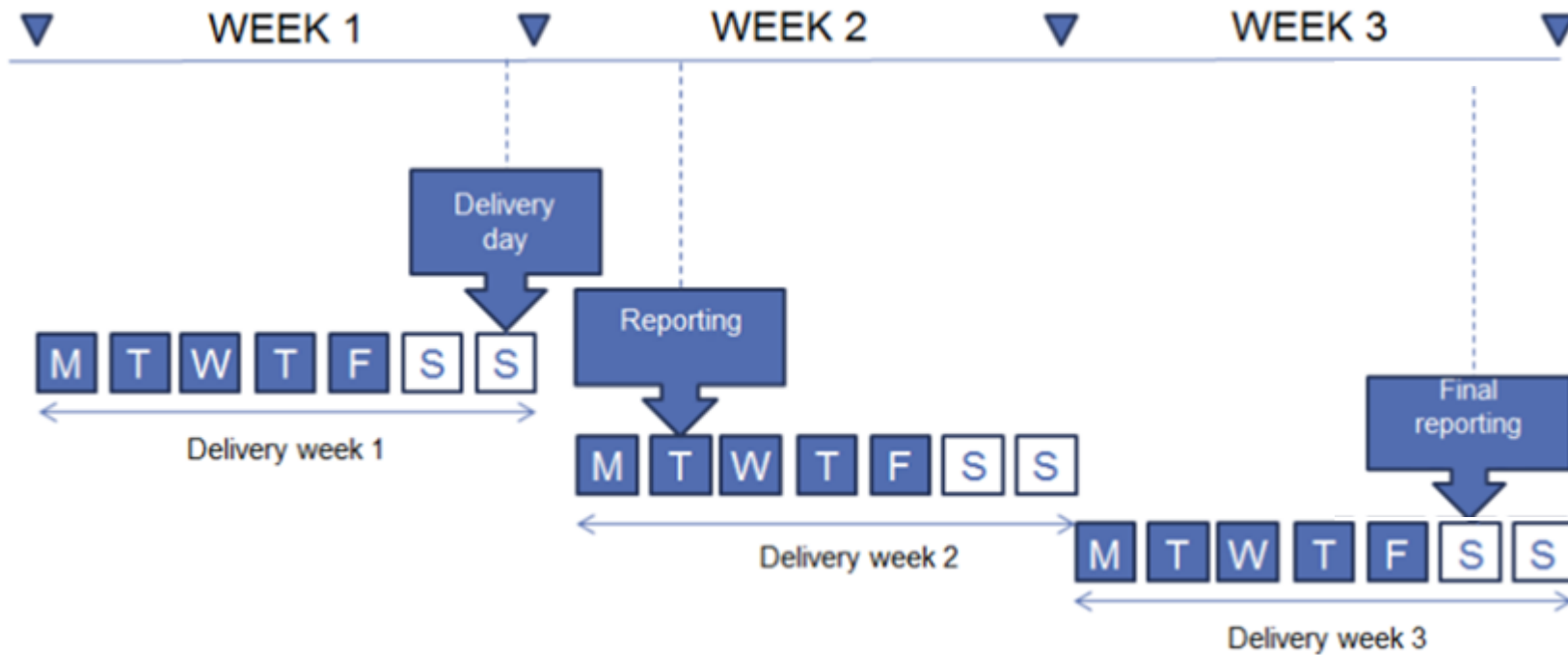


# Shortening the reporting period

Olli Vainikainen – Customer Committee 19.10.2023

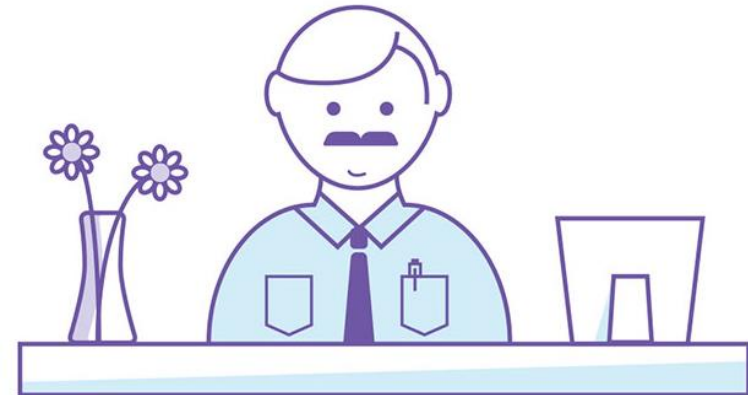


# eSett's Reporting Period



# Contents

1. Introduction
2. Results of Study
3. Potential Invoicing Schedule Impact
4. Conclusions



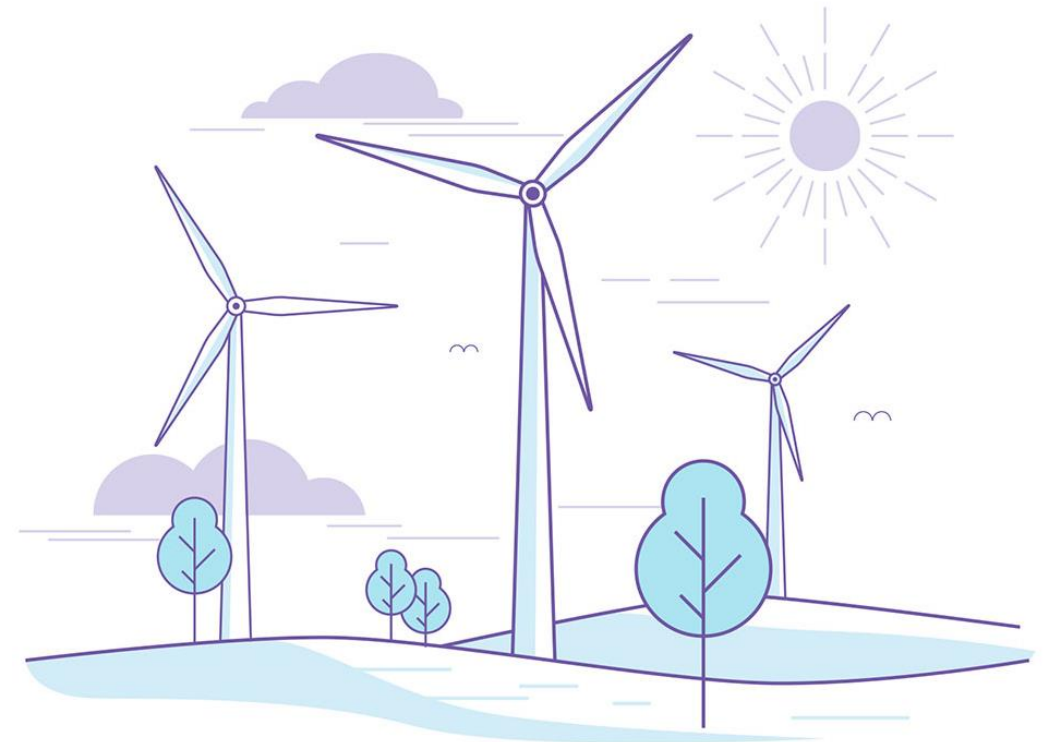
# Introduction – The Reporting Period

- Currently the reporting period lasts for maximum of 13 days from the delivery day for imbalance settlement related data
  - All reporting closes at 12:00 CET D-13
  - Reporting periods differ by type of data and by each country's national laws
- The reporting period determines the invoicing schedule: a shorter reporting period means a faster invoicing schedule
- Based on the data that eSett currently receives it is possible to identify:
  - When data is being reported
  - How data reporting differs per type, country, etc.
  - Where during the reporting period the data starts to remain relatively unchanged



