

## Introduction

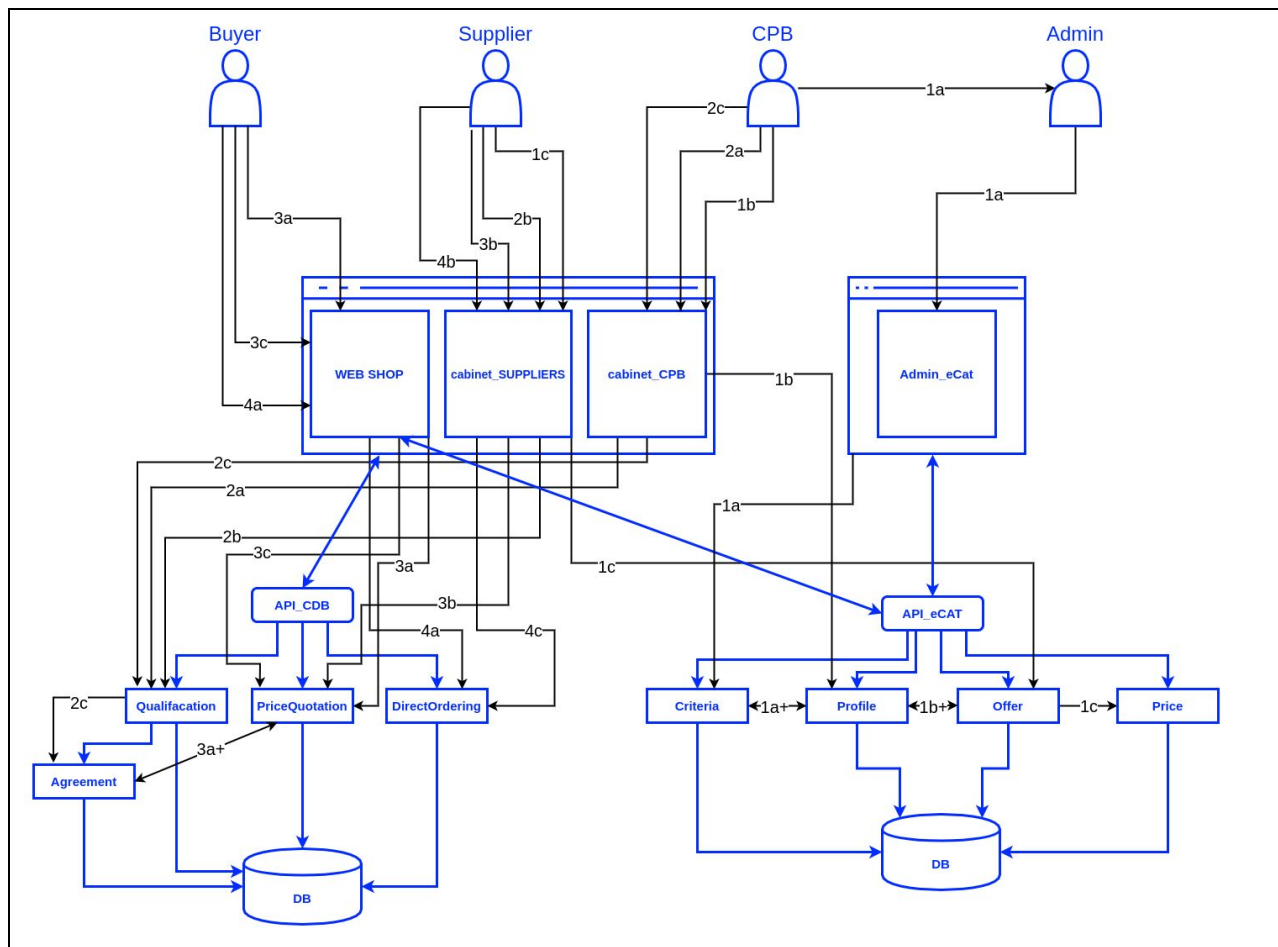
The purpose of this document is to provide a detailed description of the Price Quotation process (hereinafter PQ). It will explain the purpose and features of the procedure, the ways to implement it in the ProZorro system, the areas of stakeholder responsibility and the limitations under which it should operate.

