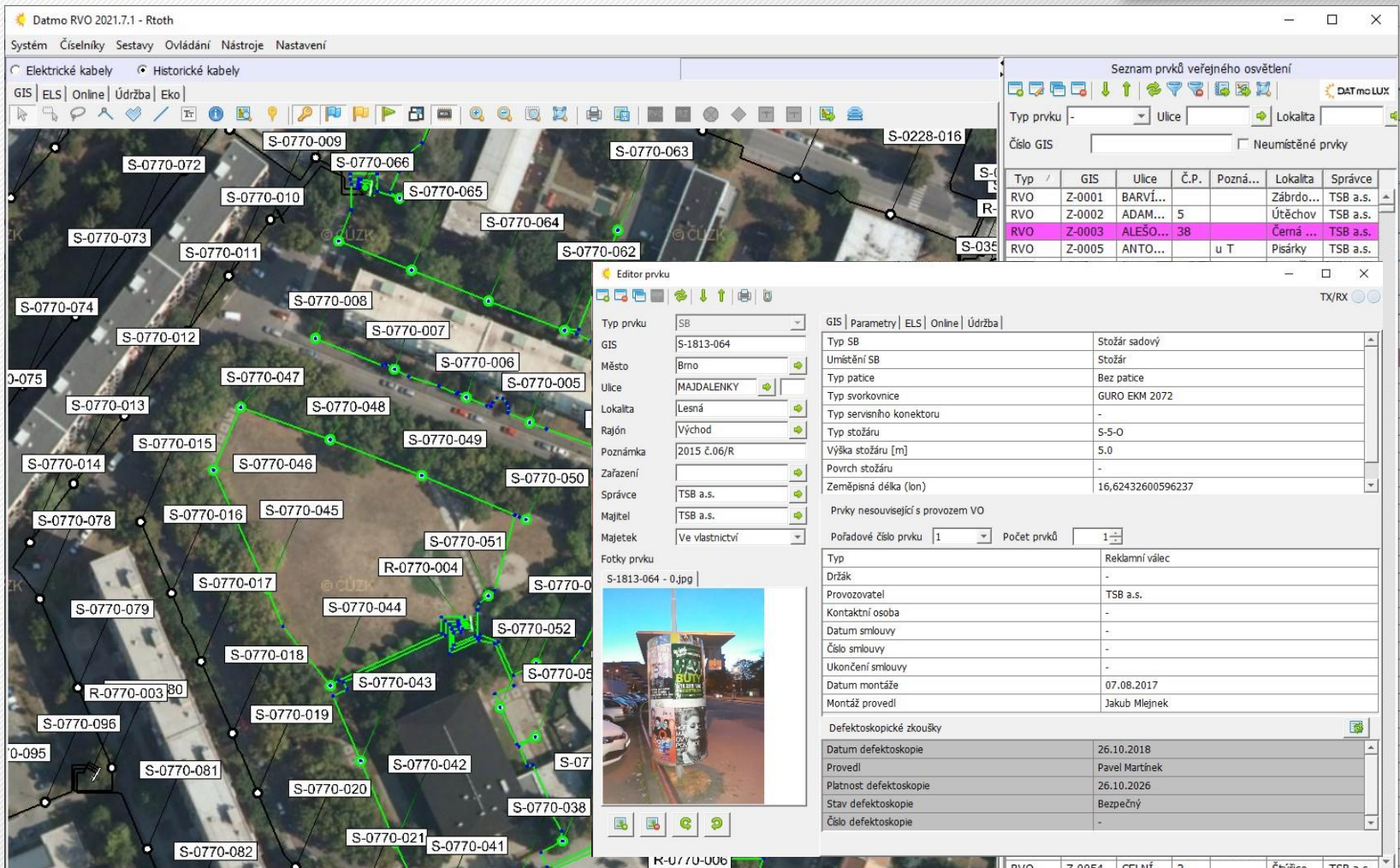
The system consists of two parts; The MSB-K WL concentrator is located in the control unit (CPU) of the DATMO RVO cabinet and The MSB—C WL element which is located in the luminaire. The MSB-C WL has several variants which are based on the requirements for the different types of ballast control or the function of the luminaire. For street lighting luminaires, the MSB-C WL elements are placed in a module in the internationally recognised NEMA standard, or in a DATMOLUX module for external installation.



