Market Operator User Group

27th May 2021



Housekeeping Rules

Keep your video switched off



Raise your hand if you have a question



When asked to unmute your line



Thank you for your cooperation



Agenda

Item	Presenter
Welcome	Anne Fitzgerald
SEMO CapEx Project Update	Mark Needham
Release Program Update	Mark Needham
Ex-Ante Markets	Liam McAllister, Michael Atcheson
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Q&A	



SEMO 2020/21 CapEx

2020/21		020/21		
		DA Annroval	Forecast Spend &	
	Project Description	RA Approval- SEM-21-006	Assets under	
		3EIVI-21-000	Construction	
Applicati	on / System Development Capital	€4,163,220	€4,142,586	
1	Market System Release Capital	€4,163,220	€4,142,586	
Project S	upport Capital	€2,103,000	€3,365,000	
2	Release Support Capital	€2,103,000	€3,365,000	
ISEM Ma	rket System Infrastructure Capital	€1,271,000	€1,228,000	
6	Market System Data Archiving	€1,128,000	€1,128,000	
16	Additional Market Environments	€143,000	€100,000	
Market S	ervice Resilience Capital	€526,000	€409,918	
8	MMS Performance Enhancements	€526,000	€409,918	
Unpredic	table CapEx	€200,000	€11,934	
	Unpredictable CapEx	€200,000	€11,934	
Total		€8,263,220	€9,157,438	



Project Update

- Market System Release Capital and Release Support Capital Releases that are underway but are not yet deployed to Production are included in Assets Under Construction. Once deployed to Production the release is capitalised and added to the asset base.
- Market Data System Archiving Currently in design discussion with our vendors on the construction of the Market Archive. We anticipate design to close by end June. Go live is expected in Q1 FY2022.
- Additional Market Environments The P2 environment has been fully commissioned and there are minor elements remaining that need to be implemented (centralised certificate management etc.) prior to deployment; we expect deployment of this project in this financial year.
- MMS Performance Enhancements This project will be completed by the end of June (when release G is deployed) and this project will be closed and capitalised¹.



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Release Program Update

Туре	Release G Summary	Business Area	System
CR	CR-072: Clarification to Intra-Day Quantity and Payment	Settlement	CSB
CR	CR-081: Amendment of conditions in which the Market Backup Price is used (MOD_03_19)	Trading/Pricing	RTPIMB
CR	CR-126: Configuration of Variable Market Operator Price to apply on a Tariff Year basis, not Calendar Year	Settlement	CSB
CR	CR-158: Repricing and relationship with Instruction Profiling	Trading/Pricing	RTPIMB
CR	CR-129: Correction of QUNDELOTOL calculations	Settlement	CSB
CR	CR-119: Changing Day Ahead Difference Quantity to Day Ahead Trade Quantity Within Day Charge Calculations	Settlement	CSB
CR	CR-088: Changes to configuration of FX Rates	Settlement	CSB
CR	CR-079: Registered Capacity Report Amendments	General/Other	Reports



Release G (On schedule for deployment June '21)

- 8 Change Requests
- 44 Defects targeted for release scope
- 14 items from Known Issues Report to be included, subject to final outcome of testing. KIR to be republished aligning with test outcome.
- High Level Impact Assessment Release G <u>here</u>

Release Program Update

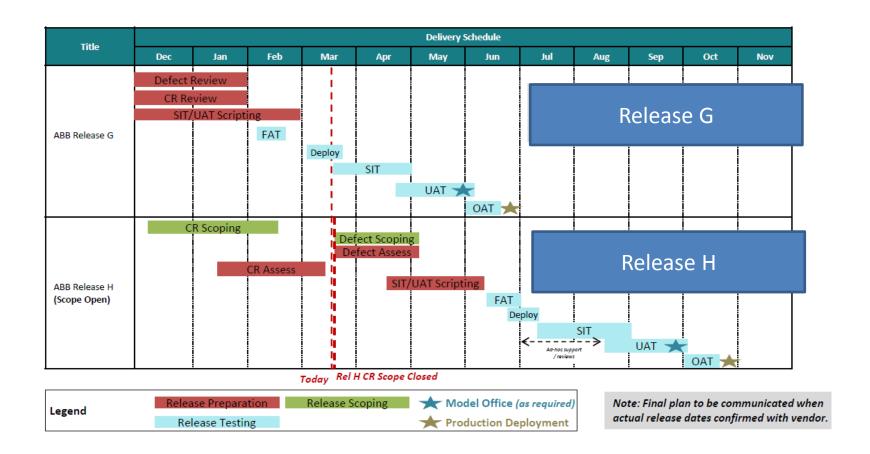
Туре	Release H Summary	Business Area	System
CR	CR-192: Submission of COD before effective date	Market Interface	MI
CR	CR-223: Technical Offer Data Submission	Market Interface	MI
CR	CR-247: Brexit VAT arrangements – ABB/MMS	Settlement	CSB
CR	CR-207: Correction of CR092: incorrect loss factors on QAB for interconnectors.	Settlements	RTPIMB
CR	CR-096: Automatic export of RD merit orders etc. after LTS, RTC, RTD runs	Trading / Pricing	MA
CR	CR-156: Recording of published LTS runs for audit	Trading / Pricing	MA