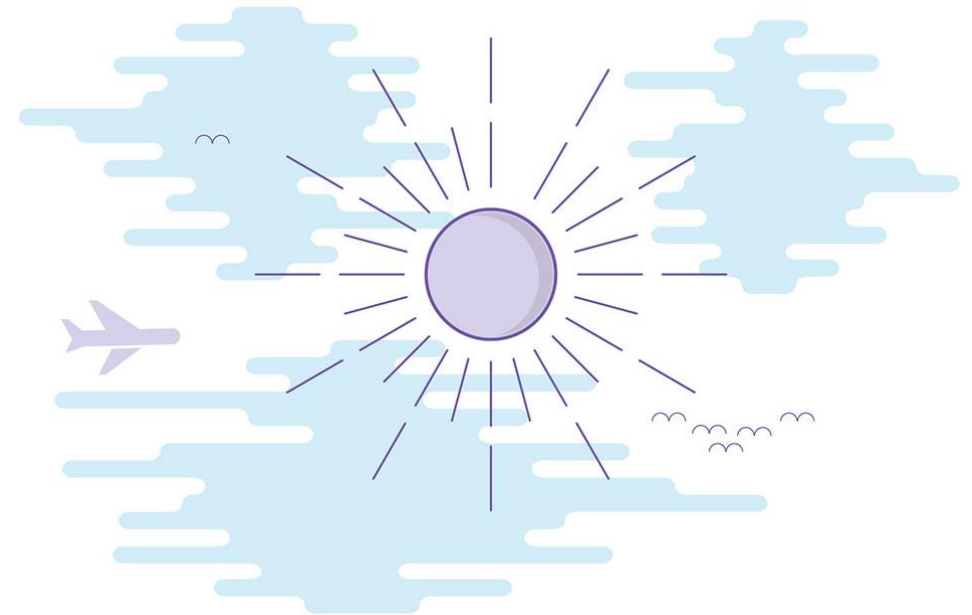
# Introduction – The Data Readiness Study

- Data Readiness – The amount and quality of input data that has been received by eSett
- Objectives of study:
  - Study Data Readiness within the open reporting window
  - Identify if it is possible to perform imbalance settlement on a sufficient level earlier than D-13 (based only on imbalance settlement data eSett receives)
- Original study was held during 21.11.2022-30.3.2023
  - Data was fetched each Monday and Thursday during the afternoon hours
  - Total number of days studied was 33

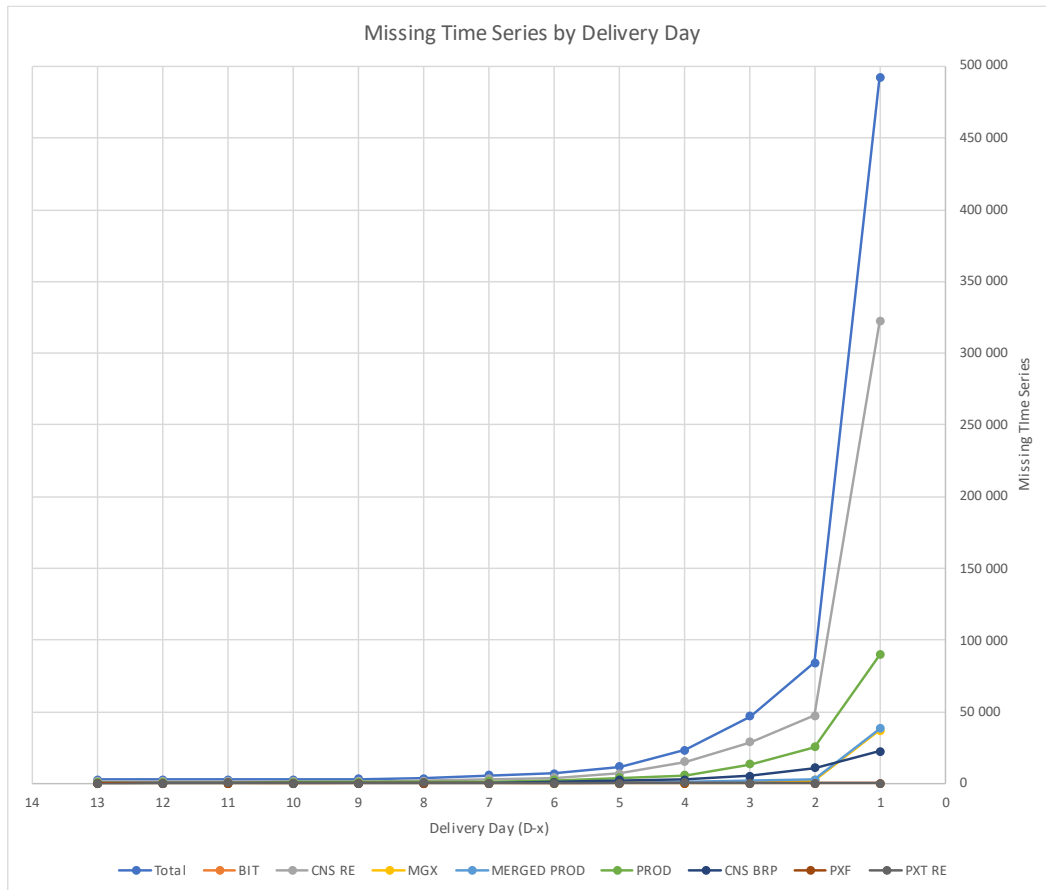


# Introduction – The Data Readiness Study

- What is analysed for Data Readiness:
  - Availability
    - Missing time series
  - Quality
    - Absolute MGA Imbalance per country
    - Absolute BRP Imbalance per country
- Also, the effect of 15 min data on Data Readiness has been examined and will be shown later in this presentation

