



## ***Index Methodology***

***ASSICURAZIONI GENERALI S.p.A.  
Leva 2 Long Daily Net Return EUR***

*Timestamp: 02<sup>nd</sup> September 2016*

## Contents

1. General information .....	3
2. Description and functioning.....	4
2.1 Index definitions .....	5
2.2 Daily chaining.....	7
3. Index calculation.....	8
3.1 Intraday rebalancing.....	9
3.2 Dividend Index adjustments.....	10
3.3 Extraordinary Index adjustments .....	11
3.4 Index split / reverse split adjustments .....	12
3.5 Impossibility to complete intraday rebalancing: .....	13
4. Index parameters.....	14
4.1 Publications.....	14
4.2 Prices and frequency of Index calculation .....	14
5. Authorisation/licences.....	15
6. Rounding.....	15
7. Interruption or suspension of trading .....	15
8. Annex .....	15

## 1. General information

This Index Methodology outlines the general methodology used to calculate the ASSICURAZIONI GENERALI S.p.A. Leva 2 Long Daily Net Return EUR (hereinafter: the "Index"). It sets forth the parameters, composition and calculation of the Index as well as the relevant criteria in this respect. ICF BANK AG exercises the utmost diligence when calculating and publishing the Index, and in implementing the criteria set out in this Methodology.

ICF BANK AG neither warrants nor guarantees the accuracy of the Index or the parameters Reference Instrument its composition and calculation, nor does it assume any liability for losses resulting from the flawed configuration or calculation of the Index or any other ratios derived therefrom. ICF BANK AG is under no obligation to notify third parties, including investors and/or financial intermediaries, of any errors or omissions pertaining to the Index.

ICF BANK AG publishes the Index on its website at [www.icf-markets.de](http://www.icf-markets.de). Publication of the Index constitutes neither investment advice nor a recommendation issued by ICF BANK AG to buy, sell or hold a given financial product. Specifically, the composition and calculation of the Index in no way represent a recommendation issued by ICF BANK AG to buy or sell individual, several or all Reference Instruments. This information does not constitute financial analysis within the meaning of § 34 b of the German Securities Trading Act (*Wertpapierhandelsgesetz*, "WpHG").

The statements contained in the following provide information relating to the composition and calculation of the Index.

The Index is calculated and published by ICF BANK AG. All rights to this Index are reserved to ICF BANK AG.

### **Index Details:**

Index Name: ASSICURAZIONI GENERALI S.p.A. Leva 2 Long Daily Net Return EUR

ISIN: DE000A2BNM26

WKN: A2BNM2

REUTERS-RIC: .ICFG00L2

Reference Instrument: ASSICURAZIONI GENERALI S.p.A., common shares

Reference Instrument ISIN: IT0000062072

Index Calculation Agent: ICF BANK AG, Kaiserstrasse 1, 60311 Frankfurt, Germany

Information Page: <https://icf-markets.de/>

## 2. Description and functioning

The Index is a factor Index. A factor Index uses a constant factor to track the daily percentage change in the market price of an Reference Instrument (e.g., an equity, an Index or a commodity) as compared to the most recent Fixing Price (as defined in section 2.1) of that Reference Instrument. The factor defines in which direction (whether the same or inverse) and what degree of leverage the factor Index reflects the daily price change of the Reference Instrument. In this case, the Index Reference Instrument is represented by the ordinary share of ASSICURAZIONI GENERALI S.p.A, traded on the Reference Exchange, as defined in Section 2.1.

To calculate the increase or decrease of the Index, a leverage- and a financing-component is used.

The leverage component reflects the change in price of the Reference Instrument between two Fixing Prices and transfers this movement (either positive or negative) onto the Index by multiplying the percentage of change with the assigned leverage. Thereby, a disproportionate effect on the value of the Index occurs. This leverage effect inherits the risk of an over proportional capital loss (“downside risk”).

For example: (excluding the financial component and events like dividends, corporate actions, etc.)

If a factor long Index has a factor of 2:

- a 5% increase in the price of the Reference Instrument (as compared to the latest Fixing Price), will result in the value of the Index increasing by  $2 \times 5\%$ .
- a 5% decrease in the price of the Reference Instrument (as compared to the latest Fixing Price), will result in the value of the Index decreasing by  $2 \times 5\%$ .