Software modules
DATMO RVO and their use

GIS – DATA PRE-CONSTRUCTION CONDITION SURVEY

The GIS module allows for the collection of data about the properties of public lighting and its locating into a map base. The map base can either have a raster or vector format. The acquisition of data can be done directly in the field into a mobile device, e.g. PDA with a GPS system. Usingsynchronisation with a dispatching PC, the current state of databases and the map base can be maintained. Each element in the SW DATMO PLS system has an unequivocal labelling (the GIS number), basic information (GIS), a description of the technical parameters, an electro-scheme, an on-line reading of the current state of the element (if the HW gear of the element allows for it), and a maintenance history.



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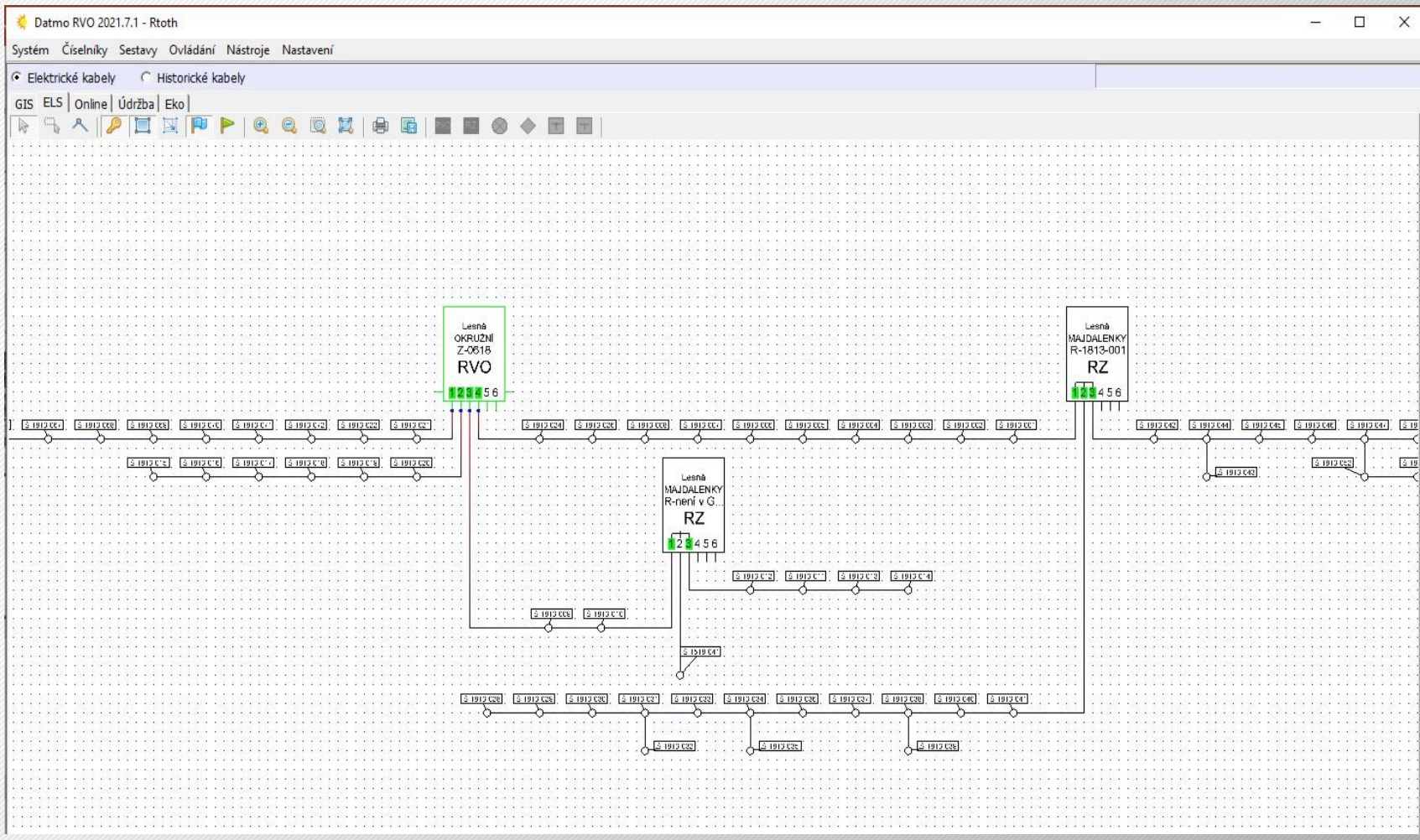
Software modules
DATMO RVO and their use

