



Nordisk mFRR EAM

- planer for idriftsættelse april 2023

Torsdag d. 26. Januar 2023

Teams møde

Agenda

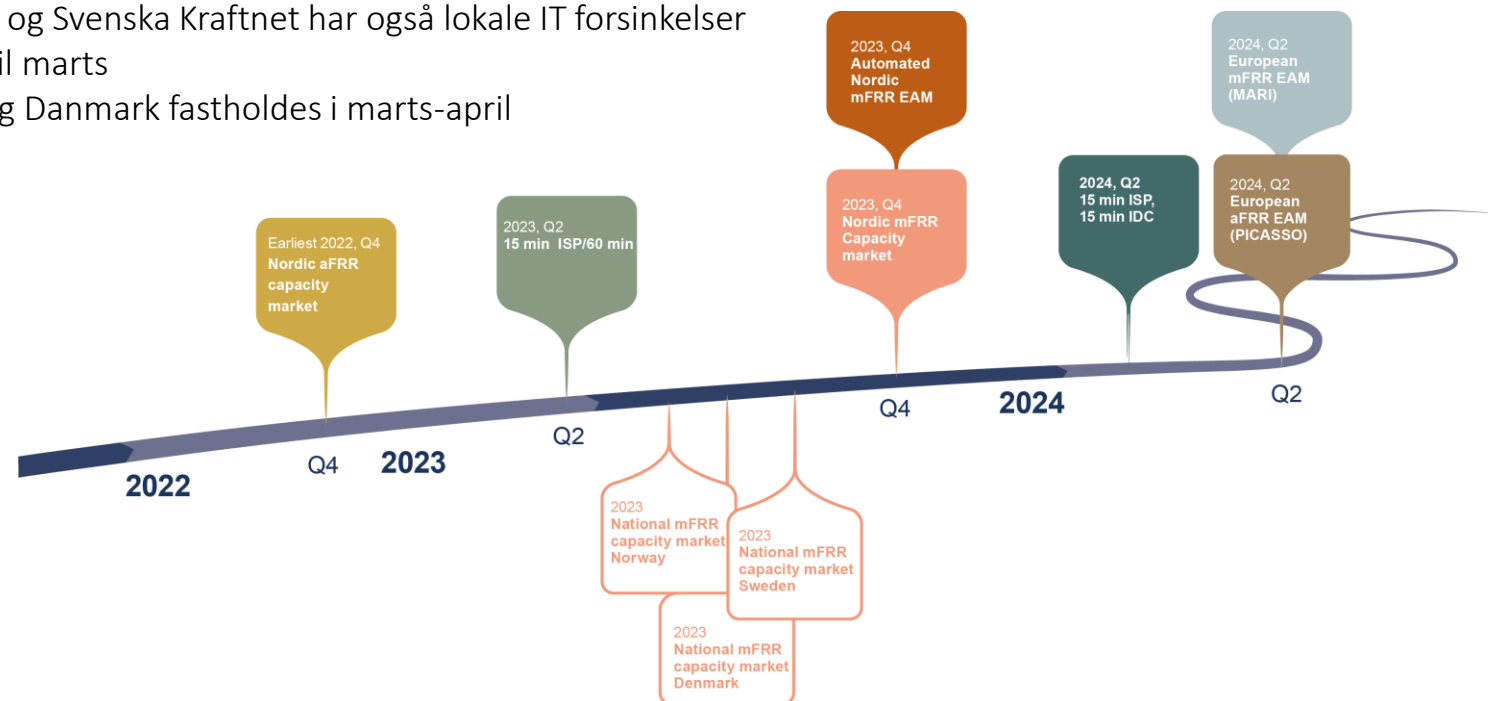


- Velkommen, praktik ift. møde
- Kort gennemgang af scope for april release
- Cutover plan, hypercare og test
- Diverse opdateringer
 - *Geotags*
 - *Ny implementation guide og eksempel filer*
- Dato for idriftsættelse

