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# B3 Shared Platform Concept Presentation for TDWG #17

Transmission – Distribution Working Group (TDWG)

**May 27, 2025**

# Agenda

- TDWG and Shared Platform Overview (5 mins)
- Market Intel (10 mins)
- B3 Requirements (25 mins)
- Next Steps (5 mins)
- Q&A (15 mins)



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# TDWG and Shared Platform Overview



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# TDWG Context

The **Transmission-Distribution Coordination Working Group** (TDWG) was **initiated in 2022** with the **IESO working closely with LDCs** and other stakeholders to inform the **DER Market Vision and Design Project**.[1,2]

The goal was to develop coordination protocols enabling the effective participation of Distributed Energy Resources either individually or in aggregation—in the IESO-administered wholesale markets. Ultimately, the work was meant to support evolving system needs related to the integration of a broader range of DERs while maintaining both transmission and distribution-level reliability.[3]

This was a collaborative engagement between:

- The IESO;
- Ontario Distribution and Transmission Companies;
- DER Aggregators; and
- other stakeholders with knowledge of grid operations, planning and/or DER integration.

The primary objective was to establish T-D coordination protocols that:

I. Enable timely, transparent communication between IESO, LDCs, and DER participants
II. Avoid conflicts, double counting, and unintended consequences
III. Support reliable coordination across both market and operational levels

Deliverables were developed for three different coordination models:

1. Dual Participation DSO (DP-DSO)
2. Total DSO (T-DSO)
3. Market Facilitator DSO (MF-DSO)



[1]The Project is a key focus area of IESO's DER integration activities and is what much of the near-term DER Roadmap efforts build towards.
[2]The DER Market Vision and Design Project will continue to be advanced through the Enabling Resources Program.
[3]Transmission-Distribution Coordination Working Group (TDWG) Terms of Reference – https://www.ieso.ca/-/media/Files/IESO/Document-Library/engage/tdwg/tdwg-20220516-terms-of-reference.pdf

# B3 Shared Platform Concept Objective

- The objective of the B3 deliverable was to conceptualize a shared platform that enables Transmission-Distribution (T-D) coordination of distribution-connected DERs, with specific focus on defining the platform requirements and functionalities to facilitate optimal system visibility and information sharing across multiple LDCs, IESO and DER owners/aggregators.
- The work also aimed to gain insights from similar demonstrations and solutions from other jurisdictions, which would help lay the foundation for what's possible.
- While the main purpose/benefit of the shared platform outlined here is to facilitate T-D coordination, there exists many benefits that go beyond coordination.

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# Shared Platform Concept - Guiding Principles

## Ease of Use

The platform must prioritize ease of use for the market participant. Building a tool that is easy to use for the end customer would positivity impact the customer experience and help remove barriers for DER participants across all levels.

## Technology Agnostic

The functionality identified within this deliverable will be developed from a technology/vendor agnostic point of view.

## Shared Access

The goal is to create a single interface for T/D coordination, as much as possible, to help facilitate information sharing across all parties

## Tri-level Coordination

The shared platform should contemplate tri-level coordination i.e., coordination between the IESO, host LDC and embedded LDC.

## Do Not Limited Access

The shared platform concept does not intent to limit access in any manner to the existing IESO markets. The shared platform would interface with existing IESO and LDC systems and processes, and the goal would be to empower DERs across all markets.

## DER Portfolio Autonomy

The DER owners/aggregators will have the autonomy to control their own DER portfolios, and this aspect will be further defined in the user roles and responsibilities.



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# Difference between Shared Platform and other utility tools

Key differences exist between utility tools and the Proposed Shared Platform Concept. Shared Platform will require inputs from multiple utility tools, not replicate functionalities.

| Name | Advanced Distribution Management system (ADMS) | Distributed Energy Resource Management System (DERMS) | Shared Platform Concept |
|---|---|---|---|
| **Primary functions** | Advanced platform that **automates grid operations**: fault location, isolation & restoration (FLISR), volt/VAR optimization, demand management, and supports DERs and EVs. Acts as the "brain" of the distribution grid. Requires accurate network models. | Manages **distributed energy resources** (solar, batteries, EVs, smart devices). Sends dispatch/control signals to DERs to optimize grid performance, reduce peaks, shift loads, or curtail generation. | Shared access between LDCs, ISOs, DER owners/aggregators to **exchange data** re: DER asset information, activation data, DER limits, and grid operator approvals to ensure safe and reliable operations. |
| **Integrations** | Integrates with **SCADA,** OMS, GIS, AMI, and optionally DERMS | Integrates with **ADMS,** AMI, aggregators, DERs; often operates independently | Could possibility integrate with utility **DERMs,** aggregator DERMs, utility and ISO internal systems. |
| **Typical users** | Utilities, DSOs, grid operators | Utilities, aggregators, VPPs | Utilities, DSOs, ISOs, Aggregators |



*Source: Camus Energy. (2022, February 28). A glossary of electric utility software systems.*

# Market Intel



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# Terminology

- **Grid services:** refers broadly to the range of services DERs can potentially provide to distribution system operators (DSO) and/or wholesale market operators (ISO). At a high level, DERs providing grid services are typically required to adjust their power output (active and/or reactive) in response to activation and/or dispatch signals sent by the grid entity to which the services are being rendered (e.g., DSO, ISO). They may require mandatory response or could be voluntary. DERs can provide services as standalone entities, or via DER aggregators (DERA).

- **Flexibility services:** In Europe and the UK, the term “flexibility services” is also used to refer to grid services. The two terms will be used interchangeably.