The basis of this document are requirements for the architecture prepared by the ProZorro team and discussion of requirements during consultations with ProZorro.

This document is intended for both stakeholders and system developers.

## ProZorro Price Quotation Requirements

Figure 1 Electronic Catalogues Architecture



Electronic Catalogues Architecture consists of following components:

### 1. Marketplace:

- WEB SHOP** - application with functionality for CA.
- cabinet\_supplier** - application with functionality for EO;
- cabinet\_CPB** - application with functionality for CPB;

### 2. Administrator cabinet (*Admin\_eCat*) application with functionality for Administrator;

### 3. ProZorro e-Catalogues:

- a. **API\_eCAT** - API of e-Catalogues:
  - i. **Criteria** - endpoint of API which includes all available criteria related to specific CPV defined by administrator;
  - ii. **Profile** - endpoint of API which includes profiles. Profiles are formed by Central Purchasing Body (CPB) where it defines values of criteria;
  - iii. **Offer** - endpoint of API which includes offers of EOs and its relation to specific profile;
  - iv. **Price** - endpoint of API which includes price of the offers;
- b. **DB** - database of ProZorro e-Catalogues.

### 4. ProZorro Business Process Engine (BPE):

- a. **API\_CDB** - API of ProZorro:
  - i. **Qualification/Agreement** - processes of EO qualification to specific Profile based on CPV.
  - ii. **priceQuotation** - belowThreshold procedure for procurement within range of 50,000 UAH to 200,000 UAH.
  - iii. **DirectOrdering** - belowThreshold procedure for procurement less than 50,000 UAH.
- b. **DB** - ProZorro database.

#### **Flow 1 Fulfilling e-Catalogues database with Criteria/Profile/Offers+Price for use by CA:**

**Step 1a:** CPB provides Administrator with information about Criteria under specific CPV.

Administrator creates Criteria under specific CPV in the e-catalogues API: endpoint Criteria allowing CPB to create Profiles.

**Step 1b:** CPB using marketplace: cabinet\_CPB creates Profile/'s with Criteria for specific CPV.

**Step 1c:** EO using marketplace: cabinet\_supplier creates Offers with Price under Profile/'s created by CPB.

#### **Flow 2 EO qualification to Agreement process:**

**Step 2a:** CPB using marketplace: cabinet\_CPB creates EO qualification process for specific Profile.

**Step 2b:** EO using marketplace: cabinet\_supplier participates in qualification to specific Profile for CPV.

**Step 2c:** CPB using marketplace: cabinet\_CPB awards EOs that pass qualification to specific Agreement for Profile.

#### **Flow 3 Price Quotation procedure:**

**Step 3a:** CA using marketplace: WEB SHOP publish priceQuotation procedure inviting to participation EO's qualified to Agreement under CPV in use.

**Step 3b:** EO qualified to Profile within Agreement under CPV used for priceQuotation procedure submits bid proposal using marketplace: cabinet\_supplier.

**Step 3c:** CA using marketplace: WEB SHOP awards the EO's with the best price and proceeds to contract.

#### **Flow 4 Direct Ordering procedure:**

**Step 4a:** CA using marketplace: WEB SHOP selects and orders EOs products (Offer+Price).

**Step 4b-c:** EO using marketplace: cabinet\_supplier receives order for products and proceeds to contract.

User roles within Price Quotation procedure:

1. *CA functionality:*
  - Create a request for proposals.
  - Choose the winner of the selection.
2. *EO functionality:*
  - May see a request for a proposal.
  - Reject offer request.
  - Respond to a request for a proposal.