NBM ROADMAP

Status per januar 2023

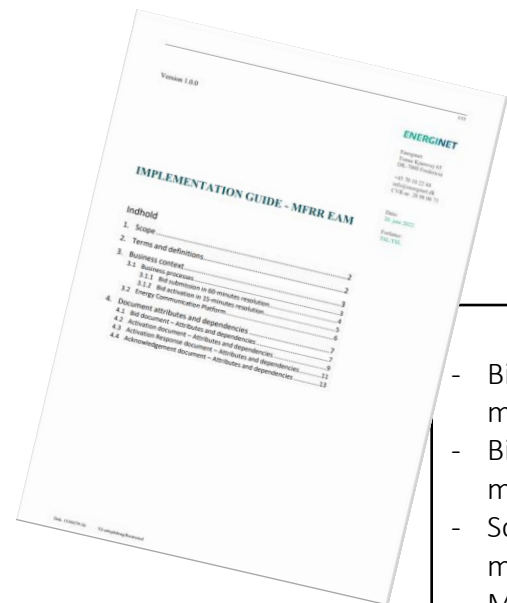
- Nordisk aFRR kapacitetsmarked blev åbnet d. 7.dec 2022
- Nationalt mFRR kapacitetsmarked i Danmark og Norge planlægges idriftsat i juni, derefter kommer svensk mFRR CM i september
- Nordic mFRR EAM har meldt ud om forsinkelse ift. oktober/november go-live
- Nordic mFRR EAM go-live kan tidligst blive i Q1 2024, da mFRR EAM har en afhængighed til go-live for Flow Based capacity calculation. Statnett og Svenska Kraftnet har også lokale IT forsinkelser
- Ny dato for nordisk mFRR EAM go-live forventes klar til marts
- Plan for national BRP/BSP transition i Norge, Sverige og Danmark fastholdes i marts-april





SCOPE FOR APRIL RELEASE

STEPWISE IMPLEMENTATION

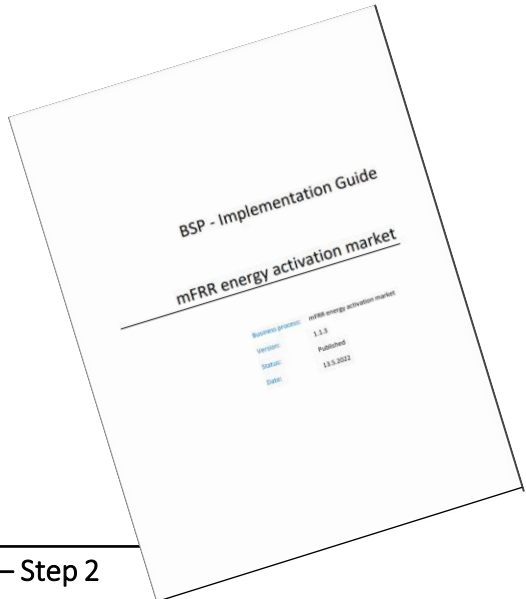


April 2023 – Step 1

- Bid submission in new format in 60-minutes resolution
- Bid activation in new format in 15-minutes resolution
- Schedules in new format and with mFRR activation timeseries
- Message exchange by ECP
- Standard ramps (ramping symmetrically around hour/quarter shift)

October/November 2023 – Step 2

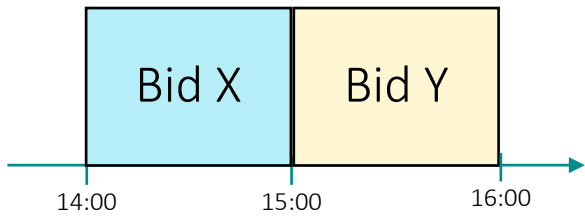
- Bid submission in 15-minute resolution
- New bid attributes
- Remaining message exchanges (health check, bid availability report, bid activation report)



