Questionnaire On transition costs

Bidding zone review

DRAF for BZR task force and consultative group, incorporating earlier comments from consultative group

Authors

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# Introduction

The methodology for the bidding zone review process[[1]](#footnote-2) (hereafter Methodology) asks for the evaluation of the transition costs occurring from a bidding zone reconfiguration. This questionnaire establishes a quantitative basis for the estimation of the market participants’ transition costs. As set out in the methodology, it does so for each bidding zone and bidding zone reconfiguration. As such, it informs the bidding zone review *transition cost* criterium.

### Relevant bidding zone configurations

As established in the ACER decision 11-2022[[2]](#footnote-3) on the alternative bidding zone configurations from August 8th 2022, the following reconfigurations must be evaluated[[3]](#footnote-4) for the first step:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Identifier | BZRR | Number of BZs per Member State | Source (ACER’s algorithm/TSOs) | Reference in ACER decision 2022-11 (Annex I) |
| 1 | CE | DE2 | k-means | p. 4 |
| 2 | CE | DE2 | Modified version of Spectral P1 | p. 5 |
| 3 | CE | DE3 | Spectral P1 | p. 6 |
| 4 | CE | DE4 | Modified version of Spectral P1 | p. 7 |
| 5 | CE | FR3 | Spectral P1 | p. 8 |
| 6 | CE | IT2 | k-means | p. 9 |
| 7 | CE | NL2 | Spectral DIRC | p. 10 |
| 8 | Nordic | SE3 | Spectral P1 | p. 11 |
| 9 | Nordic | SE3 | Modified version of Spectral P1 | p. 12 |
| 10 | Nordic | SE4 | Spectral P1 | p. 13 |
| 11 | Nordic | SE4 | Modified version of Spectral P1 | p. 14 |
| 12 | CE | DE3 | Fallback configuration for configuration 3 | p. 15 |
| 13 | CE | DE4 | Fallback configuration for configuration 4 | p. 16 |
| 14 | CE | DE5 | Fallback configuration for configuration 1 | p. 17 |

Those 14 different BZ-configurations can be found in the cost-table to be filled out on page 4 of this questionnaire.

The combinations for central Europe to be analysed in a second step as set forth in ACER decision 11-2022 are not known yet and cannot be found in the cost table to be filled out.

### What do we mean with transition costs

The definition of transition costs is set forth in article 15.11 (a) of the Methodology. Transition costs:

* Are one-off costs, expected to be incurred in case the BZ configuration is amended;
* Shall relate to adaptations that are inherently and unambiguously related to a specific BZ configuration change;
* Shall not relate to adaptations that are, in general, necessary to ensure sufficient flexibility of the systems to cope with a variable number of BZs due to a potential amendment of the BZ configuration in the future;
* Shall include an estimation of the cost of amending existing contractual obligations incurred by market participants, NEMOs and TSOs. Such estimation shall reflect the expected implementation timeline for an eventual BZ change, and the fact that when deciding on the implementation date, Member States are required to balance the need for expeditiousness with practical considerations, including forward trade of electricity.

Transition costs arise for different reasons, such as changes to business processes or adjustment of private contracts, and they are incurred by different actors, such as retailers, grid operators, traders or power exchanges. The purpose of this questionnaire is to gather empirically estimates of the different transition costs from different stakeholders. In subsequent steps these estimates will be analysed and extrapolated based on the received information to quantify transition costs for the reconfiguration of bidding zones.

**Examples** of transition costs include:

* re-structuring of teams responsible for specific bidding zones;
* re-negotiation of on-going contracts; and
* costs of adapting existing IT processes to specific BZ configurations.

Transition costs do **not include**:

* IT investments necessary to introduce flexibility of the IT systems in general; or
* a devaluation of assets due to price changes.

### Why we are asking for different lead times

The level of transition costs, in particular costs of amending contracts, will likely depend on the lead-time between the legally binding announcement of a reconfiguration and its full implementation. For estimates in this questionnaire, we assume a **lead-time of three years** as a reference point, unless otherwise mentioned meaning recipients have three years between the decision of BZ reconfiguration and the reconfiguration itself for adjusting their operations. In order to estimate the impact of lead times on the transition costs, estimations for a lead time of two and four years are also gathered through the questionnaire.

### How we are going to treat and process the data

The transition cost evaluation used in the assessment of BZ configurations will greatly depend on the results of this questionnaire as the cost estimates are based on the cleaned data from this questionnaire. Specifically, the data from the questionnaire is checked for robustness by standard methods like a comparison to benchmarks, matching techniques and statistical techniques. Please note that some of the questions are included to control for and test confounding factors and are not included as transition costs themselves. The total cost per market participant group, bidding zone and bidding zone reconfiguration is then extrapolated by scaling the cost estimates using market share and revenue data. Due to the remaining uncertainty following from this approach, the cost estimates are depicted as a range. In addition, the relative importance of the different transition cost categories are evaluated and the impact of a change in lead time for the different market participants is analysed. Therefore, all responses are highly appreciated, and additional written remarks are requested.

