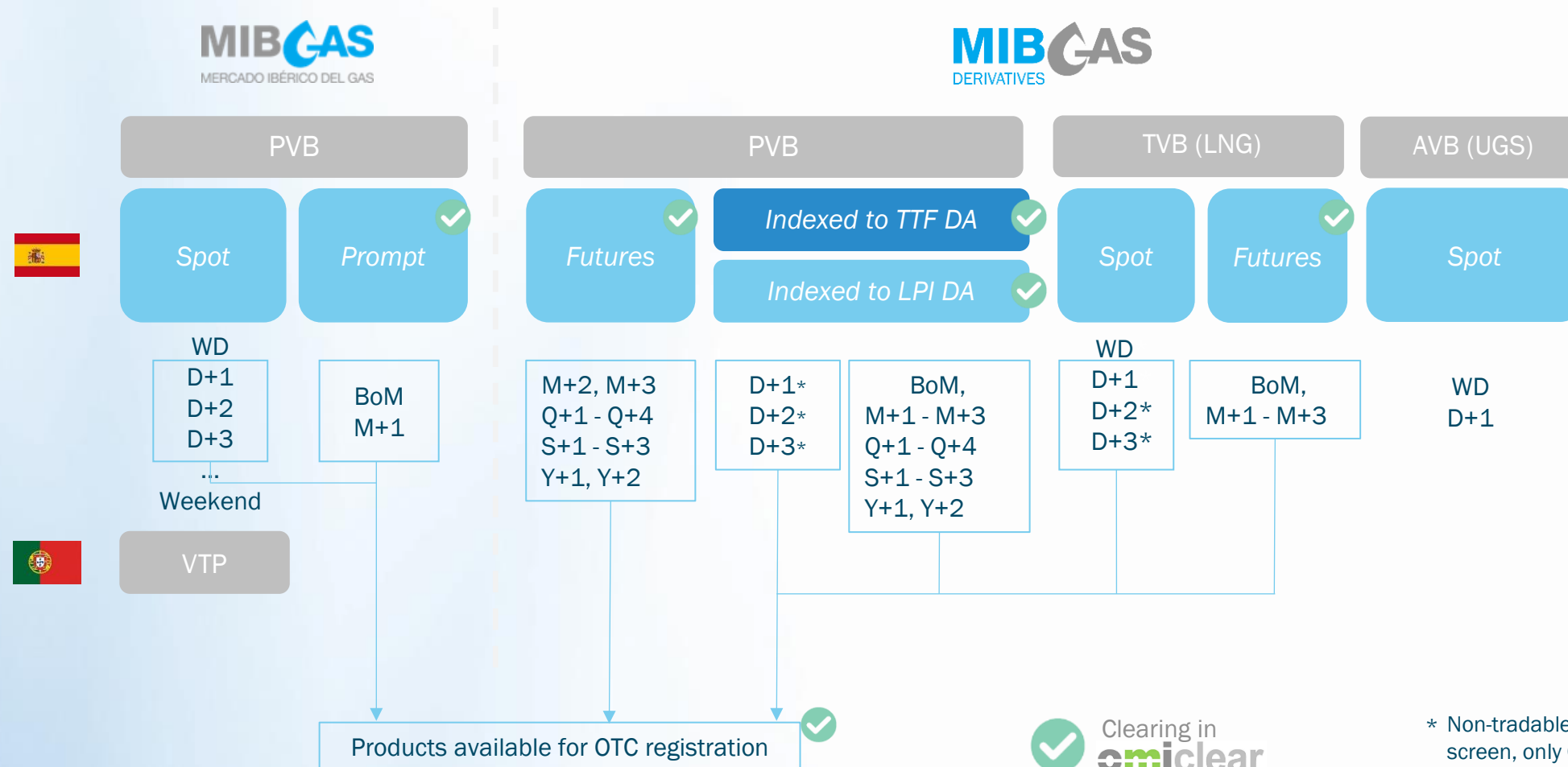

PVB FUTURES PRODUCTS INDEXED A TTF DAY-AHEAD

Product Specification and Trading

PRODUCTS TRADED ON MIBGAS AND MIBGAS DERIVATIVES



PVB PRODUCTS INDEXED TO TTF DA

Product opportunities

Agents are subject to a number of risks related to *commodities* trading.