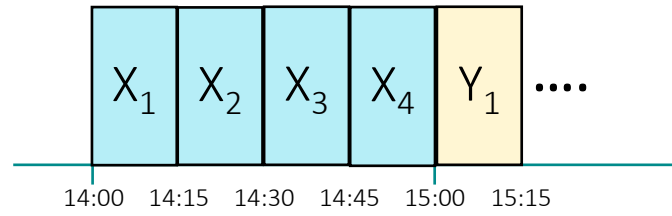
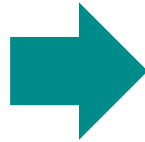
THE mFRR EAM PROCESS APRIL 2023

15 minutes activation resolution – but still 60 minutes balancing timeframe

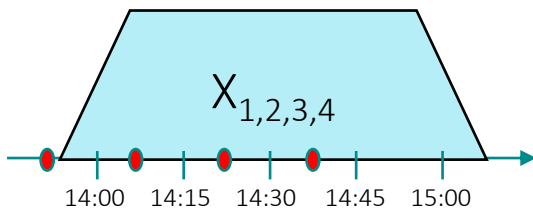
Scheduled
Activation



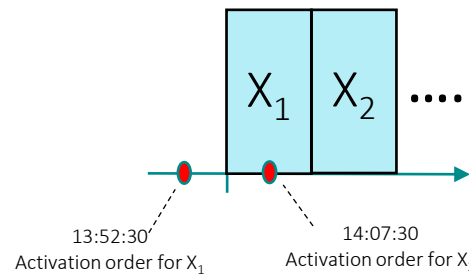
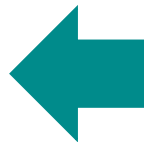
Bids are submitted in 60 minutes resolution by the BRPs.



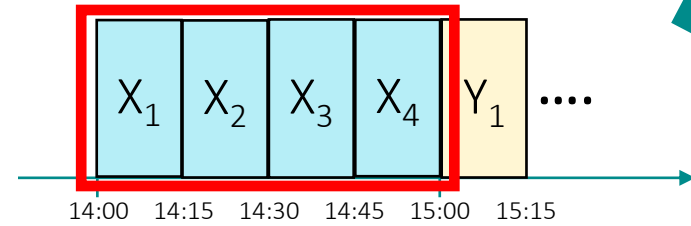
Bids are split into 15 minutes resolution by the TSO



The BRP will respond with activation respond and new schedules and is expected to ramp symmetrical around the quarter hour shift



