



Consultation document

Redesigning
the Austrian gas balancing system



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1 Background

The integrated balancing system presented in this document will achieve two goals: (a) it will encompass the entire market area, i.e. it will no longer systematically distinguish between transmission and distribution level balancing and clearing (the legal basis for this step was already laid in section 41 Natural Gas Act 2011); and (b) it will put the provisions of Commission Regulation (EU) No 312/2014 (the Gas Balancing Network Code, Gas BAL NC) into practice in Austria.

Full realisation of a reformed regime that complies with the Gas BAL NC requires merging some market roles under the Natural Gas Act 2011; this has not so far been possible but will be achieved with the future balancing system.

When Austria's current balancing regime was introduced on 1 January 2013, it was a major improvement over the previous situation. Even so, it is a complex two-system construct that means contractual and operational challenges for market participants: ex-ante balancing at transmission level, run by the market area manager and with mandatory exchange trading, co-exists with ex-post balancing at distribution level, which is handled by the clearing and settlement agents.

This separation has been the object of much international criticism. Some EU-level organisations (such as EFET and ACER) believe that the Austrian balancing regime is not fully in line with the Gas BAL NC; ACER has explicitly stated this view in last year's implementation monitoring report on the Gas Balancing Network Code.¹

Reacting to this criticism, E-Control is now submitting a proposal for a redesigned Austrian balancing system to consultation with all market participants so as to collect views from a wide pool of respondents. These will be valuable input for developing further details of the future system. For this purpose, the present document describes the proposed future system and asks concrete questions about each of its building blocks. It focuses in particular on the differences between the future and the current systems; many other elements of the current regime, such as balance groups, balance responsible parties, entering capacity into balance groups, the merit order list etc., will remain as they are.

¹ [https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/ACER%20Report%20on%20the%20implementation%20of%20the%20Balancing%20Network%20Code%20\(Second%20edition\)%20Volume%20I.pdf](https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/ACER%20Report%20on%20the%20implementation%20of%20the%20Balancing%20Network%20Code%20(Second%20edition)%20Volume%20I.pdf)

2 Goals

Austria's future balancing system must be in line with the Gas BAL NC and must accommodate

- an integrated balancing zone (including transmission and distribution) with a single clearing entity that takes on the clearing tasks which are currently exercised by the clearing and settlement agents and the market area manager;
- a daily balancing regime with centralised balancing and daily financial clearing of balance groups;
- a within day incentive mechanism that optimises linepack use by way of within day obligations;
- frequent information provision with respect to allocations and hourly updates of market area information;
- incentives for BRPs to keep their portfolios balanced;
- swift and efficient financial settlement that uses established processes;
- a neutrality charge for balancing that is calculated daily;
- centralised ex post clearing of distribution level differences between allocated quantities and metered consumption;²
- the mechanism that is already in place for curtailing BGs if market-based measures are insufficient; and
- increased transparency.

The chapters below describe how the future balancing system will meet the above goals.

