

DIGITAL PROCUREMENT: Innovative multi-platform networking system



Project background



Objectives

Open Source architecture for a new generation of digital tools to facilitate digital transformation of the procurement function in the government and the public sector



Goals

Promote latest policy thinking and leading regulatory standards for public procurement to legislate for new technologies and fit the needs of digital economy



Outcomes

Planning-to-Payment networking multi-platform digital procurement system, built on:

- Open Source
- Open Government Data Standard
- Open Contracting Data Standard (OCDS)

What UNCITRAL (and EBRD) promote



Value for money



Efficiency



Competition



Transparency



Openness



Procedural fairness

What is UNCITRAL Procurement Standard?



What to procure

Clear definition of the subject of procurement and “lots” and demand aggregation strategies



How to procure

Standardized and business-friendly procurement methods, by default very transparent and open to competition



From who to procure

Requirements for qualification of suppliers, evaluation criteria and award methodologies defined before tender

Leapfrog by legislating for new technologies

On the way to digital transformation

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Publication:
Uniform, transparent
and accurate information
on procurement
opportunities

Interaction:
Active exchange of
information. Online
forms. Customised
information on request.
Some process integration

Transaction:
Competitive online
exchange of goods and
services. Complete
transaction online. Online
productivity. Integrated
process

Transformation:
Digital process. Use of
automation and robotics.
Change in business
practice. New data-driven
products and services.
Innovation in market
structure



EBRD's Brief for New Generation Digital Procurement

'Build a transparent digital buying process where users do not need complete knowledge of all public procurement rules. Make digital workflows based on UNCITRAL policy standards to guide buyers' decisions,

so they do not have to worry about compliance. Achieve quick time to market, better buyer and seller user satisfaction and steep change in compliance and performance'



Based on global best practice in the 2011 UNCITRAL Model Law on Public Procurement



Compliant with the 2012 WTO GPA and the 2014 European Union Directives on Public Procurement



Designed to be interoperable with existing global IT resources and environment



Easily customizable to support procurement of different public and commercial buyers



Ready to be integrated into existing local IT environment and cooperate with other State eServices



Designed based on Advanced Open Contracting Data Standard (OCDS)

Minimum Required Functionality



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Aggregation of demand for centralized purchasing and disaggregation to lots for purchasing entities



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Single-stage procurement methods



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Multi-stage procurement methods



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Different types of framework agreements



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Different types of multi-criteria electronic reverse auctions



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Requisition, ordering and electronic catalogues



Creating a New Global Standard for Digital Government



Flexible
architecture



Open source
technologies



Event-driven
processes



Secure
system



OCDS
data exchange



Controlled
environment

Open Source Architecture



Fully service-oriented architecture and component approach



Compliant with the 2012 WTO GPA and the 2014 European Union Directives on Public Procurement



Designed to be interoperable with existing global IT resources and environment



Easily customizable to support procurement of different public and commercial buyers

