#### CONSULTING PYTHON DEVELOPMENT E-PROCUREMENT SOFTWARE DESIGN AND



Quintagroup is a web solutions company that has developed OpenProcurement, an open source Python-based e-procurement toolkit, used for the Prozorro system

ProZorro has extended to ProZorro.sale, MePPS and RIALTO, customized to new purposes, so far.

IMPLEMENTATION AUCTIONS

SOFTWARE

**DEVELOPMENT BUSINESS ANALYSIS** 

It has proved its efficiency, with US\$1,3 billion saved both on the local and international Level as of September 2017.

The OpenProcurement system, initially designed for public procurement in Ukraine, has been also used for the Moldovan system in cooperation with EBRD.

BUSINESS PROCESS MODELING OPEN PROCUREMENT SYSTEMS MONITORING



provides a wide variety of services, including:

- Consulting
- Python development
- e-Procurement software design and implementation
- Auctions software development
- Business Analysis
- Business Process Modeling
- OpenProcurement systems monitoring
- Automation testing
- Application Management
- Project management
- Operational support and Helpdesk
- System evolutionary development
- e-Procurement maintenance services
- Mass deployment
- Performance support

### Our:

#### Mission

One of our basic goals is popularization of the open source software. Designing eProcurement software, we believe in enhancing transparency and, therefore, build software adhering to 'everyone eyes everything' motto. Our rich experience with the OpenProcurement implementation enables us to work effectively, striving to find the most successful solutions to satisfy our customers' needs.

#### Methodology

The eProcurement software development and support services provided by Quintagroup rely on direct cooperation with our clients, and are aimed at finding the most efficient solutions to meet each and every project requirement. We apply agile development methodology practices in each of our cases, striving to cater to our customers' environmental and personnel needs as efficiently as possible.

#### Services

We are working on the global market to help businesses, physical entities, state-owned and government-funded organisations, as well as non-government and charity ones all over the world implement and launch electronic public procurement systems, customizing them to specific needs of our clients. Our team has considerable expertise in all stages of systems development life cycle, from Business Analysis up to e-Procurement implementation and further maintenance services.

# Quintagroup OpenProcurement

OpenProcurement is an open source e-procurement toolkit distributed under the Apache 2.0 license.



The main aim of this toolkit is providing the tools to design and build a procurement process that is transparent, effective, and competitive. The toolkit builds accessible processes that leverage auctions to drive savings and are backed by strong data collection and reporting. It is designed to be automated and scalable.



OpenProcurement was initially developed for ProZorro, a procurement system implemented to support public procurement in Ukraine. Later OpenProcurement has been used by other state and commercial projects, since it is flexible enough to handle all shapes and sizes of government and private sector procurements.

#### OpenProcurement architecture

The basic toolkit that comprises storing data and conducting auctions is free. The toolkit's Data Standard was developed on the basis of Open Contracting 1.0RC.

### OCDS

# Open Contracting Data Standard in Open Procurement

Open Contracting Data Standard was incorporated in the system's core - OpenProcurement toolkit. Developed by Open Contracting Partnership, OCDS is an open data standard for a structured presentation of the data on the contracting process.

OCDS is a great tool in fighting corruption as it enables greater transparency and is a golden well for data scientists since it allows to analyze efficiency, effectiveness, and fairness of public procurement of goods, works and services.

ProZorro is not the only system in Ukraine publishing OCDS data - ProZorro.sale, bank asset selling electronic system, is planning to incorporate it as well.

Using extensive documentation in several languages the system users will be able to easily participate in the corresponding stages of the e-procurement:

#### 1. Preparation

Includes user registration, creating/editing of user or organization credentials (performed on web platforms).

#### 2. Procurement Initiation

The procuring entity declares "Tender", the participants read the requirements and have opportunity to ask questions to the procuring entity.

#### 3. Auction

Participants register as bidders in the auction. When the auction ends, system automatically ranks bidders according to their bids.

#### 4. Qualification

Candidate's proposal is reviewed and qualification is checked. The procuring entity, bidders, observer can view candidate's proposal and ask for qualification documents.

#### 5. Completion

If during the Qualification stage a winner was chosen, the procuring entity registers the decision in the system, prints the extract (protocol) from the system about the held auction and its results, publishes the delivery contract in the system.

# Launching the OpenProcurement System

#### March - April, 2014

A group of volunteers initiated and started working on a public procurement reform to simplify the access for business entities and increase procurement transparency.

#### August - September, 2014

The concept of a monoplatform electronic system was agreed, following the Georgian prototype.

Later on, commercial platforms were added and the third conception was developed.

#### February - May, 2015

Quintagroup presented officially and launched the new IT-system on 12 February 2015.

The new system, developed by Quintagroup team, excels at its hybrid nature, since it combines features of both mono- and multiplatform system. On one side, the state has an absolute control over the CDB. On the other side, commercial platforms, competing, increase the quantity of suppliers, improve service and decrease costs the state pays for the system support.

