

Aerial view of three white offshore wind turbines in a blue sea. The turbine in the foreground is the largest and most detailed, showing its three blades and tower. Two other turbines are visible in the distance, one to the left and one to the right, both appearing smaller due to perspective. The water is a deep blue with some ripples.

Information about Nordic Imbalance Settlement to prospective Settlement Banks

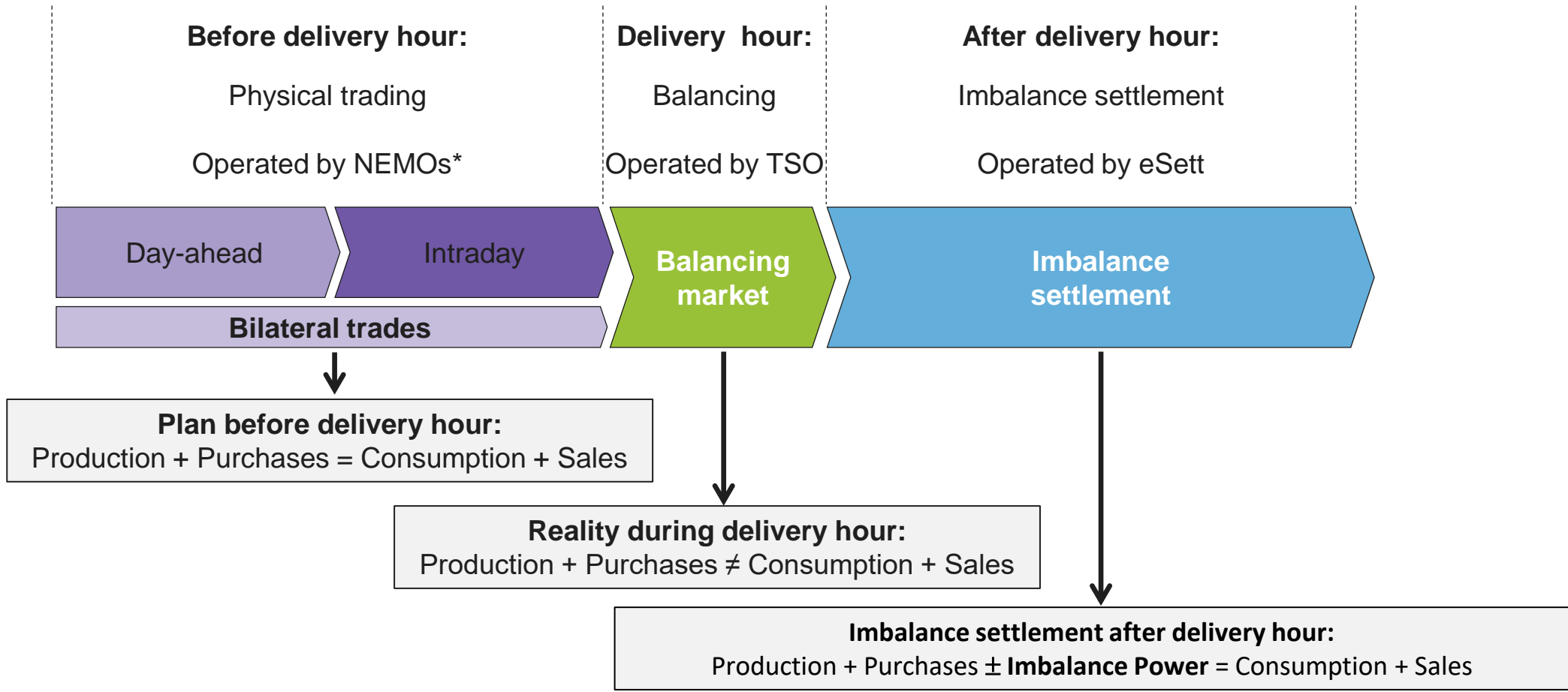
Topics

1. About the Nordic Imbalance Settlement and eSett Oy
2. Invoicing, payments and collateral
3. Role of Settlement Banks
4. Agreements
5. Steps to become a Settlement Bank
6. Further information and contracts