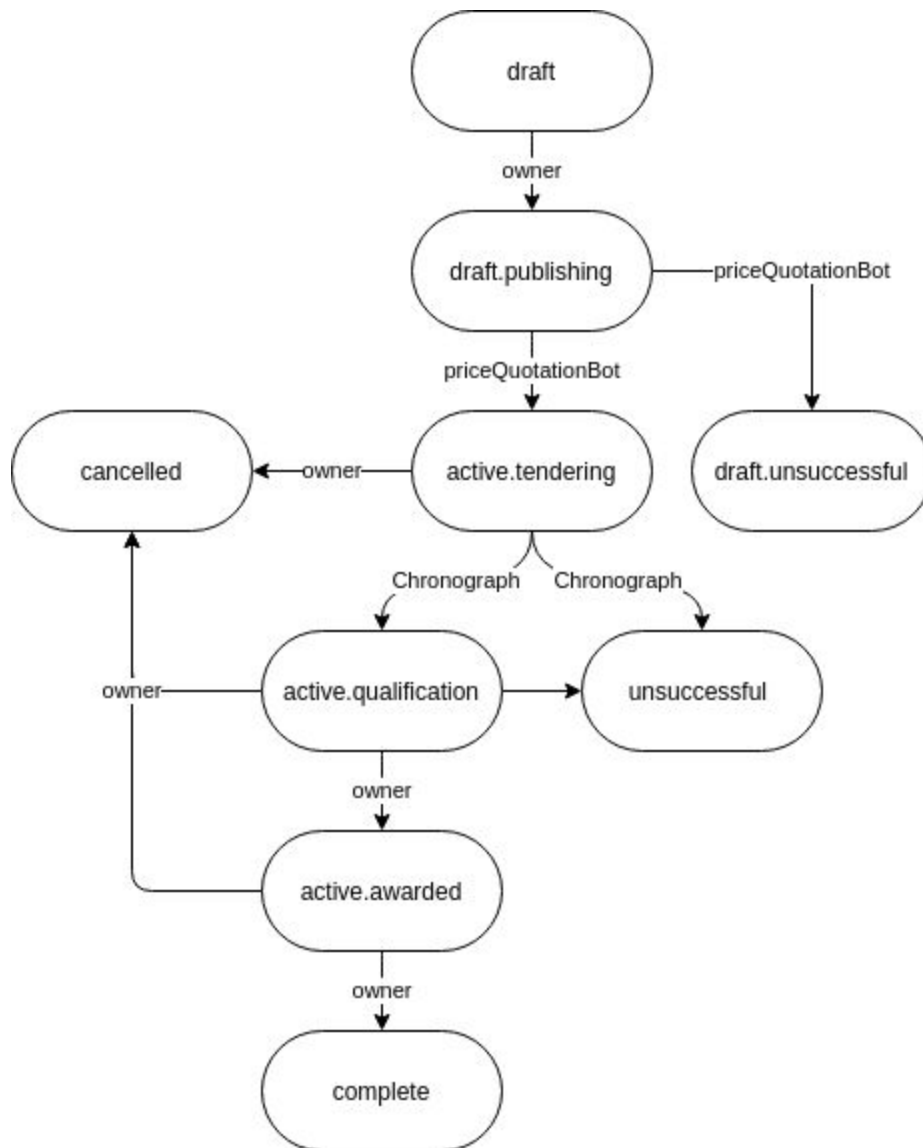
Only EO's with pre-qualification are eligible for the PQ procedure.

Qualification of suppliers in the catalogue:

- Qualification announcement
- Submission of applications
- Vendor evaluation

## Purchasing methodology and business process for Price Quotation developed by Quintgroup in cooperation with ProZorro

Figure 2 Price Quotation procedure status map



1. Price Quotation procedure begins on the side of the marketplace in status: **draft** where the Contracting Authority (**owner**) creates and provides key information about procedure.
2. After creation the owner publishes procedure switching its status to **draft.publishing** where **priceQuotationBot** robot runs validation of the procedure and supplement procedure with additional data taken from ProZorro e-Catalogues database including shortlisted firms.

In case if procedure do not pass validation due to invalid options, it will be switched to status: **draft.unsuccessful** by the priceQuotationBot resulting in the process termination.

3. After successful validation priceQuotationBot transmit procedure to status: **active.tendering** providing shortlisted Economic Operators with ability to submit Bid proposals. Procedure stays in this state until submission deadline controlled by the **Chronograph** (*system component responsible for time controls*).