ELS – ELECTRO-SCHEMES

The electro-schemes module allows for the display of the electric connection of the cable network. It checks the integrity of the network after each change of connection and allows for the calculation of the load of each cable outlet as well as entire PLS switchboards.

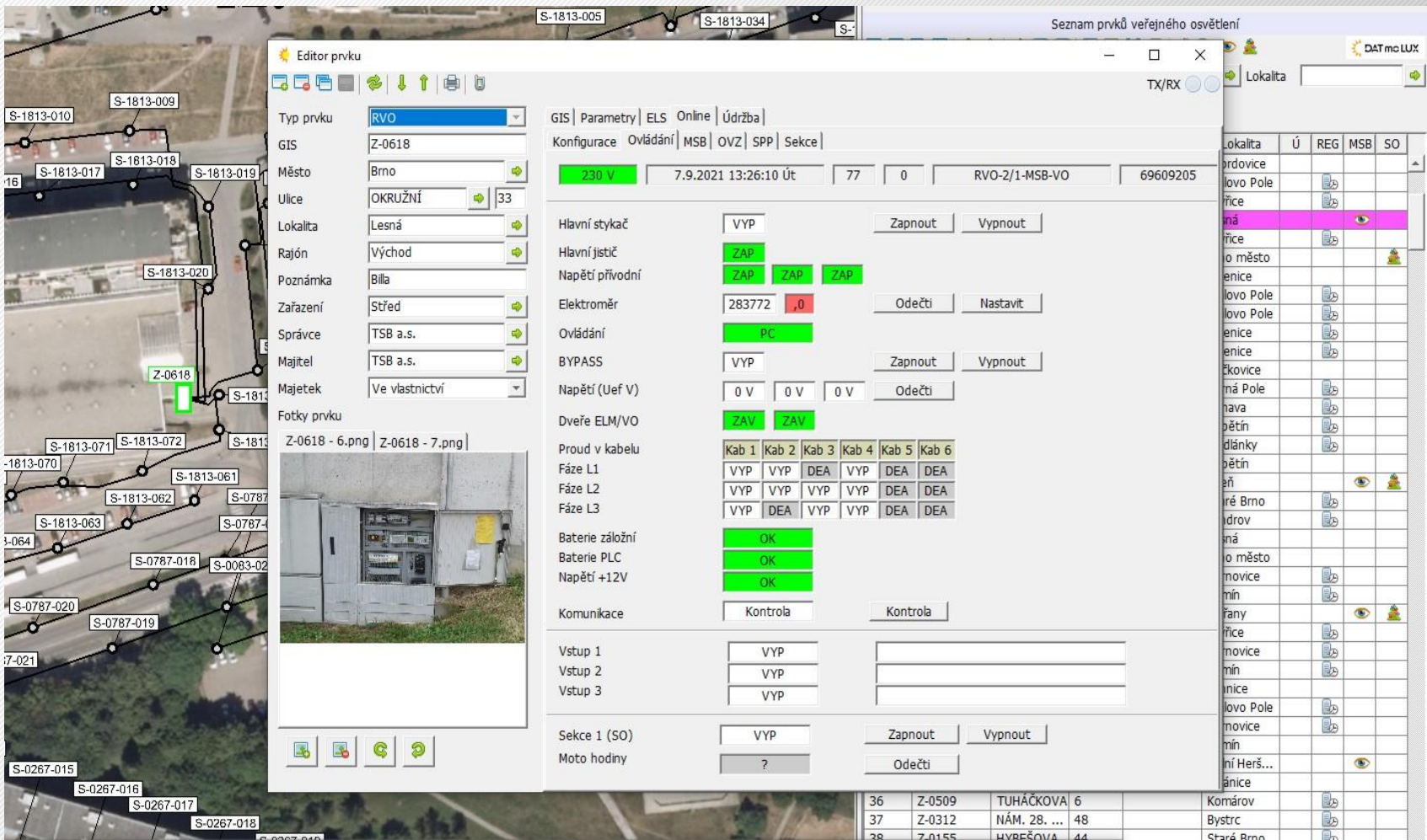


Software modules
DATMO RVO and their use

ON-LINE MODULE

The On-line module ensures the display of information about the real status of individual elements of PL.