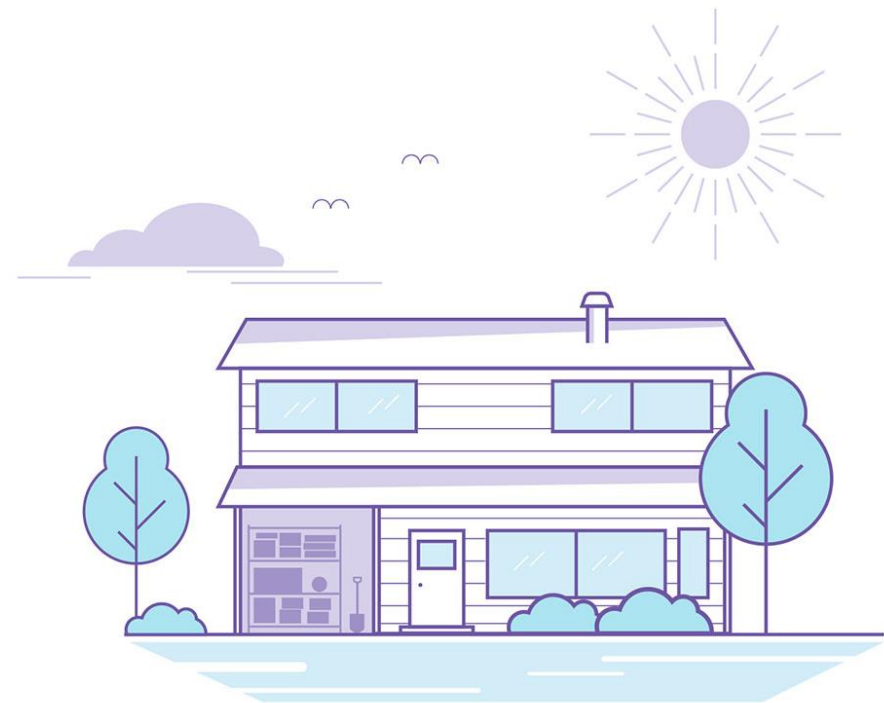


# Results – Missing Data



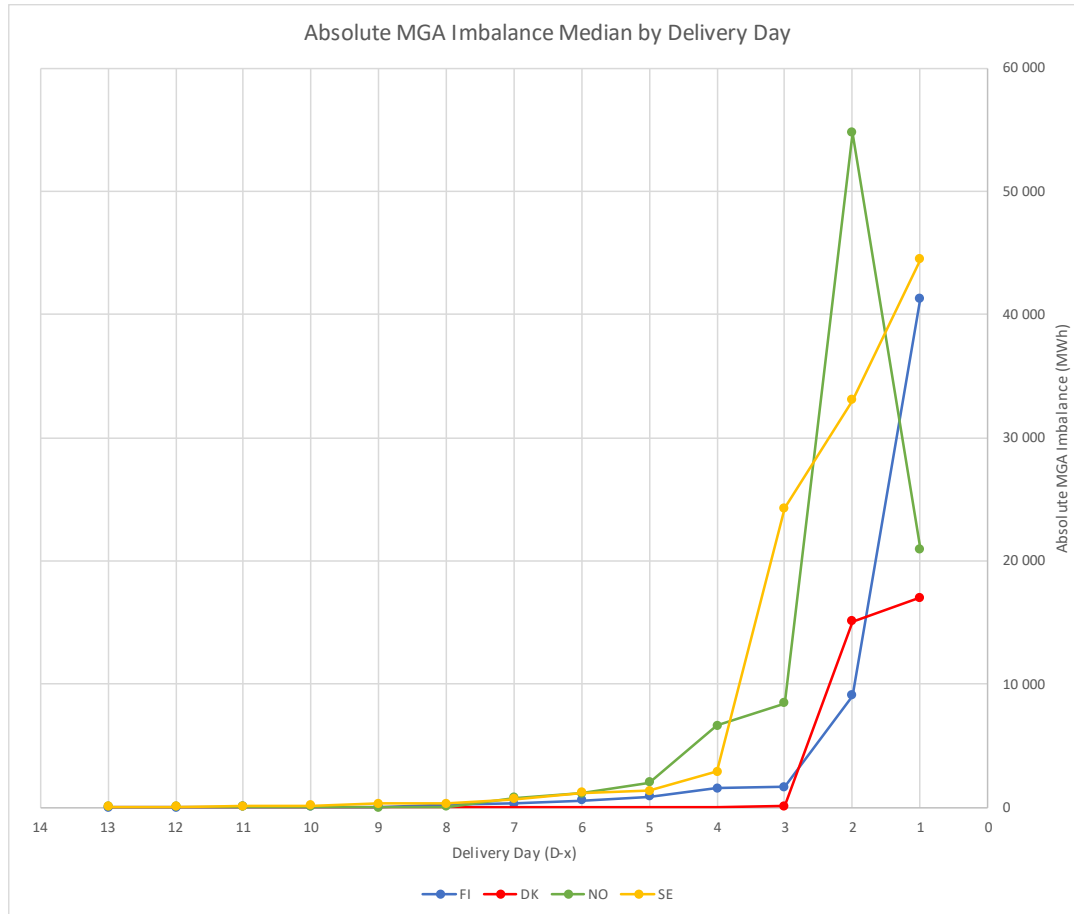
# Results – Missing Data

- Total amount of missing time series that eSett has does not drastically change in the last days of the reporting window
- Consumption and production values make up most of the missing values