In case if no bids were submitted, BPE switch procedure to status: **unsuccessful**.

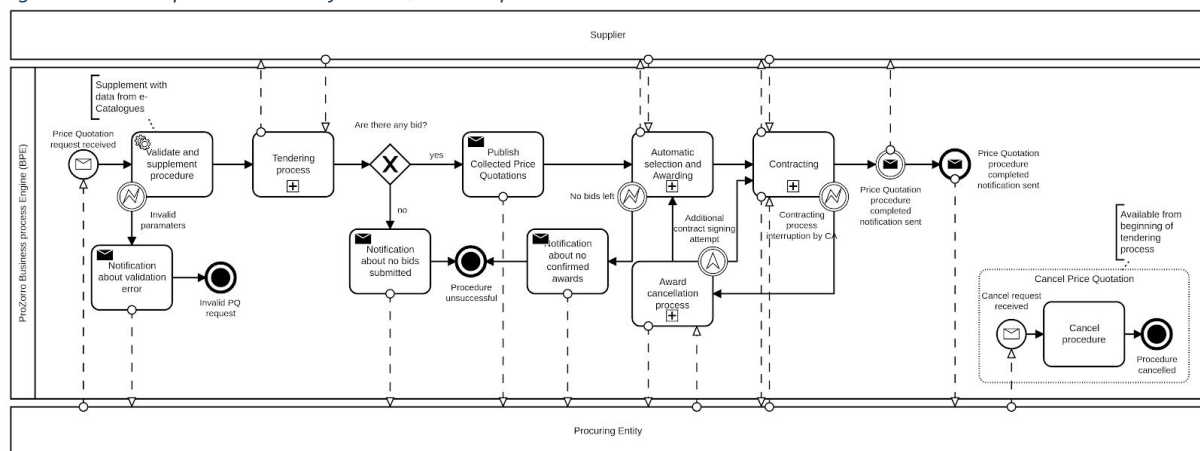
4. Subsequent switchover in the procedure is status: **active.qualification**. It is being activated if there is at least one proposal. During this state, the Contracting Authority is able to select the Price Quotation winner from the list of proposals.

CA can reject a proposal providing a rejection proof. In case of rejection of the last proposal BPE will switch procedure status to **unsuccessful**.

5. After the Price Quotation winner was selected by the owner, the procedure switches to **active.awarded** status. During this state the contracting process is being initiated.
6. Final status of the procedure is **complete**, which indicates that Price Quotation procedure was completed successfully and contract was signed and published.

The owner is able to switch the Price Quotation procedure to status **cancelled** from **active.tendering**, **active.qualification**, **active.awarded** statuses providing cancelation reason.

Figure 3 Business process model of Price Quotation procedure



BPMN: <https://cawemo.com/share/855a9a8b-450b-40d2-bc00-0fa1c1c5faf9>

By sending a request for Price Quotation to ProZorro Business Process Engine the process starts.

At this moment BPE receives and validates the Price Quotation request. Given the validation is passed the system automatically informs shortlisted (*qualified to specific eCatalogue Profile*) EO's about the request.

Receiving a Price Quotation request at the marketplace interface, EO decides if they are able to

offer the requested product. In case of rejection EO declines participation in procedure.

For the period until the tendering end date EO's would be able to submit a bid, while BPE will collect and register quotations. After the deadline system will publish received bids, allowing CA to select a winner with the best price (*awarding process*).

Selecting a winner will lead both CA and EO to the contracting process, where the contract is signed, is published and taken to execution.

## Procedure workflow

### Creating a Price Quotation Procedure

A new **procurementMethodType** will be created for endpoints **/tenders**: *'priceQuotation'*.

A mechanism for creating a two-phase commit is proposed for use:

The two-phase commit proposes a mechanism whereby the ProZorro Business Process Engine (hereinafter BPE) will publish only those purchases over which the marketplaces have control and have the ability to independently cancel their duplicates.

The first phase of the two-phase commit creates a PQ procedure in the **draft** status on the marketplace interface by selecting Profile from the eCatalogue characteristic database, within which the price quotation is made.

