ICE Futures Implied Prices

ICE Futures has expanded implied pricing capability for each of its Futures contracts. The platform fully implies prices much further out the curve.

The table below provides an overview of the implied range and broadcast range for each of the listed contracts. In some cases, the broadcast range is limited as compared to the implied range. In those cases, an ISV or direct access customer interested in knowing and displaying implied prices which are not included in the broadcast range, must replicate implied (IN and OUT) prices locally. These locally implied prices should mirror those implied by the ICE Futures matching engine and therefore be firm, executable prices. ICE implied spread prices can be executed with no legging risk.

Similarly, ICE Futures proprietary trading front-end, WebICE, also locally implies and display the same executable prices implied in the matching engine.

FAQ

1. What are the contracts for which this functionality is active right now?

The enhanced implication technology is activated for the following ICE Futures Europe, US and Singapore Futures contracts:

Contract	Implied Range	Broadcast Range
Brent Crude	Front 12 months + Juns and Decs within 5 years	Front 3 months
Mini Brent Crude	Front 9 months + all Juns and Decs	Front 3 months
Dubai Crude	Front 4 months, all quarters, all cals	Front 4 months, all quarters, all cals
Murban Crude	Front 4 months + front Dec	Front 3 months
Low Sulphur Gas Oil	Front 15 months + all remaining Juns and Decs	Front 3 months
Mini Low Sulphur Gas Oil	Front 12 months + all remaining Juns and Decs	Front 3 months
Heating Oil	Front 12 months	Front 3 months
RBOB Gasoline	Front 12 months	Front 3 months
WTI Crude	Front 12 months + Juns and Decs within 5 years	Front 3 months
Mini WTI Crude	Front 9 months + all Juns and Decs	Front 3 months
Midland WTI Crude	Front 6 months	Front 3 months
Canola	All months	All months
Cocoa	All months	All months
Coffee C	All months	Front 4 months and all Dec markets
Cotton No. 2	All months	Front 3 months for March, May, July, and December contracts
FCOJ-A	All months	Front 4 months
Sugar 11	All months	Front 3 months
Sugar 16	All months	Front 3 months
Foreign Exchange	None	None

US Dollar Index	None	None
EUA Futures and Mini Futures	All months	All months
UKA Futures	All Mar and Dec markets	All Mar and Dec markets
gC Newcastle Coal	Front 12 months, all quarters, and all cals	Front 3 months, all quarters, all cals
Richard's Bay Coal	Front 12 months, all quarters, all seasons, and all cals	Front 3 months, all quarters, all seasons, all cals
Rotterdam Coal	Front 12 months, all quarters, all seasons, and all cals	Front 3 months, all quarters, all seasons, all cals
Dutch TTF Natural Gas Futures	12 months, all quarters, all seasons, and all cals	Front 3 months, all quarters, all seasons, all cals
UK Natural Gas	All months, quarters, seasons, and cals	Front 3 months, all quarters, all seasons, and all cals
German THE Natural Gas Futures	12 months, all quarters, all seasons, and all cals	Front 3 months, all quarters, all seasons, all cals
Belgian ZTP Natural Gas Futures	12 months, all quarters, all seasons, and all cals	Front 3 months, all quarters, all seasons, all cals
Italian Natural Gas Futures	12 months, all quarters, all seasons, and all cals	Front 3 months, all quarters, all seasons, all cals
Belgian Power Futures	All months, quarters, seasons, and cals	None
Dutch Power Futures	All months, quarters, seasons, and cals	None
EU Financial Power Futures	6 months, all quarters and all cals	Front 3 months
IPE UK Electricity Base & Peak	All months, quarters, and seasons	Front 3 months
Henry LD1	Front 13 months, rolling front eight month Jan, Apr, Jul, Oct series in addition to front 13 mo, quarters out for 4 years (16 quarters total), all (Power and Gas) seasons, all cals	Front 3 months, quarters out 4 years (16 Quarters Total), front 3 seasons (3 each from both Power and Gas Seasons), all bal cals, all cals
Henry LD1 Lots	Front 13 months, rolling front eight month Jan, Apr, Jul, Oct series in addition to front 13 mo, quarters out for 4 years (16 quarters total), all seasons (Power and Gas), all cals	Front 3 months, quarters out 4 years (16 Quarters Total), front 3 seasons (3 each from both Power and Gas Seasons), all bal cals, all cals
Henry 25k HHL	Front 13 months, rolling front eight month Jan, Apr, Jul, Oct series.	Front 3 months
Financial Gas Basis Futures	Front 13 months, all quarters, seasons and years	Front 13 months, all quarters, seasons and years
Financial Power Futures	All months, quarters, seasons and years	All months, quarters, seasons and years