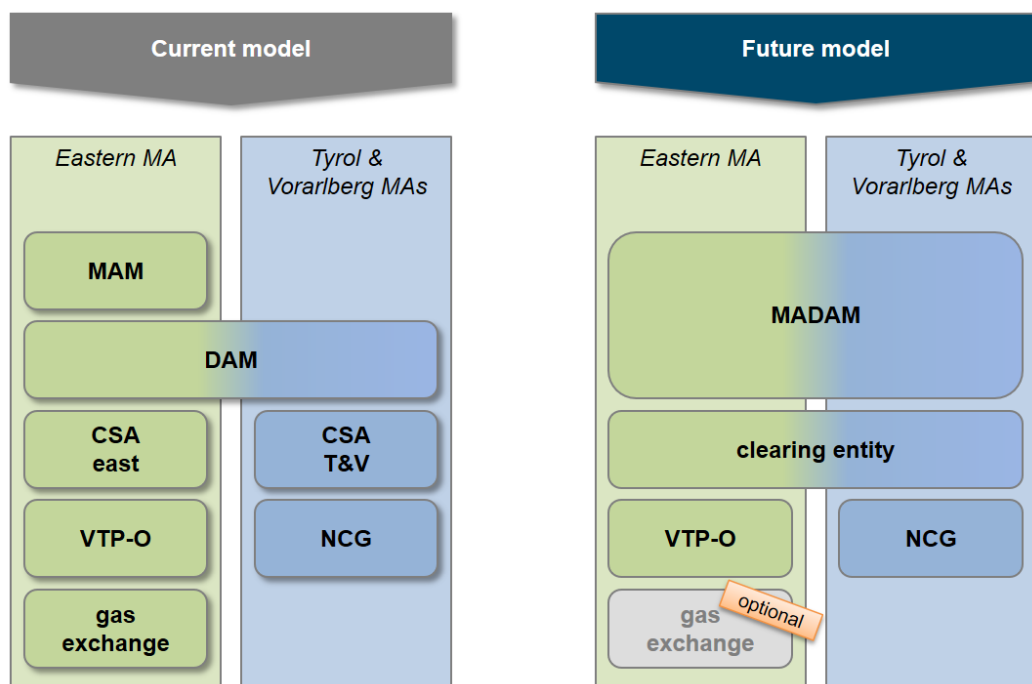
² cf. Article 2 NC BAL

3 Building blocks

3.1 BRP contracts

Balance responsible parties need to have several contracts in place to be able to operate. The future balancing system will bring some changes to this contractual construct:

Fig. 1



The market area manager (in the eastern market area) and the distribution area manager (in all three market areas) will be merged into a single market area and distribution area manager (MADAM) for all Austrian market areas. The MADAM will undertake any and all necessary balancing actions, on behalf and for account of a single clearing entity. The MADAM will also be the main point of contact for registering balance groups (currently the MAM). In addition, it will handle scheduling at distribution-level cross-border interconnection points, storage points and production points (currently a DAM task).

The distinction between ex ante balancing and clearing (through the MAM, at the gas exchange) and ex post balancing and clearing (through the clearing and settlement agent) will be dropped. Instead, a single clearing entity will handle all clearing; for financial flows, it can make use of a single settlement agent, so that synergies for market participants could result.

Mandatory gas exchange trading for market participants in the eastern market area will be abolished, but of course, the option to participate in exchange trading will remain.

Even so, it will still be necessary for participants in the eastern MA to have a contract with the operator of the virtual trading point; likewise, contracts with the NCG market area manager remain necessary for participation in the Tyrol and Vorarlberg market areas.

3.2 An integrated balancing zone

Consumption schedules (for daily and hourly balancing) play a pivotal role in the current Austrian balancing and clearing regime. They split the system into a transmission-level part and a distribution-level part: the market area manager balances nominated and scheduled gas, while the clearing and settlement agent takes care of divergences between consumer schedules and actual consumption.

In future, clearing will no longer rely on consumer schedules; the distinction between transmission and distribution-level balancing and clearing will be eliminated. Instead, there will be a single clearing entity that will clear the entire market area. Balance responsible parties will no longer be exposed to two separate, potentially opposing imbalances for the same day (ex ante and ex post). The integrated system will use a single daily imbalance quantity for each BG, and the figure below shows which quantities and readings will be used to calculate these daily imbalance quantities.

Fig. 2

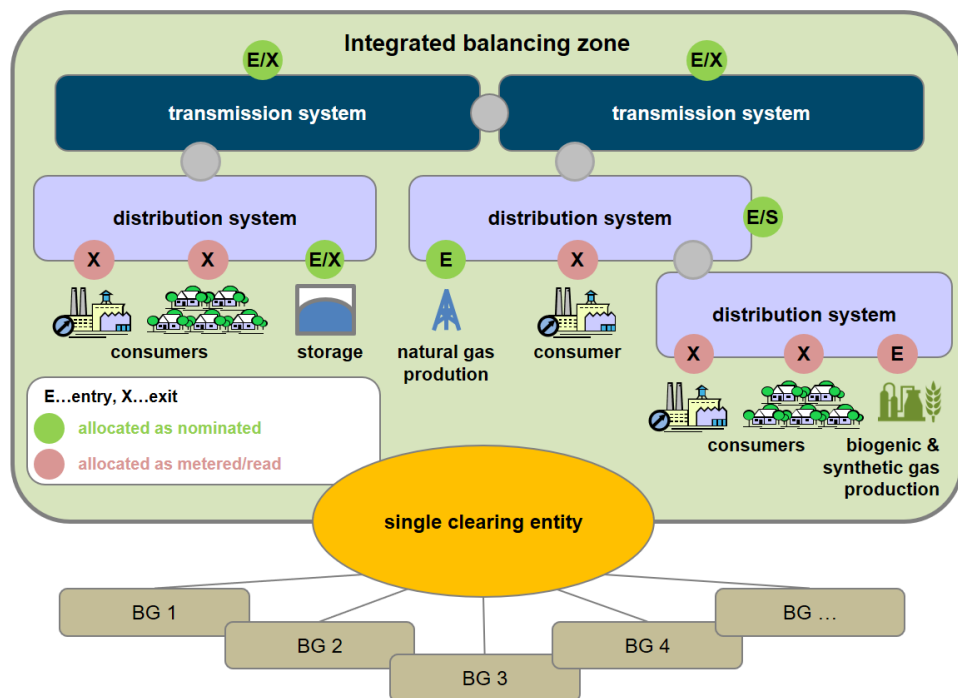
Calculation of daily imbalances		
	entry	exit
Virtual trading point (VTP)	allocated as nominated	allocated as nominated
Cross-border interconnection point	allocated as nominated	allocated as nominated
Storage	allocated as nominated	allocated as nominated
Natural gas production	allocated as nominated	—*
Biogenic and synthetic gas production	daily total of hourly readings / 24	—*
LM consumer > 300,000 kWh/h	—	hourly readings
LM consumer < 300,000 kWh/h	—	daily total of hourly readings / 24
SLP consumer	—	daily total for SLP at actual weather conditions / 24
daily imbalance quantity		