*Source: EPRI report from DER Scenarios and Modelling study - Procuring Grid Services from Distributed Energy Resources (DER)*

# Emerging flexibility platforms

Snapshot of the emergence of flexibility platforms across Europe

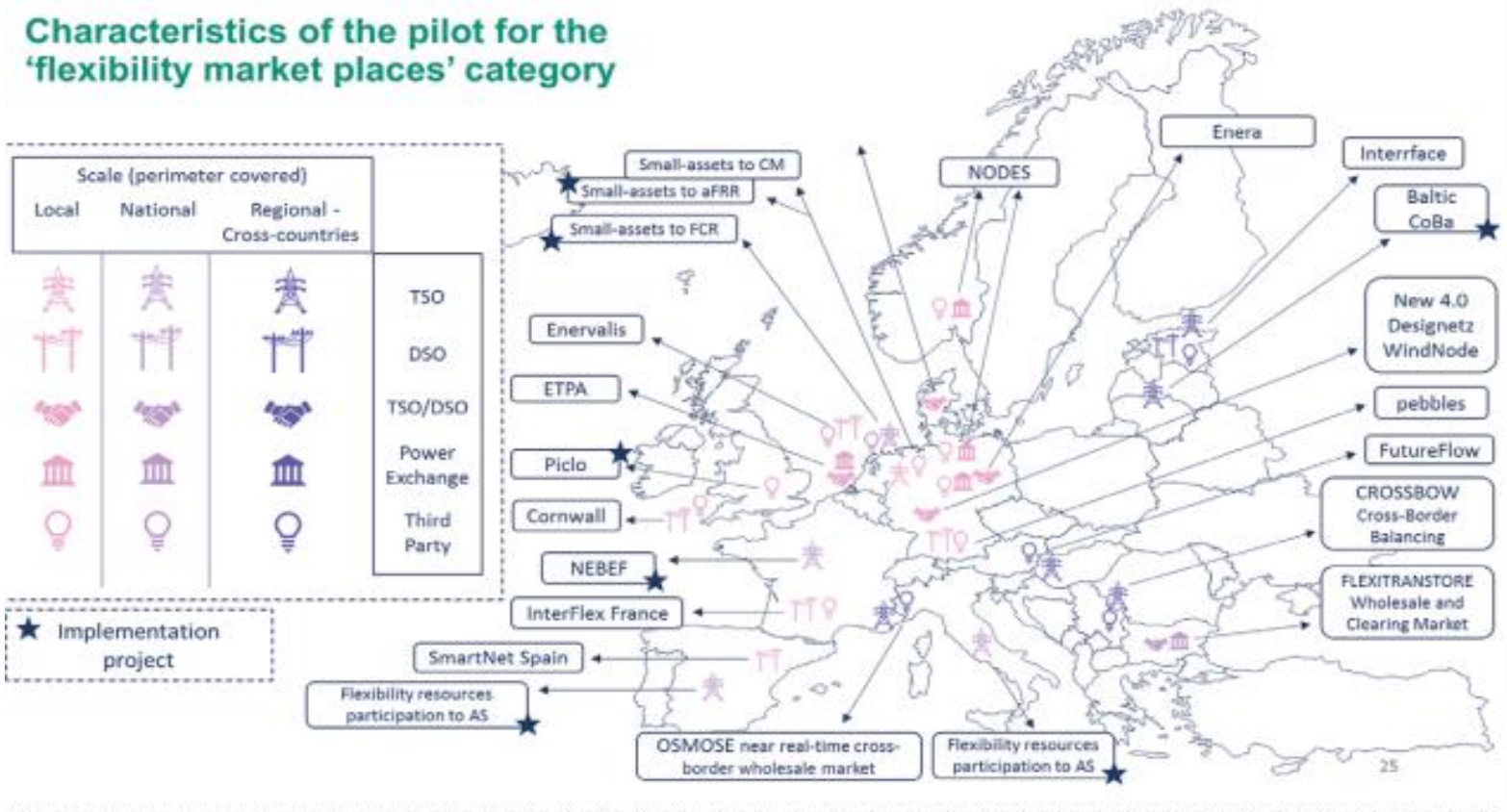


Figure 2: Emergence of flexibility platforms across EU member states

Source: ENTSO-E. Available at: *eepublicdownloads.entsoe.eu/clean-documents/events/2019/191205_Flexibility%20Framework_full_public.pdf?Web=1*



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# Terminology

DERs can offer the following services in the **operational timeframe***:

- **Congestion Management:** The set of actions and procedures used to prevent or alleviate congestion in power transmission networks. Congestion generally occurs when there is too much power being transmitted along a certain pathway in the grid, exceeding its capacity, which can lead to inefficiencies, increased costs, and potential network instability.
- **Frequency Regulation:** Process of maintaining the grid frequency within its nominal value to ensure stable and reliable operation of the power system.
- **Voltage Control:** Maintaining the voltage levels within a power grid at their target values. Voltage levels in a power grid can fluctuate due to changes in power supply and demand, the varying reactive power output of generators, and the physical characteristics of the transmission and distribution lines.
- **Black start:** Restore part of the electric grid to operation to recover from a total or partial shutdown.
- **Controlled Islanding:** Intentionally isolating a portion of the grid when there is a risk of a large-scale blackout. This procedure aims to prevent a disturbance from spreading throughout the entire grid and allows for quicker restoration of power.
- **Inertia response:** The natural ability of a grid to resist changes in frequency due to changes in the balance of supply and demand. This inertia primarily comes from large, rotating generators that have significant kinetic energy.
- **Redispatch:** Changing the dispatch of generation units to redirect power flows away from congested lines and towards those with spare capacity.
- **Load Following:** Adjusting the output of a DER (i.e.: battery storage) to track the daily changes in electricity demand.