- 6 Change Requests
- 13 Defects confirmed at present for release scope
- # items from Known Issues Report will be validated as design closes and all defects included are agreed. KIR will be confirmed after test outcome.
- High Level Impact Assessment will be published once vendor design completes



Market Management System Delivery Schedule 2021





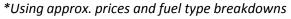
Agenda

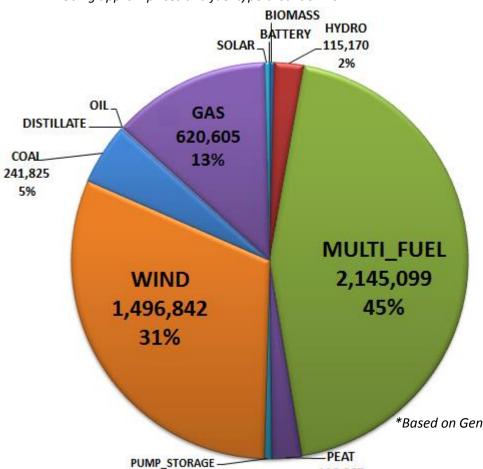
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Ex-Ante Markets

Volumes and Fuel Mix Mar - Apr 2021





116,867

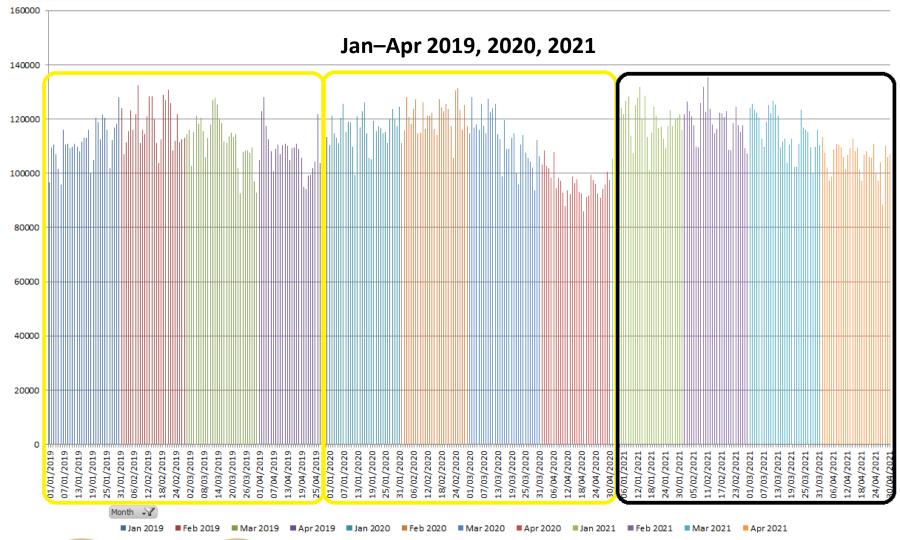
3%

		% of
	Value	DAM
DAM	€547,630,525	
IDA1	€164,930,064	30.12%
IDA2	€22,825,307	4.17%
IDA3	€6,856,352	1.25%
IDC	€527,440	0.10%

*Based on Generator DAM sell's by Fuel Type

29,835

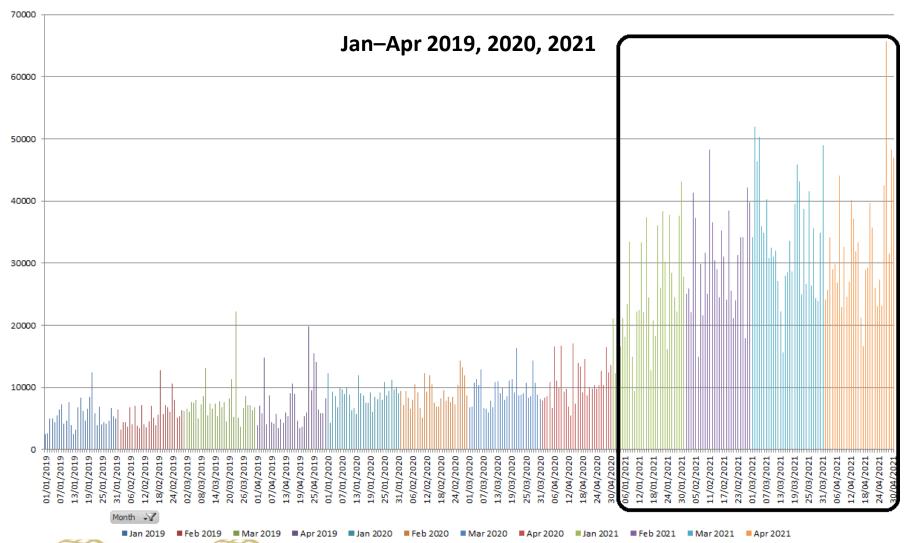
How have DAM Auction Volumes held up post Brexit?