We would like to make the respondents aware that the **data submitted will not be shared with any market participant**. However, **anonymised versions** of this questionnaire might be shared with the responsible national regulatory authorities and/or ACER.

The next section will provide an overview of the cost categories used for the questionnaire. Afterwards, the questionnaire itself is structured as follows: The first sub-section enquires about the background and market role of the recipient. The second section covers the actual cost estimates. The third and last section addresses the effects of intra-company transactions on liquidity, a topic not directly related to transition costs, but relevant for the overall BZ review.

In case of questions, please contact Gjorgji Shemov (gjorgji.shemov@entsoe.eu).

# Cost categories

The table below provides an overview of the different cost categories assessed and provides several practical examples to facilitate filling out the questionnaire.

You can also open this table to a new tab to facilitate filling out the questionnaire on the following pages.

|  |  |  |
| --- | --- | --- |
| * 1. **Cost category** | * 1. **Definition** | * 1. **Transition cost examples** |
| * 1. Changes to internal **business processes and IT systems** | Costs incurred by changes to organization and coordination specifically attributable to BZ re-configuration | * Adapting existing IT systems to specific BZ configurations * Costs associated to the efforts (FTE) linked to changing of processes like for example:   + splitting or merging teams that are responsible for a specific BZ   + changing trading or algorithmic trading processes   + going through the process of revaluating assets   + adopting portfolio optimisation processes   + adopting processes around the payment of renewable subsidies like feed-in-tariffs   + testing changed processes   + informing employees about the changed processes * changes to other ongoing exchanges between market participants and TSOs and public bodies, for example balancing and electricity balancing accounts |
| * 1. Adjustment to or termination of **contracts and regulation** | * 1. Costs incurred by amending existing contracts to BZ re-configuration including. legal costs | * Re-negotiation, or termination of contracts, depending on their complexity. Particularly, if the reference location of price changes or is not accepted by contract parties anymore (incl. GOs, PPAs, legal arrangements) * Re-drawing of legislation, for instance contracts/legislation that refer to a single bidding zone, that does not exist anymore after a BZ reconfiguration * Possible costs, because electricity sold forward is affected (will apply mainly in case of shorter lead times) |
| * 1. Adjustments of processes with NEMOs, **TSOs and public bodies** | * 1. Costs incurred by adapting interaction with NEMOs, TSOs or public bodies | * Reporting obligations that must be adjusted to be specific for each new BZ |
| * 1. **Additional costs** | * 1. Any costs directly related to the BZ configuration not covered by any of the categories above | * Any examples not covered above |

# Questionnaire

* 1. **General questions**

1. Please provide your company name, address, as well as contact details for questions (e-mail and telephone number).

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Company name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Contact details, e-mail: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Contact details, phone: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. As what kind of organisation do you qualify?  
     
    Generator or storage operator  
    Large-scale industrial consumer  
    Energy trader

Retailer  
 Aggregator  
☐ NEMO, derivative exchange or delegated operator  
☐ Clearing house  
☐ Ministries or National Regulatory Authority  
☐ TSO  
☐ DSO  
Other: \_\_\_\_\_\_\_\_\_\_\_\_\_

* 1. In case you qualify as a generator or storage operator, consumer, energy trader or retailer/aggregator, what are your generated, consumed or throughput quantities in 2021 in TWh per BZ?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* 1. In case you qualify as a generator, consumer, energy trader or retailer/aggregator, what is your annual turnover per BZ?

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* 1. In case you qualify as a generator or storage operator, what is your installed capacity per BZ?

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1. Have you been affected by a past BZ reconfiguration in a way that incurred transition costs?  
    Yes  No
   1. If yes, please note the specific reconfiguration that affected you:  
        
        
      \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. If yes, was your main area (the area where you are most active in in terms of generated/ traded/ throughput/ consumed/ overseen volume) of business subject to re-configuration or have you been affected by a reconfiguration outside your main area of business?  
        
      \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. If yes, what was the lead-time for this reconfiguration and how did the lead-time affect your transition costs?  
        
      \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. How large is your market share, differentiated by BZ, business activity and market share metric (e.g. energy, capacity or revenue) if applicable? (response should be based on question 2) (relevant for scaling-up individual results to entire BZ in subsequent steps)  
     
   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* 1. **Estimates of transition costs for BZ reconfiguration**

In the file below, please share your estimates of the transition costs per cost category you expect to incur in case of a BZ reconfiguration. You will see that the template contains a separate table for all 14 BZ reconfigurations. **Please fill out the tables for the BZ reconfigurations that are relevant to you** (e.g. in which you are active and for which you wish to provide an estimate). In case you only fill out one sheet, we will assume that your costs are the same for different BZ reconfigurations in your country.