**Operational timeframe can be defined as Day-ahead and earlier*

# Platform classification by grid services explored

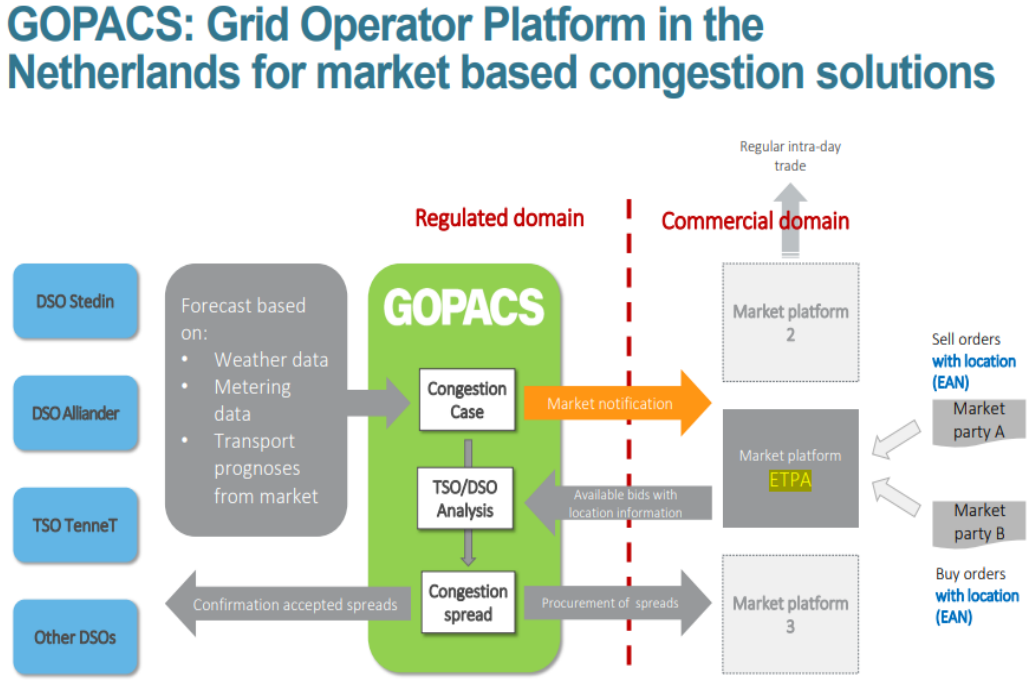
**For information purposes only; NOT a vendor/technology assessment**

| SO use cases | Platform | SERVICES | | | | | | | Additional information |
|---|---|---|---|---|---|---|---|---|---|
| | | Congestion Management | Voltage Control | Inertia Response | Black start | Controlled islanding | Frequency regulation | Redispatch | |
| **SOLUTIONS AS PART OF PROJECTS** | | | | | | | | | |
| TSO and DSO use cases | Crossbow | ✓ | ✓ | | | | ✓ | | T-D coordination for voltage control and congestion management. Demand side management |
| | Enera | ✓ | | | | | | | |
| | Coordinet | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| | INTERFFACE | ✓ | | | | | ✓ | | TSO: mFRR, aFRR, FCR. For DSO: Congestion M. |
| | FLEXITRANSTRE | ✓ | ✓ | | | | ✓ | | |
| | Xflex | | | | | | ✓ | | mFRR |
| | EUSysflex | ✓ | ✓ | | | | ✓ | | |
| | GOPACS+ ETPA | ✓ | | | | | | | |
| | DA/RE | | | | | | | ✓ | |
| | Platone | | ✓ | | | | | | Also: Dynamic Phasor simulation, State-Estimation, CIM/CGMES visualization and editing, Probabilistic time-series Forecasting |
| | TDX Assist | ✓ | ✓ | | | | | | |
| TSO | Crown Balancing platform by Equigy | | | | | | ✓ | ✓ | FCR,aFRR, mFRR; DSO coordination will be explored |
| DSO | Euniversal | ✓ | ✓ | | | | | | For DSO only. TSO involvement will be explored |
| n/A | IBM-Ofgem: System Flexibility Exchange/Utility Flexibility Platform | | | | | | | | Did not contemplate services; mapped out use cases |
| **SOFTWARE PLATFORMS** | | | | | | | | | |
| TSO and DSO uses cases | Open Access Technology International (OATI) | ✓ | ✓ | | | | ✓ | | Congestion and outage management, other transmission grid services. Demand side management Dispatch services . |
| | Olivine | | | | | | | | Part of Demand Response programs for Resource Adequacy; capable of wholesale market interactions |
| | NODES Platform & Market Metering Service (MMS) | ✓ | ✓ | * | * | * | ✓ | ✓ | Sector Coupling, Reactive Power |
| | N-Side | ✓ | ✓ | | ✓ | ✓ | | | Mobile Generation Capacity, Emergency Load Control, Support to Network Planning and Maintenance |
| | Piclo | ✓ | ✓ | * | * | * | * | * | NWAs is a significant use case for many of their DSO clients |
| Not known | Opus One GE | ✓ | ✓ | | | | ✓ | ✓ | |
| Not known | GridBeyond | ✓ | ✓ | ✓ | | | ✓ | | |
| Not known | Greensync | ✓ | ✓ | | | | | | |
| Not known | EA Technology | ✓ | ✓ | | | | | | |