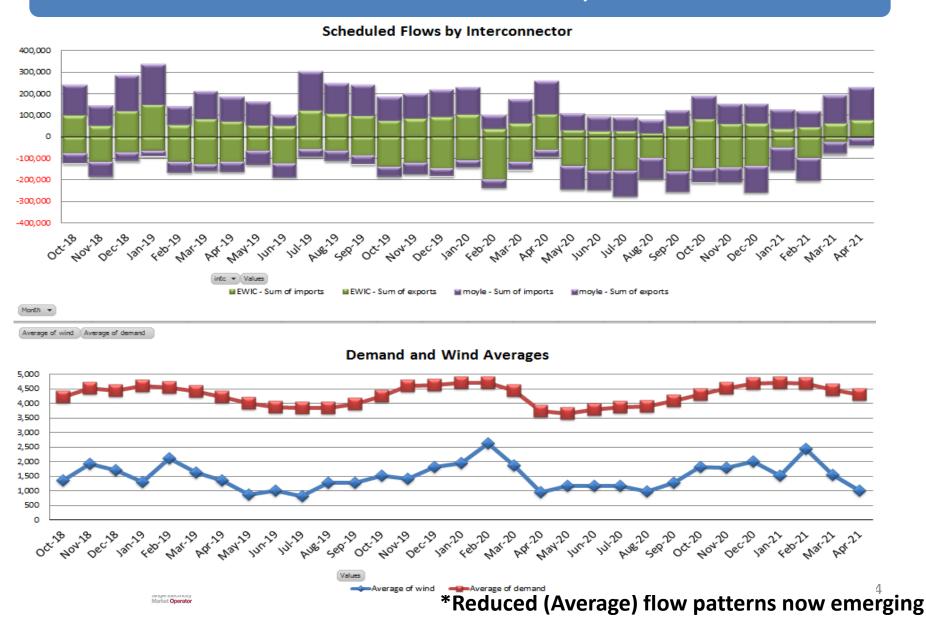
IDA1 Volumes



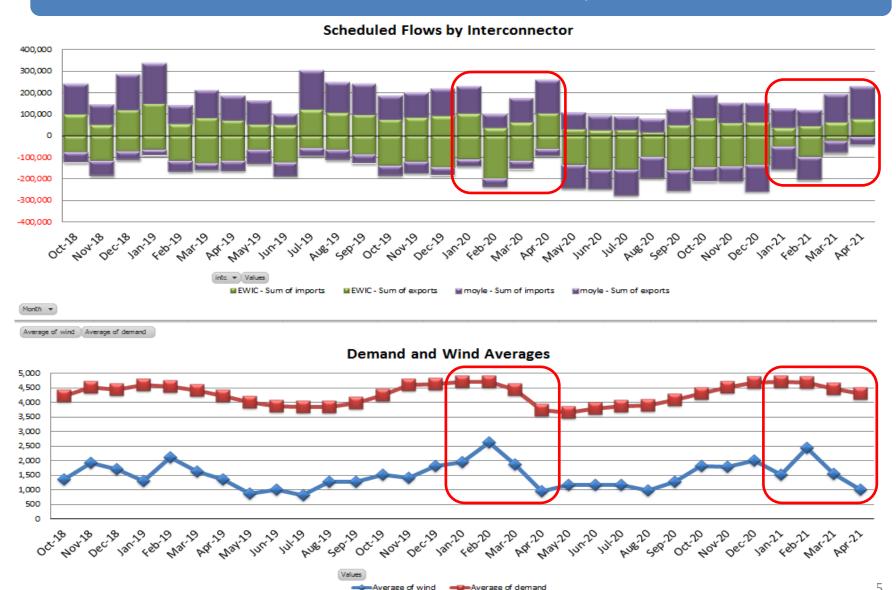




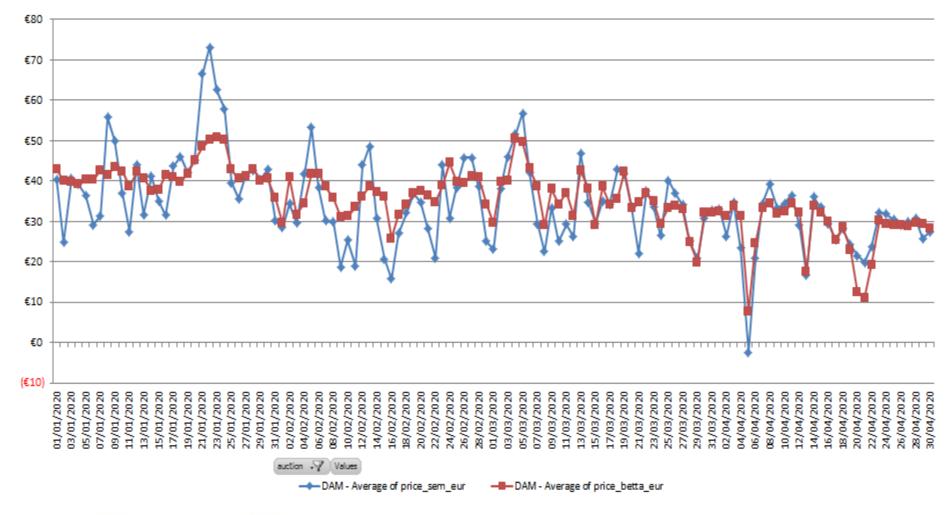
Scheduled Flows Pre/Post Brexit Comparison