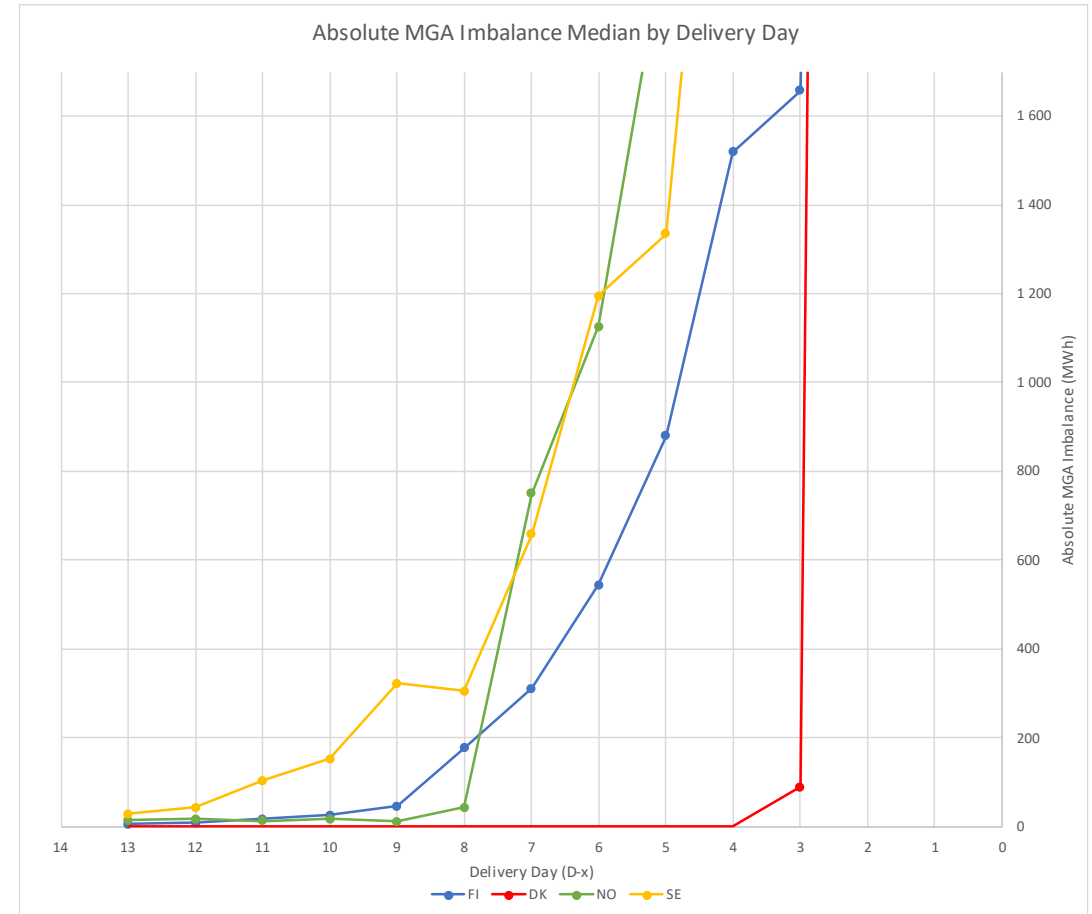




# Results – MGA Imbalance

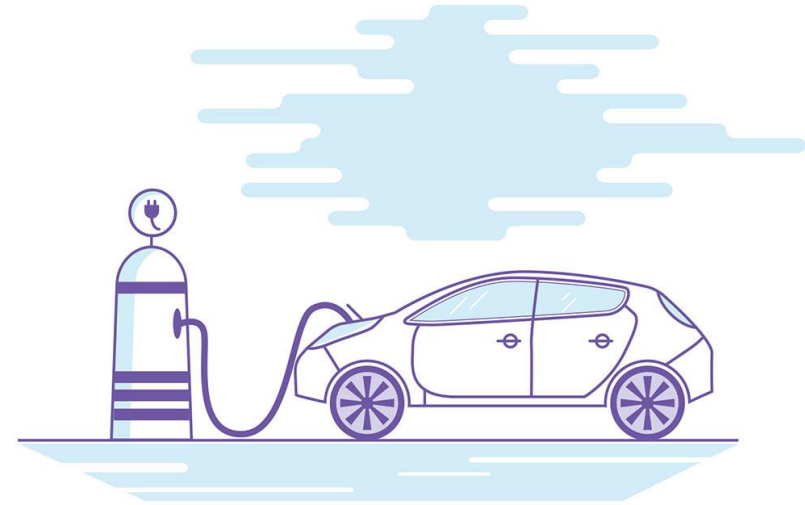


zoom

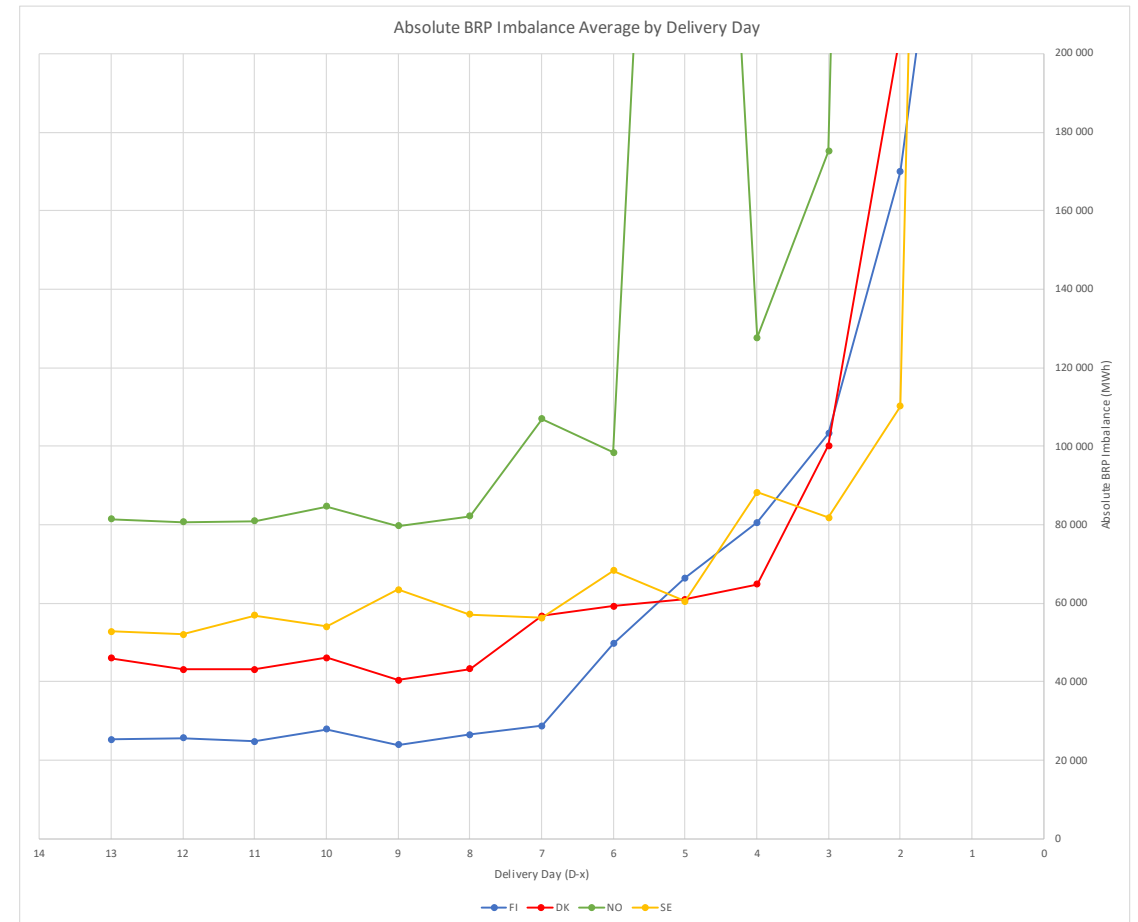
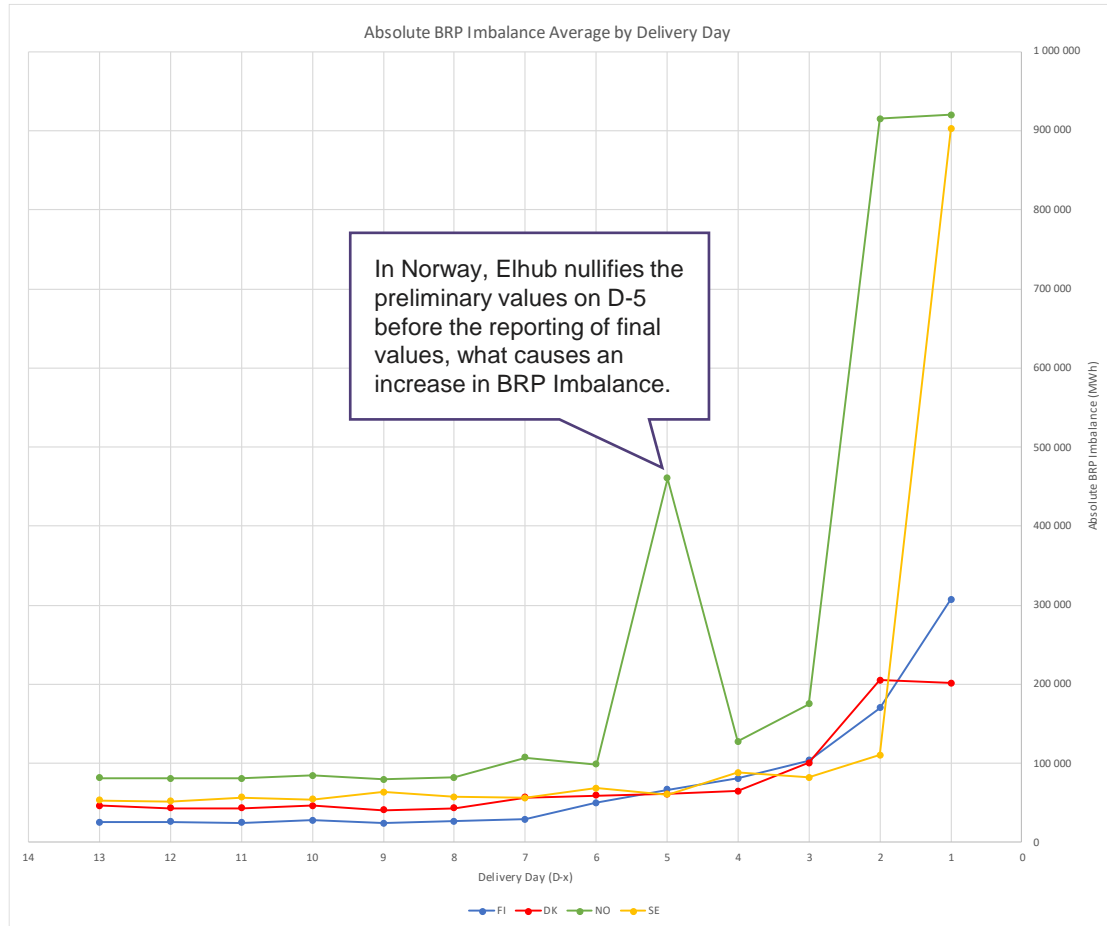


## Results – MGA Imbalance

- MGA Imbalance is highly variable, which makes analysis of it's data quality a bit more difficult. Therefore, median values were analyzed instead of the average value of the data set