Activation orders are sent to the BRPs at T-7½ for each quarter



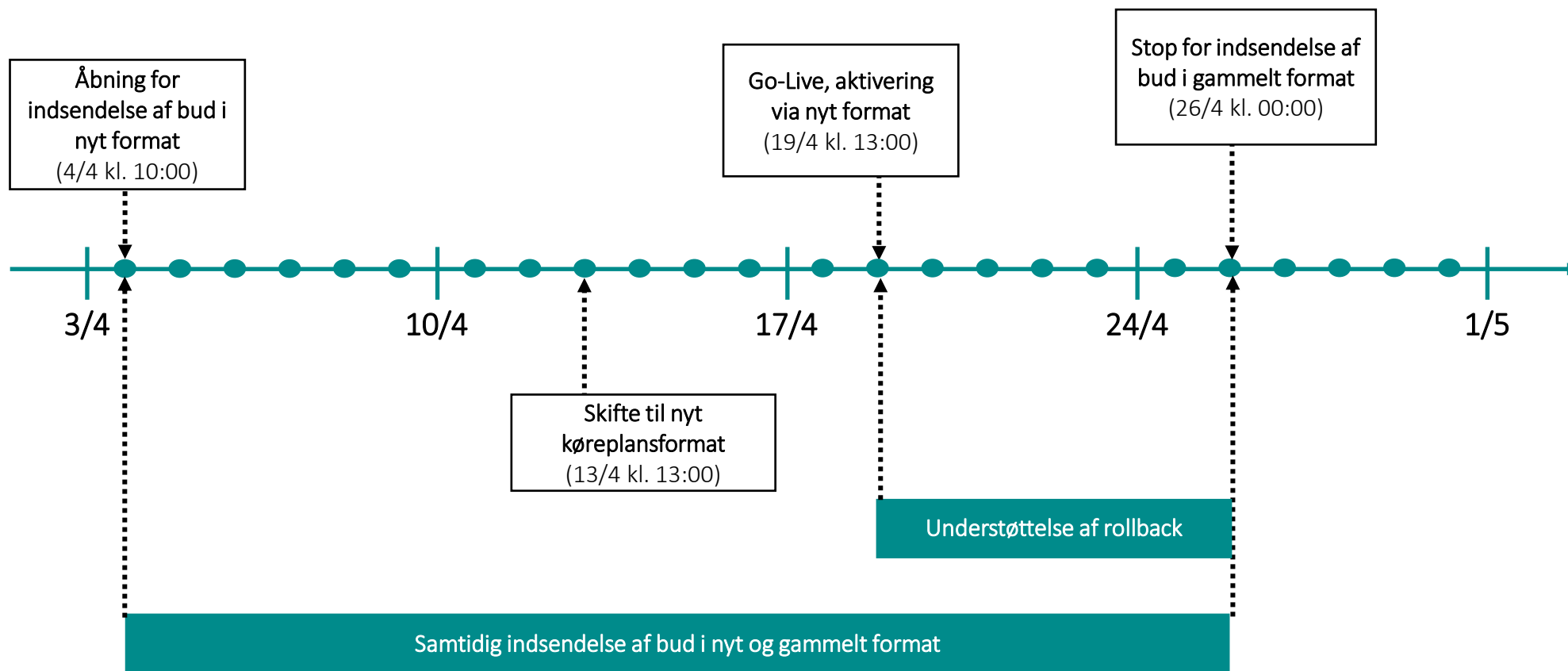
Energinet KC operator will select bids to activate each hour as today – but can select bids for a shorter period if necessary

A decorative graphic in the top-left corner consisting of a complex, interconnected network of thin, light-blue lines forming various geometric shapes like triangles and polygons, resembling a wireframe or a network diagram.

CUTOVER PLAN, HYPERCARE OG END-2-END TEST

TIDSLINJE FOR CUTOVER

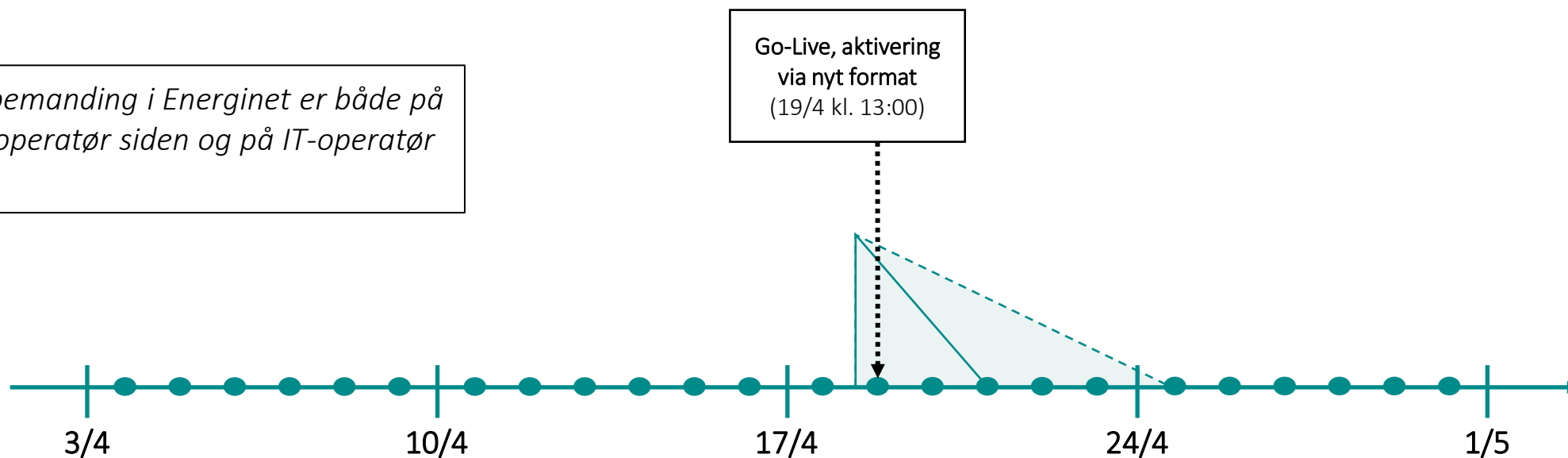
Go-live dato er besluttet til den 19/4. Tidspunktet forventes at blive kl. 13:00, men det vil blive kommunikeret endeligt i et opfølgende aktørmøde.