If the PLS switchboards and individual luminaires are equipped with electronics from the DATMO set, it is possible to monitor their real operation status from the dispatching computer. The module ensures the display of alarm reports and carries out their archiving.



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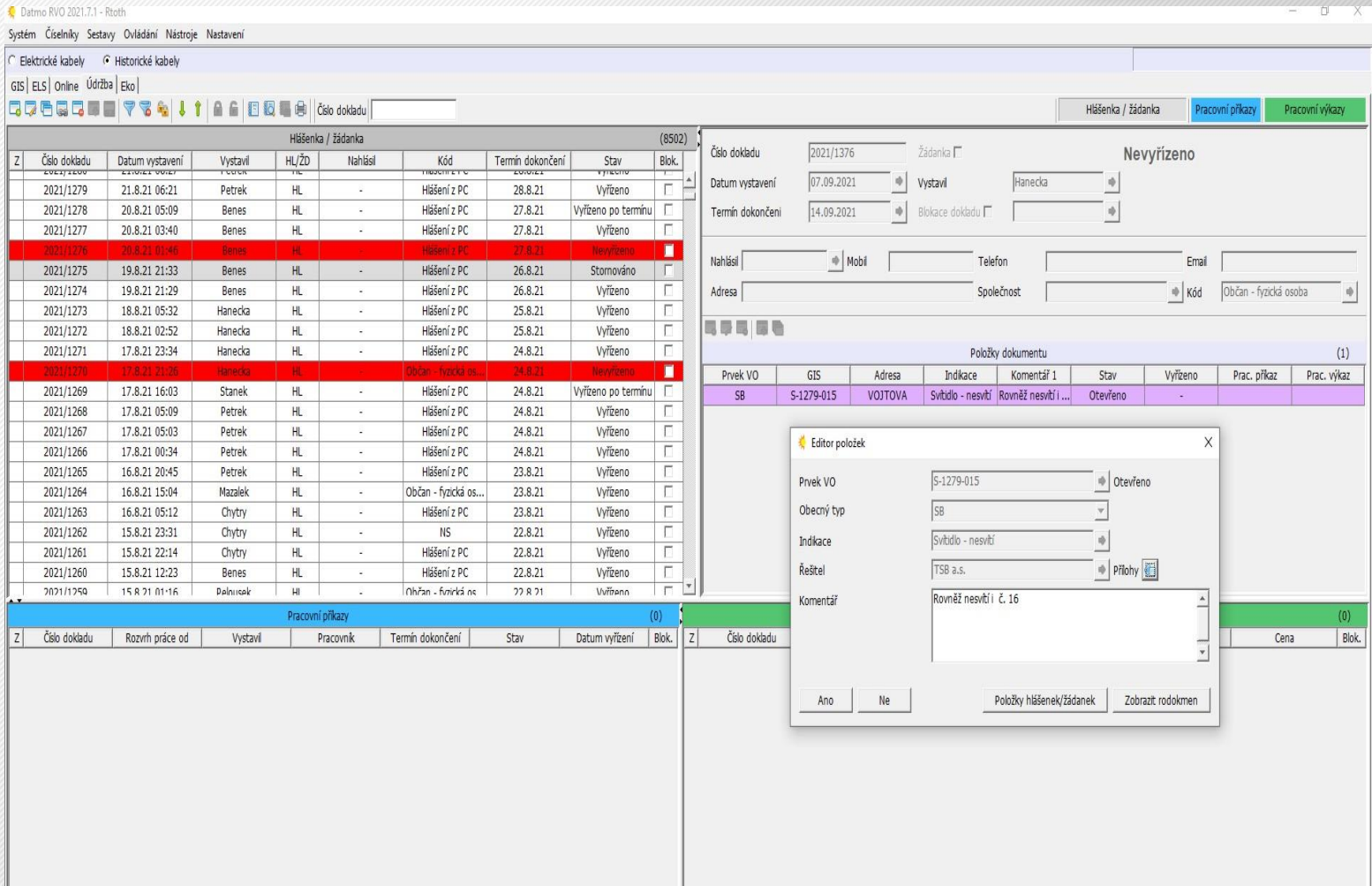
Software modules
DATMO RVO and their use