- It can be said that MGA Imbalance in each country stays relatively stable after the eight day of reporting. There is some variance in this between the countries



# Results – BRP Imbalance



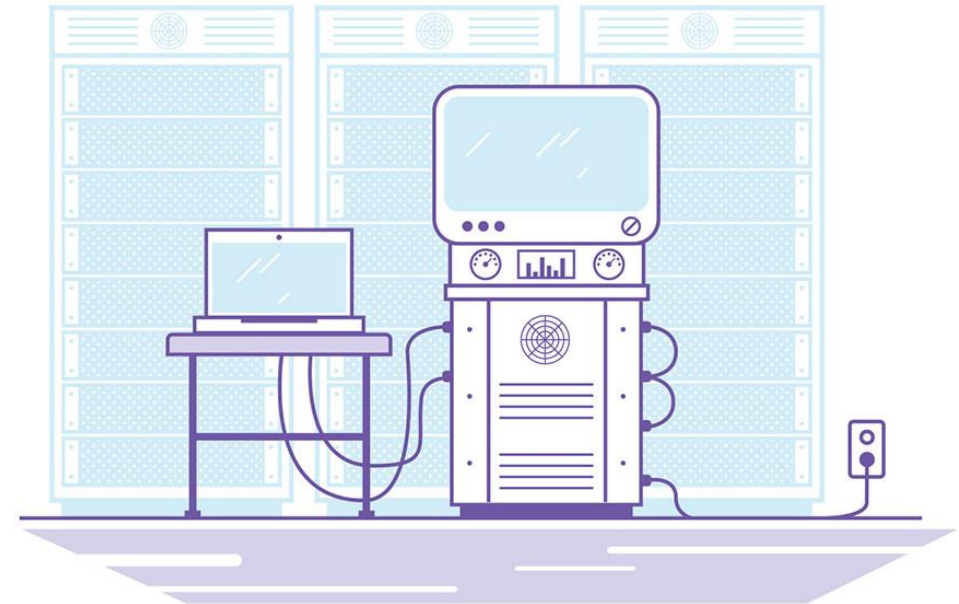
# Results – BRP Imbalance

- Absolute BRP Imbalance on country level is dependent on multiple things, but especially on the number of MBAs
- Absolute BRP Imbalance stays quite stable for the larger part of the reporting window in each country