HYPERCARE

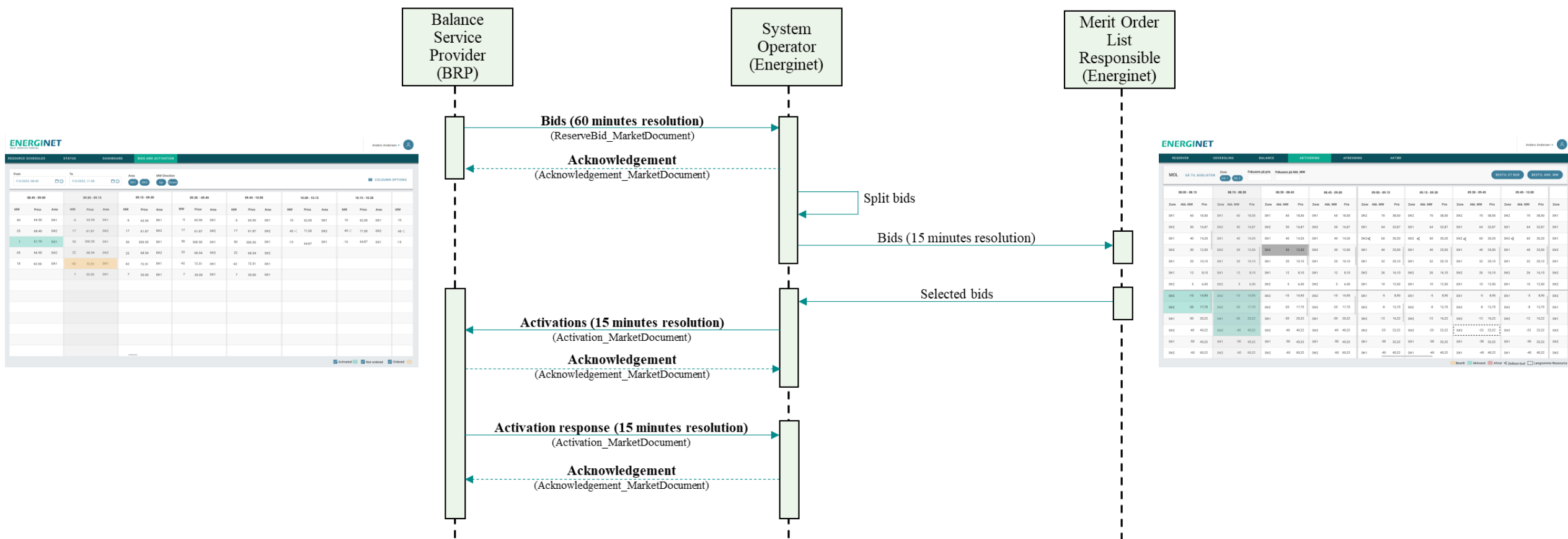
Energinet har øget bemanning i forbindelse med go-live. Forventningen er, at øget bemanning opretholdes i 2 døgn, men kan udvides efter behov.