* Should there be exits at these points, they will be accounted for in the same way as entries.

The daily imbalance quantities of (smaller) consumers will be net daily quantities. Entries and exits metered during the day will only be relevant for (larger) consumers with a contracted capacity > 300,000 kWh/h. (In the current system, the thresholds are 10,000 and 50,000 kWh/h.) Exits for SLP consumers will not be metered but calculated from the applicable load profile and the actual weather conditions.³ This corresponds to the base case described in the Gas BAL NC.⁴

A single clearing entity will use the above data to clear the entire market area each day.

Fig. 3



E = entry / X = exit
Please note that

- the system will take care of all cross-border interconnection points, regardless of whether they are at transmission or at distribution level;
- system operators must design their interconnection point agreements so that they can accommodate the "allocated as nominated" rule. Any differences between nominated/allocated quantities and actual meter readings must be documented in OBAs.

Questions for consultation:

- A: Will a single clearing entity improve the system and make it easier to use?
- B: Do you welcome that BRPs will no longer be exposed to potentially opposing imbalances for the same day (ex ante and ex post)?
- C: Are the standard load profiles that are currently used suitable for the future system?

³ Any gas unaccounted for will be attributed to the distribution system operator (s. chapter 3.11).

⁴ The Gas BAL NC provides that for the information models 'base case' and 'variant 1', all gas delivered to the distribution system be allocated.

3.3 Daily balancing and clearing

The market area and distribution area manager will undertake any and all necessary balancing actions (on behalf and for account of the single clearing entity). Balancing each BG's position during the day (on behalf and for account of the BRP) will not be necessary anymore. This implies that BRPs do not necessarily have to trade at the gas exchange anymore.

The single clearing entity will be financially responsible for the balancing actions undertaken; it will in turn financially settle any and all daily imbalance quantities with the BRPs. The daily imbalance quantity will be calculated as the difference between each BG's allocated entries and exits (s. chapter 3.2).

Available linepack will primarily be used to reduce the need for balancing actions, thereby also reducing the balancing incentive mark-up (s. chapter 3.6) and imbalance charges. There will be no linepack flexibility service (cf. Article 21(2)(a) Gas BAL NC).

4.3 Information provision

BRPs will need to balance their portfolios during each balancing period as best they can.

The MADAM, which will function as central data repository, will assist them in this task by providing the below information.⁵ Please note that much of this information will be preliminary when it is made available; in the end, the daily imbalance quantity for each BG will be calculated and financially settled based on allocated quantities.

Table 1

#	Information provided	Description	Frequency
Market area			
1	preliminary daily market area position	forecast market area position at day-end, calculated from the most recent available information (s. #10 below)	each hour
2	balancing actions quantities and prices	quantities and prices of balancing actions taken	near real time
3	market area consumption	total metered or allocated consumption in the market area so far, for <ul style="list-style-type: none"> • SLP consumers • LM consumers 	<ul style="list-style-type: none"> • whenever updated information becomes available • ex post, once final data become available
4	linepack and linepack use	available linepack in the market area as a percentage of the linepack limits set by the MADAM	each hour
Balance groups			

⁵ In addition, the MADAM will provide an SLP consumption forecast by noon each day for the following day. (This information is already made available to BGs under the current system, by the DAM.)