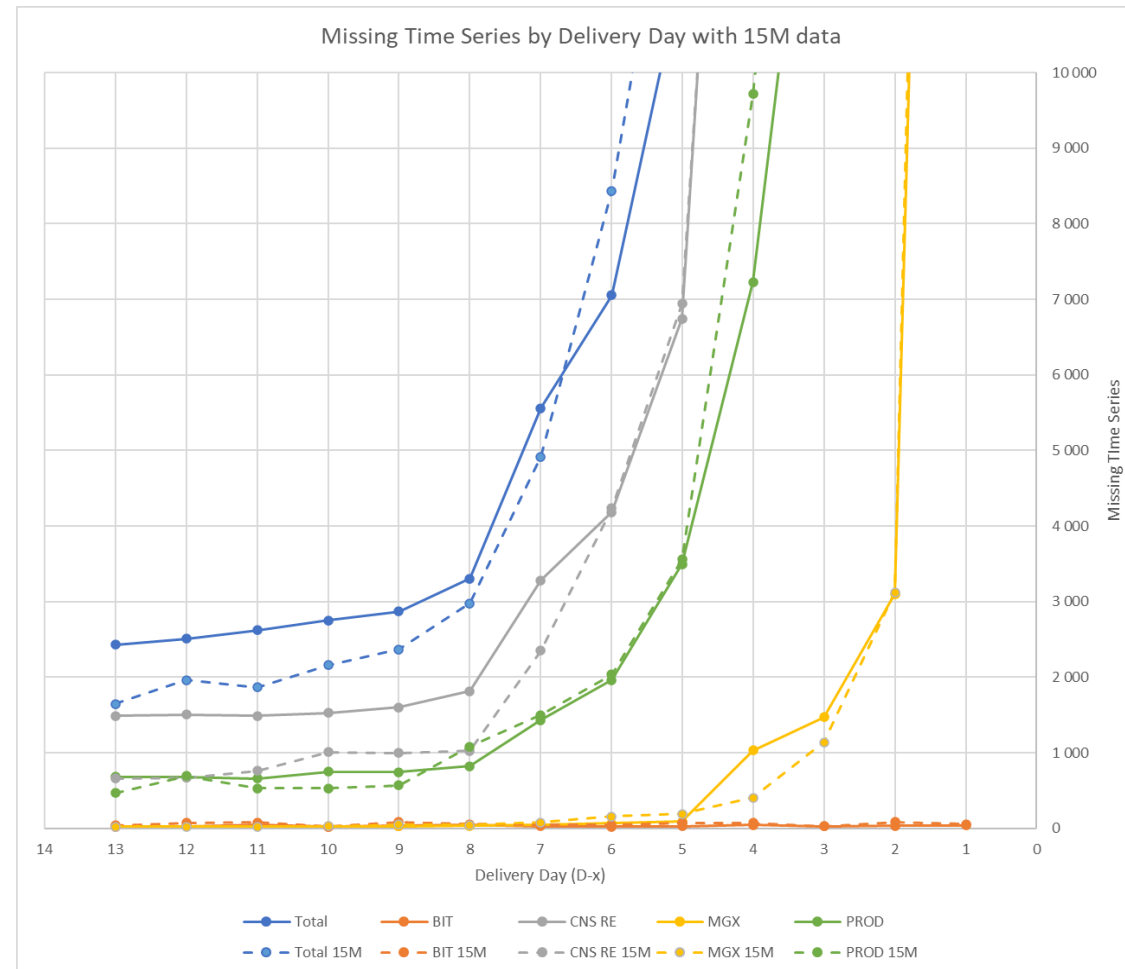


## Results – Impact of 15 min

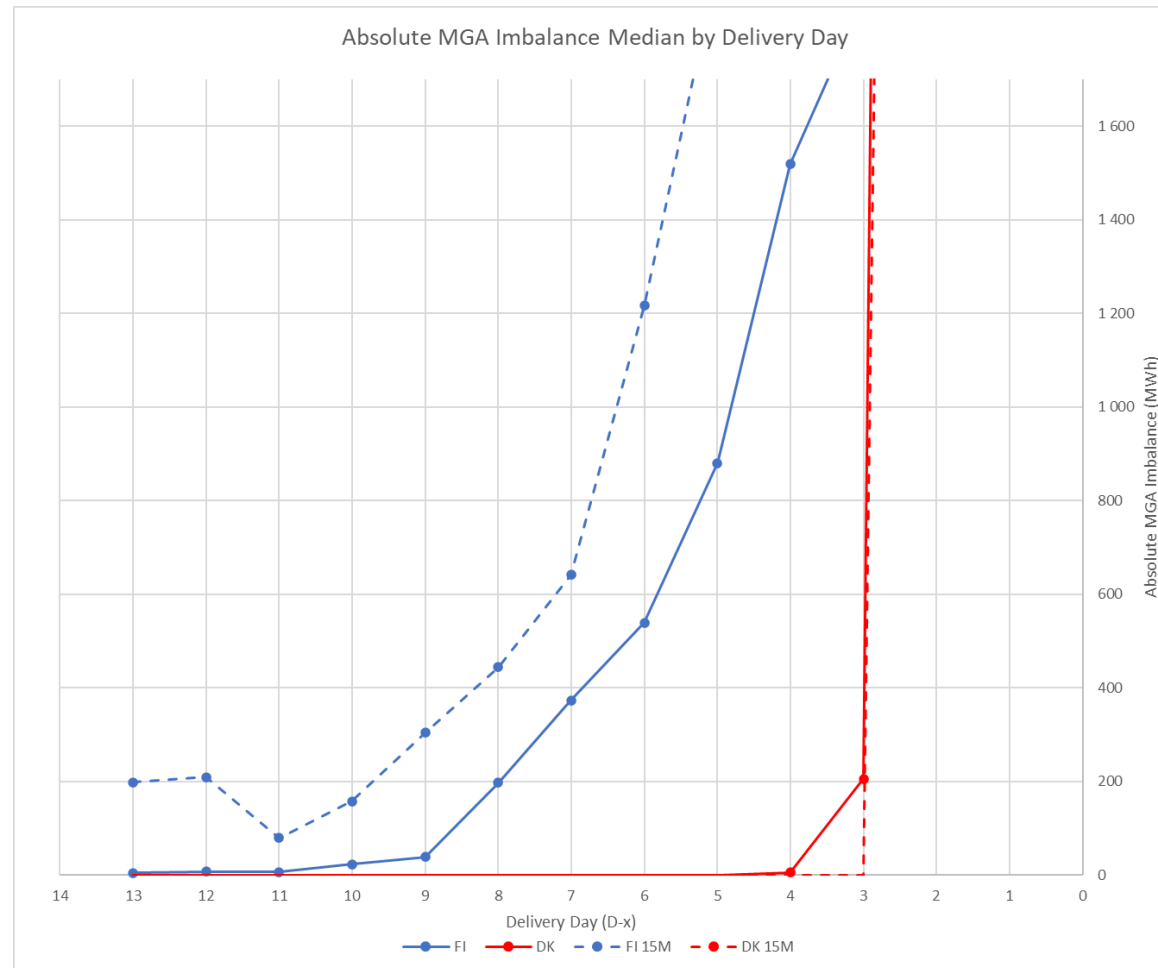
- 15 min imbalance settlement period has been in use in Denmark and Finland from 22.5.2023
- Therefore, it can be analyzed if 15 min data has had impact on Data Readiness
- 16 days during May-July 2023 were used in the analysis of 15 min impact and compared to the original Data Readiness study results