** Can be implemented in the future.*

# Emerging flexibility platforms

## GOPACS: Netherlands




## EU's Coordinet Project

Spanish Demonstration as part of EU's Coordinet Project

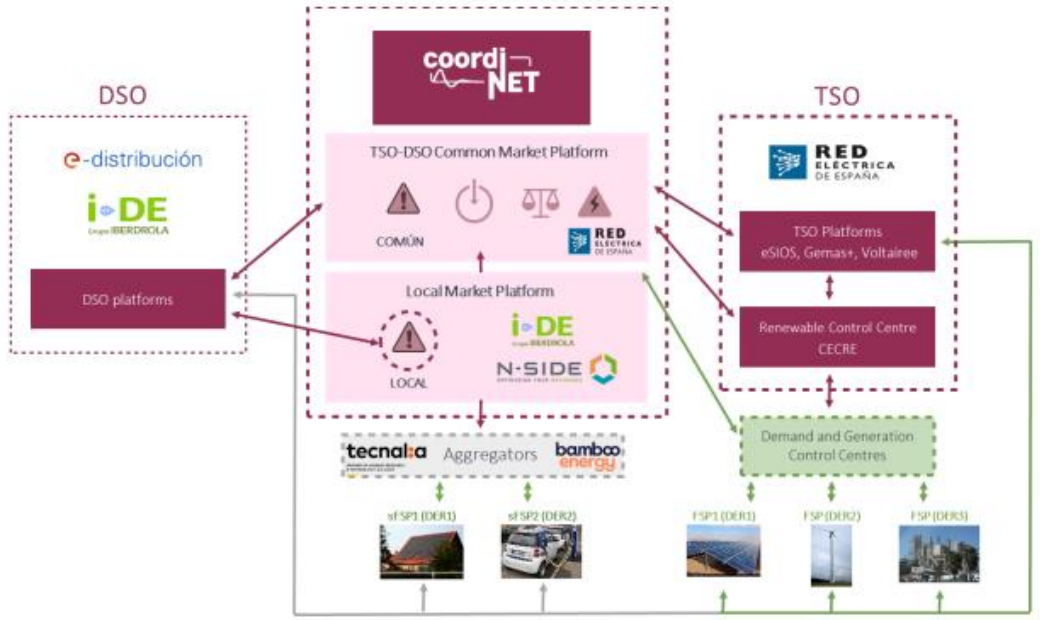



Figure 1 Platforms developed and adapted for the CoordiNet Spanish demonstrator



Link: Detailed Market Intel presented at the IESO TDWG meeting

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# ICF - Department of Energy: MOC Platform

The U.S. Department of Energy collaborated with the consultants at ICF to outlines a framework for integrating distributed energy resources (DERs) into both wholesale and distribution electricity markets. Key highlights are outlined below:

- Functional areas were identified in the paper:
  - **DER Registration:** Establish standardized processes for cataloging DER technical specifications, locations, and operational constraints to facilitate market entry and grid integration.
  - **Market Coordination**: Develop protocols for information sharing, market rule alignment, and participation agreements among regional transmission organizations (RTOs), independent system operators (ISOs), distribution system operators (DSOs), and aggregators.
  - **Operational Coordination**: Implement real-time coordination mechanisms between transmission and distribution systems, including data sharing for metering and telemetry to support settlements and audits.
- **Market and Operational Coordination (MOC) Platform**: The report proposes a scalable MOC platform to support the above functions, emphasizing scalability, interoperability and security.
- Retail Electric Retail Regulatory Authorities (RERRAs) play a crucial role in overseeing DER tariffs, interconnection standards, and dispute resolution between DSOs and aggregators.
- Conclusion: The integration of DERs into electricity markets necessitates a **coordinated approach** involving standardized registration, market participation protocols, and real-time operational coordination. The proposed MOC platform aims to facilitate this integration, ensuring grid reliability and regulatory compliance.



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*Source: U.S. Department of Energy, Office of Electricity. (2024, April). TSO-DSO-Aggregator Market and Operational Coordination Requirements (Version 9).*

# Key Observations from Market Intel

- There is no one solution to effectively accomplish T/D coordination, it will need a whole eco-system to interact with multiple tools.
- Complexity of T-D coordination was highlighted by some of the deep-dive examples
- Jurisdictions have taken many different approaches: some have built new platforms, some have enhanced platforms already in place, some have only dealt with one component of the DER lifecycle through a platform or have used a combination.
- There is no one-size-fits-all platform out there. Each solution tackles a different component of the DER lifecycle. A combination of existing and new tools will provide the required landscape for coordination of DERs and accomplish T/D coordination of these DERs to unlock maximum potential.
- Existing markets have a role; they have served as a starting point to building software tools like a Shared Platform.
- Processes between TSO and DSOs can be shared. For example: registration can all happen in the same place. This would minimize the burden of information exchange, especially in cases where new information is required.
- To enable information exchange needed within the shared platform, important to understand how all the system actors existing platforms will interact with each other. Look at it as a whole landscape, just not one solution.