5	SLP consumption forecasts	SLP consumption forecasts per supplier for the current balancing period, based on recent weather forecasts	3 times per day (first before noon)
6	preliminary allocations for HB-LM consumers that submit data each hour	preliminary readings from large consumers, i.e. consumers with a contracted capacity > 300,000 kWh/h	each hour
7	preliminary allocations for DB-LM consumers that submit data each hour	preliminary readings from DB-LM consumers with a contracted capacity > 10,000 kWh/h	each hour
8	preliminary calculated ⁶ allocations for DB-LM consumers that do not submit data each hour	BG share in calculated overall consumption of DB-LM consumers that do not submit data each hour ⁷	each hour or 3 times per day (first before noon)
9	preliminary allocations for biogenic and synthetic gas	preliminary meter readings from biogenic and synthetic gas production facilities	each hour
10	preliminary net position	<p>net imbalances that have accrued so far (i.e. not a forecast of the BG's daily imbalance quantity), based on</p> <ul style="list-style-type: none"> • nominations • SLP consumption forecasts • preliminary readings for LM consumers that submit data each hour • preliminary, calculated allocations for LM consumers that do not submit data each hour • preliminary allocations for biogenic and synthetic gas 	each hour

The below example shows how the preliminary net positions will be calculated and provided to the BRPs by noon on gas day D. It uses a fictitious BG that imports through Baumgarten, buys at the VTP and exits gas towards all three DB consumer categories.

⁶ Hourly readings for these consumers are recorded but are not available during the day. A proxy is calculated and provided to BRPs instead.

⁷ Overall consumption for this consumer group can be calculated from available (preliminary) information for the market area. A BG's share in it is derived from its percentage share in the overall consumption of this consumer group according to the most recent available meter readings.

Table 2

	BAUM-GARTEN	VTP	SLP	LM (hourly data)	LM (no hourly data)	PRELIM. NET POS.
Direction	Entry	Entry	Exit	Exit	Exit	
Available	all hours on gas day D			First 5 hours on gas day D		
Data basis	Confirmed (re)nominations for hours up to 10:00-11:00 (receipt by 07:59)	Confirmed (re)nominations for hours up to 10:00-11:00 (receipt by 08:59)	First within day update of SLP consumption forecasts (provided by 11:00), divided by 24	Preliminary readings for these 5 hours	BG share in calculated overall consumption of DB-LM consumers that do not submit data each hour, for these 5 hours	
06:00-07:00	5	10	5	7	3	
07:00-08:00	5	10	5	7	3	
08:00-09:00	5	10	5	7	3	
09:00-10:00	5	12	5	7	3	
10:00-11:00	6	12	5	7	3	
Quantity	+26	+54	-25	-35	-15	+5

Questions for consultation:

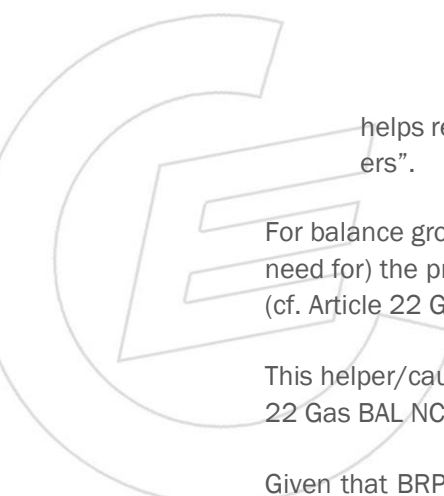
- D: Are the additional data that will be provided useful? Is this an efficient information system?
- E: Which of the data provided during the day are particularly important for BGs to be able to balance their portfolios?
- F: When calculating the preliminary net position of a BG, does it make sense to simplify the approach for preliminary allocations of DB-LM consumers without hourly data submission, as is proposed above?
- G: Should calculated preliminary allocations for DB-LM consumers without hourly data submission be provided each hour or rather 3 times a day (as for SLP consumption forecasts)?

3.5 Incentives for balanced portfolios

The applicable price for the daily imbalance charge will correspond to the rules in Article 22 Gas BAL NC: either marginal sell price for positive balancing actions and marginal buy price for negative balancing actions that the MADAM must undertake on behalf and for account of the single clearing entity, or weighted average price of gas.

The weighted average price of gas on the relevant market will apply

- on gas days during which the MADAM does not have to procure balancing actions, to all balance groups;
- on gas days during which the MADAM had to procure only either positive or negative balancing actions, to the balance groups whose net position at day-end is contrary to (i.e.



helps reduce the need for) the procured balancing actions. Such BGs will be called “helpers”.