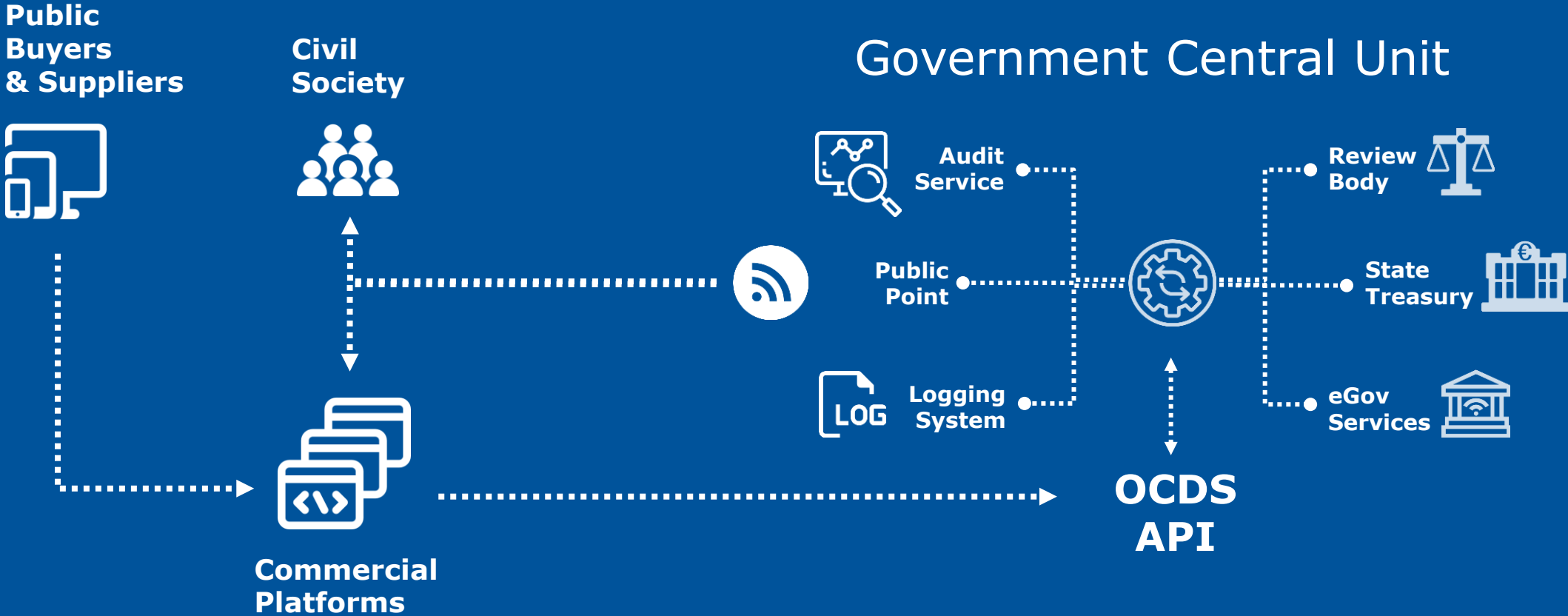


Ready to be integrated into existing local IT environment and cooperate with other State eServices