# B3 Requirements



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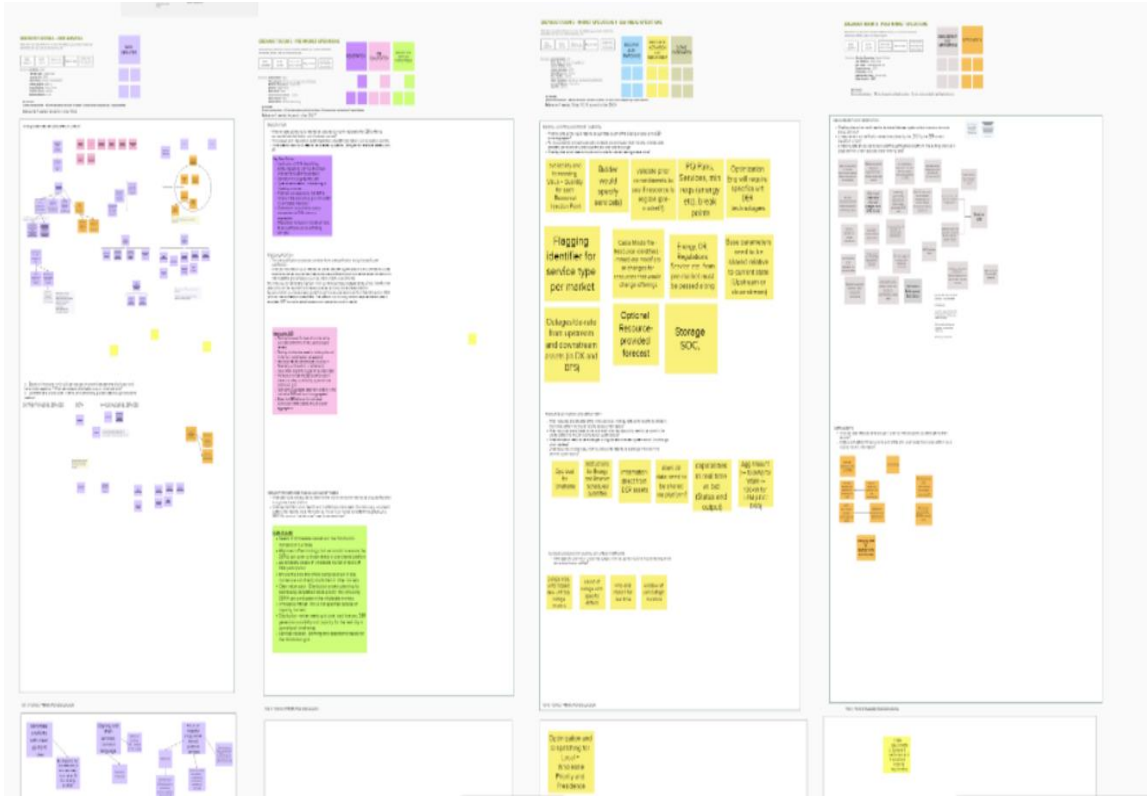
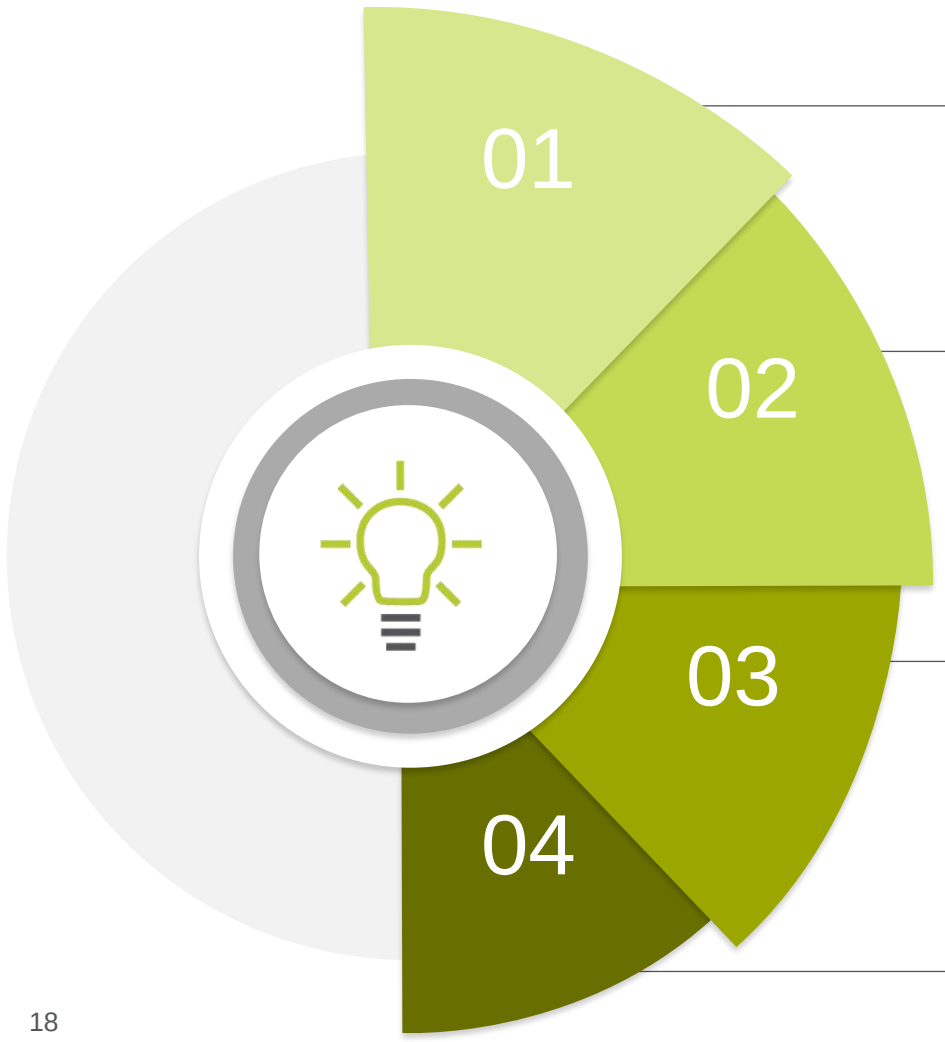
# B3 Workshops

- Conducted many small (5-10 members) and large (>30 member) workshops to help understand the requirements for a shared platform concept
- The focus group workshop was run virtually with voluntary participation from ~30 TDWG members. Virtual collaboration tool Mural was used to facilitate discussion.
  - IESO
  - LDCS: Hydro One, Essex Power, ENWIN Utilities, Alectra
  - Vendors: Piclo, Quanta Technology, GE Vernova
  - Consultants: ICF ,EPRI
  - Ontario Energy Board
  - Ministry of Energy and Electrification

This workshops helped gather insights for input to defining the requirements and facilitate collaboration amongst TDWG members.