#### April, 2016; August, 2016

The ProZorro team started the transition to the electronic procurement system that was realized in two steps: starting from April, 1 ProZorro became obligatory for use for central authorities and monopolists, and from August, 1 - for all the other state customers.

#### May - July, 2014

In summer 2014 the first conception of a new electronic system appeared. As a result of communication with Georgian experts who succeeded in introducing a similar reform in 2009-2010, the group of volunteers decided to adopt the system the reformers elaborated.

#### October, 2014 - February, 2015

The main features of the system were accepted, such as:

- Everyone sees everything;
- A hybrid system: a sole state central database (CDB) and many commercial platforms;
- Cross-access to the CDB from platforms;
- -Financial sustainability;
- MVP (minimum viable product) from simple to complicated;
- -Open code etc.Quintagroup team undertook CDB creation, Auction module, API development and the system designing. The NGO "Transparency International Ukraine", the Ukrainian office of the international organisation with a considerable reputation for its anticorruption activities in the procurement sphere, was chosen to fulfil an advisory role in the current reforming initiative.

#### June, 2015 - March, 2016

Quintagroup team was designing the IT-system and IT-infrastructure. Finished the system, the state received the

#### January, 2017

MVP of MePPS (Prozorro in Moldova) goes live.

#### OpenProcurement Cases

# ProZorro

Quintagroup has developed and implemented e-Procurement solution that was used by the Ukrainian electronic public procurement system - Prozorro

Prozorro provides cross-access to the system. Users can see all procurements via their web platforms and suppliers can register their bid proposals to any procurement regardless of where the proposal was first announced. Competition between web platforms will lead to the procurement service improvement.

Fourteen e-Malls are already providing access to the system. What is more important, the project is open, so any web platform can join if it provides the necessary functionality.

#### **ProZorro** encompasses three main types of procedures:

- Open.ua auction type that corresponds Ukrainian legislation norms;
- Open.eu auction type, corresponding international procurement law;
- **ESCO** (Energy Service Contracts) a new mechanism for the procurement of energy service contracts that should be carried out via the ProZorro Project according to the new regulation.



# Awards and recognition

- The World Procurement Award (WPA) 2016 at Public Sector Awards in London, on May, 18 for design and implementation of an e-procurement system with a unique architecture and philosophy.
- The Open Government Awards 2016 - during the Global Summit in Paris, France on December 7.
- Procurement Award. Also it became a showcase for the Open Contracting Partnership, a collaborative effort by the World Bank that promotes interest, openness and participation in public contracting.

#### Electronic Public Procurement System

# ProZorro Sale

High performance indicators of the ProZorro project's model and a substantial interest of the business sector in a similar system for commercial tenders resulted in Rialto, "the commercial ProZorro".

In its core this project shares the principles of the ProZorro public e-procurement system - everybody plays by the same rules, a winner is selected transparently, and a fair competition is encouraged.

The key components are as those in the original ProZorro: the central unit, which includes two databases (ProZorro.sale CDB1 & ProZorro.sale CDB2), an API and several commercial platforms to provide or exchange information with a range of stakeholders. Quintagroup provides the system with continuous support 24/7, develops it and implements new features, introduced within the change management project.

#### ProZorro.Sale includes two types of procurement procedures:

- dgfOtherAssets sale of the insolvent bank property
- **dgfFinancialAssets** sale of the creditor claim right



# Awards and recognition

Won in the demo-days of the Citi Tech for Integrity Challenge (CitiT4IChallenge) anti-corruption startups finals held in Hyderabad, India.

# **Dutch Auction and Assets Registry**

are two new large-scale projects within ProZorro.Sale that are currently in development.

# **Dutch Auction**

**Dutch Auction** is a new project within ProZorro.Sale, currently in development. The adoption of Dutch auction will facilitate the reform of the disposal of bank assets that are to be liquidated, started more than two years ago by the Deposit Guarantee Fund. Dutch auction is a modification of a Dutch auction and price ascending auction, consisting of three stages:

- 1. Dutch auction;
- 2. Sealed bid;
- 3. Best price.

# **Assets Registry**

Assets Registry presupposes creation of the Registry Database that covers registered property Meand rights on claim on credit contracts, existing on banks' balance sheets. On the basis of this registry of basic assets and compound assets, lots will be formed and sold at price ascending auction.

The Assets Registry is based on OpenProcurement system.

### Rialto

Rialto is "the commercial ProZorro" that appeared as a result of high performance indicators of the model and a substantial interest of the business sector in a similar system for commercial tenders.

To ensure timely and elegant implementation, OpenProcurement toolkit was used. The key components are as those in the Original ProZorro: the central unit, which includes a central database (CDB), an API and several commercial platforms to provide or exchange information with a range of stakeholders.

# **MePPS**

Launched in January 2017, Moldovan Electronic Public Procurement System (MePPS) has been developed by Quintagroup on the basis of the Prozorro open source code and tailored to the Moldovan legislation. Quintagroup has cooperated with the European Bank of Reconstruction and Development and has catered for technical assistance in eProcurement system Implementation in Moldova.