

ISDA Market Practice Guidance for Rescaling of the:

**Indice de Precios de Consumo (SPIPC)
Norway Consumer Price Index (NOCPI)**

March 8, 2017

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:

- Indice de Precios de Consumo (SPIPC)
- Norway Consumer Price Index (NOCPI)

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.

Indice de Precios de Consumo (SPIPC)

Further to the recent announcement by Instituto Nacional de Estadística (Spanish Statistical Office) that, starting from (and including) the release of the SPIPC index level for January 2017, SPIPC index levels have been rescaled such that the reference year has changed from the previous 2011 = 100 to the new 2016 = 100 base, the SPIPC has been “rebased” rescaling the level of prices in 2016 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 2011 = 100 and the Index based on 2016 = 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 SPIPC, in order to maintain the economic integrity of the transactions, it is proposed that the same methodology is applied.

For the SPIPC 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 SPIPC:

$$C_{RB} = \frac{IR_{Dec\ 2016}^{base\ 2016}}{IR_{Dec\ 2016}^{base\ 2011}}$$

Where:

$IR_{Dec\ 2016}^{base\ 2016}$ is the SPIPC of December 2016 expressed in the new 2016 = 100 base (= 102.049);

and

$IR_{Dec\ 2016}^{base\ 2011}$ is the SPIPC of December 2016 expressed in the old 2011 = 100 base (= 105.114).

The rebasing key is therefore:

$$C_{RB} = \frac{102.049}{105.114} = 0.9708411820$$

With the rebasing key, it is possible to rebase from 2011 to 2016 = 100 any daily inflation reference ($IR_{d,m}$):

$$IR_{d,m}^{base\ 2016} = IR_{d,m}^{base\ 2011} \times C_{RB}$$

As an example, the inflation reference for September 2016 expressed in the new 2016 = 100 base is as follows (it was 102.941 in the old 2011 = 100 base):

$$102.941 \times 0.9708411820 = 99.9393621163 \text{ (rounded to ten decimal places)}$$

Norway Consumer Price Index (NOCPI)

Further to the recent announcement by Statistics Norway that, starting from (and including) the release of the NOCPI for January 2017, NOCPI levels have been rescaled such that the reference year has changed from the previous 1998 = 100 to the new 2015 = 100 base, the NOCPI 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 NOCPI, in order to maintain the economic integrity of the transactions, it is proposed that the same methodology is applied.

For the NOCPI 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 NOCPI:

$$C_{RB} = \frac{IR_{Dec\ 2016}^{base\ 2015}}{IR_{Dec\ 2016}^{base\ 1998}}$$

Where:

$IR_{Dec\ 2016}^{base\ 2015}$ is the NOCPI of December 2016 expressed in the new 2015 = 100 base (= 104.4); and

$IR_{Dec\ 2016}^{base\ 1998}$ is the NOCPI of December 2016 expressed in the old 1998 = 100 base (= 146.0).

The rebasing key is therefore:

$$C_{RB} = \frac{104.4}{146.0} = 0.7150684932$$

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

$$IR_{d,m}^{base\ 2015} = IR_{d,m}^{base\ 1998} \times C_{RB}$$

As an example, the inflation reference for September 2016 expressed in the new 2015 = 100 base is as follows (it was 145.7 in the old 1998 = 100 base):

$$145.7 \times 0.7150684932 = 104.1854794592 \text{ (rounded to ten decimal places)}$$