The marketplace transmits the following information to the ProZorro BPE when creating the procedure:

Procurement organization: **procuringEntity**: **Organization**

Profiles from the eCatalogue characteristic Database: **profiles**: **Profiles**

Agreement from the available agreement for this profile: **agreement**: **Agreement**

*This field is to be passed as of OpenFA Agreement implementation is in place.*

Quantity: **items[\*].quantity**: **Quantity** (*The customer specifies when ordering*)

Delivery **Place**: **items[\*].deliveryAddress**: **Address** (*The customer specifies when ordering*)

(optional) standard contract: **documents[type='contractProforma']**: **Document**.

*The customer will download / select from the available templates. If the template is defined by the Agreement, it is not transferred, and the responsibility is in the setting up of priceQuotationBot.*

Bid Deadline: **tenderPeriod**: **Period**, can not be less than 2 business days. The customer specifies **start** / **endDate** on the marketplace interface.

### Filling in information from catalogue

On the second phase of the two-phase commit marketplace transfers the procedure to the **draft.publishing** status, after which it will be checked by the **priceQuotationBot** robot, and filled with additional information from the Profile / Agreement, namely:

**items[\*].unit**

**items[\*].classification**

**documents[type='contractProforma']** *(If the template is fixed by the Agreement)*

**tenderPeriod: Period** *(If the period is determined by the Agreement)*

**shortlistedFirms: List of Firm objects** - List of EO's

List of companies that are admitted to Price Quotation in their respective Profile. Will be taken from one of the relevant sources:

**Agreement.whitelisted** *(subject to Qualified Vendor Registration Mechanism)*

**Profile.category.whitelisted** *(if MVP version of e-Catalogue software is available where qualified vendors are registered in Category)*

Transfer procedure to **status: active.tendering**

## Submission of Proposals

When submitting a **Bid**, the participant must specify the identifier of their item registered as a position (*requirementsResponse*) in the catalog.

It is proposed to use a mechanism similar to the registration of documents uploaded to the Document Service (*ProZorro system component*), where when registering Bid you will need to pass the ID generated by the system of the offer registration (*requirementsResponse*).

Upon completion of the tenderPeriod, the procedure may change its **status** to:

**active.qualification** or **unsuccessful**, depending on the presence or absence of bidders submitting their bids.

## Qualification

**active.qualification** is the status of the subsequent step in the procedure. It is being activated if there is at least one proposal.

At the end of tenderPeriod, the system automatically determines the award for the bid with the most economically advantageous price.

This proposal creates the first award with status: pending. Only the EO can change this status.

The EO confirms the award by changing its status to active or refuses by changing the status to unsuccessful and then the system creates an award for the next most economically advantageous bid.

After switching to status: active, only the CA has control over the award, who has the opportunity to cancel the award by changing its status to cancelled.

Changing the status to cancelled in the system should create the following award with status: pending on the same bid where the customer can (optionally) upload documents. Only the CA has control over this award.

The second (and subsequent) award for the same bid can be transferred by the CA to status: active or unsuccessful. If it is translated into status: unsuccessful - award goes to the next most

economically advantageous bid.

The second (and subsequent) award can also be transferred by the CA from active to cancelled as well as the first.

!! Note: If there are no bids in the procedure after transferring award to status: unsuccessful, the procedure acquires status: unsuccessful (edited)

After award is in status: active two options for contracting will be offered for electronic catalogues:

'Classic' contracting currently in place in the system.  
e-Contracting.

### **Signing the contract**

The final step will be to switch the procedure to status: **complete** by signing (activation of Contract, status: **active**) by the Contracting Authority (owner of the contract).

### **Cancellation**

The CA is able to cancel the Price Quotation procedure in the following statuses:

**active.tendering**  
**active.qualification**  
**active.awarded**

**draft.unsuccessful** status:

There are three possible options when the procedure goes into this status:

Not found (does not exist, incorrectly specified) profile from catalogue;  
No associated category was found in the catalogue;  
The suppliers list (Profile.category.whitelisted) is empty.