For balance groups whose net position at day-end has the same direction as (i.e. aggravates the need for) the procured balancing actions, the marginal sell/buy price for title products will apply (cf. Article 22 Gas BAL NC). These balance groups will be called “causers”.

This helper/causer system⁸ will make the small adjustment that can be introduced under Article 22 Gas BAL NC redundant.

Given that BRPs will receive updated information about the daily market area position and the preliminary net position of their balance group each hour, this pricing mechanism will result in an incentive for balance groups to contribute to an overall balanced market area.

In addition to the above cases, there will be days during which the MADAM will need to procure both positive and negative balancing actions. On such days, differentiating between helpers and causers will not be possible. Instead, the applicable price for all daily imbalance quantities will be the marginal prices mentioned above.

Questions for consultation:

- H: Will the helper/causer system (instead of the small adjustment) incentivise balance groups to balance their portfolios and to contribute to system stability?

3.6 Adjusted within day obligations

Within day obligations will continue to be used to ensure that contrary balancing actions are paid for by those who cause them, to adequately incentivise reducing the overall costs of balancing and to ensure the stability of the network. However, the system will be redesigned; exits to consumers with contracted capacities < 300,000 kWh/h will be calculated as constant 24-hour blocks (s. chapter 3.2).

Should the MADAM need to procure both positive and negative balancing services during a gas day, imbalanced BGs will have to pay a balancing incentive mark-up. The balancing incentive mark-up will depend on a BG's daily imbalance quantity (i.e. the difference between all its entry and exit allocations for the gas day). However, no balancing incentive mark-up will apply below a certain tolerance level. This tolerance level will depend on the quantity of gas exited to consumers with contracted capacities > 300,000 kWh/h with hourly allocations under chapter 3.2. More precisely, the tolerance level will correspond to a percentage of these exits; the percentage will be defined by the MADAM based on how much linepack is available (i.e. how much linepack is not needed for within day imbalances of DB consumers). There will be no tolerances for exits

⁸ The information provided to BRPs in the course of each day will enable them to continuously assess their own position relative to the market area's.

towards DB consumers, because they already benefit from linepack by default. Neither will there be tolerances for any other entries or exits that are allocated as nominated as these will not be exposed to any allocation uncertainty.

On gas days during which the MADAM needs to take both positive and negative balancing actions, BGs will have to pay the balancing incentive mark-up for their daily imbalance quantity beyond the tolerance level.

The below example shows how the tolerance level, the hourly imbalances and the basis for the balancing incentive mark-up will be calculated. The example uses a fictitious percentage of 5% for the tolerance level

Fig. 4

Stunde	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Σ entry to BG	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Σ exit from BG	-10	-10	-10	-10	-10	-10	-12	-12	-12	-12	-12	-12	-8	-8	-8	-8	-8	-8	-8	-8	-8	-12	-12	-12
to consumers with a contracted capacity > 300,000 kWh/h	3	3	1	2	4	4	4	6	4	4	3	2	3	2	3	2	3	4	5	4	4	4	3	3
Hourly imbalance: Σ entry - Σ exit	0	0	0	0	0	0	-2	-2	-2	-2	-2	-2	2	2	2	2	2	2	2	2	2	-2	-2	-2
Net position	0	0	0	0	0	0	-2	-4	-6	-8	-10	-12	-10	-8	-6	-4	-2	0	2	4	6	4	2	0
Tolerance (5% of daily allocation)	± 4	± 4	± 4	± 4	± 4	± 4	± 4	± 4	± 4	± 4	± 4	± 4	± 4	± 4	± 4	± 4	± 4	± 4	± 4	± 4	± 4	± 4	± 4	± 4
Quantity beyond tolerance \rightarrow basis for mark-up	0	0	0	0	0	0	0	0	2	4	6	8	6	4	2	0	0	0	0	0	2	0	0	0



The balancing incentive mark-up will serve to recover the single clearing entity's costs for within day balancing. These costs will be calculated as difference between the weighted average price for the positive and negative balancing actions that had to be purchased during a day, multiplied by the quantity of either the positive or negative balancing actions, whichever is smaller.

These costs will then be divided by the total daily imbalance quantities beyond the tolerance level of all BGs to arrive at the rate of the balancing incentive mark-up in ct/kWh. The balancing incentive mark-up payable by a BG will be this rate multiplied by the BG's mark-up quantity, i.e. its daily imbalance quantity beyond the tolerance level.

The example below shows the above system for a fictitious situation.

