

Market Trials Administration

Market Trials Working Group
May 2, 2011



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- The objectives for the execution of the Market Trials (MT) phase of the EDAC project are as follows:
 - To demonstrate the readiness of both the IESO and market participant staff and systems to participate in the enhanced Day-Ahead Commitment Process (DACP).
 - To ensure that market participants have the opportunity to demonstrate the integration of their business processes with the EDAC business procedures and technical deliverables, and to test that the new EDAC systems derive the results expected under a range of scenarios.

- All Market Participants are encouraged to participate in Market Trials.
- The Market Trials will be guided and supported by an EDAC Market Trials Working Group (MTWG)
- The structured tests performed in Market Trials will be led by the EDAC Project team.
- Participants will have opportunities to undertake unstructured testing and report findings or defects to the EDAC Project team.

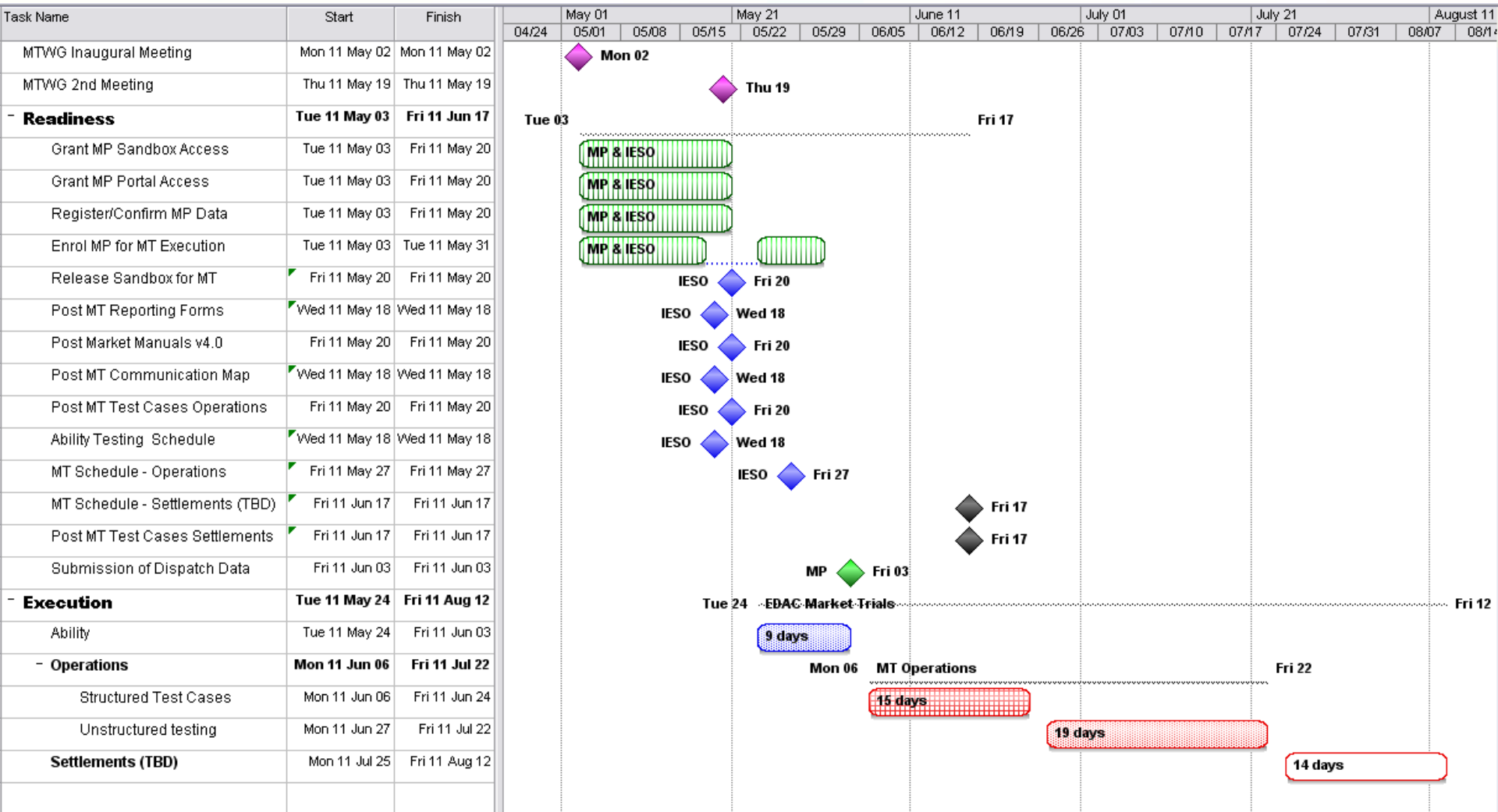
In Scope:

- Market Trials infrastructure testing:
 - **Connectivity Testing** – Designated for market participants using an Application Programming Interface (API) to connect to the IESO Market Information Management (MIM) system. This test allows market participants to test their API connections to the IESO Sandbox environment.
 - **Ability Testing** – Testing the market participant’s ability to connect to the Sandbox, to submit bids and offers, and to receive schedules and reports.
- Market Trials business process testing:
 - **Registration of New DACP Data** – Testing the procedures supporting the entry and maintenance of the market participant and facility registration data.
 - **Day-Ahead, Pre-dispatch, and Real-Time Operations** – Testing the business processes related to three operational timeframes (day-ahead, pre-dispatch, and real-time operations).
 - **Settlements** – Testing the business processes related to the settlements of the DACP.

Out of Scope:

- Testing of the discrete functions, processes, and systems that generate or receive information within a Market Participant's organization.
- Independent review of the implementation of the Day-Ahead Calculation Engine (DACE) and Settlements System - a final report will be made available to market participants.
- User Acceptance Testing (UAT) – a summary of test cases executed as part of UAT will be made available to market participants.
- Site Acceptance Testing (SIT).
- System Technical Testing – a summary of test cases for the Settlements systems only will be made available to market participants.

Market Trials Timeline & Key Events



- Market Trials testing will be conducted in the IESO Sandbox environment.
- Market participants connected to the IESO Sandbox will interact with the new and modified IESO systems that support the enhanced DACP.
- The IESO Sandbox will be upgraded to include all the changes resulting from the EDAC Project.

- Market Participants:
 - If you have access to the current IESO Sandbox (i.e., you have a User ID) - regardless of whether you received access to the upgraded IESO Sandbox during Stage 1 - you must request access to the new functionality by sending an email to edac@ieso.ca
 - Your request must specify:
 - Your existing User ID.
 - Your IP address of the workstation where IDK is loaded.
 - Your contact phone number.
- IESO :
 - Once the request is processed, the IESO will provide you with:
 - URL of Sandbox Stage 2 (via email).
 - IDK Implementation Manual:
http://iesoqa/imowebpub/201102/IMO_MAN_0023_v11.1.pdf
 - Password for Stage 2 (via telephone).

- Registration of new DACP data for testing will be conducted prior to the commencement of market Trials and will be reflected in the registration system in the IESO Sandbox.
- The IESO will provide communication contacts in advance of Market Trials. Contact phone numbers will be provided for the IESO roles participating:
 - Market Trials Test Coordinator
 - Market Entry (registration)
 - DACP Operator
 - Control Room Operator
- The IESO will provide a detailed test schedule in advance of Market Trials.

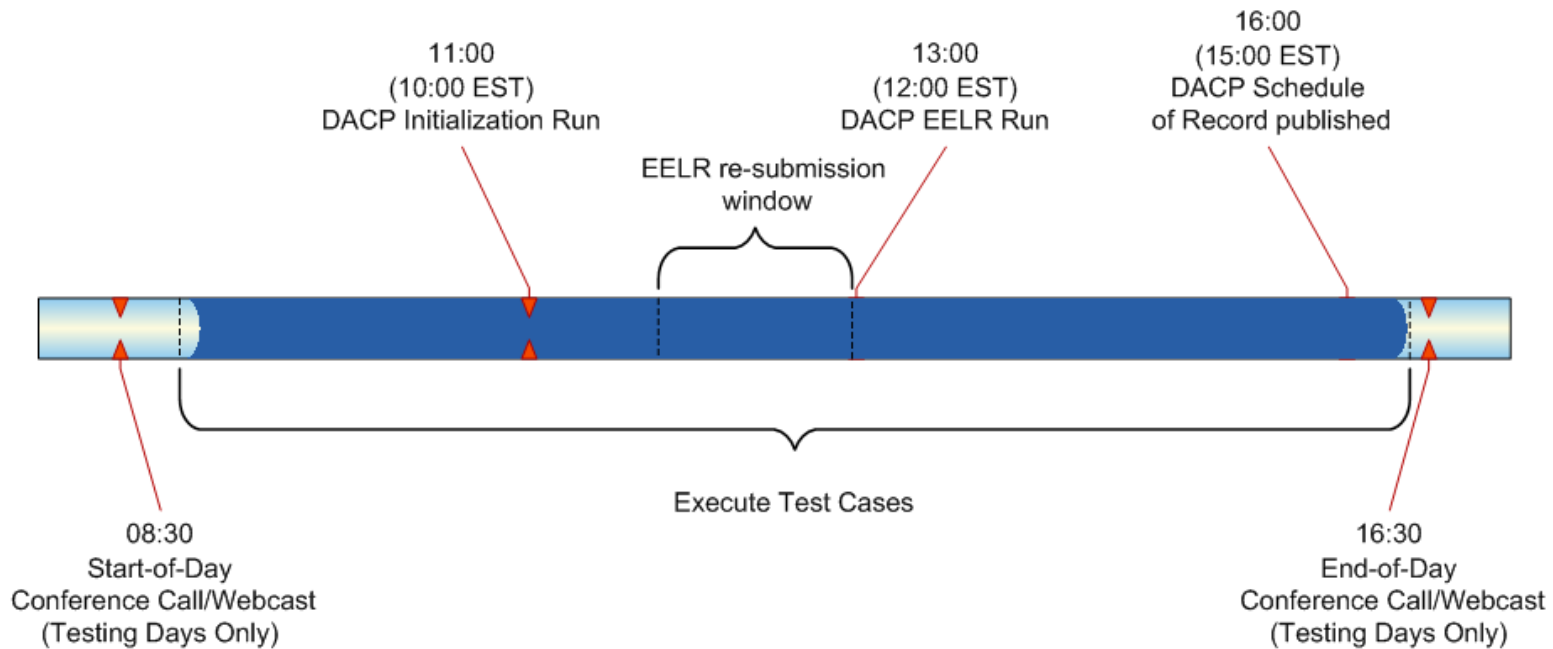
- The following methods will be used to communicate with market participants in preparation for, and throughout the execution of the Market Trials:
 - Meetings (MTWG).
 - Daily Conference Calls / Webcast (with teleconference link) .
 - Email.
 - IESO Portal.
 - Posted Schedules.
 - Reporting.