IFUS Mortgage Rate Lock Futures	All months	All months
IFUS Equity Indices	None	None
IFUS SOFR Futures	All months	All months
Robusta Coffee, London Cocoa, UK Feed Wheat, White Sugar Futures	All months	All months
Gilt, Bund, BTP, Bond, Swiss Confederation Futures	All months	All months
2yr, 5yr, 10yr Euro and US Dollar Swapnote Futures	All months	All months
Three Month Euro (Euribor) Future	All months	Front 3 quarter ending months
Three Month ESTR Indexed Future	All months	Front 4 quarter ending months
One Month Eonia Future	All months, excluding the front month	All months, excluding the front month
One Month Sonia Future	All months, excluding the front month	All months, excluding the front month
Three Month Sonia Future	All months, excluding the front quarter ending month	Continuous first 2 contracts with an equivalent minimum price movement
Three Month SARON Future	All months, excluding the front quarter ending month	All months, excluding the front quarter ending month
One Month SOFR Future	All months	All months
Three Month SOFR Future	All months	Front 3 quarter ending months
FTSE 100, FTSE 250 Index Futures	All months	All months
MSCI World NTR, MSCI Europe NTR Futures	All months	All months
CoinDesk Bitcoin Futures	All months	All months
Singapore Forex and Micro MSCI Indices	None	None

As per the table above,

- Broadcast Range indicates the implied prices that will be disseminated on the iMpact market data feed on all channels
- All executed implied prices are broadcast as trades on the market data feed.
- Implied Range indicates the contracts in which implied prices are computed by the matching engine and published on the Full Implied channels on iMpact market data feed.

2. Is implication enabled for inter-commodity spreads?

At this time, implication is only supported for the following inter-commodity spreads:

- European Gas Spreads
- European Power Spreads
- UK Spark Spread
- Dutch Spark Spread (TTF)
- German Spark Spread (TTF)
- Italian Spark Spread (TTF)
- Italian Spark Spread (PSV)
- Brent/Dubai Spread
- Murban/Brent Spread
- Murban/Dubai Spread
- Midland/WTI Spread
- Midland/WTI TAS Spread
- Mini Brent/Mini WTI Spread
- Mini LS Gas Oil/Mini Brent Crack
- Three Month ESTR/Three Month Euribor Spread
- Brent/WTI Futures Spreads and Box Strategies
    - Note: implied functionality will broadcast derivation into the box strategy as well as out to the location spreads
- Short/Medium Gilt Future Spread
    - Note: implied functionality will broadcast derivation into the spread as well as out to the Short Gilt leg
- Short/Long Gilt Future Spread
    - Note: implied functionality will broadcast derivation into the spread as well as out to the Short Gilt leg
- Medium/Long Gilt Future Spread
    - Note: implied functionality will broadcast derivation into the spread as well as out to the Medium Gilt leg

There will be no implication changes at this time to the remaining ICE Futures inter-commodity spread markets.

3. What is the implication logic used in the matching engine?

The ICE matching engine fully implies (IN and OUT) prices for the markets within a certain strip type (month, quarter, season or cal) in the implied range. An Implied IN price is a spread price generated from two outright prices, implied or otherwise, in different markets. An Implied OUT price is an outright price in one market from an outright price, implied or otherwise, in a different market and a spread price, implied or otherwise, between the two markets.