Fixed price risk

It is the risk related to the exposure to the **price negotiated for a contract**.

Agents normally have little exposure to this risk; **prices can be very volatile**.

In the traditional model, an agent buys a *commodity*, and **hedges the resulting position** through a **derivative transaction** (e.g., the sale of futures contracts) **until the physical position is unwound** by selling the original position.

Therefore, the agents **transform this risk into a basis risk**.

Currently, the agents use the following operations to hedge physical futures with delivery in PVB:

Purchase/Sale of a physical future PVB

TTF opposite transaction (same delivery horizon)

Daily unwind position via TTF DA

$$P\&L = - PVB \text{ Future} + TTF \text{ Future} - TTF \text{ Spot (delivery)}$$

$$P\&L = - (\text{Future TTF} + \text{Diff.}) + \text{Future TTF} - \text{Spot TTF (delivery)}$$

$$P\&L = - \text{Diff.} - \text{Spot TTF (delivery)}$$

Therefore, P&L only depends on the TTF.

In the end, you will only be exposed to the PVB-TTF difference for the life of the product, and gas will be available only in the PVB (not in TTF).

PVB PRODUCTS INDEXED TO TTF DA

Launched on September 12, 2023

ICIS TTF Price Assessment DA

Price published by ICIS in its publication 'European Spot Gas Markets'. For weekend days the Weekend will be used.



Products with physical delivery and non-financial derivatives outside the scope of MiFID II.

Underlying

Natural gas, for physical delivery at the Spanish virtual trading point (PVB), available for all types of trading.

Trading

On screen

Opening Auction
Continuous market

OTC

With broker
No broker

Delivery period

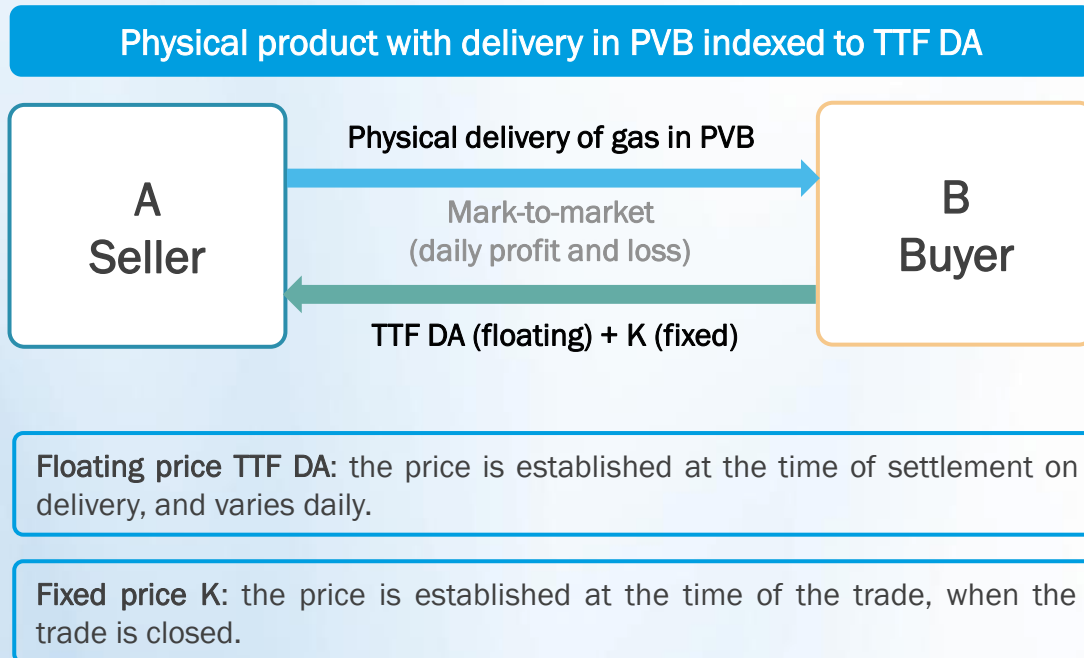
Available for all periods traded in MIBGAS.