Fig. 5

4
Calculating the single clearing entity's costs for within day balancing

5
Calculating the general rate and applicable balancing incentive mark-up for each balance group

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Σ		
Positive balancing actions																											
Quantity 1									5	10	5															20	
Price 1									20.0	20.0	20.0																
Quantity 2										5																	5
Price 2										20.5																	
Negative balancing actions																											
Quantity 1																											
Price 1		10	10	10	10	5										10	10	10	10	10	10						105
Quantity 2		19.5	19.5	19.5	19.5	19.5										19.5	19.5	19.5	19.5	19.5	19.5						
Price 2																						5	5				20
																						19.0	19.0				
Average price for balancing actions																											
Positive balancing actions																								20.10			
Negative balancing actions																								19.42			
Price difference																								-0.68			
Smaller quantity: positive and negative balancing actions																											
																								25			
Costs for within-day balancing																											
																								-17.00			
Total BG mark-up quantities																											
																								340			
Rate																											
																								-0.050			
Fictitious BG's mark-up quantity																											
																								52			
Balancing incentive mark-up payable by fictitious BG																											
																								-2.60			

Questions for consultation:

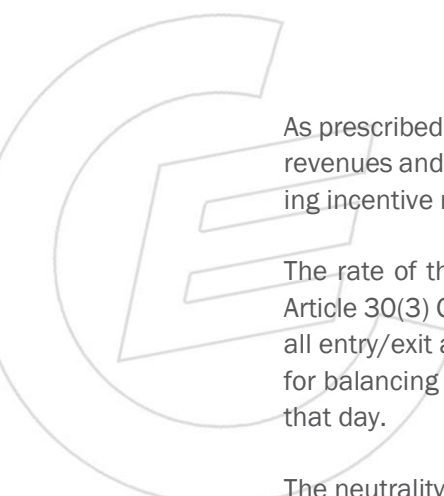
- I: Considering the redesigned system for within day obligations, are the much higher thresholds for hourly balancing (contracted capacity > 300,000 kWh/h) well chosen?
- J: Should the percentage for the tolerance level be fixed ex ante for an extended period of time or should it be calculated ex post, based on actual daily linepack use?
- K: Should within day obligations generally be avoided? Please consider that the neutrality charge for balancing would then need to cover any and all costs of the single clearing entity for within-day balancing actions and it might be necessary to curtail BGs more often (s. chapter 3.10).

3.7 A daily neutrality charge for balancing

The future balancing system will feature a neutrality charge for balancing that will be calculated and financially cleared each day.

Any costs and revenues resulting from balancing will thus be quickly assigned to those who cause them and immediately financially settled; cumulative effects and rash jumps in the neutrality charge will be avoided and impact on market players' liquidity minimised.⁹

⁹ The Gas BAL NC provides that the applicable prices for daily imbalance quantities are the marginal prices and that the neutrality charge for balancing be distributed across all entries and exits in the market area. The neutrality charge for balancing can therefore be expected to be rather low and to usually result in credit to BRPs (at least in the case of within day obligations as described above).



As prescribed in Article 29 Gas BAL NC, the neutrality charge for balancing will cover any and all revenues and expenditures from balancing actions, 1st clearing (s. chapter 3.8) and the balancing incentive mark-up.¹⁰

The rate of the neutrality charge for balancing (in ct/kWh) will be calculated as described in Article 30(3) Gas BAL NC: the total sum to be recovered will be divided by the total quantities of all entry/exit allocations during a gas day. Each balance group will then pay a neutrality charge for balancing that corresponds to the rate multiplied by the BG's total entry/exit allocations for that day.

The neutrality charge for balancing will be financially settled as part of the 1st clearing.

Questions for consultation:

- L: Does it make sense to recalculate the amount of the neutrality charge for balancing each day?
- M: What is the threshold (in ct/kWh) for an acceptable neutrality charge for balancing, considering that it is calculated ex post and market participants cannot know it ex ante?
- N: Is it preferable to re-calculate the neutrality charge for balancing each day (thereby better reflecting who causes imbalances) or would you rather have a neutrality charge for balancing that is fixed for a longer period of time (with a time lag against the actual situation)?

3.8 Financial settlement

The future balancing regime will settle open positions as quickly as possible, thereby reducing liquidity risks and other risks for market participants. Available information about allocations for each gas day D (s. chapter 3.2) will enable financial settlement of daily imbalance quantities, the neutrality charge for balancing and the balancing incentive mark-up on day D+3 (1st clearing). For this purpose, system operators will send the relevant information about gas day D to the single clearing entity no later than on D+2.