Scheduled Flows Pre/Post Brexit Comparison

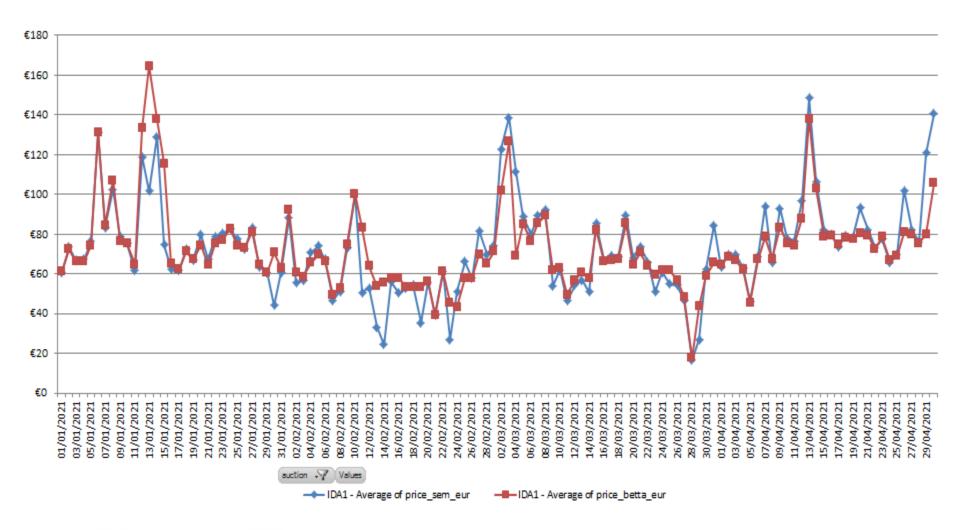


SEM-GB Price Spreads Jan-Apr 2020 (DAM)



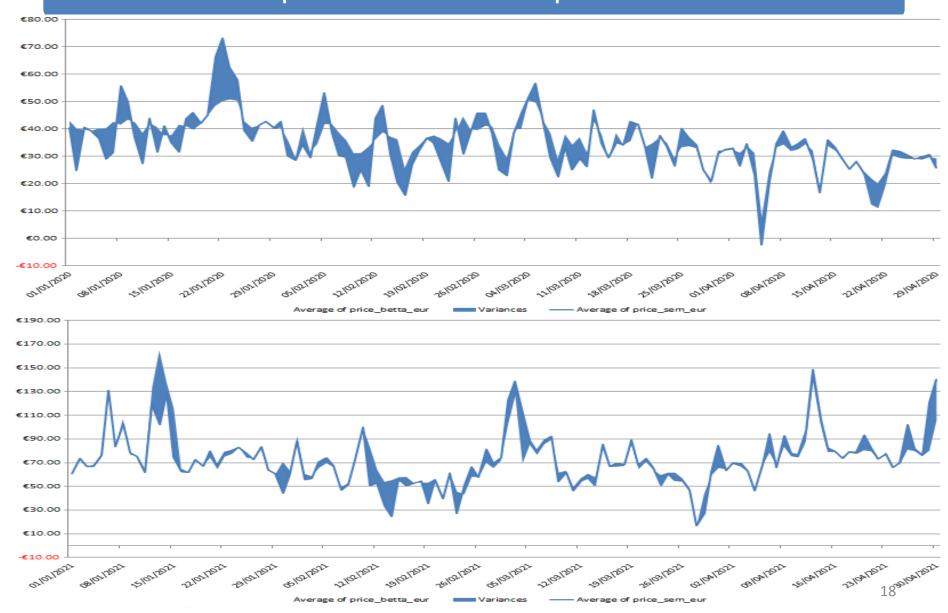


SEM-GB Price Spreads Jan-Apr 2021 (IDA1)