# Key Benefits of a Shared Platform




## Removing barriers for DER participation in the province

- Simplifying onboarding and customer experience.
- With 60+ LDCs, standardized registration tools are key.
- Multiple platforms with varying rules would make DER aggregation impractical and unviable in Ontario.

## Improving coordination for system operators and utilities

- Avoids point to point integrations.
- Will ensure commitments made to one party doesn't conflict with another.

## Shared visibility of available DERs across the province

- The concept of a DER register is important.
- Integrations from existing/new LDC systems can be built.

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## Offers communication mechanism for responsibilities outlined in the coordination protocols

- The coordination protocols outlined by the IESO requires the LDC to share DER related information with the IESO, and the shared platform could facilitate that data exchange.

# User profiles

## DER Aggregator

Manages and operates a combined capacity of multiple individual DERs to create a single, larger resource. As part of the shared platform, an aggregator will be able to manage one or more contributor DERs within it's one account.

## DER Owner

An individual that owns the DER asset and is offering energy services through their assets directly to the utility and/or bid it in the wholesale market. One DER owner can operate multiple assets/resources.

## Transmission System Operator

This represents the IESO in the province of Ontario. Within the shared platform, the TSO will have various access and user rights, such as sending information about wholesale-level dispatches, and extracting DER asset-specific information

## Distribution System Operator*

Represented by a future entity, such as a distribution system operator, that manages the distribution level system. The DSO will also have various access and user rights, like sharing Dx-level outage information, placing DER limits, ensuring DER assets are able to operate within safe measures.

## Platform Administrator

have administrative user rights to approve/reject changes (such as changes to user profile information), update resources IDs or other identifiers, or any related updates. The entity who will assume this role will be decided later, once it is clear who is responsible for building, managing, and maintaining this platform.

## Guest Profile

This profile/user will have view only access, and this entity will be able to view some pre-determined information for information purposes only.
To be determined. Some roles would have to be established in the future



*The roles and responsibilities of the DSO within the shared platform will be incumbent upon sector alignment on the DSO topic.

# DER Lifecycle Processes

A Shared Platform Concept can house functionalities within each processes of the DER lifecycle, from “Bid to Bill”. Build on the Functional Assessment (B1) work, the following processes cover the DER lifecycle:

- Planning
- **Pre-Market/Registration**
- **System Conditions, Operation and Needs**
- **Needs Communication, Response & Reception**
- Response Evaluation
- **DER Operations**
- **Measurement and Verifications**
- **Settlements**

Planning for DER use cases and Response Evaluation of DER bids/offers is not a part of the shared platform scope. These are utility-specific functions that will utilize existing/new business processes/tools.



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# Process: Pre-market/Registration

**User Registration**

- Supports multiple user profiles
- Collects personal and contact details.
- Admins can edit user data.
- Unique ID assignment.
- Integration with IESO for data sharing.

**Asset Registration**

- Supports single and aggregated DERs.
- Captures resource data (name, address, type, ramp speeds, Meter IDs).
- Allows future updates and system operator approvals.
- Assets can be tagged for wholesale use cases, distribution use cases, or both.
- Prevents duplicate registrations and supports aggregator switching.
- Shows DER location and grid connection details.
- Compares registered meter IDs for validation.

**Unique Identifier: Opportunity for sector collaboration**

A unique identifier that can be shared between DER/As, LDCs and IESO will be key to enabling data exchange. This ID should be tied to Asset Specific Information, Grid Specific information (Station, Feeder – Nominal Conditions) and update when required.

# Process: Pre-market/Registration

**Contract Management**
- Potential for joint contracting using standardized templates
- Enables cross-market contract coordination and testing of resource capabilities

**Contributor DER Management**
- Aggregators can upload/manage DER lists with activation dates
- Platform ensures DERs aren't registered in multiple programs simultaneously
- Displays service territories and maintains logs of active/deactivated DERs

**Connection Assessment Checks**
- Validates connection assessments (under/over 10 MW)
- May evolve into a DER register centralizing interconnection data

**Asset Meter Management**
- DERs submit metering information
- System operators validate and approve
- Meter updated/change process should be available to DER owners/aggregators

# Process: System Conditions, Operation and Needs

**Bids/Offers Functionality**

- **Resource Plans**: DER Aggregators (DER/As) will submit resource plans via a shared platform, detailing when their DERs will bid for energy availability.
- **Integration with IESO**:
  - The platform will connect with IESO systems (e.g., EMI) via APIs to pull bids/offers and energy schedules.
  - Future enhancements may allow direct submission of wholesale market bids through the shared platform.
- **Bid Submission and Management**:
  - DER/As will submit bids including quantity, price, availability windows, and resource IDs.
  - Bids for the same asset should be consolidated and tagged with unique identifiers for visibility across both wholesale and distribution markets.
  - All bids/offers should be visible to relevant operators; notifications must be sent to DER/As upon bid selection.
  - Updates to bids after market close must be logged and shared with system operators.
  - Historical bid/resource data should be exportable (CSV/Excel).
  - Bidding will be blocked during participant-reported outages or distribution constraints.