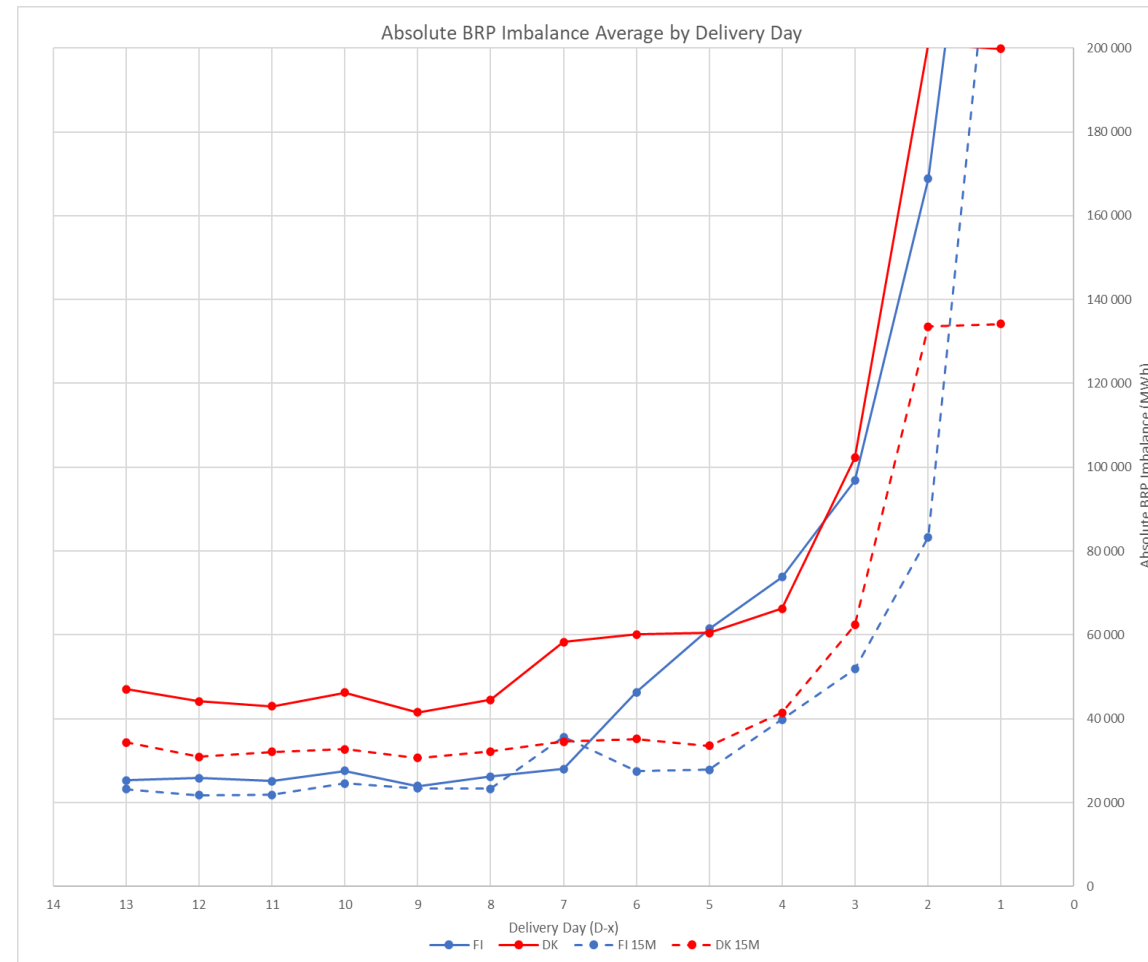
# Results – Impact of 15 min



# Results – Impact of 15 min



# Results – Impact of 15 min





## Results – Impact of 15 min

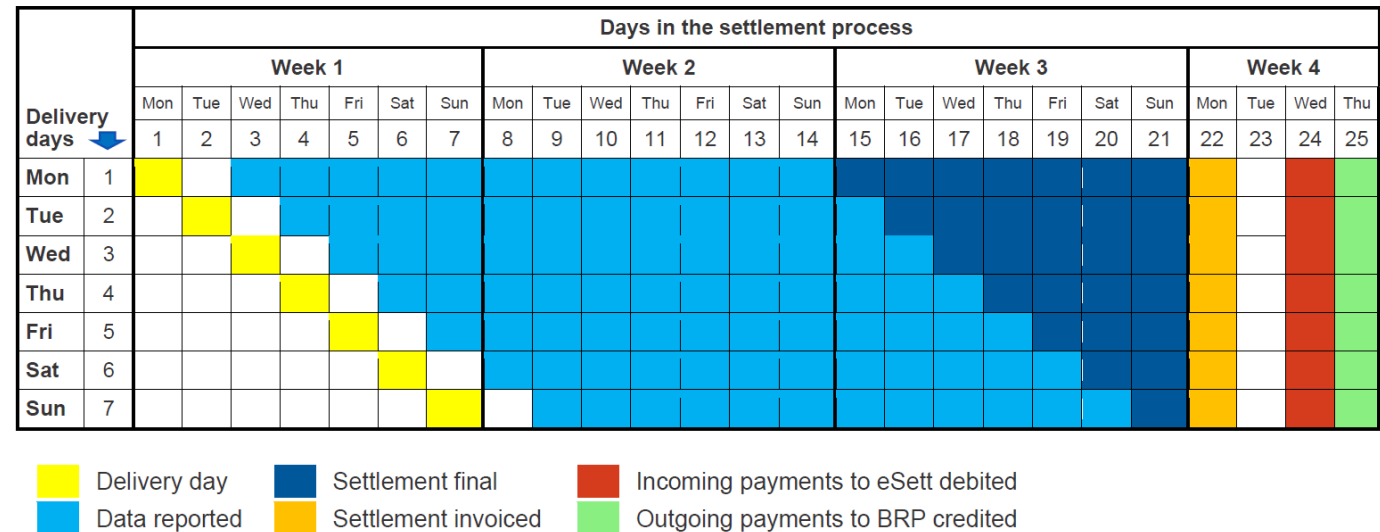
- 15 min values have not had much of an effect on the amount of missing values
- MGA Imbalance has increased in Finland during 15 min ISP, but this is due to some metering being still in 60 min. This leads to imbalance within the hour
- BRP Imbalance has seemed to have decreased with 15 min, but the data for 15 min values was gathered during the summer where imbalances are generally lower
- All in all, Data Readiness has not seemed to be greatly affected by 15 min data



