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# **Annex 2: Alternative configurations of the Bidding zone review region “Nordics” which are to be considered in the bidding zone review process**

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Bidding Zone Review Region Nordic Region

18 February 2020

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This annex depicts in detail the Bidding Zone configurations for the Bidding Zone Review "Nordics" that are to be considered in the bidding zone review process in accordance with Article 14(5) of Regulation (EU) 2019/943 of the European Parliament and the Council of 5<sup>th</sup> June 2019 on the internal market for electricity (recast).

## 1. Overview of the configurations of the Bidding Zone Review Region Nordic

The following table summarizes the alternative configurations to be further considered in the Bidding Zone Review Region Nordic (BZRR Nordics).

Nordic	TSO	BZ1	Action Plan	Config 1	Config 2	Config 3	Config 4	Config 5
				Current Configuration	Split of NO4 (NO4a and NO4b)	Merge of current SE3 and SE4, and new SE <sub>54</sub>	Merge of current SE3 and SE4, merge of current SE1 and SE2, and new SE5	Config 2 and config 4 combined
Denmark <sup>1</sup>	Energinet	DK2	No	1 BZ	1 BZ	1 BZ	1 BZ	1 BZ
Sweden	Svenska kraftnät	SE1, SE2, SE3, SE4	No	4 BZ	4 BZ	4 BZ (expert based)	3 BZ (expert based)	3 BZ (expert based)
Finland	Fingrid	FI	No	1 BZ	1 BZ	1 BZ	1 BZ	1 BZ
Norway	Statnett	NO1, NO2, NO3, NO4, NO5	No	5 BZ	6 BZ (expert based)	5 BZ	5 BZ	6BZ (expert based)

Table 1: Alternative configurations to be further considered in the BZRR Nordics.

<sup>1</sup> Denmark is a part of two Bidding zone review regions, and DK1 is included in the continental Europe region.