The financial component contains the costs of borrowing money at a one-day rate (EONIA Rate, see Section 3 for more information) increased by a per annum rate (ICF Rate) that reflects the Index calculation fee.

The Index will be continuously calculated during the Reference Instrument trading hours on the Reference Exchange by the Index Calculation Agent. This means, that the Index will be re-calculated at every change in price of the Reference Instrument. The Index Calculation Agent will charge an annual fee of 0.7% p.a., which will be deducted daily (based on a year comprising 360 days), during the calculation of the Index.

For periods longer than one day, the compounding effect shall be taken into account. Indeed, returns on the Reference Instrument cannot simply be multiplied with the selected factor since the performance of the factor Index depends on each individual daily performance of the Reference Instrument. If the performance of a factor Index is compared against that of the Reference Instrument over a period longer than one day, the observed price trends will deviate not only for prices of the Reference Instrument which constantly rise or fall, but also for those which fluctuate.

## 2.1 Index definitions

The definitions below shall apply for the purposes of this Index description.

"**Barrier**" indicates the maximum permitted negative (in case of a long Index) or positive (in case of a short Index) change in price of the Reference Instrument compared to its most recent Fixing Value before an intraday Index adjustment takes place. In this Index, indicated by parameter P, the Barrier is -30%.

"**Derivatives Exchange**" are the main exchanges where options or futures of the Reference Instrument are traded.

"**Dividend**" shall mean the Dividend of the company, exclusive of which the Reference Instrument is traded on the reference exchange on the Ex-Dividend day.

"**Ex-Dividend Date**" means the Trading Day on which the Reference Instrument trades "Ex-Dividend" on the Reference Exchange.

"**Extraordinary Adjustment Event**" means any of the following events as they relate to the Reference Instrument:

- a. capital increase by way of the issue of new shares in return for contributions in cash or in kind with the grant of a subscription right, capital increase from retained earnings, issue of securities with option or conversion rights into shares, distribution of special Dividends, share split, subdivision, consolidation or reclassification of the shares
- b. probable or definitive discontinuation of stock exchange trading in the shares as a result of a merger by absorption or new company formation or takeover of the company of the Reference Instrument by another company
- c. spin-off of a division of the company in such a manner that a new independent company is created or the division is absorbed by a third company
- d. any other event, which the Index Calculation Agent may at its reasonable discretion deem to have a comparable or similar impact on the calculation of the Factor Index in the event no adjustments were to be made

In case of securities representing shares (ADR/GDR) as the Reference Instrument, the following provisions shall additionally apply:

- e. any modification of the terms and conditions of the securities representing shares by their issuers
- f. discontinuation of the stock exchange quotation of the securities representing shares or of the shares underlying them
- g. insolvency of the issuer of the securities representing shares
- h. end of the term of the securities representing shares as a result of termination by the issuer of the securities representing shares

For ADRs and GDRs or any other securities representing shares and other Dividend-bearing securities (e.g. profit participation rights, participation certificates) as the Reference Instrument the provisions specified under (a) to (c) shall apply mutatis mutandis with respect to the Reference Instrument and the issuing company.

"**Fixing Price**" of the Reference Instrument for an Index Calculation Day is – subject to an Extraordinary Adjustment to the calculation of the Index in accordance with section 3 – the official closing price, or for Italian stocks underlyings the reference closing price (“prezzo di riferimento”) of the Reference Instrument, as determined and published for that day by the Reference Exchange. If an Index Calculation Day falls on a day which is not a Trading Day, the Fixing Price of the immediately preceding Index Calculation Day shall continue to apply. If no Fixing Price for the Reference Instrument is determined or published on a Trading Day, the Index Calculation Agent shall determine the Fixing Price of the Reference Instrument for that day on the basis of the most recent prices set for the Reference Instrument at its due discretion.

"**Index Calculation Agent**" means ICF BANK AG, Kaiserstrasse 1, 60311 Frankfurt, Germany

"**Index Calculation Day**" means every day from Monday to Friday except holidays on which the Reference Exchange is closed

"**Index Calculation Fee**" is 0.7% per annum. The Index Calculation Fee is charged each calendar day, beginning as of the Index Start Date. It is calculated on the basis of a 360-day year and the most recently calculated Index Closing Value.

