

Notes to assist with interpretation of the Delayed Market Data ("DMD") Files

1.1 Viewing in Excel

The DMD files are semi colon delimited. It is possible to view the files in Excel, by highlighting column A and then selecting "Data", "Text to Columns". However, if using this method, please be aware that Excel truncates some fields, i.e. does not display all of the data that is actually present in the underlying DMD files, as follows:

• Post Trade DMD Files

 Column A, Timestamp is truncated but will display correctly if a custom format of hh:mm:ss.000 is used

• Pre Trade DMD Files

1. Column A, Timestamp is truncated but will display correctly if a custom format of hh:mm:ss.000 is used

1.2 General Notes on the content of the files

- All timestamps, both in the name of the files and on the messages within the files, are in UTC.
- The messages within the DMD files are similar to the messages that were published on Borsa Italiana real time feeds, but there are three differences:
 - 1. messages within the DMD files are abridged and so only contain a subset of the fields that are published in the real time feed
 - 2. the DMD files are published after a delay of 15 minutes.
- The user can consult the GTP technical specifications at the following link https://www.borsaitaliana.it/borsaitaliana/gestione-mercati/group-ticker-plant/overview.htm for a fuller explanation of the meaning of the fields within the files than is given here.





1.3 Notes specific to Pre-Trade files

- The first file published each day will show the opening order book, which contains the orders brought forward from the previous business day. This is published on the real time feed at 06:00 CET/CEST timezone (in the summer 04:00 UTC, in the winter 05:00 UTC).
- The pre trade files show messages that relate to the first price level in Bid and Ask of orderbook only. Therefore, any order that will result in an updated of price or aggregated size of the Bid or Ask price levels, will be included.