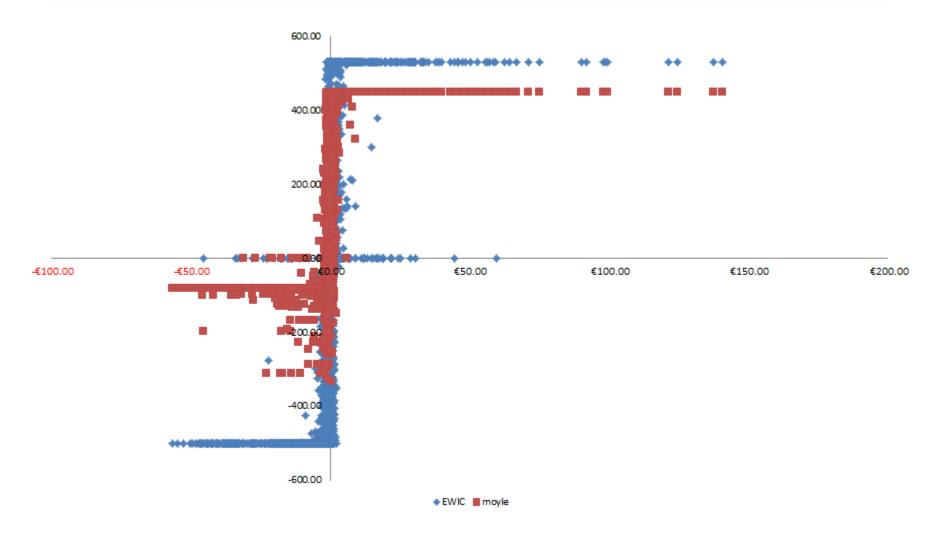




Variance of Coupled Auction Jan-Apr 2020 v 2021



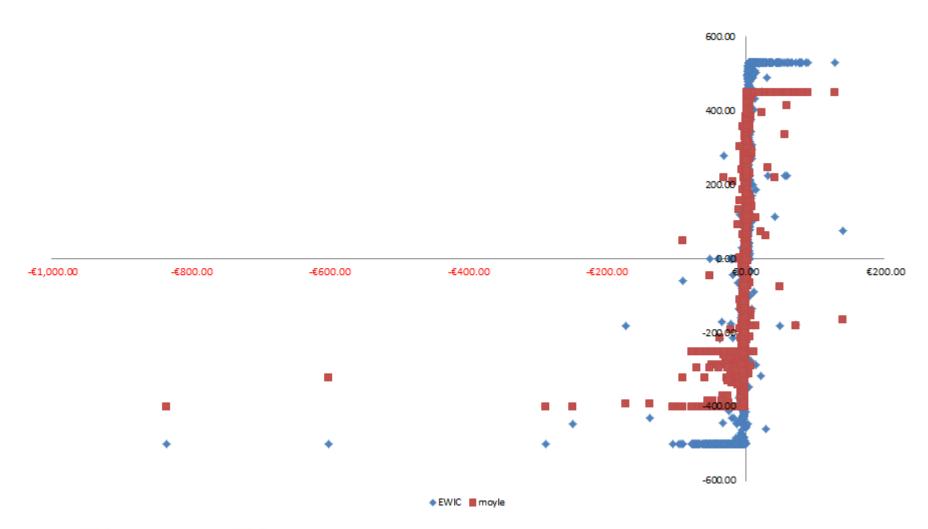
DAM SEM v BETTA Pre-Brexit Jan - Apr 2020







IDA1/2 SEM v BETTA Post-Brexit Jan - Apr 2021





Ex-Ante Market Analysis

In Summary

- ✓ Simple Look Back Analysis located on SEMOpx website here :
 - https://www.semopx.com/documents/general-publications/lookback_mkt.xlsx



ETS Releases

Version	Content	Client	Impact	Timeline
V3.5.1	 User permission restriction – Member change (This feature in the Trader Front End will allow the member to manage the permissions of the company's users) Forced logoff - Member change (ETS 3.5 will introduce the possibility to log off their ETS Users themselves. The objective of this change is that a second login is possible in case the first person logged in faces an issue and can't use its User) 	New client	Upgradable	Q2 2021 *End of June
V3.6	Scoping in progress			Q4 2021



ETS Maintenance Windows

Date & time	Impact	Reason	Communication
11/05/2021	ETS not accessible	Monthly Maintenance	ETS chat message (1 hour before the maintenance) + OMM message (email sent a week in advance and on the same morning)
08/06/2021	ETS not accessible	Monthly Maintenance	ETS chat message (1 hour before the maintenance) + OMM message (email sent a week in advance and on the same morning)
13/07/2021	ETS not accessible	Monthly Maintenance	ETS chat message (1 hour before the maintenance) + OMM message (email sent a week in advance and on the same morning)

^{*}Regular maintenance: Between 18:40 and 21:15 IST every 2nd Tuesday of the Month.



M7 Releases

Version	Content	Impact	Timeline
V6.11	Release notes / Impact to be sent.	 Very little change and none that currently impact functionality Mostly XBID and MO bug fixes 	Q2 2021 *End of June
V6.12	Release notes / Impact to be sent.	No information yet	Q3 2021
V6.13	Release notes / Impact to be sent.	No information yet	Q4 - 2021



M7 Maintenance Windows

Date & time	Impact	Reason	Communication
11/05/2021	Maintenance Cancelled	No updates from DBAG, ECC or EPEX IT side	M7 chat message (1 hour before the maintainance) + OMM message (email sent a week in advance and on the same morning)
08/06/2021	Maintenance	TBC	M7 chat message (1 hour before the maintenance) + OMM message (email sent a week in advance and on the same morning)
13/07/2021	Maintenance	TBC	M7 chat message (1 hour before the maintenance) + OMM message (email sent a week in advance and on the same morning)

Regular maintenance: Between 18:40 and 21:15 IST every 2nd Tuesday of the Month.