Day	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14	Day 15	Day 16	Day 17	Day 18	
Enrolment	E-001	E-007	E-023	E-023															
	E-002	E-008	E-024	E-024															
	E-003	E-009																	
	E-004	E-010																	
	E-005	E-011																	
	E-006	E-022																	
	E-020																		
	E-021																		
Initialization								I-012	I-008	I-001					I-020	I-010			
								I-013	I-009	I-002					I-021	I-011			
								I-014	I-018	I-004									
								I-015		I-007									
								I-016		I-019									
								O-001	O-014	O-012					O-017	O-007			
Optimization					O-004			O-002	O-016										
								O-003											
								O-005											
Real-Time															R-001	R-003			
															R-002	R-005			
																R-008			
Actors	- MP -Market Entry	- MP -Market Entry	- MP -Market Entry	- MP - Market Entry CRO - DACP Operator	- MP - DACP Operator			- MP - DACP Operator	- MP - DACP Operator	- MP - DACP Operator	- MP - Market Entry CRO - DACP Operator				- MP - CRO - DACP Operator	- MP - CRO - DACP Operator	- MP - Market Entry CRO - DACP Operator	- MP - Market Entry CRO - DACP Operator	
	LEGEND																		
	Testing Day		Test Cases will be executed on this date																
	Scheduled Case #		Specific Test cases that will be executed																
	Environment U/A		IT using testing environment for defet testing, releases etc.																
	Weenend/Holiday		No testing																
	Ad Hoc Testing		Tester Training																

- Generic market trials schedule showing test cases scheduled, testing days (structured and ad-hoc) and off days including days when the testing environment may be unavailable.
- The draft schedule can be found on the IESO portal at: [EDAC Stakeholder Engagement/8. Market Trials Working Group/Market Trials Schedule/Generic DACP MT Schedule and Playbook.xls](#)
- The final schedule will include specific dates.

- Start-of-Day Conference Call/Webcast to discuss:
 - Test environment issues
 - Test cases to be executed
 - Resource types participating
 - IESO roles participating
- Execute Test Cases:
 - Complete test execution forms.
 - Identify testing defects
- End-of-Day Conference Call/Webcast to discuss:
 - Test execution status
 - Testing issues/defects
 - Impact of reported defects
 - Issues encountered during testing that may affect the schedule for the next testing day

Market Trials Daily Schedule (Testing Days Only)



- Discuss testing environment issues
- Review test cases to be executed
- Review resource types (market trials participants) participating
- Review IESO roles participating

- Review test execution reports
- Discuss testing issues and defects
- Determine impact of defects on test schedule

- **Market Participant Responsibilities Prior to Market Trials:**
 - Declare your intent to participate for the duration of the testing cycle
 - Provide contact information for your testers
 - Request access to the IESO sandbox environment for Market Trials testing
 - Complete ability testing before the commencement of the market trials
 - Submit revised registration data as necessary
 - Submit dispatch data for the duration of the testing cycle (may be standing data)

- **Market Participant Responsibilities during Market Trials:**
 - Have testers available to address data issues for the duration of the testing cycle
 - Participate in market trials conference calls/webcasts
 - Execute the test cases that apply to your resource type
 - Report progress and status on the execution of test cases
 - Report defects on IESO systems, reports and processes that arise during market trials