Daily *	D+1 to D+3
BoM	
Month	M+1 to M+3
Quarter	Q+1 to Q+4
Semester-Gas	S+1 to S+3
Year	Y+1 to Y+2

* Only tradable through OTC registration.

PVB PRODUCTS INDEXED TO TTF DA

Hedge with the MIBGAS ICIS TTF DA



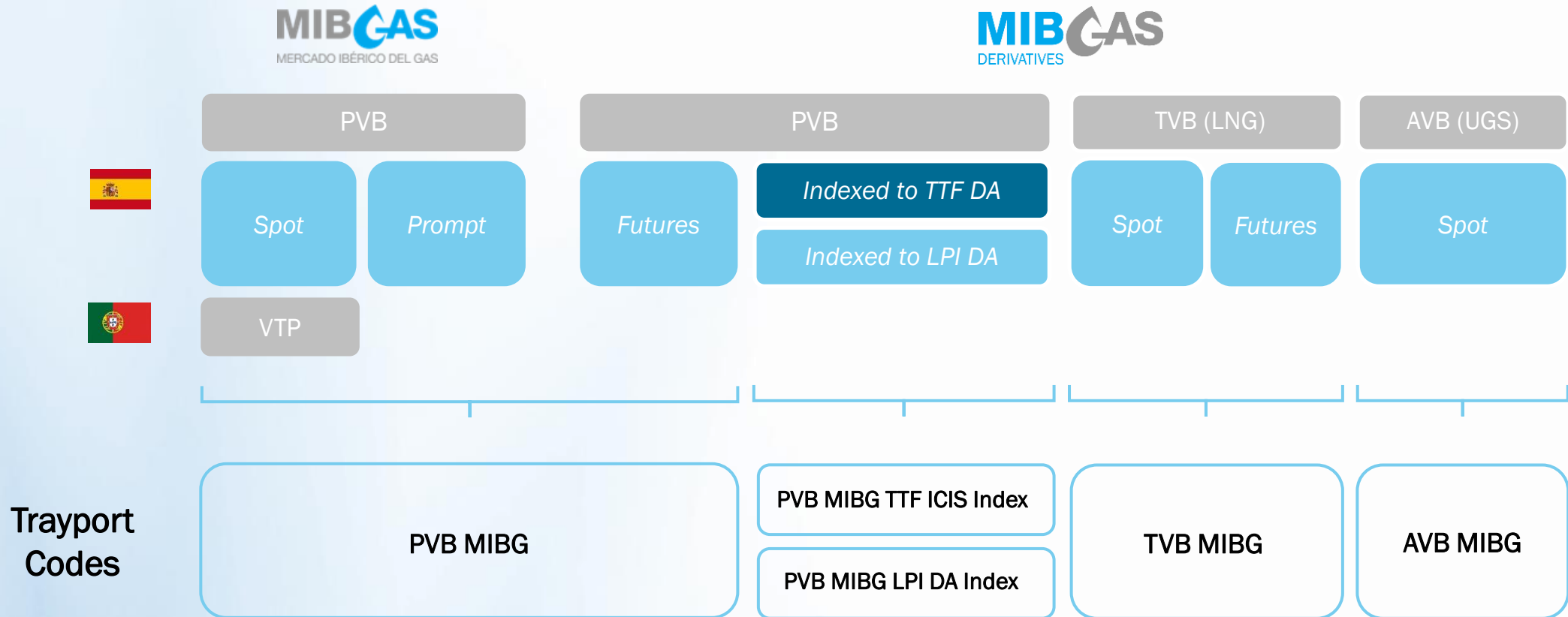
Settlement

When a K spread is traded, the seller receives from the buyer the ICIS TTF Day-Ahead + K, on each delivery day, for a volume of the face value of the contract.

