

PIBIV dashboards

Known issues and limitations

The items below list potential differences between how cash penalties and buy-ins are determined by PIBIV dashboards and how they may be calculated by the official Clearstream ICSD and European Central Bank T2S cash penalty pipelines that are scheduled to start in Feb 2022:

- We use weekly-released ESMA FIRDS and FITRS files instead of daily ESMA updates. As a result, penalties for some securities may not be assessed for up to first four days of their inclusion in the CSDR scope or may be incorrectly considered for up to four days after their removal from the CSDR scope.
 - We do not use CFI codes from ESMA FIRDS files because they can (and do) contain multiple entries for the same ISIN from various Trading Venues, and all could contain a different CFI code. Instead, we use CSDR instrument types (for example, SHRS, SOVR) from [WSS](#) as it provides unique values for each ISIN.
 - Due to a lack of certain historical data [in the ICSD dashboard](#), we do not consider or report penalties for settlements between the Clearstream ICSD and [external](#) CSDs (that is, we do not consider instruction types 81, 8M, 8A, 8D, 61 and 6F).
 - For the ICSD dashboard and for instructions that fail to deliver cash, we only calculate penalties if the payments are in USD, GBP, CNY, MXN, AUD, CAD, RUB, NOK, EUR, JPY, SEK, DKK or CHF currencies. As a result of this limitation, less than 0.01% of the failed volume does not have a penalty assessed.
- Note:** Penalties where the failing side receives securities for free or delivers securities (versus payment or free of payment), are calculated regardless of the currency as in this case the penalty calculation does not involve an overnight cash (for example, interest) rate.
- For the CBF dashboard, we do not consider or calculate penalties for settlements that involve non-EUR currencies.
 - Our code was able to assign a failure reason and cash penalty for 98% of failed instructions in ICSD during the 2019 to [mid-July 2021](#) period (95% for CBF CSD). For the remaining 2% of failed instructions (5% for CBF CSD), we either did not have the necessary reference data (for example, prices or interest rates) or the fail reason was not determined (because the detection logic is imperfect).

- For financial instruments traded on SME growth markets, CSDR settlement discipline rules specify that a) the buy-in is initiated if delivery is not made within 15 business days after the Requested Settlement Date and b) the cash penalty rate is 0.25 basis points (0.15 basis points for debt instruments). However, since our reference information does not indicate whether a financial instrument has been traded on SME growth markets, we do not apply the above rules and instead treat **all** instruments like they were **not** traded on SME growth markets.
- To simplify the penalty logic and its implementation, we assume that all settlements finish four or seven days after the Requested Settlement Date (for liquid equities and otherwise, respectively). After these periods, deliveries of securities enter a buy-in auction and settle on the same day, while all other instructions just settle (without entering the buy-in regime).