# Process: System Conditions, Operation and Needs contd.

**Floor Prices (for Distribution Service Visibility)**

- Distributors can submit “floor price” (zero-price) bids to reflect DERs selected for distribution services.
- This process can be automated and integrated with internal distributor systems.
- Floor price bids will be automatically updated during outages and can also be overridden manually by distributors.
- All floor price changes will be logged and made available via reports.

**DER Limits**

- Distributors will approve DER participation manually or via automation, depending on system maturity.
- Approvals must occur a few hours before IESO’s Day-Ahead Market closure.
- Distributors can also set operational limits (initially peak limits; future potential for dynamic limit curves).
- The platform should display aggregated DER load at T/D connection points and support partial automation of limit processes as systems evolve.

# Process: Needs Communication, Response & Reception

**Visibility and Coordination of Grid Service Needs**

- According to the coordination protocols, it's crucial that both the DSO IESO have visibility into each other's instructions to DER Aggregators (DER/As). While the **needs assessment** (identifying system needs) occurs outside the shared platform using standardized tools, the **communication of those needs** can take place within the shared platform.
- For **distribution service needs**, DSOs could submit requests by market zones, congestion zones etc (to be determined at a later stage), which may include:
  - "Requests for service" with alerts to participants
  - Advance "standby notices" to indicate potential needs
  - Published requirements (e.g., location, size, timing, frequency)

Distribution schedules will be created in DSO-specific systems but displayed in the shared platform.

For **wholesale market needs**

- the platform will pull information like pre-dispatch schedules using **APIs** will enable integration with IESO systems (EMI, Dispatch Services, CROW, Dispatch Service application).
- Communication fallbacks, like phone calls when dispatch systems are offline, must be considered in system design.

# Process #6: DER Operations

- **Selection**
  - DERs are selected based on previous bids/offers.
  - At the wholesale level, selection continues through IESO systems.
  - For distribution services, selections and dispatch instructions (e.g., MW/MVAR, availability, duration) can be communicated via the shared platform.
  - Market participants must acknowledge selections.
  - Coordination protocols emphasize selecting DERs for distribution services **in advance** of IESO's real-time and day-ahead market processes.

- **Dispatch**
  - DER activation is guided by **real-time telemetry** (from DERs and Dx system configurations).
  - DSOs and the IESO must have **mutual visibility** into each other's instructions to avoid dispatch conflicts—especially when DERs serve both markets.
  - IESO must be notified by 10:00 EPT of next-day disconnections or load reductions.
  - Coordination includes:
    - Sequenced instructions to avoid over-commitment.
    - Shared platform logic to flag potential conflicts.
    - Exchange of real-time data through **existing communication pathways** ( real-time telemetry not a part of the shared platform)

# Process #6: DER Operations

- **DER Outage Management**
  - Outages affecting DER availability must be reported promptly by DSOs to the IESO.
  - Information shared includes state changes, affected areas, and estimated restoration times can be shared as needed.
  - The shared platform should allow LDCs to submit planned maintenance or outage notices.
  - Gaps in outage data readiness across LDCs may affect integration—survey data can clarify this.

- **Distribution Constraints**
  - The platform should enable operators to log **planned outages or constraints**, trigger automatic alerts to DER owners/aggregators, and notify the IESO of any potential impacts to wholesale schedules.
  - A **historical log** of distribution constraints should be exportable (CSV/Excel).
  - DER output may be limited (de-rated) due to system conditions, which becomes complex when constraints apply to individual DERs within aggregations.

# Process: M&V and settlements

## Measurement and verifications reporting

- Integration with IESO MDMR system for access to residential data, if needed.
- Integration with LDC Meter Data Management (MDM) systems to pull metering data
- Performance reporting views
  - Activated kWs
  - Delivered kWs
  - % delivered
- Storing baseline data (historical loading) at a pre-set interval. This information can be used to establish baseline parameters for demand response resources.

## Settlements reporting

- Number of events
- Unofficial activation and/or delivery payments
- Assets run time
- Breakdown of trades, pie charts
- Participation set points data
- DER limits
- Outage notices, maintenance schedules

# Wholesale System Integrations

The following information can be pulled into the Shared Platform from existing IESO systems:

- **Dispatch Data:** submitted by MPs through the IESO's Energy Management Interface (EMI) application. MPs can either input the data directly via the IESO's web-based application, or they can submit data via an EMI Application Programming Interface (API). Data from EMI then feeds into the IESO's Market Information Management (MIM) system, which is responsible for receiving dispatch data, and then publishing market results.
- **Dispatch Instructions:** Dispatch instructions are sent to MPs via the IESO's Dispatch Service (DS) application. MPs can either receive the data directly through the DS web user interface, or they can receive it through a DS API.
- **Outage Information:** Through the Control Room Operations Window (CROW) application.

Important note:  Most of this information will be pulled through point-to-point integrations or API connections. To the extent possible use standardized communication protocols (e.g., IEEE 2030.5, OpenADR, etc.) for the Shared Platform API.