## 2. Detailed information per configuration

### a) Current bidding zone configurations

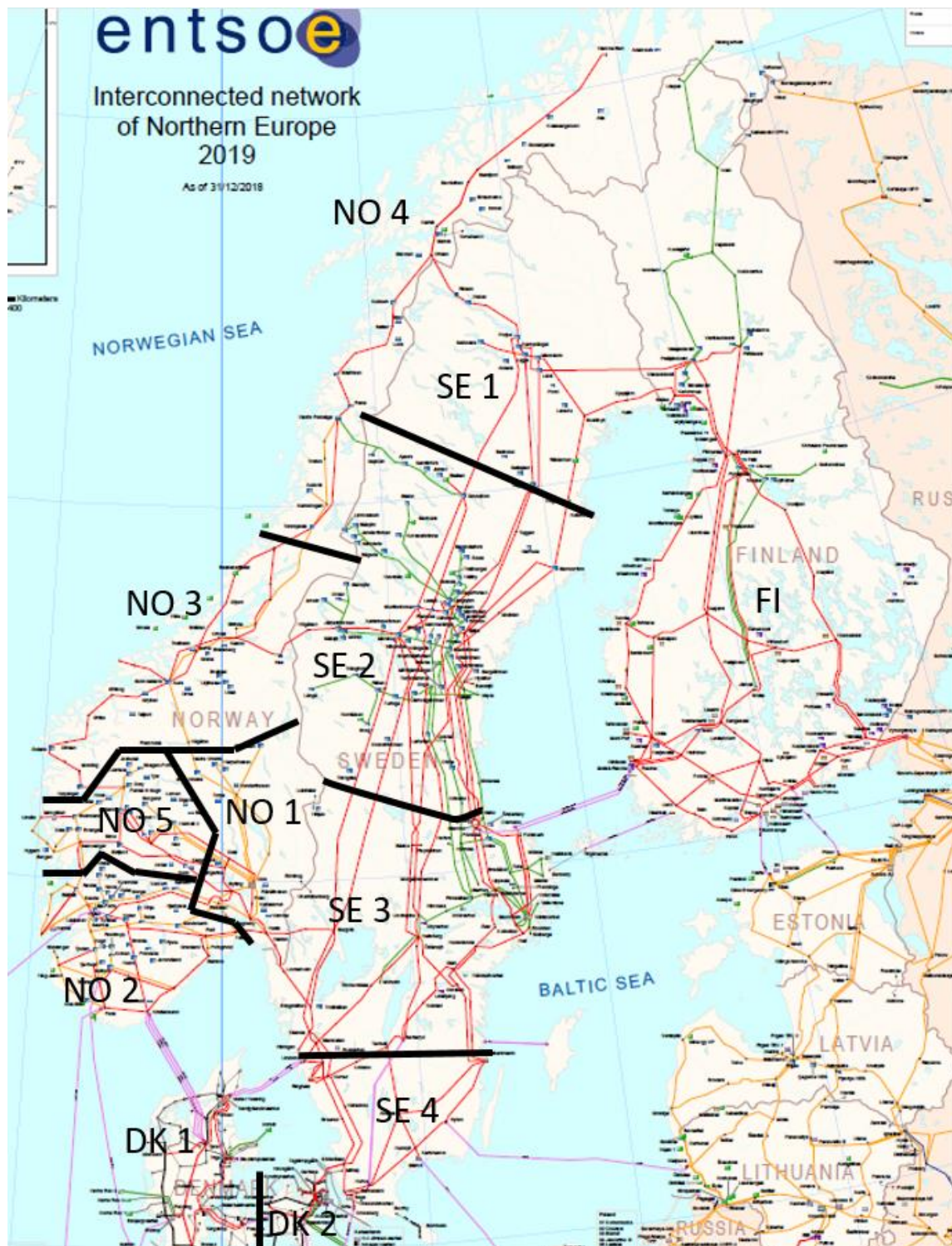


Figure A: Current configurations.



b) A geographical overview of alternative bidding zone delineations to be assessed