K: It is the 'theoretical' spread between PVB and TTF that an Agent is willing to order to ensure the delivery of gas in PVB.

* Calculated from the daily variations of the reference prices used by OMIClear for these products, which are based on the Agents' trading in these products.

AVAILABLE IN TRAYPORT



PVB FUTURES PRODUCTS INDEXED TO TTF DAY-AHEAD

Settlement and processes at OMIClear

PVB FUTURES CONTRACTS INDEXED TO TTF DA

Integration in OMIClear and risk model

Contract fully integrated into the MiClear system - no additional actions required by Agents

- PVB physical delivery futures contract
- Any Registration Agent (Trading Member in MIBGAS Derivatives) that is enabled to register PVB contracts is automatically enabled to register trades of the new TTF DA indexed futures contracts.
- Physical delivery in PVB (transfer of ownership in the balance portfolios) will occur on an aggregate basis for all contracts with PVB underlying (i.e. PVB futures contracts / futures contracts indexed to TTF / PVB futures contracts indexed to PVB LPI DA) through daily notification of net positions in delivery by OMIClear to Enagás GTS (process designated "single sided nomination").
- The collateral deposited with OMIClear by the agents serves to support the liabilities arising from the positions in these contracts. The liabilities inherent to the positions are designated as "margins", one of the most important being the "initial margin" (explained below).

Very simple risk model - MtM in the trading period / Initial Margin

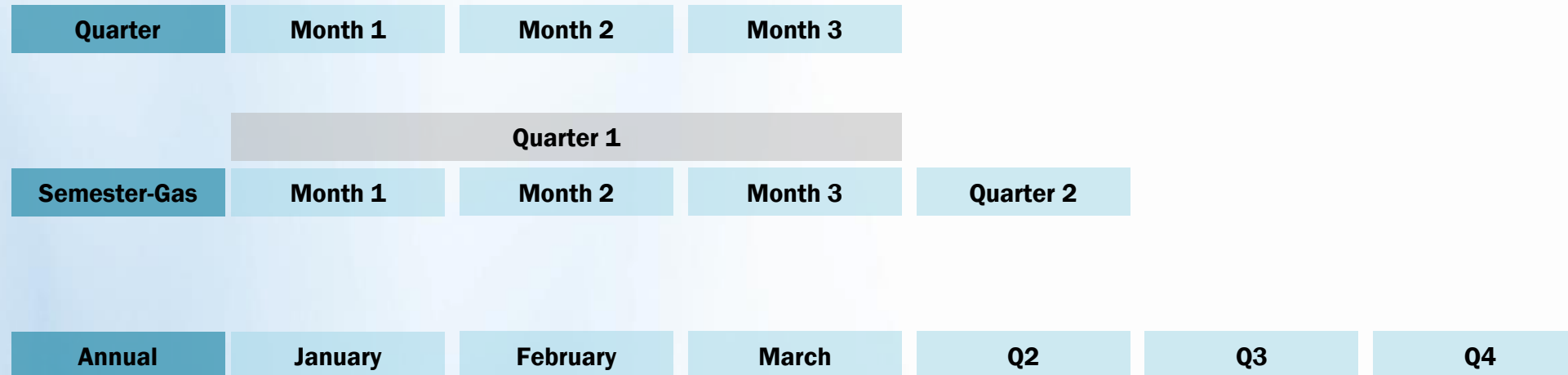
- In the trading period, the daily MtM - Mark-to-Market (Daily Profit and Loss Settlement) is produced.
- The initial margin model covers the risk that, in a default environment, the Central Counterparty (OMIClear) will be forced to close out the defaulting agent's positions and face adverse price variations (mark-to-market losses). This will allow it, under this scenario, to have in advance sufficient resources to manage the default.
- The initial margin is covered by collateral to be deposited with the clearing member with whom the agent has signed an agreement, or directly with the Clearing House (in case the agent is a clearing member). The Mark-to-Market calculation methodology, as well as Initial Margin are defined in OMIClear's rules ([Circular B10/2014](#) - Margin Calculation and Settlements).