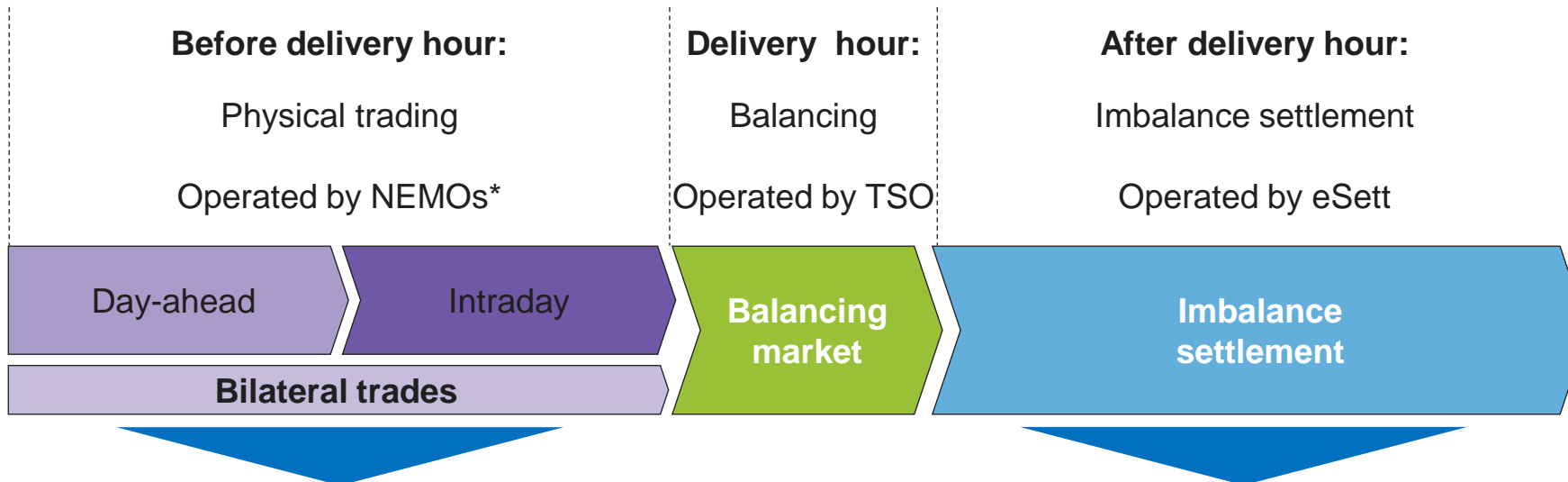
About the Nordic Imbalance Settlement and eSett Oy

- Imbalance settlement is a natural monopoly and a necessary function in a commercial electricity market
- The Transmission System Operators (TSO) Fingrid, Statnett and Svenska kraftnät decided to implement a common imbalance settlement service for the electricity markets in Finland, Norway and Sweden. Now Denmark's TSO Energinet is joining.
- The three TSOs founded the joint service company eSett Oy to operate the Nordic Imbalance Settlement.
- eSett Oy is incorporated in Finland and owned by Fingrid, Statnett, Svenska kraftnät and Energinet, each with a 25% share.
- eSett has operated the imbalance settlement since May 2017, and the go-live for Denmark is Q1 2021.
- The common Nordic Imbalance Settlement solution is supported by the governments and regulators in the Nordic countries and is regarded as an important step towards a fully functional common retail market.
- Each national TSO is still ultimately responsible for the balancing operations in their country but eSett will manage the settlement on their behalf.

Imbalance Settlement is a necessary function in a commercial electricity market

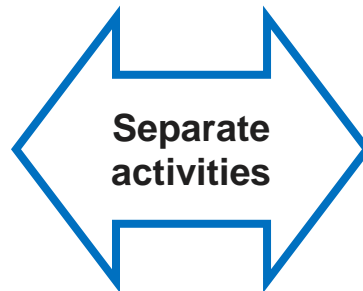


Imbalance Settlement is separate from the settlement of the physical trades



Settlement of physical trades:

- Day-ahead and Intraday trades settled by NEMOs
- Bilateral trades settled between the trading parties



Imbalance settlement:

- Imbalance settlement is the settlement of **differences** between the physical trades and the actual production and consumption (=imbalances).
- Imbalance settlement also includes the invoicing of certain fees as well as the settlement of reserves activated by the TSO in the balancing market.