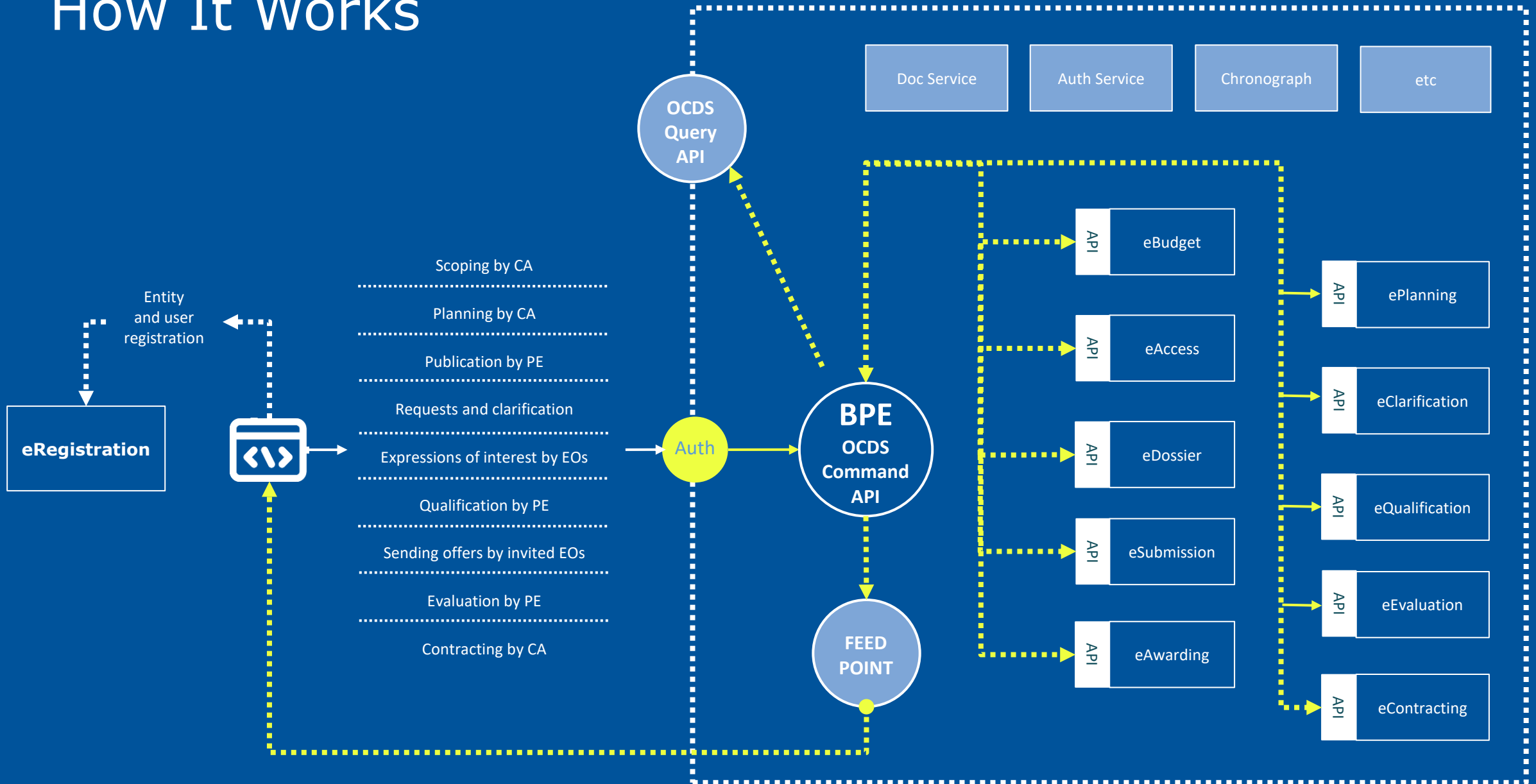


Designed based on Advanced Open Contracting Data Standard (OCDS)

Collaborative Digital Public Service – e-Gov & Commercial Platforms



How It Works



Technology choice



Cassandra
Primary DB



JWT
Authentication



Camunda
Process engine



Kafka
Messaging



Kotlin
Primary back-end



Spring
Secondary back-end



Main Benefits of the Networking Model



Collaborative Digital
Public Service



Deeper and faster market
penetration



Quality of service to end-
users and competition



Attractive
for start-ups



Shared cost
and responsibility



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Main Benefits of the 'Open' Approach



Open source

Always available for audit, monitoring and scalability



Clear process

End-to-end digital cycle in controlled environment



Real-time and public

procedural fairness and best value for money for all



Open data

Public contract register with quality OCDS for reuse



Networking model

Service guaranteed by several NEPPs



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What is Available

Scoping and budgeting

Buyer's profile linked with budgeting and tenders

Automated tracking of spending

Cash flow control

Procurement planning

Project plan

Annual and Multiannual program plan

Aggregated plan

Qualification and tendering

Structured criteria and conditions

Automated / semi-automated qualification

Open & Restricted, Framework agreements

Awarding and contracting

Automated evaluation, scoring function

Digital data-based online contract

Standardized conditions on different templates

Contract implementation

Amendments and extensions

Contract administration

Links to invoicing and payment



Multi-criteria multiple-round electronic auction

M·Tender



Check it out:

www.mtender.gov.md

Learn more:

youtu.be/CiUsNrO-V-k



Ministry of Finance of the Republic of Moldova is leading a transition to digital public procurement to ensure more transparent and efficient spending of the state budget of the Republic of Moldova. With MTender digital service, all public tenders are accessible online and every procurement decision transparently published online in real time, in the OCDS data-format.