Please specify these **transition costs in terms of full time equivalents (FTEs)** for new and existing staff conditional on the lead time (2, 3, or 4 years until reconfiguration). Please further estimate the **average FTE** cost for the respective cost category. In case no FTE cost is provided, a country standard rate will be assumed. In case you are unable to split the costs into FTEs, please provide a **lump-sum cost estimate** in the column “**personnel costs**”. Transition costs that are not personnel costs shall be included in the column “**other cost**”.

In the column on the estimate of the share of transition costs independent of company size, please insert your estimation of which share of those costs are **“fixed” costs of a BZ-split**, which are not dependent on company size.

Please provide a clear description of the cost items and corresponding cost estimates in the cell “**description of the cost**” for both personnel costs and other costs.

Any cost item for which a clear description is not provided, may be disregarded.

As an **optional addition to transition costs** as defined, which only cover the costs of the actual transition, and not costs that you incur as a consequence of making your systems and processes flexible, you may provide information on what the **costs of making your systems and processes flexible** are (or were, if you have had a BZ-reconfiguration already).

Please fill out the cost estimates in terms of “**2022 Euros**”, meaning that you estimate what your costs would be based on the prices of goods and services in 2022. This means that you do not need to make your own estimation with regards to what the prices of, say, IT services will be in the future. Compass Lexecon will then be using consistent inflation assumptions for the different cost estimates.

Please do not forget to fill out the sheet “**company information**” in the file before uploading it.

Please download the file here.

* 1. **Effects of intra-company transactions on liquidity**   
     This section specifically applies to market participants with generation and retail positions that are currently within a single BZ, but which will be spread across different zones after the BZ reconfiguration is implemented.
     1. Do you have generation assets or hold retail positions that will be spread across different zones after the BZ reconfiguration?  
          
        ☐ Yes ☐ No
        + 1. If yes, assuming no changes to today’s market and portfolio landscape, how are the shares of generation or retail distributed across reconfigured zones in TWh per year?  
               
             \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
     2. Please consider the three exemplary market cases below and briefly explain what kind of decision making you would expect in each example. For your answers, consider a short- to medium-term of 4 to 5 years and a market without implicit BZ third-party access.
        + 1. After the BZ reconfiguration, 60 MWh of generation are in a bidding zone without a retail position. Will the market participant/you go through the market, which would increase market liquidity, adjust physical production or retail positions, or approach the reconfiguration through other means (such as buying cross-border transmission rights)?

**Positions in BZ 1 and 2 after reconfiguration**

|  |  |  |
| --- | --- | --- |
|  | BZ 1 | BZ 2 |
| Physical production position | 20 MWh | 80 MWh |
| retail position | 80 MWh | 20 MWh |

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* + - * 1. After the BZ reconfiguration a retail position of 20 MWh has no physical production position in the same BZ. Would the market participant/you withdraw the retail position from BZ 2, rely on the market (and own physical position in BZ 1) to supply the retail position, or approach the reconfiguration through other means (such as buying cross-border transmission rights)?

**Positions in BZ 1 and 2 after reconfiguration**

|  |  |  |
| --- | --- | --- |
|  | BZ 1 | BZ 2 |
| Physical production position | 100 MWh | 0 MWh |
| Retail position | 80 MWh | 20 MWh |

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* + - * 1. After the BZ reconfiguration, a production position of 20 MWh has no corresponding retail position in the same BZ. Would the market participant/you withdraw the production position, sell the generated electricity through the market, or approach the reconfiguration through other means (such as buying cross-border transmission rights)?

**Positions in BZ 1 and 2 after reconfiguration**

|  |  |  |
| --- | --- | --- |
|  | BZ 1 | BZ 2 |
| Production position | 20 MWh | 80 MWh |
| Retail position | 0 MWh | 100 MWh |

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* 1. **Additional remarks**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
     \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
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     \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. ACER 2020: Methodology and assumptions that are to be used in the bidding zone review process in accordance with Article 14(5) of the Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity [↑](#footnote-ref-2)
2. ACER 2022: ACER’s Decision on the alternative bidding zone configurations to be considered in the bidding zone review process [↑](#footnote-ref-3)
3. Please see here for a detailed depiction of the reconfigurations:

   <https://www.acer.europa.eu/sites/default/files/documents/Individual%20Decisions_annex/ACER%20Decision%2011-2022%20on%20alternative%20BZ%20configurations%20-%20Annex%20I.pdf> [↑](#footnote-ref-4)