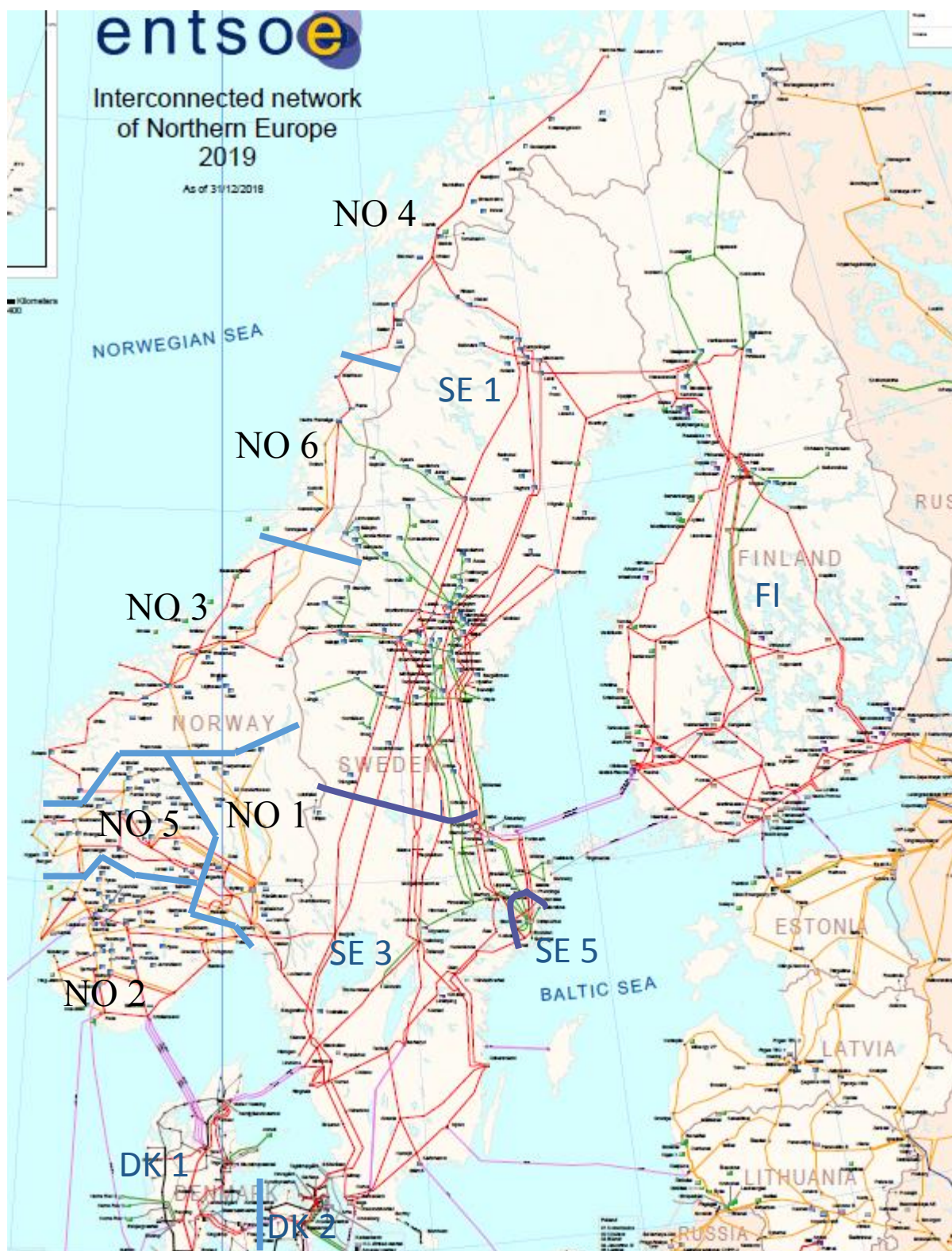


Figure B: Alternative configuration to be analysed for Sweden and Norway. In the proposed configuration regarding Sweden, a modified BZ SE3 is introduced in the Stockholm Metropolitan Area. The current BZ SE4 is expanded to include the remaining area of current BZ SE3. **The current BZ SE1 is merged with BZ SE2.** In Norway a split of NO4 is proposed, and a new BZ NO6 is introduced. For Denmark and Finland no alternative configuration will be assessed at this stage.

The network elements which will form the Bidding Zone Borders of this configuration, is given in table 2.

Bidding Zone Border	TSO1	TSO2	Voltage level [kV]	Type	New/different compared to status quo?
<del>SE1-SE2</del>	Svk	Svk	400 kV	<del>Southbound 400 kV tie-lines</del>	Status quo
SE2-SE3	Svk	Svk	400 kV & 220 kV	Southbound 400 and 220 kV tie-lines	Status quo
SE3- New SE <del>5</del> <u>4</u>	Svk	Svk	220 kV	220 kV and 400 kV in-feed network elements	Different
NO1- NO2	Statnett	Statnett	420, 300 kV	Tie-lines	Status quo
NO2- NO5	Statnett	Statnett	300 kV	Tie-line	Status quo
NO5- NO1	Statnett	Statnett	420, 300 kV	Tie-lines	Status quo
NO3- NO5	Statnett	Statnett	420 kV	Tie-line	Status quo
NO1- NO3	Statnett	Statnett	300 kV	Tie-line	Status quo
NO3- NO6	Statnett	Statnett	420, 300 kV	Tie-lines	Status quo (currently NO3-NO4)
NO6- NO4	Statnett	Statnett	420 kV	Tie-line	New
NO1- SE3	Statnett	SvK	420 kV	Tie-lines	Status quo
NO3- SE <del>12</del> <u>1</u>	Statnett	SvK	420 kV	Tie-line	Status quo ( <u>currently NO3-SE2</u> )
NO6- SE <del>12</del> <u>1</u>	Statnett	SvK	220 kV	Tie-line	Status quo (currently NO4-SE2)
NO4- SE1	Statnett	SvK	420 kV	Tie-line	Status quo

Table 2: Bidding Zone Borders of alternative configuration Sweden and Norway. As regards Norway and Sweden, All BZ borders to the rest of the Nordic TSOs are unchanged in the proposed configuration. The current border NO4-SE2 is renamed NO6-SE2 and NO3-SE2 is renamed NO3-SE1, in the proposal, but the tie-line of the border is unchanged.

### Sweden

Identification and assessment of the exact network elements that constitute the border between SE3 and the new BZ SE~~5~~4 in the alternative configuration for Sweden will be part of the upcoming regional BZ review.