PVB FUTURES CONTRACTS INDEXED TO TTF DA

Maturity by fraction of positions. Cascading

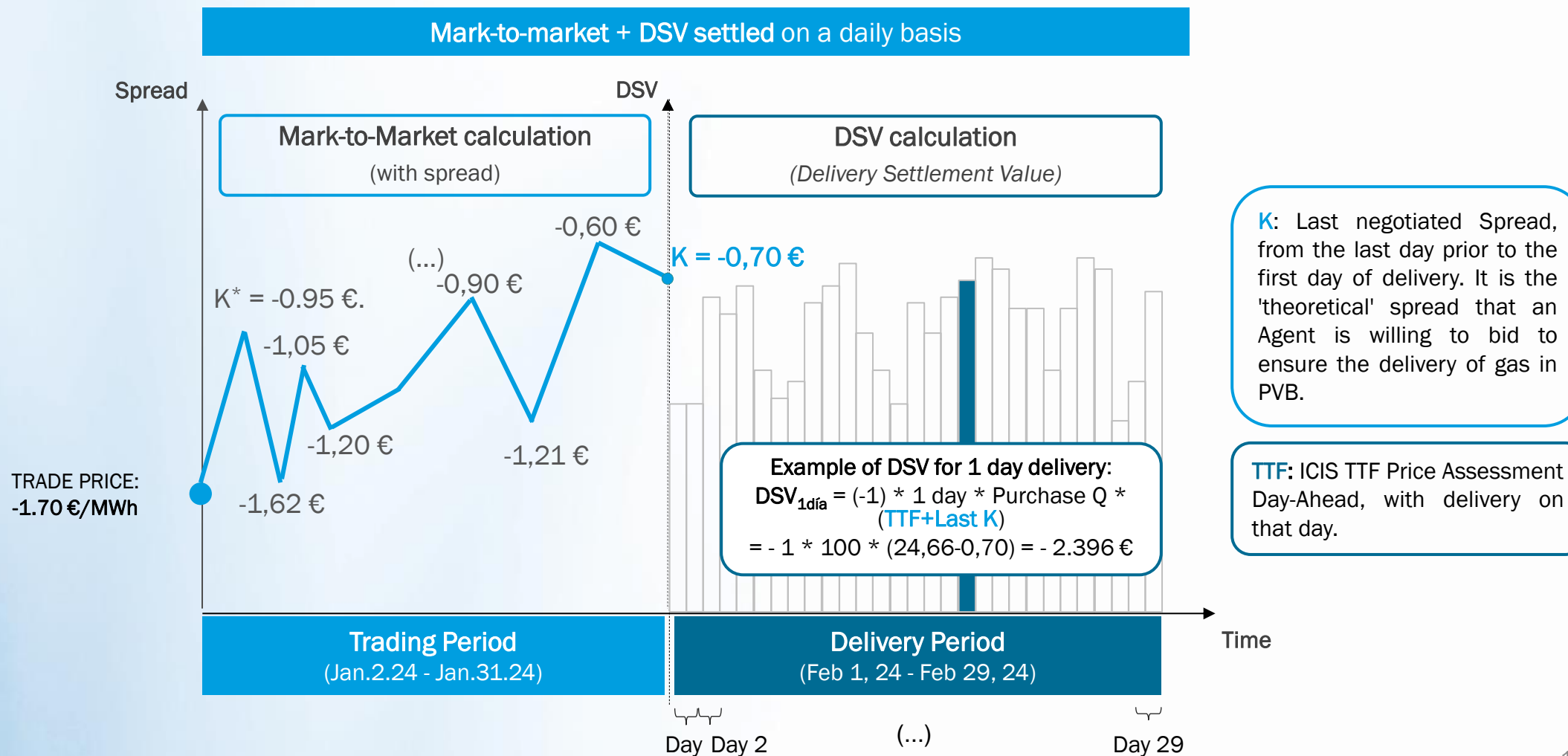
The maturity of quarter, semester-gas and annual contracts is processed by fractioning the positions in positions of identical volume of contracts underlying such contracts.