Øget bemanning i Energinet er både på drifts-operatør siden og på IT-operatør siden.



END-2-END TEST

Scope - Test af komplet aktiveringsflow



+ Test af indsendelse af køreplaner

END-2-END TEST

Muligt fra mandag d. 6. februar til og med fredag d. 17. februar.

For tilmelding send mail med angivelse af ønsket testdag til:

Charlotte Bo Nielsen (xchbn@energinet.dk)

I vil herefter blive kontaktet med praktisk information om testen.

Dato	Aktør
6. Februar	-----
7. Februar	-----



DIVERSE OPDATERINGER

GEOTAGS

registeredResource.mRID skal indeholde den geografiske information, som pt. er "indkodet" i bud ID'et.

10/15

		10YDK-2-----M (DK2)
quantity_Measurement_Unit.name	M	MAW – megawatt
currency_Unit.name	M	EUR – euro
Divisible	M	A01 = Yes - quantity may be reduced to the minimum bid size by increments of 1 MW. When bid is divisible minimum_Quantity.quantity must be set to indicate the minimum allowed bid size. A02 = No - no reduction possible on the quantity, the bid is indivisible.
Status	M	A06 – Available
registeredResource.mRID	O	Name of the underlying ressource
flowDirection.direction	M	A01 – Up A02 – Down
energyPrice_Measure_Unit.name	M	MWH - Megawatt hours.
activation_ConstraintDuration.duration	M	Activation time - time for full activation of the physical resource including preparation time and ramping time

1. Revision history

Version	Date	Changed by	Comments
1.0.0	20.06.2022	Tage Søndergaard Larsen (TSL)	First published version of the guide
1.0.1	25.01.2023	Tage Søndergaard Larsen (TSL)	<p>Added:</p> <ul style="list-style-type: none">- Added revision history chapter- Added short paragraph on slower resources in chapter 4.1.1.- Added min (5 MW) and max (50 MW) limits in the description of attribute quantity.quantity <p>Changed:</p> <ul style="list-style-type: none">- Moved energy_Price.amount to after minimum_Quantity.quantity in ReserveBid_MarketDocument- Changed maximum price from 5.000 EUR/MW to 10.000 EUR/MW in the bid characteristics table in chapter 4.1.1.- Changed allowed minimum quantity for divisible bids from 0 MW to 5 MW (in attribute minimum_Quantity.quantity)- quantity_Measurement_Unit.name- Changed go-live date from «12th of April 2023» to «April 2023» <p>Corrected:</p> <ul style="list-style-type: none">- Corrected spelling error in attribute measurement_Unit.name

Ny implementation guide og nye eksempelfiler

Link: [Implementeringsguide mFRR-energiaktiveringsmarked \(energinet.dk\)](https://energinet.dk/energiaktiveringsmarked/mfrr-implemteringsguide)

SPØRGSMÅL TIL IG FOR KØREPLANER

Spørgsmål:

Hvordan angives en mFRR EAM nedregulering i det nye køreplansformat?

Svar:

Angives med negativt fortegn i mFRR EAM tidsserien. Tidligere version af IG angav, at negative værdier ikke er tilladt. Det er rettet i nyeste version.

A97 (mFRR): Indicates the amount of activated mFRR energy per facility/sum of fuel type with sign, with upward regulation indicated by a positive sign and downward regulation indicated by a negative sign. This time series must always be supplied. If ancillary services are not provided, the time series must be 0.

Example of use of signs for regulation:

Generation facilities that increase generation when activated supply a time series with a positive sign.

Demand facilities that reduce demand when activated supply a time series with a positive sign.



DATO FOR IDRIFTSÆTTELSE



And the winner is:

SPØRGSMÅL?