Any differences between allocated exits and actually metered and read consumption will be financially settled with the BGs fourteen months later (2nd clearing, s. chapter 3.9). The applicable price for these quantities will be the weighted average price of gas for the relevant gas day.

The single clearing entity can entrust handling of financial flows for the 1st and 2nd clearings to a competent (and existing) settlement agency. A settlement agency is considered to be competent if it can correctly and cost-efficiently handle financial settlement and if it enables synergies across market areas in terms of costs, processes etc. that will benefit market participants.

¹⁰ Depending on the financial clearing regime, Article 31(3) Gas BAL NC provides that losses due to defaults by market players will also have to be recovered through the neutrality charge.

It will no longer be mandatory for market participants to be admitted to trading at the gas exchange; a contract with the settlement agency will suffice.

Questions for consultation:

- O: Is it efficient and sensible to expedite financial settlement of the 1st clearing by entrusting it to a largely automated financial settlement agency (e.g. an exchange's clearing house)?

3.9 Centralised 2nd clearing¹¹ for all distribution systems

Any differences between the allocated entries and exits to consumers and the actually metered and read entries and exits by consumers will be financially settled with the BGs fourteen months after the 1st clearing (2nd clearing). The applicable price for these quantities will be the weighted average price of gas for the relevant gas day. The 2nd clearing will be done once a month but will use daily data and result in charges or credits for each individual gas day.

As during the 1st clearing, the clearing itself will be done by the single clearing entity and financial settlement will be taken care of by a settlement agent.

The below example shows the 1st and 2nd clearings for three days for a fictitious supplier/BRP that services several SLP consumers.

Fig. 6

DAY	ALLOCATIONS FOR 1ST CLEARING (based on SLPs, actual weather conditions and previous year's consumption at MP)	ALLOCATIONS FOR 2ND CLEARING (based on SLPs, actual weather conditions and read consumption at MP)	NET	EXCHANGE REFERENCE PRICE	CHARGE (pos. value: credit)
<i>Unit</i>	<i>[MWH]</i>	<i>[MWH]</i>	<i>[MWH]</i>	<i>[EUR/MWH]</i>	<i>[EUR]</i>
Day 1	50	48	+2	17.5	+35.0
Day 2	55	53	+2	18.0	+36.0
Day 3	54	55	-1	18.5	-18.5
Result of 2nd clearing					+52.5

¹¹ cf. Article 2 Gas BAL NC

3.10 BG curtailment

The Austrian virtual trading point handles much smaller quantities for Austria than are transited through the country. It is therefore unlikely that all balancing actions that might be necessary can be procured at the VTP.

The existing possibility to curtail BGs will therefore be kept, albeit modified.

As is currently the case when market-based balancing actions are insufficient, the MADAM will change the nominations of those balance groups whose preliminary net positions are endangering system stability. However, consumer schedules will no longer be considered when calculating each BG's preliminary net position. Consumer schedules will no longer figure in the balancing system at all; instead, the most recently calculated net position of each BG will be used (s. chapter 3.4).

3.11 Increased transparency

Transmission and distribution system operators will still be required to have a special balance group and to nominate a balance responsible party for it. However, the redesign of the balancing regime offers an opportunity for increased transparency.

1. Clearly and logically differentiating between and linking
 - allocated quantities in the 1st clearing and metered quantities in the 2nd clearing;
 - actually metered gas flows (gas volumes and actual calorific values) at market area borders and connection points between systems;
 - linepack at transmission and distribution level.
2. Clearly and transparently defining
 - which calorific value (default or actual) will apply;
 - how costs are recovered through the neutrality charge for balancing and through grid charges.

Calorific values:

The default calorific value will continue to be calculated in line with the rules in annex 2 of the Gas Market Model Ordinance in its latest version. Actual calorific values will be calculated by the MADAM each day, based on the calorific values registered by the system operators. This will result in

- an individual actual calorific value for each market area entry and exit point (except consumer points);
- an individual actual calorific value for each connection point between systems;
- an actual weighted calorific value for all of a system operator's consumer points.

Allocations for balancing:

The below table summarises all allocations that will be used for balancing and clearing, lists how they will be calculated and, if applicable, indicates the relevant calorific value.

