# ISDA Market Practice Guidance for Rescaling of the:

# FRC - Excluding Tobacco-Non-Revised Consumer Price Index EUR-Excluding Tobacco-Non-revised Consumer Price Index ITL - Inflation for Blue Collar Workers and Employees-Excluding Tobacco Consumer Price Index GBP – Harmonised-Non-revised Consumer Price Index (HICP) NLG - Non-revised Consumer Price Index (CPI)

# March 4<sup>th</sup>, 2016

The International Swaps and Derivatives Association, Inc. ("ISDA") announces the following guidance for parties to inflation derivative transactions that are affected by the rebasing of the following indices as of February 2016:

- FRC Excluding Tobacco-Non-Revised Consumer Price Index (FR CPIxT);
- EUR-Excluding Tobacco-Non-revised Consumer Price Index (EU HICPxT);
- ITL Inflation for Blue Collar Workers and Employees-Excluding Tobacco Consumer Price Index (IT CPI);
- GBP Harmonised-Non-revised Consumer Price Index (HICP) (UK CPI); and
- NLG Non-revised Consumer Price Index (CPI) (NLG CPI).

ISDA is issuing this guidance in the interest of mitigating market risk and the promotion of orderly valuation and settlement of positions by market participants. Parties are not obliged to follow the guidance set forth below and may choose alternate means of addressing the event.

Please Note: This statement does not constitute legal, accounting or financial advice. Each participant in an affected transaction must satisfy itself that the recommendation is appropriate for the transaction and has been properly applied in the context of the transaction to reflect the commercial intention of the participants.

### "FRC - Excluding Tobacco-Non-Revised Consumer Price Index" (FR CPIxT)

Further to the recent announcement by Institut National de la Statistique et des Etudes Economiques that, starting from (and including) the release of the FR CPIxT for February 2016, FR CPIxT Index levels have been rescaled such that the reference year has changed from the previous 1998 = 100 to the new 2015 = 100 base, the FR CPIxT has been "rebased" rescaling the level of prices in 2015 to 100.

Whenever the base is changed, a rebasing key ( $C_{RB}$ ) is required to convert values from the old to the new base. The key ensures a smooth transition for the series of the indexation coefficients ensuring a seamless transition between the Index based on 1998 = 100 and the Index based on 2015 = 100.

Many inflation-linked derivatives transactions, including those that incorporate the 2008 ISDA Inflation Derivatives Definitions, provide that following such rebasing of the Index,

the Calculation Agent shall make such adjustments to the levels of the Rebased Index so that the Rebased Index levels reflect the same rate of inflation as the Index before it was rebased. As such, for transactions affected by the rebasing of the FR CPIxT, in order to maintain the economic integrity of the transactions, it is proposed that the same methodology is applied.

For the FR CPIxT rebasing described above, ISDA, in consultation with market participants, recommends calculation of the key as follows for inflation derivative transactions where the underlying Index is specified as FR CPIxT:

$$C_{RB} = rac{IE_{Dec\,2015}^{base\,2015}}{IE_{Dec\,2015}^{base\,1998}}$$

Where:

 $IE_{Dec 2015}^{base 2015}$  is the FR CPIxT of December 2015 expressed in the new 2015 = 100 base (= 100.04); and

 $IE \frac{base 1998}{Dec 2015}$  is the FR CPIxT of December 2015 expressed in the old 1998 = 100 base (= 126.03).

The rebasing key is therefore:

$$C_{RB} = \frac{100.04}{126.03} = 0.79377925890661$$

With the rebasing key, it is possible to rebase from 1998 to 2015 = 100 any daily inflation reference  $(IR_{dm})$ :

$$IR_{d,m}^{base2015} = IR_{d,m}^{base1998} \times C_{RB}$$

As an example, the inflation reference for September 2015 expressed in the new 2015 = 100base is as follows (it was 125.92 in the old 1998 = 100 base):

125.92 x 0.79377925890661 = 99.9526842815 (rounded to ten decimal places)

#### "EUR-Excluding Tobacco-Non-revised Consumer Price Index" (EU HICPxT)

Further to the recent announcement by Eurostat that, starting from (and including) the release of the EU HICPxT for February 2016, EU HICPxT Index levels have been rescaled such that the reference year has changed from the previous 2005 = 100 to the new 2015 =100 base, the EU HICPxT has been "rebased" rescaling the level of prices in 2015 to 100.