Key aspects of the invoicing model

Each Monday, eSett invoices the settlement result and fees from the delivery week that started three weeks ago

Weekly invoicing of imbalances, activated reserves and fees

- Positive invoice amount (BRP pays to eSett) → “Debit Notice”
- Negative invoice amount (eSett pays to BRP) → “Credit Notice”

BRP receives one invoice per country where it operates

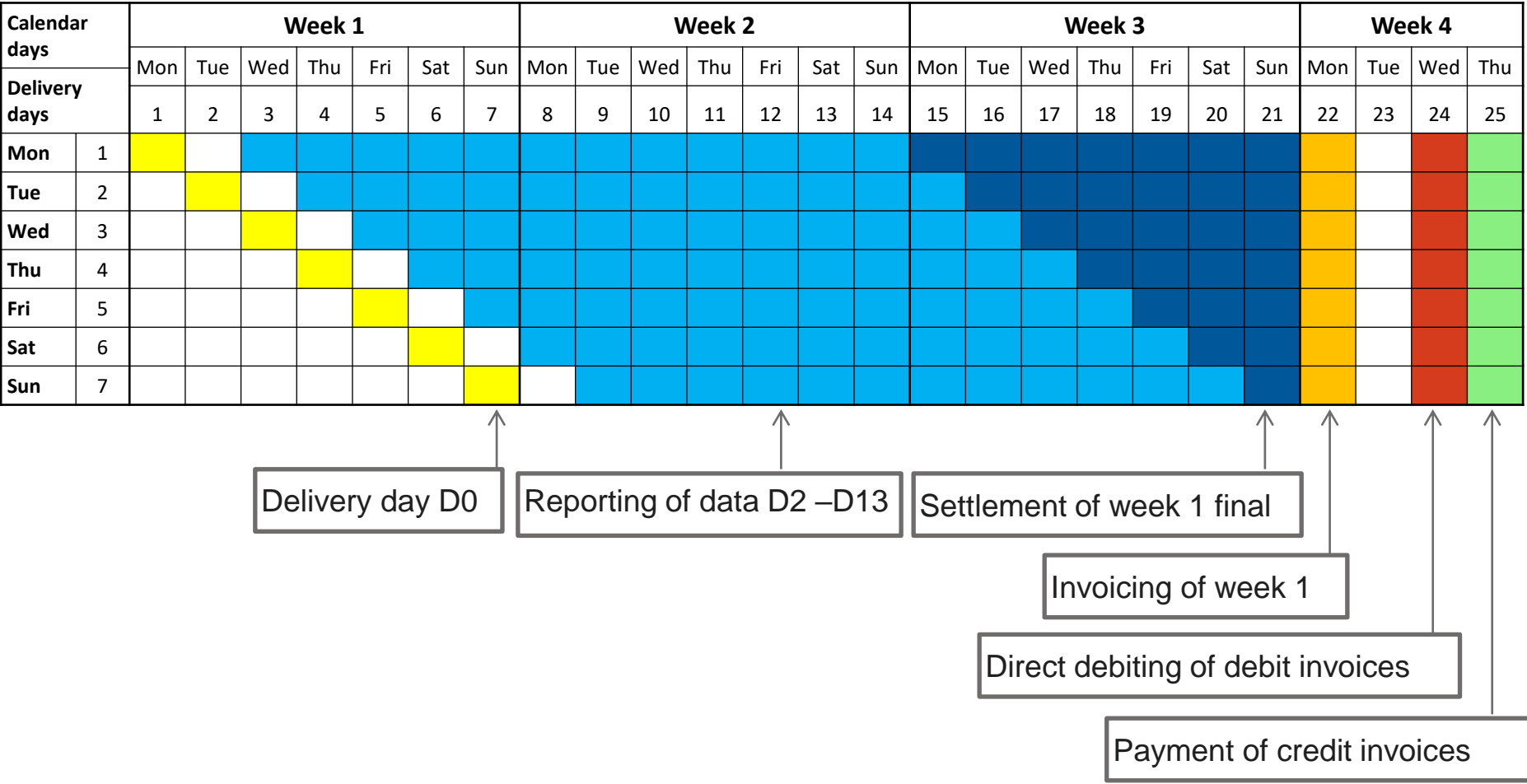
BRPs can select to be invoiced either in default currency (EUR) or in local currency of the market balance area it is active (DKK, NOK or SEK)