Change to Operational Timings DAM only

Changes to Operational Timings – go-live 17th June 2021

Normal Process	Current Timing	Proposed Timing (as of 17/06/21)
Results Publication	11:42	11:45
Final Results Publication	ASAP after 11:55	ASAP after 11:57

Fall Back Process	Current Timing	Proposed Timing (as of 17/06/21)
Full Decoupling Deadline (FD1)	12:50	13:00
Partial Decoupling Deadline (PD 1)	10:45	10:30
Partial Decoupling Deadline (PD 2)	11:40	11:45

Fall Back Process Communications	Current Timing	Proposed Timing (as of 17/06/21)
Deadline of informing about risk of Partial Decoupling (PD 2) Message ExC_03a	11:18	11:25
Deadline of declaring of Partial Decoupling (PD 2) Message ExC_04a	11:40	11:45
Deadline of informing about risk of Full Decoupling (FD1) Message ExC_03b	12:18	12:28
Deadline of declaring of Full Decoupling (FD1) Message ExC_04b	12:50	13:00



Upcoming Training Sessions

Submission on Behalf of Tool training session:

Date TBC

Communication issued out on 27th January 2021 outlining the training session overview and registration requirements

SDAC Decoupling member-test

3rd November 2021

Details to be provided in advance. If you would like to see something specific tested please let us know.



SEMOpx Help Desk Arrangements

SEMOpx Helpdesk

Ireland: 1800 283 010

Northern Ireland: 0800 008 3010

International: +353 1 668 8183

The SEMOpx Helpdesk is available Mon-Fri from 9.00am until 5.00pm, for all general queries or non-urgent operational queries.

1. Urgent Auction operational issues:	24 hr	marketops@ops.semopx.com
2. Urgent Continuous operational issues:	24 hr	marketops@ops.semopx.com
3. General queries:	9-5	info@semopx.com
4. Registration queries:	9-5	registration@semopx.com

SEMOpx customer support for urgent queries is available 24/7, 365 days a year.

This should only be used for emergency operational issues relating to Day-Ahead Market and Intraday Market.

For a detailed breakdown of gueries with the correct points of contact please refer to SEMOpx Contacts



REMIT Pass-Through Fees

- As communicated in a <u>market message</u> on the 10th February 2021, SEMOpx are implementing a **REMIT Reporting** Fee, which is a **pass-through fee for the ACER costs** associated with ACER's collection, handling, processing and analysing of the information that market participants report.
- ACER have calculated the REMIT fee payable for 2021 each member. Values range from €1,000-€4,000 dependent on the number of transactions(trades) reported. Earlier this week details have been emailed to registration contacts for each member by SEMOpx.
- SEMOpx plan to invoice for these REMIT fees at the start of June 2021.
- The fee will be invoiced on a separate SEMOpx REMIT reporting invoice. The REMIT fee
 invoices will be issued and payments collected by ECC on behalf of SEMOpx. Further details
 can be found in the <u>Statement of Charges</u>.
- Separate ECC Payment_Report_Summary (PRS) and ECC Payment_Report_Detail (PRD) files
 will be created for the SEMOpx Remit reporting invoices. They will have the same format as
 the existing SEMOpx invoice reports, the only differences being that the ACER REMIT
 reporting fee will be the only product ID, that VAT will be zero as the pass-through fee is
 outside the scope of VAT, and the report name will include REMIT_EGRD or REMIT_SONI.
- Feel free to contact us on info@semopx.com if you have any questions.



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Materiality Review

Progress to Date

Summary Changes	To be Completed	Completion Status
Total Days To be Repriced	100	59
Total Imbalance Settlement Periods	1500	984
Total 5 Minute Prices	9000	5,904
Material Periods to Date	NA	38% (prev 35%)

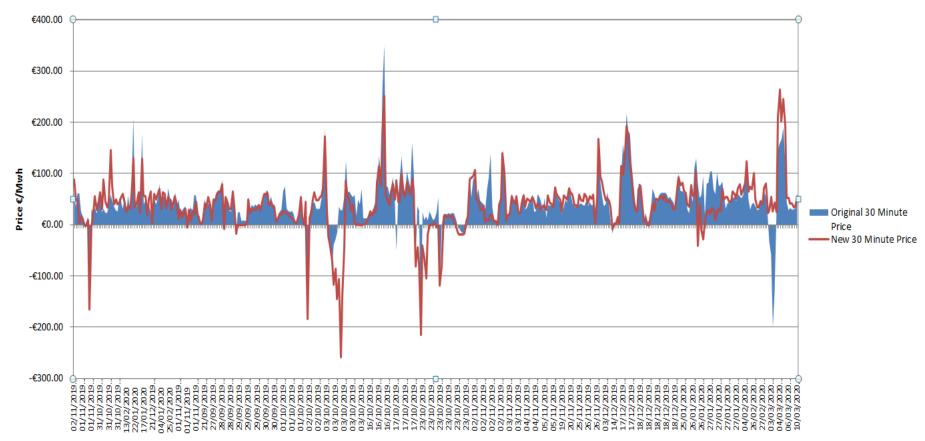
Price Change Summary (to date)

Summary Changes	Imbalance Settlement Price (€)
Average Price Change	-€ 10.92
Max Price Increase	€ 135.71
Max Price Decrease	-€ 286.57
Average Repriced ISP	€ 34.02
Average Original ISP	€ 44.94



Materiality Overview

Repricing Change Overview

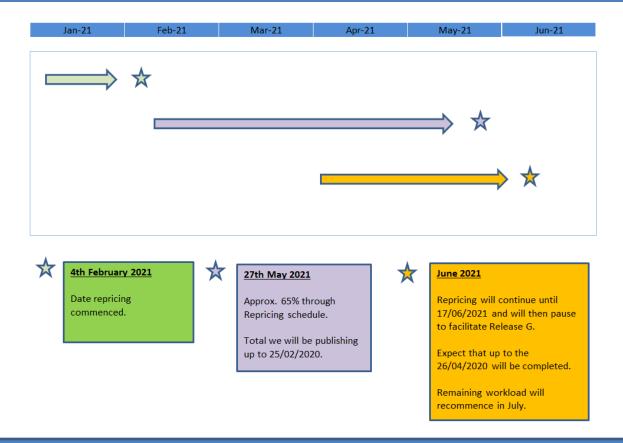


Dates Repriced





Next Steps



We are unable to publish 10th to 15th August 2019 and 8th October 2019 at this time; these dates will be scheduled post Release G deployment.