Whenever the base is changed, a rebasing key  $(C_{RB})$  is required to convert values from the old to the new base. The key ensures a smooth transition for the series of the indexation coefficients ensuring a seamless transition between the Index based on 2005 = 100 and the Index based on 2015 = 100.

Many inflation-linked derivatives transactions, including those that incorporate the 2008 ISDA Inflation Derivatives Definitions, provide that following such rebasing of the Index, the Calculation Agent shall make such adjustments to the levels of the Rebased Index so that the Rebased Index levels reflect the same rate of inflation as the Index before it was rebased. As such, for transactions affected by the rebasing of the EU HICPxT, in order to maintain the economic integrity of the transactions, it is proposed that the same methodology is applied.

For the EU HICPxT rebasing described above, ISDA, in consultation with market participants, recommends calculation of the key as follows for inflation derivative transactions where the underlying Index is specified as EU HICPxT:

$$C_{RB} = \frac{IE_{Dec\,2015}^{base\,2015}}{IE_{Dec\,2015}^{base\,2005}}$$

Where:

 $IE_{Dec\,2015}^{base\,2015}$  is the EU HICPxT of December 2015 expressed in the new 2015 = 100 base (= 100.16); and

 $IE_{Dec\,2015}^{base\,2005}$  is the EU HICPxT of December 2015 expressed in the old 2005 = 100 base (= 117.21).

The rebasing key is therefore:

$$C_{\rm \tiny RB} = \frac{100.16}{117.21} = 0.854534596024230$$

With the rebasing key, it is possible to rebase from 2005 to 2015 = 100 any daily inflation reference ( $IR_{d,m}$ ):

$$IR_{d,m}^{base2015} = IR_{d,m}^{base2005} \times C_{RB}$$

As an example, the inflation reference for September 2015 expressed in the new 2015=100 base is as follows (it was 117.23 in the old 2005 = 100 base):

117.23 x 0.854534596024230 = 100.1770906919 (rounded to ten decimal places)

"ITL - Inflation for Blue Collar Workers and Employees-Excluding Tobacco Consumer Price Index" (IT CPI)

Further to the recent announcement by the Italian National Institute of Statistics that, starting from (and including) the release of the IT CPI for February 2016, IT CPI Index levels have been rescaled such that the reference year has changed from the previous 2010 = 100 to the new 2015 = 100 base, the IT CPI has been "rebased" rescaling the level of prices in 2015 to 100.

Whenever the base is changed, a rebasing key ( $C_{RB}$ ) is required to convert values from the old to the new base. The key ensures a smooth transition for the series of the indexation coefficients ensuring a seamless transition between the Index based on 2010 = 100 and the Index based on 2015 = 100.

Many inflation-linked derivatives transactions, including those that incorporate the 2008 ISDA Inflation Derivatives Definitions, provide that following such rebasing of the Index, the Calculation Agent shall make such adjustments to the levels of the Rebased Index so that the Rebased Index levels reflect the same rate of inflation as the Index before it was rebased. As such, for transactions affected by the rebasing of the IT CPI, in order to maintain the economic integrity of the transactions, it is proposed that the same methodology is applied.

For the IT CPI rebasing described above, ISDA, in consultation with market participants, recommends calculation of the key for inflation derivative transactions where the underlying Index is specified as IT CPI using a simple average approach of 2015 levels (under the old 2010=100 base) divided by 100.

The rebasing key is therefore 1.071.

With the rebasing key, it is possible to rebase from 2010 to 2015 = 100 any daily inflation reference ( $IR_{d,m}$ ):

$$IR_{d,m}^{base2015} = \frac{IR_{d,m}^{base2010}}{C_{RB}}$$

As an example, the inflation reference for September 2015 expressed in the new 2015=100 base is as follows (it was 107.0 in the old 2010 = 100 base):

107.0 / 1.071 = 99.9066293184 (rounded to ten decimal places)

## <u>"GBP – Harmonised-Non-revised</u> Consumer Price Index (HICP)" (UK CPI)

Further to the recent announcement by the Office for National Statistics that, starting from (and including) the release of the UK CPI for February 2016, UK CPI Index levels have been rescaled such that the reference year has changed from the previous 2005 = 100 to the new 2015 = 100 base, the UK CPI has been "rebased" rescaling the level of prices in 2015 to 100.