Invoices are settled by eSett during the same week:

- Invoices are published on Monday
- Amount of Debit Notice direct debited by eSett on Wednesday
- Amount of Credit Notice paid out by eSett on Thursday

A holiday in the interval Monday - Thursday in any of the NBS countries shifts the activities on and after the holiday one business day forward

The imbalance settlement results are invoiced and settled ~3 weeks after the delivery day



Role of Settlement Bank

1. Provision of cash accounts to the BRPs
2. Execution of "Request for Transfer" instructions from eSett
3. Daily reporting of balances and transactions on the cash accounts to eSett

Provision of Cash Accounts to the BRPs

Forms of cash accounts:

A. Pledged Cash Account

- Used for posting of cash collateral and for settlement of the BRP's invoices
- Governed by Pledged Cash Account Agreement

General conditions of Cash Accounts:

- Account has to be held in any of the participating countries
- Currency can be DKK, EUR, NOK or SEK depending on the settlement currency
- Bank and BRP can agree on terms, but these may not be in conflict with terms of Pledged / Non-Pledged Cash Account Agreement between Bank, BRP and eSett

Execution of “Request for Transfer” instructions from eSett

- To collect the BRP’s payable amounts to eSett, eSett instructs the Settlement Bank to debit the BRP’s cash account and transfer the funds to eSett’s account in eSett’s bank
- Instructions issued by eSett are forwarded by eSett’s bank to Settlement Bank as MT101 message
- Instructed transfers to be executed by Settlement Bank in accordance with the “Request for Transfer” service defined by SWIFT
- “Request for Transfer” model enabled by following agreements:
 - Settlement Bank Agreement between Settlement Bank and eSett
 - Cash Account Agreement between BRP, Settlement Bank and eSett
 - Bilateral agreement between Settlement Bank and eSett’s bank
 - Any necessary agreements between Settlement Bank and BRP
- Outgoing payment executed as Same-Day-Value payment
- The Settlement Bank shall include, unaltered, at least the 35 first characters of any remittance information supplied in field 70 of the incoming MT101 message
- The Settlement Bank shall immediately inform eSett if it, due to any reason, is unable to execute a payment from a Cash Account as instructed by eSett

Schedule for execution of Request for Transfer

#	Message or transaction	Description	Cut-off time
(1)	Incoming Request for Transfer from eSett	Deadline for when an incoming Request for Transfer instruction from eSett shall be available to the Settlement Bank in order for deadline (2) to apply	13:00 CET D+0
(2)	Outgoing payment transfer to eSett	Deadline for when a payment transfer from the BRP's Settlement Account to eSett's account shall be available to eSett's bank, provided that the incoming Request for Transfer instruction was available to the Settlement Bank by deadline (1)	14:45 CET D+0

Daily reporting of Balances and Transactions on the Cash Accounts to eSett

- For collateral monitoring and for ensuring orderly settlement of outstanding invoices, eSett needs to have up to date information about the balances and transactions on the BRPs' Cash Accounts
- The Settlement Bank shall make daily end-of-day transaction and balance reports on the BRPs' Cash Accounts available to eSett in the SWIFT MT940 format defined by SWIFT
- The MT940 reports will be retrieved from the Settlement Bank on eSett's behalf by eSett's bank
- When needed, the Settlement Bank shall also respond to eSett's enquiries concerning transactions and balances on a Cash Account during the day.

