



Guarantee Manual

HETS Grid Code

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1. General

In accordance with the provisions of subsection 11.3 of the Hellenic Electricity Transmission System Grid Code (HETS Grid Code), any participant registered with the HETS Operator Registry, whilst the HETS Operator Transactions Contract is in force, must provide full guarantees for the fulfillment of all its obligations arising from the said Contract.

The Guarantee Validity Period shall be defined as the time period from 1st October of year N up to and including September 30th of year N+1, "October N – September N+1".

Each registered participant of the HETS Operator Registry must provide guarantees by September 30th of year N for the guarantee period "October N – September N+1". The guarantees should enter into force no later than October 1st of year N.

The obligation to provide guarantees is fulfilled, in accordance with subsection 11.3 of the HETS Grid Code, either by submitting a letter of guarantee or by depositing an amount in a special account held by the HETS Operator.

2. Calculation of the amount of guarantees due

The amount of outstanding guarantees for all obligations of the participants registered with the HETS Operator Registry in the framework of the HETS Operator Transactions Contract shall be calculated on both an annual and a monthly basis, as described below.

2.1. Annual guarantee calculation

The System Operator shall calculate the amount of the guarantees due for all the participants registered with the HETS Operator Registry during each calendar year N. In particular, by September 10th of year N, the calculations shall be completed and the persons responsible shall be informed of the amount of the requisite guarantees for the Guarantee Validity Period 'October N - September N+1`.

For the purpose of calculating the amount of the guarantee, historical data available on the relevant settlements of the following accounts (Λ) shall be used:

- Λ -A: Inter-TSO Compensation Mechanism (ITC) between TSOs for the cost of Losses due to hosting cross-border flows of electricity;
- Λ -B: Account for revenues from Emergency Imports of Surplus Energy;
- Λ -Γ: Non-Balancing Ancillary services and other services;
- Λ -Δ: Transmission Use of System Charges, and
- Λ -ΣT: Uplift Accounts.

In the event that additional settlement accounts arise, such as indicatively, the application of the Interruptible Load Service, the Transitory Flexibility Remuneration Mechanism or the Long-term Capacity Mechanism, the calculation of the amount of the guarantee shall include these accounts, unless specific provisions expressly stipulate otherwise.

For each Guarantee Validity Period for ‘October N - September N+1’, credit and debit data from the settlement procedures of the above accounts shall be used for the period from July 1st of year N-1 up to and including June 30th of year N.

The procedure for determining the amount of the requisite guarantees shall include the following steps for each participant (Σ) registered with the HETS Operator Registry:

- determination of the Maximum Monthly Charge, and
- determination of the amount of the guarantee.

In particular, the Maximum Monthly Charge $MMX_{\Sigma,\Lambda}$ is calculated as the maximum value between the sum of the monthly debits and credits calculated in the context of the settlements pertaining to all accounts (Λ) mentioned above, for the participant registered with the HETS Operator Registry (Σ), during the aforementioned period (“July 1st N-1 – June 30th N”).

The amount of the requisite guarantees ($E\Gamma\Gamma_{\Sigma}$) for each participant (Σ) registered with the HETS Operator Registry shall be calculated as follows:

$$E\Gamma\Gamma_{\Sigma} = MMX_{\Sigma} = \max \left\{ \begin{array}{c} [\Sigma_{\Lambda} (MX_{\Sigma,\Lambda})]_{m1} \\ \dots \\ [\Sigma_{\Lambda} (MX_{\Sigma,\Lambda})]_{m12} \end{array} \right\}$$

Where:

- MMX_{Σ} : The Maximum Monthly Charge for the participant (Σ) registered with the HETS Operator Registry, for all its accounts;
- $MX_{\Sigma,\Lambda}$: the Monthly Charge for the participant (Σ) registered with the HETS Operator Registry in respect of account Λ , and
- $m_{1..12}$: each month of the period July 1st N-1 – June 30th N.

If the amount of the requisite guarantee $E\Gamma\Gamma_{\Sigma}$ as calculated above is less than the amount of the minimum guarantee in Section 3.1, then the amount of the requisite guarantee $E\Gamma\Gamma_{\Sigma}$ shall be defined as equal to the amount of the minimum guarantee.

For new registrants to the HETS Operator Registry for whom the sum of the Maximum Monthly Charges per account cannot be calculated, Section 3.2 shall apply.

2.2. Monthly guarantee calculation

Following the completion of settlement procedure for month M, which takes place at the time points described in subsection 11.5 of the HETS Grid Code, the HETS Operator shall recalculate the amount of the guarantees for each participant (Σ) registered with the HETS Operator Registry. The amount of the new requisite guarantee ($E\Gamma\Gamma_{\Sigma,M}$) calculated for each participant (Σ) registered with the HETS Operator Registry shall be calculated as follows:

$$E\Gamma\Gamma_{\Sigma,M} = \sum_{\Lambda} (X_{\Sigma,\Lambda})$$

Where:

- $X_{\Sigma,\Lambda}$, the monthly debits and credits for the participant (Σ) registered with the HETS Operator Registry, as regards account Λ as shown in month $M+2$ from the results of the settlement of month M .

If the amount of the requisite guarantee based on the monthly calculation of $EFG_{\Sigma,M}$, for the month M exceeds the amount of the deposited guarantee by at least 20%, the System Operator shall invite the participant registered with the HETS Operator Registry to provide additional guarantees within ten (10) days from their notification by letter or email.