The quarter contracts are split into the three underlying month contracts, the semester-gas contracts into the three underlying first quarter Month contracts and the underlying second quarter contract, and the annual contracts into the January, February and March month contracts, and the Q2, Q3 and Q4 quarter contracts.



PVB PRODUCTS INDEXED TO TTF DA

Product Settlement - Buyer agent



* Settlement Price: Settlement Reference Price used by OMIClear to calculate the MtM and based on the market expectation for K (PVB-TTF spread).

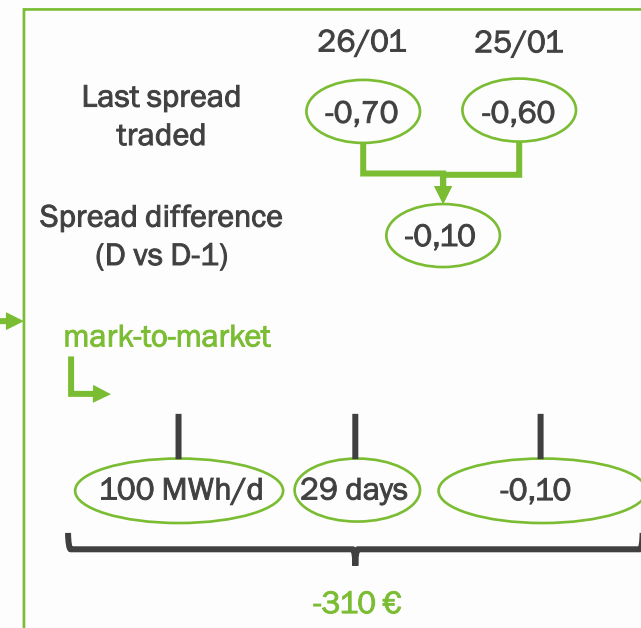
ANNEX. EXAMPLE OF FINANCIAL SETTLEMENT OF THE CONTRACT

For a buying agent A, during the trading period the mark-to-market will be settled daily:

Delivery day	Trading Period					
	Spread traded day D	Spread traded day D-1	Spread Difference	Total Volume (MWh)	mark-to-market	mark-to-market (accumulated value)
03/01/2024	-	-1,70				
04/01/2024	-0,95	-1,70	0,75	2.900	2.175 €	2.175 €
05/01/2024	-1,62	-0,95	-0,67	2.900	1.946 €	229 €
08/01/2024	-1,05	-1,62	0,57	2.900	1.656 €	1.885 €
09/01/2024	-1,20	-1,05	-0,15	2.900	435 €	1.450 €
10/01/2024	-1,65	-1,20	-0,45	2.900	1.305 €	145 €
11/01/2024	-1,65	-1,65	0,00	2.900	-€	145 €
12/01/2024	-1,65	-1,65	0,00	2.900	-€	145 €
15/01/2024	-1,50	-1,65	0,15	2.900	435 €	580 €
16/01/2024	-1,57	-1,50	-0,07	2.900	215 €	365 €
17/01/2024	-1,70	-1,57	-0,13	2.900	365 €	-€
18/01/2024	-1,50	-1,70	0,20	2.900	580 €	580 €
19/01/2024	-1,50	-1,50	0,00	2.900	-€	580 €
22/01/2024	-0,90	-1,50	0,60	2.900	1.740 €	2.320 €
23/01/2024	-0,90	-0,90	0,00	2.900	-€	2.320 €
24/01/2024	-1,21	-0,90	-0,31	2.900	896 €	1.424 €
25/01/2024	-0,60	-1,21	0,61	2.900	1.766 €	3.190 €
26/01/2024	-0,70	-0,60	-0,10	2.900	290 €	2.900 €
29/01/2024	-0,60	-0,70	0,10	2.900	290 €	3.190 €
30/01/2024	-0,70	-0,60	-0,10	2.900	290 €	2.900 €
31/01/2024	-0,70	-0,70	0,00	2.900	-€	2.900 €