Table 3

#	Allocation	Calculation	Calorific value
1	allocated entries and exits at cross-border interconnection points (transmission and distribution level)	allocated as nominated	not relevant
2	allocated entries from and exits to storage	allocated as nominated	not relevant
3	allocated entries from and exits to natural gas production	allocated as nominated	not relevant
4	entries from and exits to biogas and synthetic gas production	metered	actual calorific value
5	allocated exits to LM consumers	metered	default calorific value ¹²
6	allocated exits to SLP consumers	metered ¹³	default calorific value
7	metered transfers at connection points between systems in the market area	metered	actual calorific value
8	nominations to cover own consumption	allocated as nominated	not relevant
9	metered own consumption	metered	default calorific value
10	non-metered own consumption	calculated	default calorific value

¹² Section 126(3)(7) Natural Gas Act 2011 specifies that the default calorific value be used to calculate exits to consumers unless the actual calorific value is metered on site.

¹³ 1st clearing data are derived from the SLP; 2nd clearing data are metered and applied 14 months later.

Balancing as an element of the grid charges:

The actual calorific values calculated by the MADAM and the meter readings at market area entry and exit points and connection points will serve to calculate the below elements.

Table 4

#	Element	Calculation	Relevance for grid charges
1	OBA fluctuations	difference between allocated quantities and actual gas volume multiplied by the actual calorific value at points where quantities are "allocated as nominated"	no <i>(basis for "allocated as nominated" allocations)</i>
2	linepack fluctuations	difference between the available linepack at the beginning and at the end of the gas day	no <i>(primarily serves to keep the system balanced and able to transport gas)</i>
3	difference in calorific values for exits towards consumers	allocated exits towards LM and SLP consumers, multiplied by the difference between the weighted actual calorific value and the default calorific value	yes
4	gas unaccounted for	difference between allocated and metered quantities that cannot be accounted for by elements 1-3 (e.g. systemic errors from SLP application, metering errors etc.)	yes

Some of these elements will be taken into account when setting grid charges, i.e. any financial advantages or disadvantages that consumers might have due to the above discrepancies will be offset by way of the grid charges.

Any differences between the actual calorific value and the default calorific value that is applied for consumer exits and gas unaccounted for will be attributed to the system where these exits have taken place. They will then be multiplied by the weighted average price of gas and integrated into the system charges.

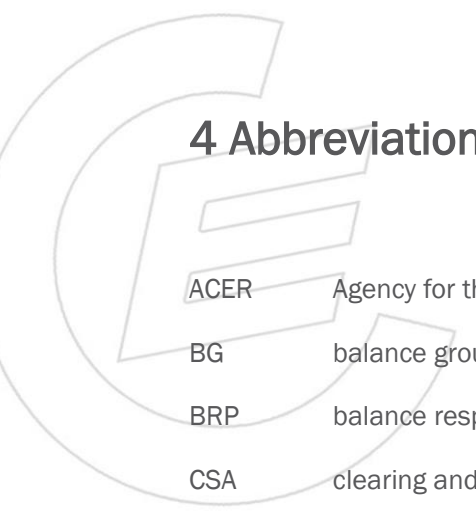
3.11 Rules for Tyrol and Vorarlberg

Tyrol and Vorarlberg will continue to be balanced through the VTP in the adjacent upstream market area in Germany. As is currently the case, consumption forecasts will serve to calculate how much gas will be needed to supply consumers in Tyrol and Vorarlberg, and this gas will be transferred to the MADAM (currently: the DAM) at the German VTP.

The single clearing entity clears the market areas following the same principles as above:

- it allocates quantities and uses the data described in chapter 3.2;
- it calculates the daily imbalance quantities, as described in chapter 3.3;
- it provides the data listed in chapter 3.4;
- it calculates the applicable price for daily imbalance quantities as described in chapter 3.5;
- it applies the within day obligations defined in chapter 3.6;
- it calculates and settles the neutrality charge for balancing as described in chapter 3.7;
- it settles BRPs financially without undue delay, as described in chapter 3.8;
- it performs the 2nd clearing as described in chapter 3.9; and
- it calculates the elements that are relevant for the grid charges, as outlined in chapter 3.10.

4 Abbreviations



ACER	Agency for the Cooperation of Energy Regulators
BG	balance group
BRP	balance responsible party
CSA	clearing and settlement agent
DAM	distribution area manager
DB-LM	daily balanced and load metered
EFET	European Federation of Energy Traders
HB-LM	hourly balanced and load metered
LM	load metered
MA	market area
MADAM	market area and distribution area manager
MAM	market area manager
NCG	NetConnect Germany (German market area)
SLP	standard load profile
T&V	Tyrol and Vorarlberg
VTP	virtual trading point
VTP-O	operator of the virtual trading point