Provision of collateral

A BRP operating in Denmark is not required to post collateral to eSett. However, should the BRP operate in any other country in eSett's model, they need to have fulfil collateral requirements.

- Minimum collateral demand in the other countries is EUR 40 000,00
- A dynamic collateral model is being used. Collaterals are calculated every weekday, and new collateral demands can be published if the demand has increased substantially
- Collateral can be posted by funds on the pledged settlement account, by On-Demand Guarantee or a combination of the two

Service fees

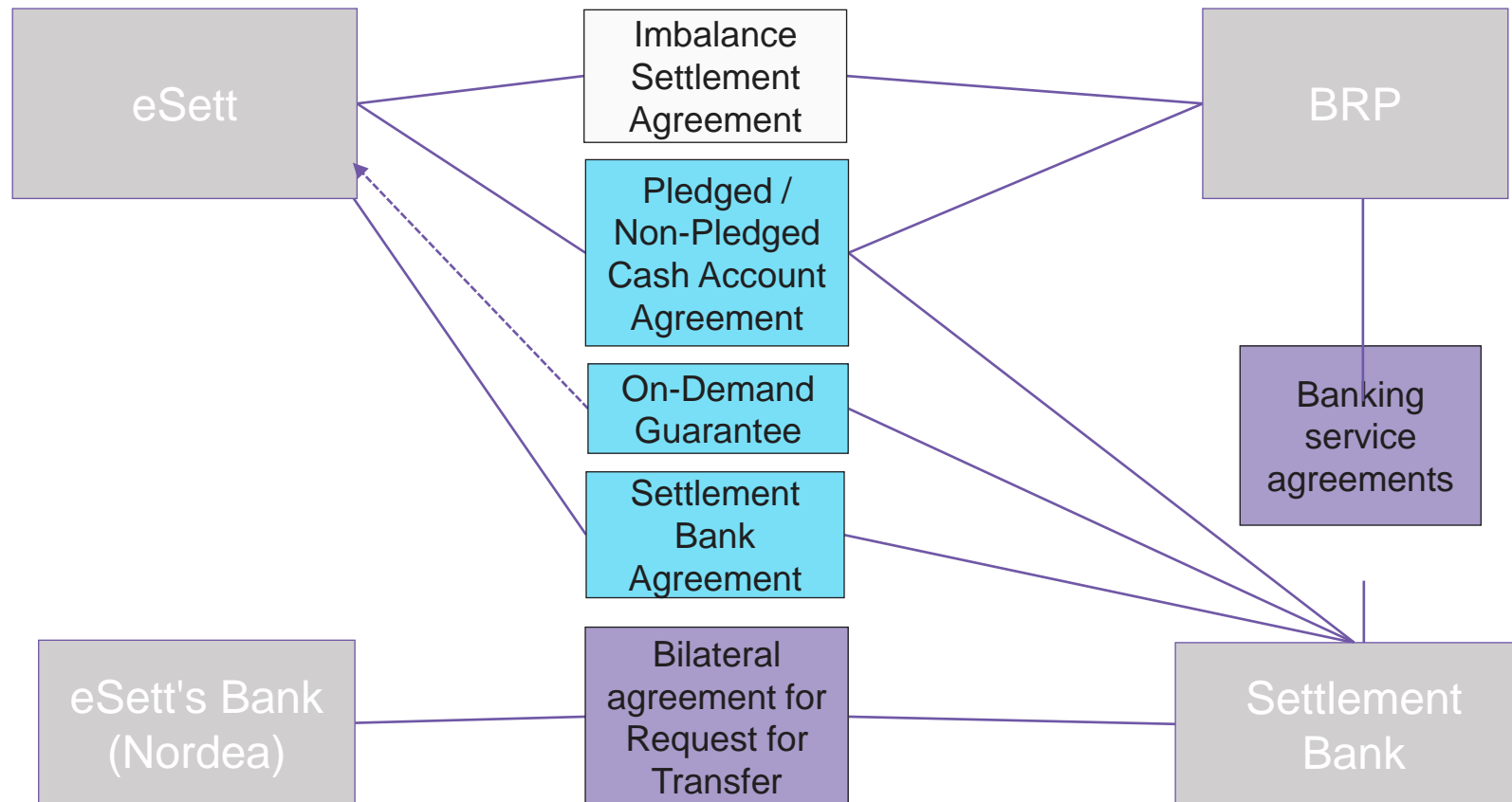
- The BRP is responsible for all applicable service fees for the settlement bank services
- eSett is not responsible for any fees or costs incurred by the Settlement Bank
- Any pricing model can be applied to the settlement bank services, but settlement account cannot be used to cover the bank's service fees as all the funds need to be pledged to eSett