The above tolerance percentage for the change in the guarantees may be adjusted by a decision of RAE following a recommendation by the HETS Operator.

It should be noted that during the month of September, when the annual guarantees are calculated, monthly guarantee checks are not carried out.

3. Minimum guarantee

All participants registered with the HETS Operator Registry shall have submitted a guarantee for at least the amount of Minimum Guarantee, as set out below.

3.1. Minimum Guarantee amounts

The participants registered with the HETS Operator Registry, in order to have a Transaction Contract in force with HETS Operator, shall be obliged to have a deposit equal to or greater than the minimum Guarantee amount. The parties registered with the HETS Operator Registry for which the amount calculated under Section 2 is greater than the Minimum Guarantee amount shall be required to provide the amount resulting from these calculations.

The minimum Guarantee Amount for Suppliers and Self-Supplied Customers is set at € 20,000. The minimum Guarantee amount for Traders is set at €10,000, and no minimum Guarantee amount is set for producers, RES Aggregators and Demand Response Aggregators.

The above minimum Guarantee amounts may be adjusted by a decision of RAE following a recommendation by the HETS Operator.

3.2. Guarantees for new registrants in the HETS Operator Registry

The registration of a new participant in the HETS Operator Registry requires the provision of guarantees to cover all of its obligations in the framework of the HETS Operator Transactions Contract.

The amount of the guarantee that a company requesting its registration with the HETS Operator Registry must deposit as a Trader shall be equal to the minimum Guarantee amount for Traders.

The amount of the guarantee that a company requesting its registration with the HETS Operator Registry must deposit as a Supplier or Self-Supplied customer shall be equal to the minimum Guarantee amount for Suppliers.

4. Non-Compliance Charges

In the event that the participant registered with the HETS Operator Registry does not provide the requisite guarantee in due time, in line with the timeline described in Section 2, the HETS Operator shall impose a charge $C_{E\Gamma\Gamma}$ of one per thousand (1 ‰) of the remaining amount for each day of delay with a minimum payment of € 1.000 per day, i.e.:

$$C_{E\Gamma\Gamma} = \sum_{d=1}^n \max\left(\frac{Y\Pi_d}{1000}, 1000\right)$$

where:

$Y\Pi_d$: the amount not paid in time and relating to day d,

n : the number of days of delay in submitting the requisite guarantee.

5. Examples of how to calculate guarantees

5.1. Example 1: Annual guarantee calculation

Supposing that the HETS Operator wants to calculate the guarantee for Participant A for the guarantee period October 2021-September 2022. For this purpose, debit and credit data from the settlement of the participant's accounts related to the period from July 1st, 2020 to June 30th, 2021 inclusive shall be used, as presented in the following table.

Total monthly transactions of participant A	
Jul-20	687,801
Aug-20	556,887
Sep-20	557,260
Oct-20	644,620
Nov-20	692,868
Dec-20	654,313
Jan-21	629,674
Feb-21	669,566
Mar-21	672,286
Apr-21	773,729
May-21	596,570
Jun-21	723,508
MMX_{A,A}	773,729

The amount of the requisite guarantee of participant A has been calculated as set forth in section 2.1 and equals

$$E\Gamma\Gamma_A^{E.\Pi.} = 773,729 \text{ €}$$

5.2. Example 2: Monthly guarantee calculation

The monthly check for the same participant is presented below, in order to determine whether the guarantee paid covers the amount of its subsequent transactions. Following the calculations in section 2.2 the total transactions resulting from the settlement of accounts Λ-A, Λ-Γ, Λ-Δ & Λ-ΣΤ of participant A, relating to the months of July and August 2021 are presented in the following month.

Month	Settlement Amount (€)	New guarantee Calculation	Difference (%) compared to existing guarantee
Jul-21	754,464	754,464	-2%
Aug-21	936,795	936,795	21%

According to the results of the table, no additional guarantee is required for the month of July 2021, as the amount of transactions is covered by the existing guarantee provided by participant A as shown in Example 1. On the other hand, transactions in August 2021 are not covered by the amount of the guarantee paid. As the increase in the requisite guarantee is 21% compared to the existing one, which exceeds the tolerance limit in accordance with section 2.2, the participant should provide an additional guarantee equal to:

$$EGG_{A,\sigma\nu\mu\pi} = 936,795 - 773,729 = 163,066 \text{ €}$$

5.3. Example 3: Non-Compliance Charges

If participant A must submit the supplementary guarantee calculated in example 2 within 10 days of being notified, $\gamma\pi = 163,066 \text{ €}$. Supposing that the participant pays the amount € 100,000 with a two-day delay and the remainder with a 5-day delay. As set out in Section 4, the HETS Operator shall calculate the charge as follows:

$$C_{EGG} = \frac{100,000}{1,000} \times 2 + \frac{63,066}{1,000} \times 5 = 515.33 \text{ €}.$$

The minimum daily charge is then checked.

The participant will incur a charge for the delay of at least $5 \times 1,000 = 5,000 \text{ €}$.

Therefore, since $515.33 \text{ €} < 5,000 \text{ €}$, the final non-compliance charge is equal to $C_{EGG} = 5,000 \text{ €}$.