AGENT A

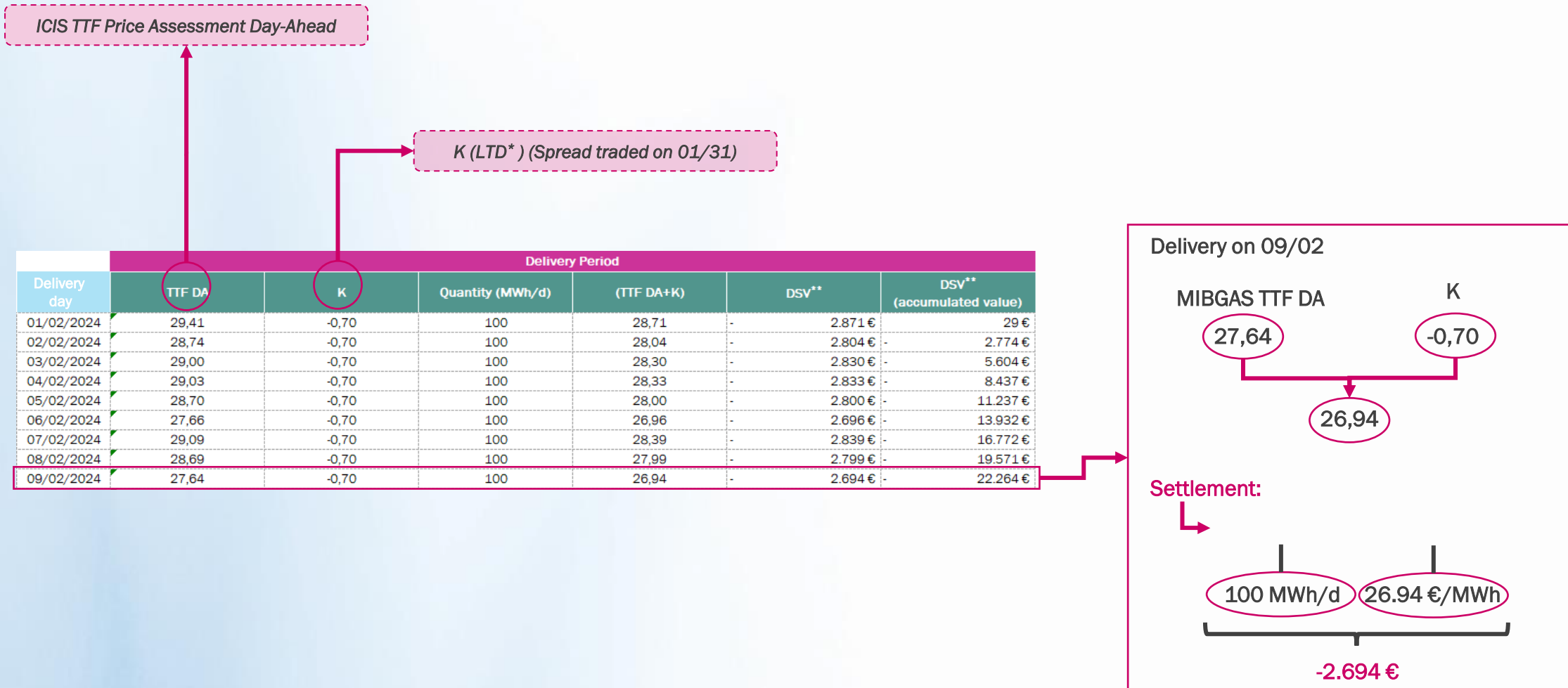
B/A: IDB ●
PRICE: -1.70 €/MWh
QUANTITY: 100 MWh/d



K (LTD)*

* Last Trading Day: last trading day of the product.

During the delivery period, the traded quantity will be settled daily, based on the sum of the Settlement Reference Price on the last trading day (K) and the ICIS TTF Day Ahead of each day:



* Last Trading Day: last trading day of the product.

** Delivery Settlement Value.