Requirements on Settlement Banks

Technical requirements for settlement banks:

- A bank domiciled in Denmark, Finland, Iceland, Norway or Sweden (including a branch of such a bank, the branch operating in Denmark, Finland, Iceland, Norway or Sweden)
 - Member of SWIFT or operating through another SWIFT member
 - Ability to execute Request for Transfer instruction / MT101 with Same Day Value according to eSett's schedule
 - Ability to include remittance information from incoming MT101 in outgoing payment
 - Ability to report balances in MT940 format according to eSett's schedule
 - Valid Settlement Bank Agreement with eSett
 - Valid bilateral agreement with eSett's bank (Nordea) for execution of Request for Transfer transactions
- Rating requirements for settlement banks:
 - The Settlement Bank needs to be rated by at least one of the three major rating agencies (Fitch, Moody's or Standard & Poor's) and the rating must be on at least the following level:
 - Standard & Poor's: long term rating "A-"
 - Moody's: long term rating "A3"
 - Fitch: long term rating "A-"
 - If the Settlement Bank is rated by several agencies, at least one of the ratings must be on the aforementioned level and the lowest rating must be at least BBB+ (Fitch, Standard & Poor's) or Baa1 (Moody's).

Contract structure for governing invoicing, payments and collateral in the Nordic imbalance settlement



Essential terms of Settlement Bank Agreement

- Governance of Pledged Cash Accounts
 - Opening and terms
 - Pledge in favor of eSett
 - Right of disposal for eSett
 - Procedure for release of excess funds
- Governance of Non-Pledged Cash Accounts
 - Opening and terms
 - Right of disposal for eSett
- Execution of Request for Transfer Transactions
- Reporting of Account Balances and Transactions to eSett
- Issuing of On-Demand Guarantees
- Notices and other communication
- Liability
- Fees
- Appendices:
 - Operating procedures
 - Requirements on Settlement Banks
 - Pledged Cash Account Agreement
 - Non-Pledged Cash Account Agreement

Essential terms of Cash Account Agreements

Pledged Cash Account Agreement

- Pledge in favour of eSett
- Right of Disposal for eSett
- Information Disclosure
- Procedure for release of excess funds
- Appendix: Settlement Bank Agreement

Non-Pledged Cash Account Agreement

- Right of Disposal for eSett
- Information Disclosure
- Appendix: Settlement Bank Agreement

Essential terms of On-Demand Guarantee

Currency can be DKK, EUR, NOK or SEK

Payable on first demand

Payment within 3 banking days of demand

Continuing guarantee, can be terminated by bank with 3 months' notice

- Upon termination the guarantee remains valid for payment obligations incurred until the termination date until such payment obligations have been settled in full

Steps to become a settlement bank

1. Bank informs eSett about intention to act as Settlement Bank
 - Notices to finance@esett.com or named contact persons at eSett
 - Bank to appoint contact person for further communication
2. eSett requests and reviews information about the bank's capability to operate in accordance with eSett's operating procedures
3. eSett confirms to the bank whether the bank can be approved as a Settlement Bank in the Nordic Imbalance Settlement
4. Bank and eSett sign Settlement Bank Agreement
5. eSett performs end-to-end testing of Request for Transfer transaction and Balance Reporting together with selected BRP
6. eSett adds bank onto public list of approved Settlement Banks

Further information

eSett's website www.esett.com

- Handbook chapters 8 and 9
- Materials – Settlement banks

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WE SETTLE, TOGETHER!