# Invoicing Schedule Impact

- Based on the earlier results, Data Readiness is relatively stable for multiple days before the delivery day
- This would indicate that invoicing could be performed with an earlier reporting window than D-13
- Next few slides show hypothetical examples of invoicing schedules with shorter reporting windows

## Current invoicing schedule with D-13 reporting window:



# Example 1: Invoicing Schedule on D-10 reporting window

- Invoicing done on Thursday 11 days after last delivery day of the invoicing week
  - Incoming payments to eSett on Monday
  - Outgoing payments from eSett on Tuesday
- Compared to current invoicing schedule:
  - Invoicing completed 4 days earlier
  - Reporting window narrowed down by 3 days

**Invoicing schedule with D-10 reporting window:**

		Week 1							Week 2							Week 3							Week 4	
		Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue
Delivery day		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Mon	1																							
Tue	2																							
Wed	3																							
Thu	4																							
Fri	5																							
Sat	6																							
Sun	7																							

Delivery day

Data reported

Settlement final

Settlement invoiced

Incoming payments to eSett debited

Outgoing payments to BRP credited

## Example 2: Invoicing Schedule on D-8 reporting window

- Invoicing done on Tuesday 9 days after last delivery day of the invoicing week
  - Incoming payments to eSett on Thursday
  - Outgoing payments from eSett on Friday
- Compared to current invoicing schedule:
  - Invoicing completed 6 days earlier
  - Reporting window narrowed down by 5 days

**Invoicing schedule with D-8 reporting window:**

		Week 1							Week 2							Week 3						
		Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Delivery day		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Mon	1																					
Tue	2																					
Wed	3																					
Thu	4																					
Fri	5																					
Sat	6																					
Sun	7																					

Delivery day

Data reported

Settlement final

Settlement invoiced

Incoming payments to eSett debited

Outgoing payments to BRP credited

# Example 3: Invoicing Schedule on D-7 reporting window

- Invoicing done on Monday 8 days after last delivery day of the invoicing week
  - Incoming payments to eSett on Wednesday
  - Outgoing payments from eSett on Thursday
- Compared to current invoicing schedule:
  - Invoicing completed 7 days earlier
  - Reporting window narrowed down by 6 days

**Invoicing schedule with D-7 reporting window:**

		Week 1							Week 2							Week 3						
		Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Delivery day		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Mon	1																					
Tue	2																					
Wed	3																					
Thu	4																					
Fri	5																					
Sat	6																					
Sun	7																					

Delivery day

Data reported

Settlement final

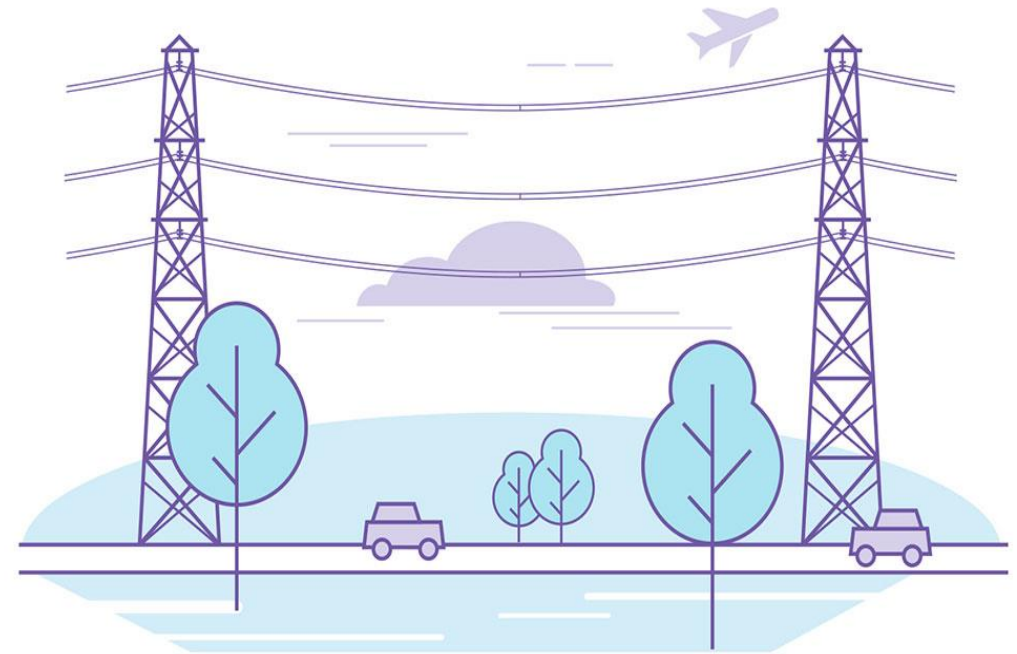
Settlement invoiced

Incoming payments to eSett debited

Outgoing payments to BRP credited

# Conclusions

- Based on this Data Readiness study, the quality and availability of input data eSett receives does not drastically change during the last days of the current reporting window
  - 15 min data has not seemed to affect the results
- Therefore, shortening the reporting window would seem to have a relatively low impact on imbalance settlement
- Operating on a tighter reporting window could allow invoicing to be concluded multiple days earlier
- Possible uncertainties:
  - Will correction of settlement results (bilaterally or by eSett) increase drastically when narrowing down the open reporting window?
  - How big of a workload would implementing a shorter reporting window be?
    - Legislation changes
    - Impact on all stakeholders' systems (eSett, TSOs, DSOs,...)





WE SETTLE, TOGETHER!