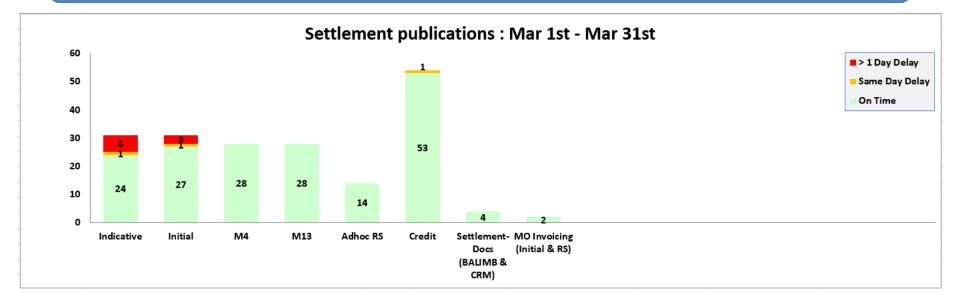


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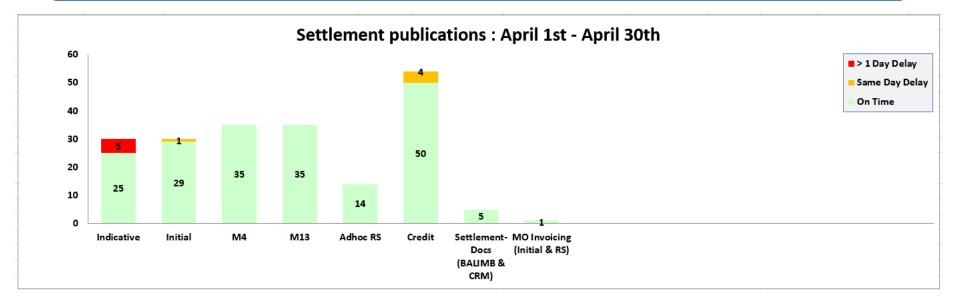
Settlement publications & timelines : Mar 2021



- Indicative publications: Delays due to Instruction Profiler issue (3) (KIR #209,601, now resolved) impacts of MDP data delays (2), internal system outage (1), additional review time required (1)
- Initial publications: Delays due to Instruction Profiler issue (1) (KIR #209,601, now resolved) and impacts of SONI TSO MDP data delays (3)
- M4 Resettlement: Published on time
- M13 Resettlement: Published on time
- Adhoc Resettlement: Weeks 41,42 2018 included with Settlement Docs in Mar 2021.
- Settlement Documents & MO Invoicing: Published on time



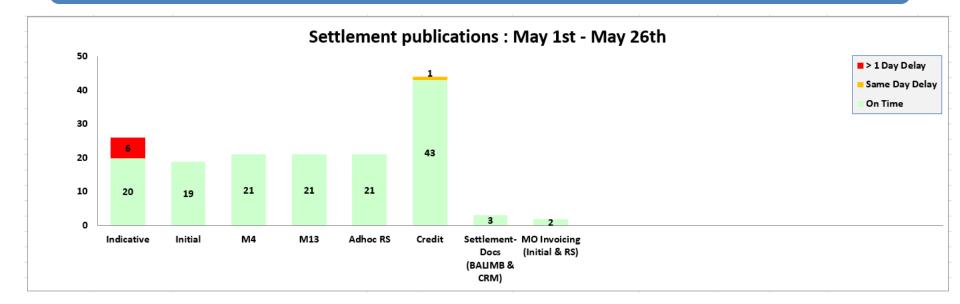
Settlement publications & timelines : April 2021



- Indicative publications: Late publications due to delay with receipt of SONI TSO MDP data (5)
- Initial publications: Late same day publication due to backlog of processing (1)
- M4 Resettlement: Published on time
- M13 Resettlement: Published on time
- Adhoc Resettlement: Weeks 43,44,45,46 2018 included with Settlement Docs in April 2021.
- Credit Reports: delayed indicative processing (2) & Internal system issue & outage (2)
- Settlement Documents & MO Invoicing: Published on time



Settlement publications & timelines : May to date (26th)



- Indicative publications: Late publications due to delay with day ahead market (DAM) trades (3), delays with receipt of MDP data (3) (MRSO MDP & SONI TSO MDP)
- Initial publications: Published on time
- M4 Resettlement: Published on time
- M13 Resettlement: Published on time
- Adhoc Resettlement: Weeks 47,48,49 2018 included with Settlement Docs in May 2021.
- Settlement Documents & MO Invoicing: Published on time