• IESO Responsibilities Prior to Market Trials

- Provide contact information for ability testing (phone #'s and email address). IESO contact phone #'s will be provided for the following roles:
 - Market Entry
 - DACP Operator
 - Control Room
 - Test Coordinator
- Provide system access information:
 - Portal login & password (MPI)
 - Reports URL
 - Registration Form URL
- Provide phone numbers/URL's for daily conference calls/webcasts
- Provide market trials test schedule and test cases
- Provide form for reporting test case execution status
- Provide form for reporting defects (see Market Trials Test Plan)

- **IESO Responsibilities during Market Trials:**
 - Provide an up to date testing schedule
 - Identify test cases to be executed and resource types participating
 - Conduct start-of-day conference calls/webcasts (on testing days).
 - Conduct end-of-day conference calls/webcasts (on testing days).
 - Record and report on test case execution status
 - Record and report on defect status

- Market participants and the IESO will execute the test cases identified in the Market Trials Schedule and reviewed during the end-of-day and start-of-day conference calls/webcasts.
- Market Participants will submit a test case execution form for each test case.
- The test case execution form will identify the actors involved in each test case step and the execution status for each market participant test case step.
- The IESO will complete the form by adding the execution status of the IESO test case steps and determining the overall execution status of the test case.

Test Status	Test Status Description
Fail	The actual results and the expected results are different, indicating that a defect has been detected.
Pass	The actual results and the expected results are the same, indicating that the test case has passed.
In Process	The test case is in the process of being executed.
Retest	A defect has been fixed, or a change request has been implemented, which results in the need to re-run the test case.
Blocked	A test case cannot be executed because it is blocked by a defect.
Not Tested	A test case that is ready for testing, but has not been executed yet.
Conditional Pass	Allows test cases with a workaround (i.e., a defect was raised for a step in the test case).

- The EDAC Testing Team will track all defects raised during the execution of Market Trials.
- All market-facing defects raised will be reported to MT participants and the status of these defects will be communicated to MT participants through the SE-73 working group set up for Market Trials.
- Defects reported by MT participants should include all available information.
- The EDAC Testing Team will provide a form and mechanism for the submission of data related to defects.

Defect Priority	Defect Priority Description
Critical	<ul style="list-style-type: none"> - The defect results in a stoppage in testing and no acceptable workaround exists. - The enhanced DACP cannot be deployed with these defects outstanding ('showstopper').
High	<ul style="list-style-type: none"> - An acceptable workaround exists that allows Market Trials test execution to continue. - The enhanced DACP can be deployed with this defect outstanding, provided that a plan is in place to resolve the defect.
Medium	<ul style="list-style-type: none"> - The defect has no significant impact on Market Trials test execution. - The enhanced DACP can be deployed with this defect outstanding, provided that a plan is in place to resolve the defect.
Low	<ul style="list-style-type: none"> - The defect is minor or cosmetic in nature and does not impact the Market Trials test execution, or subsequent use by market participants or the IESO. - The enhanced DACP can be promoted to production with these defects outstanding. - These defects can be resolved at a subsequent release in accordance with business priority.

EDAC Market Trials Defect Form
<u>Date Reported:</u>
Submitted By:
Defect Name:
Defect Description:
Steps to recreate: 1. 2. 3. 4. 5.
Supporting Documentation:
Comments:
Resolution/Action Plan:
Date Closed:

- Test progress will be reported on a regular basis throughout the testing, and will be the responsibility of the EDAC Testing Lead.
- Sample of reports available to MPs include:

Process Coverage Summary

Process	Total Test Cases	Pass	Fail	Blocked	Retest	Not Tested	In Progress	Conditional Pass	Not Applicable	Outstanding
Enrolment	45	9	1	12	0	22	0	1	0	36
Enrolment, Initialization, Optimization	4	0	0	2	0	2	0	0	0	4
Initialization	44	18	2	2	0	22	0	0	0	26
Optimization	52	18	0	6	0	26	0	2	0	34
Real Time	16	4	3	1	0	8	0	0	0	12
Grand Total	161	49	6	23	0	80	0	3	0	112

Defect Tracking Report - MT

Defect ID	Date Created	Defect Name	Testing Cycle	Priority	Assigned Date	Defect State	Resolution	Target Resolution Date	Root Cause Description
DEF-026	February 14, 2011	Sample Defect for Market Trials	MT	High	February 14, 2011	Open	Testing sample for Market Trials		

- 100% of all test cases scheduled for Market Trials have been executed.
- No Critical, High, or Medium defects outstanding (without a plan to resolve).
- Market Trials Results report is available to market participants.