MAINTENANCE CONTROL MODULE

The maintenance control module consists of a defect report, the creation of work commands for the removal of these defects, and the filling of work commands on the conduct of the work according to the command.

Defect reports can be implemented on the basis of information from citizens, or automatically transferred from a list of alarms from the On-line module. The module is designed in such a way that a superior inspects and confirms the documents of his/her subordinates.

The creation of all types of documents is not a precondition and depends only on the organisational structure of the company and the methods of the maintenance organisation. The result comes as a worksheet, which also contains the costs for its conduct. These costs are then the basis for the EKO module.



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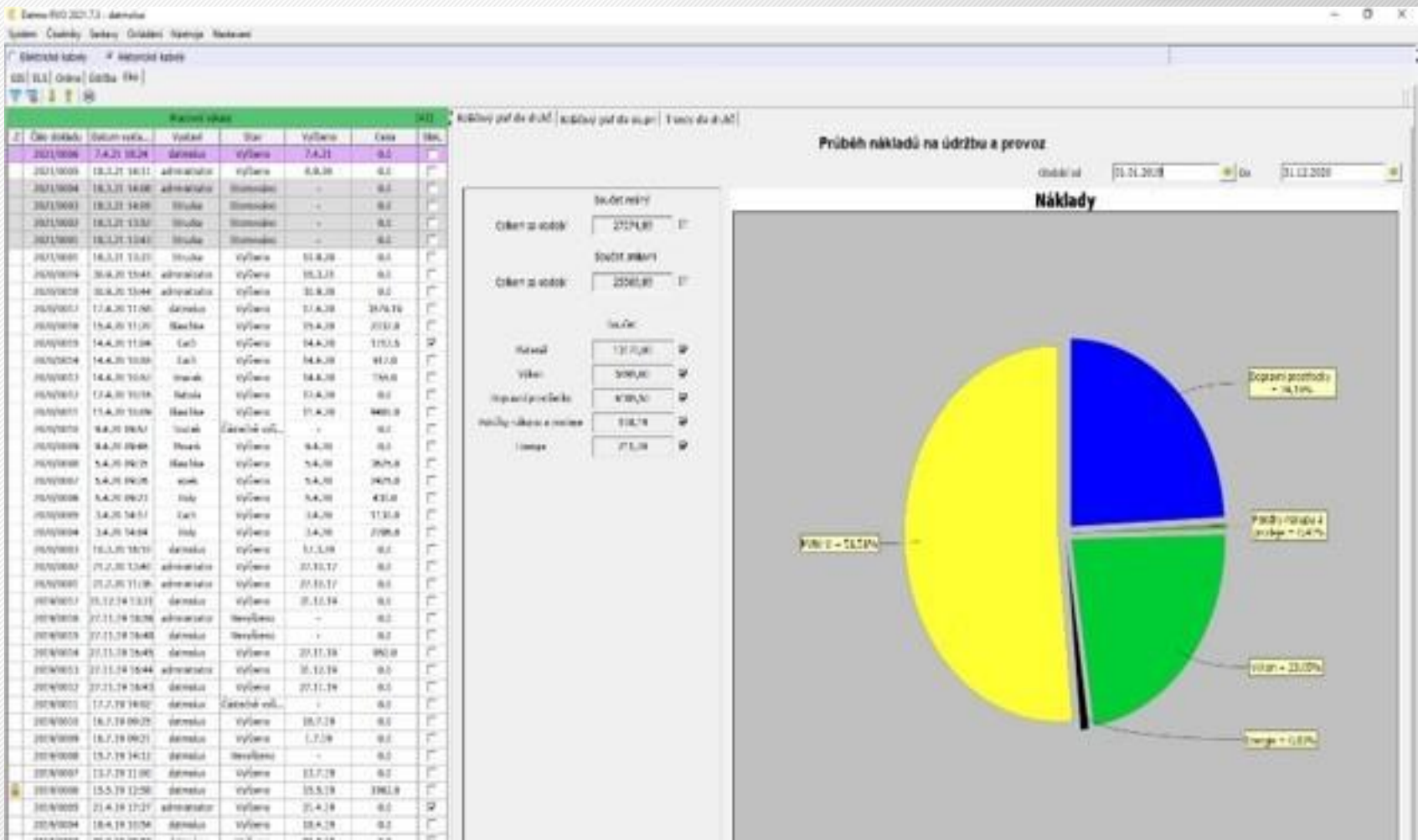
Software modules
DATMO RVO and their use