Settlements: Adhoc resettlement update

- 12 weeks of adhoc resettlement processed to date (October 2018 to December 2018)
- Adhoc processing to continue as per current adhoc schedule (one adhoc billing period resettled per week)
- SEMO will continue to assess and review the adhoc schedule once Release G is deployed to production systems (end of June timelines)



Settlements: MO Invoicing schedule change

- Feedback received from market participants re: payment fees and resource overhead required for small MO invoice amounts (received through weekly market calls and MODs committee)
- SEMO Settlements and Finance teams reviewed the process and recommended a schedule change to the MO Invoice publication dates: https://www.sem-o.com/market-messages/message/index.xml?message=3418
- ullet First month was trialled on May 10^{th} , with no issues raised from the market since MO invoices were published
- SEMO recommend keeping the revised monthly MO invoice schedule in place going forward is there any further feedback from the market?

MO Invoices: May 11 th publications;			
MO (1): Invoice contained Initial, M13 & Adhoc @23%			
MO (2): Invoice contained M4 @21%			
MO Invoice type	Previous expected publication date	Changed publication date	Vat rate
Initial resettlement - April 2021	May 10th	May 11th	23%
M4 resettlement - Dec 2020	April 30th	May 11th	21%
M13 resettlement - Mar 2020	April 30th	May 11th	23%
Adhoc resettlement - Nov 2018	May 10th	May 11th	23%



Settlements: Settlement Documents, May 28th

Settlement Document 1:

M4 BALIMB - (24/01/21 -30/01/21) – Week 04 2021

M13 BALIMB - (26/04/20 -02/05/20) – Week 17 2020

AH BALIMB - (16/12/18-22/12/18) – Week 50 2018

CRM M13 - April 20

Settlement Document 2:

INITIAL BALIMB - (16/05/21-22/05/21) - Week 20 2021



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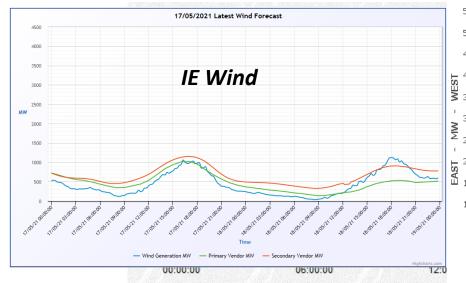
IE System Alert of 17th May 2021

Event Lead Up:

- IE Forecast Peak Demand: 4100 MW
- IE Generation Available (Non-RES): 4094 MW
- DB1, AD2, HN2, WG1, TYC, TB1, TB2, TB4, TP1, TP3 unavailable
- MP2 derated to 120 MW
- IE Wind Generation: 144 MW @
 09:15, forecast to gradually rise
- EWIC: **0** MW scheduled flow @ peak

Event & Follow Up:

- Unit TB3 tripped from 200 MW @ 09:25
- High NI->IE MW flows
- System Alert issued @ 10:15
- EWIC trade: 250 MW import from 15:00 to 20:00
- TB3 resynced @ 10:50
- MP2 declared to 175 MW @ 13:13
- System Alert lifted @ 15:25





Al System Alert of 13th April 2021

- Failure of All-Island Energy Management System (EMS) @ 10:34
- System conditions at time of event:
 - Demand stable ~ 5150 MW
 - Very low wind generation
 - No interconnector ramping
- System Alert issued @ 11:10
- Back-up Imbalance Pricing invoked
- System Alert lifted @ 12:50
- Report on incident provided to RAs



SO Further Updates

- IE Generation Margins remain tight:
 - New Security of Supply TCG introduced
 - Further System Alerts possible
 - Situation should improve from July
- System Non-Synchronous Penetration (SNSP)
 - 70% limit now enduring policy
 - 75% limit trial commenced April 22nd
 - Hit ~73% on May 3rd

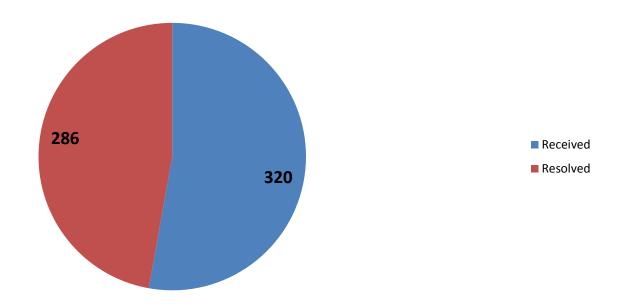


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General Query Statistics





Formal Query \ Dispute Statistics

From the 25th of March to the 24th May 2021:

- Formal Queries:
 - 45 were raised 26 answered, 19 are in progress.
- Disputes:
 - 1 General Disputes was raised, it was not upheld.



MOUG Calendar

Please see the MOUG dates for the remainder of the year:

- 12th August
- 14th October
- 16th December Operational updates



^{*}Subject to change if required

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Close

- > SEMO Website: http://www.sem-o.com/
- Semopx Website: http://www.semopx.com/
- Queries: lnfo@semopx.com; lnfo@semopx.com; lnfo
- Capacity Market: Capacity Market@sem-o.com

Thank you for your attendance.