The engine also derives implied prices from implied prices that are generated as part of the prior pass or generation. In other words, the matching engine will determine the best bid and offer price in each market regardless of the number of generations required. As a result, an executed implied price could trigger trades in 3, 4, 5, or more outright markets. Also, we will always generate the best implied price for a given market and include it in the book, so the implied price can be at a depth below the best outright price in the market.

Note, for the contracts in which it is setup to be notified, implied price will be disseminated only when it is the best price in the market. Also on WebICE, implied price is visible only when it is the best price in the market.

When the implied price can be matched, it will have lower priority than the outright orders at the same price.

4. Can you provide me with an example of 'implied on implied implication'?

Example:

Sep Bid @ 75.90,
Oct Offer @ 76.83
Oct/Nov Bid @ -0.52

generates

Implied “IN” Bid in Sep/Oct spread @ -0.93 (1st Generation)
Implied “OUT” Offer in Nov @ 77.35 (1st Generation)
Implied “IN” Bid in Sep/Nov spread @ -1.45 based on the Sep Bid and Nov offer above (2nd Generation)

5. Can you provide the ICE implication algorithm in some form to better understand the logic?

Attached to the FAQ is the ICE implication Excel spreadsheet that codifies the algorithm.

https://www.ice.com/publicdocs/technology/ICE_Derivations_Test_3_Months.xls

6. If I am a WebICE user, how do I activate the local implication of prices to mirror the executable prices in the matching engine?

At the local level, each WebICE user can enable/disable full implication (the default is disabled).

To enable full implication, the user selects the WebICE menu option:
“Admin > User Preferences > Trading > Implieds”

Once enabled, WebICE will imply and display the same executable prices implied in the matching engine for each contract for which the enhanced implication technology is activated. If disabled, WebICE receives and displays implied prices for the months that are being disseminated for that contract.

The WebICE Spread Matrix portfolio is recommended for best viewing and trading of calendar spreads. The Spread Matrix portfolio can be created for any ICE Futures contract from the WebICE menu option:
“Admin > Manage Portfolios > New Spread Matrix”

7. If I am a WebICE user, what are the minimum specifications required for my PC – especially if I wish to use to enable local implication?

Calculating implied prices is computationally intensive. You should expect your CPU utilization to increase approximately 10-50% with the local implication enabled, but this is highly dependent upon the number of ICE Futures contracts in your portfolios, number of viewers and the message rate. Memory usage may also increase making it necessary for some users to increase their Java virtual memory from the WebICE default of 128 MB to a larger value such as 256 MB.

In general, a WebICE user’s PC should be equipped with a 2.5 GHz CPU (if single CPU) or better, 1 GB of RAM, and 128 MB of video memory. The WebICE video speed test should complete within 2 seconds, and the WebICE connection speed test should return a value of 1.0 or better. Performance of PCs equipped with dual-core CPUs is superior to those without.

Use of proxy servers for WebICE traffic is not recommended.
A full list of WebICE system specifications is available at:
https://www.ice.com/publicdocs/technology/WebICE_System_Specifications_Guide.pdf.

8. If I use an ISV, how can I view implied prices maintained by the matching engine for contract months beyond the first three?

Most ISVs offer implication functionality to generate implied prices locally. Please contact your ISV for more information.

9. What functionality should an ISV or direct access customer implement to support the additional implied prices?

- Capability to imply prices locally for an individual ICE Futures contract.
- Capability to enable and disable local implication.

10. Is there a tag in the FIX API indicating whether an instrument supports implied prices?

We have a custom tag ImpliedType (9002) in the Security definition response message that indicates if a given market supports implication.

Note, this is supported only in the FIX 2.X version of the message specification.

11. If a contract is activated by ICE Futures with the enhanced implication technology and I do not have local implication enabled either on WebICE or through my ISV, what am I missing?

For those contract months beyond the first three:

- You will not see the best bid or offer price if the best price is implied.
- You will not see the total quantity available at the best bid or offer price if some portion of that quantity is implied.
- You may get filled at a price that is better (but not worse) than the best price you see.
- You may see trades executed at prices for which you saw no bid or offer if the bid or offer was implied.

12. Who should I contact for more information?

For further information, ISVs and direct access customers should contact:

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Or open an integrate support ticket at service.ice.com with their questions.