EKO – MODULE

EKO (economic superstructure) allows for the calculation of costs for the maintenance of public lighting. The assessment of the pricing of products and services is a prerequisite. The more detailed the pricelist, the more accurate the resulting effect. In the framework of the 'Work Report', the maintenance worker puts the material, the duration of the performance, and possibly the hourly rate for the machinery into the system (automobiles, lifts, etc.). By storing such a filled-in 'Work Report', the amount is recorded and can be used for statistics and the display of trends.

The pricelist of performances and services can be imported into table form from various accounting and warehouse programs.



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Integrability of the RADIOControl system

One of the many advantages of the RADIOControl system is its easy integration into smart city and intelligent transport systems integration platforms. In this field we cooperate with company Incinity s.r.o. - INVIPO integration platform.

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Why work with us?

Company

More than twenty years of experience in the field of public lighting not only in the Czech Republic but also surrounding markets. We pay close attention to socio-cultural differences in the given areas. In this regard we cooperate closely with the Ministry of Foreign Affairs or state agencies (CzechTrade / Czech Trade Promotion Agency).

Product

DATmoLUX Inc. during its existence has developed and is continuously developing a control system and the corresponding HW which ranks among the best control systems in the field of public lighting in the world due to its complexity and at the same time its modularity. For all our products (HW / SW) we maintain the status of OEM - Original Equipment Manufacturer.

Integrability of our product

The easy integration of our product gives us an advantage over the competition in integration into higher management and information platforms. We are thus moving our product further into the 21st century where "on / off" solution is not enough - the Smart City concept.

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Why work with us?

Complete Service

The public lighting renovation project does not end with the actual implementation of equipment and SW. We carefully pay attention to the quality training of operating personnel and provide remote monitoring of the system and assistance in resolving alarm situations.

Turnkey Solution – Partnership

Our specialty is "turnkey" projects. However, this presupposes the conclusion of quality alliances with local companies. At the same time, we pay great attention to the training of employees of local companies.

Project administration

Thanks to our focus and long-term work in the field of public projects, we have gained valuable experience in the administration and complete processing of projects especially in the field of grant programs and transnational support programs such as the United Nations Development Program (public lighting restoration project in Ungheni, Moldova).

DATmoLUX

Thank you for your attention

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Complexity, Quality, Service