Whenever the base is changed, a rebasing key ( $C_{RB}$ ) is required to convert values from the old to the new base. The key ensures a smooth transition for the series of the indexation coefficients ensuring a seamless transition between the Index based on 2005 = 100 and the Index based on 2015 = 100.

Many inflation-linked derivatives transactions, including those that incorporate the 2008 ISDA Inflation Derivatives Definitions, provide that following such rebasing of the Index, the Calculation Agent shall make such adjustments to the levels of the Rebased Index so that the Rebased Index levels reflect the same rate of inflation as the Index before it was rebased. As such, for transactions affected by the rebasing of the UK CPI, in order to maintain the economic integrity of the transactions, it is proposed that the same methodology is applied.

For the UK CPI rebasing described above, ISDA, in consultation with market participants, recommends calculation of the key as follows for inflation derivative transactions where the underlying Index is specified as UK CPI:

$$C_{RB} = rac{IE_{Dec\,2015}^{base\,2015}}{IE_{Dec\,2015}^{base\,2005}}$$

Where:

base 2015

 $IE \frac{Dase 2015}{Dec 2015}$  is the UK CPI of December 2015 expressed in the new 2015 = 100 base (= 100.336); and

 $IE \frac{base 2005}{Dec 2015}$  is the UK CPI of December 2015 expressed in the old 2005 = 100 base (= 128.452).

The rebasing key is therefore:

$$C_{\rm \tiny RB} = \frac{100.336}{128.452} = 0.7811166817177$$

With the rebasing key, it is possible to rebase from 2005 to 2015 = 100 any daily inflation reference  $(IR_{dm})$ :

$$IR_{d,m}^{base\,2015} = IR_{d,m}^{base\,2005} \times C_{RB}$$

As an example, the inflation reference for September 2015 expressed in the new 2015=100 base is as follows (it was 128.227 in the old 2005 = 100 base):

#### "NLG - Non-revised Consumer Price Index (CPI)" (NLG CPI)

Further to the recent announcement by Statistics Netherlands that, starting from (and including) the release of the NLG CPI for February 2016, NLG CPI Index levels have been rescaled such that the reference year has changed from the previous 2005 = 100 to the new 2015 = 100 base, the NLG CPI has been "rebased" rescaling the level of prices in 2015 to 100.

Whenever the base is changed, a rebasing key  $(C_{RB})$  is required to convert values from the old to the new base. The key ensures a smooth transition for the series of the indexation coefficients ensuring a seamless transition between the Index based on 2005 = 100 and the Index based on 2015 = 100.

Many inflation-linked derivatives transactions, including those that incorporate the 2008 ISDA Inflation Derivatives Definitions, provide that following such rebasing of the Index, the Calculation Agent shall make such adjustments to the levels of the Rebased Index so that the Rebased Index levels reflect the same rate of inflation as the Index before it was rebased. As such, for transactions affected by the rebasing of the NLG CPI, in order to maintain the economic integrity of the transactions, it is proposed that the same methodology is applied.

For the NLG CPI rebasing described above, ISDA, in consultation with market participants, recommends calculation of the key as follows for inflation derivative transactions where the underlying Index is specified as NLG CPI:

$$C_{RB} = \frac{IE_{Dec\,2015}^{base\,2015}}{IE_{Dec\,2015}^{base\,2005}}$$

Where:

 $IE_{Dec\,2015}^{base\,2015}$  is the NLG CPI of December 2015 expressed in the new 2015 = 100 base (= 99.73); and

 $IE \frac{base 2005}{Dec 2015}$  is the NLG CPI of December 2015 expressed in the old 2005 = 100 base (= 116.28).

The rebasing key is therefore:

$$C_{\rm int} = \frac{99.73}{116.28} = 0.8576711386309$$

With the rebasing key, it is possible to rebase from 2005 to 2015 = 100 any daily inflation reference  $(IR_{d,m})$ :

$$IR_{d,m}^{base2015} = IR_{d,m}^{base2005} \times C_{RB}$$

As an example, the inflation reference for September 2015 expressed in the new 2015=100 base is as follows (it was 117.18 in the old 2005 = 100 base):

117.18 x 0.8576711386309 = 100.5019040248 (rounded to ten decimal places)