# Distribution System Integrations

As highlighted in the B1 (Functional Assessment) Deliverable, the Shared Platform can be linked to utility systems through an operational service bus, integration with DSO systems like:

- **Whole System Coordinator (WSC):** brain of the DSO operations
- **Forecaster (Short Term):** generates forecast at different time granularities as needed
- **Power System Analysis (PSA):** determines system conditions/needs

In terms of specific LDC systems, shared platform can built integrations with the following LDC specific systems to pull DER specific information:

- **ADMS:** Advanced Distribution Management System
- **GIS:** Geographic Information System
- **MDMS:** Meter Data Management System

# Regulatory and ownership considerations

Important to highlight the need for a regulatory, ownership and governance framework for a shared platform:

## Regulatory considerations

- Fair and equal access to all market players in the ecosystem
- Needs to be a flexible solution - the platform should allow for ongoing evolution of market design construct development
- Make market process robust, using the most advanced available technology
- Efficient and ongoing maintenance is an assigned responsibility
- Shared ownership should be contemplated - Ownership allows fast decision making to adapt changes required to serve it's intended service. Explore various ownership models to allow joint consensus
- Regulatory guiding principles will provide guiderails to help design this solution in the future: most effective tool to add value to ratepayers. Outline social benefits, ratepayers benefit etc.

## Ownership and governance considerations

- Ownership refers to who holds legal and financial control of the platform.
- Governance refers to how key decisions about the platform are made.
- Ownership includes securing funding, managing assets, and recovering costs—along with any associated financial risks and rewards.
- Governance involves setting strategy, establishing policies, and representing stakeholder interests through oversight structures (e.g., a Board of Directors).
- Both ownership and governance of the Shared Platform must be clearly defined and addressed.



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# Next steps



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# Things to consider

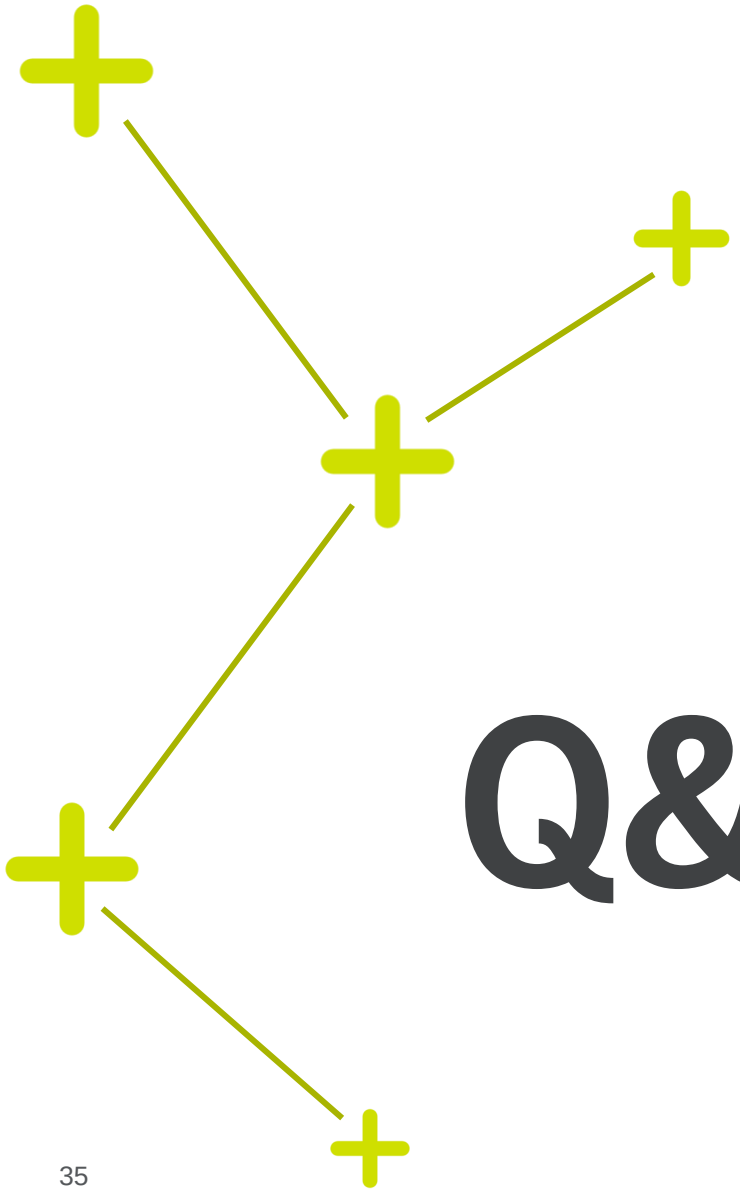
Questions to be answered to propel this work forward:

- To enable service stacking in the future, consistent procurement practices across system actors should be considered.
- A **standardized set of LDC-level market rules** and program designs is imperative.
- The current state of DER growth, both provincially and locally, must be assessed to understand where DER participation interest exists.
- The benefits and drawbacks of a **standardized platform vs. individual LDC/DSO platforms** must be evaluated — considering ownership, access, and confidentiality implications.
- A suite of tools, including utility systems like DERMS and ADMS, will be needed — not just a single tool.
- Since not all features can be implemented at once, it's important to establish **selection criteria** to prioritize features. Governance and implementation roles will also need to be clearly defined.
- Although remuneration has been deemed out of scope, it's important to acknowledge that **cost recovery** for coordination, system updates, and personnel is a critical topic that requires future attention to support effective DER integration.
- Ongoing **engagement** through the OEB's DSO consultation and the IESO's Enabling Resources Program (depending on ERP scope) will be important to maintain alignment and momentum.

# Stakeholder feedback questions

Engagement Questions:

1. Are there any other functionalities that you consider important for the shared platform?
2. Are there any considerations you would like to highlight regarding the use of a shared platform?
3. General comments



# Q&A



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# Thank You!



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