MTender - digital procurement system Republic of Moldova



Aim

New digital government service – MTender will support public procurement from planning the purchase to payment for public contracts: it will shorten time for tendering for public bodies and waiting time for payment for suppliers and contractors; Citizens can watch government procurement decisions and how taxpayers money are spent on public services; on account of online and easy to participate tenders, the new fully digital procurement service will offer better access to opportunities in public procurement for business community, in particular local small and medium-sized enterprises; For public bodies, new digital service will also bring improved planning of spending, quicker purchases and better-quality as a result of 'zero paper' electronic bidding procedures



Technology

MTender is a multi-platform networking digital procurement service, it comprise a government- operated Open Data central database unit and is networking with several commercial electronic platforms certified to support electronic tendering processes for public sector. From technological perspective MTender is: open source flexible architecture based on unified BPMN 2.0 Central Unit and Business Process Engine; disclosed processes and predictable steps via "executable" Open Contracting Data Standard (OCDS) inside; deep integration with local eGov environment: trusted authentication of CAs, initial verification of EOs. automated disclosure and initial verification of funding allocation, partially automated eligibility check and ranking according to requirements prescribed by ESPD, digital contract register and online registration of the contracts in State Treasury, disclosed contract implementation schedule both: execution/delivery and payment



Results

- Within 12 months, a pilot of MTender, implementing the GPA/EU public procurement policy standards reached 3500 public buyers (almost 95 percent of market) and about 4500 sellers (30 per cent increase in new suppliers brought to the market, and overall 30 percent of local SMEs)
- 50,000 electronic procedures was processed and 27,000 online contracts signed
- In addition to increased transparency and reduced transaction cost, the economy in state budget spending is estimated at **30 million euros**.



Location

Republic of Moldova, Ministry of Finance



Pilot Phase 2

From October 2018

Challenges



System infrastructure



Central Unit Operator



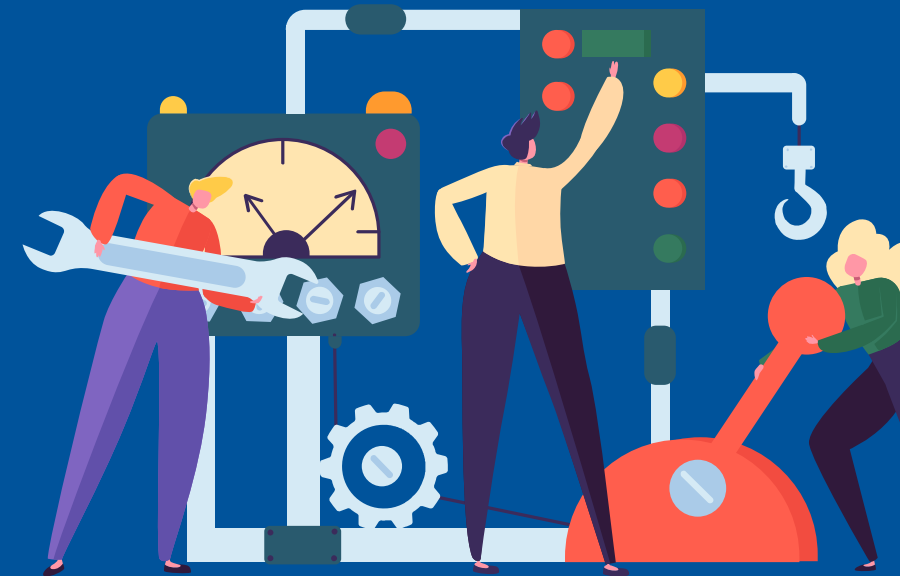
Commercial Platforms



eGov and digital registers



Change management



In progress



'ALL-Digital'



Smart contracts



Digital payments



Predictive analytics



More Process Automation

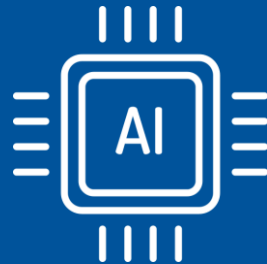


Next steps...



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Cross-border decentralized networking based on OCDS exchange



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Standardized and business-friendly procurement methods, by default very transparent and open to competition



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Requirements for qualification of suppliers, evaluation criteria and award methodologies defined before tender

For further enquiries please feel free to contact us

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