"**Index Currency**" means EUR

"**Index Fixing Value**" is calculated for each Index Calculation Day by the Index Calculation Agent in accordance with section 3 of this Index description on the basis of the Reference Price (“prezzo di riferimento”) of the Reference Instrument for this Index Calculation Day and published in accordance with section 4.1 of this Index description.

"**Information Page**" means <https://icf-markets.de/>

"**Index Start Date**" means 26<sup>th</sup> August 2016

"**Index Start Value**" is 100 Index points and represents the Index Closing Value on Index Calculation Day T=0 for the purposes of calculating the Index in accordance with Section 3 of this document

"**Interest Rate**" means EONIA. EONIA (Euro Over Night Index Average) is a weighted average interest rate for overnight interbank money calculated act/360 by the European Central Bank since 4 January 1999 on the basis of effective turnover. If the Interest Rate is not set or published on an Index Calculation Day, the Interest Rate applied on the immediately preceding Index Calculation Day is used to calculate the Index in accordance with section 3 of this document. If the Interest Rate has neither been set nor published for ten consecutive Index Calculation Days, the Index Calculation Agent has the right and obligation to stipulate in its reasonable discretion an alternative relevant Interest Rate which has functions comparable to the previous Interest Rate.

"**Leverage**" describes the impact, that a change in the price of the Reference Instrument has on the relevant factor Index. The leverage on this Index is 2. See Lev parameter in section 3.

"**Market Disruption Event**" means each of the following events:

- a) the failure of the Reference Exchange to open for trading during its regular trading sessions
- b) the suspension or restriction of trading in the Reference Instrument on the Reference Exchange
- c) in general the suspension or restriction of trading in a Derivative of the Reference Instrument on the Derivatives Exchange

**"Reference Exchange"** means Borsa Italiana S.p.A. – LSE Group

**"Reference Instrument"** means ASSICURAZIONI GENERALI S.p.A.

Asset Type: Ordinary Share

Currency: EUR

ISIN: IT0000062072

Bloomberg symbol: G IM EQUITY

**"Reference Instrument Price"** corresponds at any time during the trading period on the Reference Exchange to the price of the Reference Instrument

**"Trading Day"** means every day on which the Reference Instrument is traded on the Reference Exchange.

**"VWAP"** means volume weighted average price of the Reference Instrument. See section 3.1 of this document

**"Withholding-Tax"** shall be 26.00% on the Index Start Date. The Index Calculation Agent may change the Withholding-Tax Factor at its due discretion on any Index Calculation Day with prospective effect, if the relevant tax law applicable to the Index Calculation Agent changes, resulting in a change in the amount of the – after tax – Dividend virtually accruing to it. Check <https://icf-markets.de/> for current Withholding-Tax value.

## 2.2 Daily chaining

As mentioned in Section 2, the value of a factor Index is calculated by applying, on a daily basis, the corresponding leverage- and financial component to the daily change in the Reference Instrument. The Index is calculated on the basis of the change in the price of the Reference Instrument as compared to its most recent Fixing Price, which, in this case, will be represented by the “prezzo di riferimento” which is calculated at closing and published by the Reference Exchange. Thus every new fixing price for the Reference Instrument represents a new reference price, which serves as the basis for calculating the percentage variation in underlying Fixing Price and apply the daily constant leverage factor, according to the index calculation methodology described in the present document, in order to derive the fixing value of the index. This daily adjustment of the factor Index is automatic and is known as chaining.

### 3. Index calculation

The Index will be calculated on the basis of the following formula:

Leverage Component:

$$Index_T \times \left( Lev \times \frac{Stock_t}{(Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t} - (Lev - 1) \right)$$

Financial Component:

$$Index_T \times \left( \frac{(Lev - 1) \times IR_T + ICF_T}{360} \right) \times D_{t,T}$$

Index Calculation:

$$Index_t = Leverage Component_t - Financial Component_t$$

The calculation formula is using the following parameters:

Parameter	Description
t	Represents the current calculation date
T	Represents the last fixing date, which is the date of the last closing price, represented by the “prezzo di riferimento”, as calculated and published by the Reference Exchange
Index <sub>t</sub>	Current Index level at calculation time t
Index <sub>T</sub>	Recent Index fixing level as described in Section 2.2
Stock <sub>t</sub>	Last traded share price of the Reference Instrument, traded on the Reference Exchange at calculation time t
Stock <sub>T</sub>	Last Reference Instrument Fixing Price as described in Section 2.2
D <sub>t,T</sub>	Number of calendar days between T and t
IR <sub>T</sub>	EONIA Rate (Euro Over Night Index Average), describes an overnight-loanrate that is determined by the European Central Bank. The value of IR <sub>T</sub> always equates the EONIA Rate of date T
ICF <sub>T</sub>	Index calculation fee which is charged by the Index Calculation Agent
Lev	Leverage (see definition in section 2.1)
Div <sub>t</sub>	Dividend correction, that equates the gross Dividend amount paid by the Reference Instrument on Ex-Dividend date t. If date t is not an Ex-Dividend date, this parameter has a value of 0. See Section 3.2 for more information
RFactorSS <sub>t</sub>	Represents the factor of a potential corporate action event of the Reference Instrument on date t. See Section 3.3 for more information. If date t is not a corporate action date, this parameter has a value of 1
WT	Withholding-Tax, that is subtracted from the Dividend correction in case date t is an Ex-Dividend date. See section 3.2 for more information

### 3.1 Intraday rebalancing

If, for instance, the price of the Reference Instrument suffers a 50% daily loss, the value of a factor long Index with a factor of 2 would have to drop to zero (total loss) since the factor Index would also double its losses. In order to counteract a total loss, factor indices feature a Barrier (represented by the parameter P), which triggers an intraday Index adjustment if the Reference Instrument reaches or falls below it.

In the event of an intraday rebalancing, new fixing values for the Index and the Reference Instrument calculated and therefore, a new day is simulated from which the ongoing calculation continues. The consequence is that the negative daily return for the factor Index is attenuated. However, if the calculated price of the index is significantly low, this can result in an intraday loss which, in economic terms, closely approximates a total loss.

The condition for triggering an intraday adjustment is as follows:

$$\frac{Stock_t}{\left( (Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t \right)} - 1 \leq P$$

Whereby the parameter P represents the Barrier.

In this case, the value of P is -30% (-0.3).

In case of an intraday adjustment, the calculation of the Index is interrupted for half an hour (30 minutes) period, excluding the time of any Market Disruption Event. For this half an hour trading time calculation break, a volume weighted average price (VWAP) will be defined. The determined VWAP will then be used as new fixing value for the Reference Instrument in the continued calculation. Given the case, a rebalancing event occurs less than 30 minutes before market close, the calculation period for the VWAP will be prolonged into the next trading day, until the 30 minutes trading time window from the past trading day is completed. Note that the half an hour trading time window refers to 30 minutes of trading on the Reference Exchange. If the Reference Instrument is, for example, currently suspended, this does not add to the 30 minutes of trading time. Then the VWAP time will be prolonged until 30 minutes of trading time is reached.

For example, if an intraday adjustment is triggered at 03:28:15 p.m. CET (given that the Index calculation continues until 05:35:00 p.m. CET), the ongoing calculation of the Index immediately stops. The VWAP relevant calculation time then will include the timespan between 03:29:00 p.m. CET and 03:58:59 p.m. CET. At 03:59:00 p.m. CET the new fixing values for the Index and the Reference Instrument are calculated. Afterwards, the ongoing calculation will continue with the new fixing values.

For example, if an intraday adjustment is triggered at 05:21:15 p.m. CET (given that the Index calculation continues until 05:35:00 p.m. CET), the ongoing calculation of the Index immediately stops. The VWAP relevant calculation time then will include the timespan between 05:22:00 p.m. CET and 09:16:59 a.m. CET of the following trading day. At 09:17:00 a.m. CET the new fixing values for the Index and the Reference Instrument are calculated. Afterwards, the ongoing calculation will continue with the new fixing values. In case of an overnight rebalancing, there will not be the regular fixing described in Section 2.2

After the 30 minute calculation break, new fixing values will be calculated as follows:

### **New Index Fixing value**

Leverage Component<sup>new</sup>:

$$Index_T \times \left( Lev \times \frac{VWAP}{(Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t} - (Lev - 1) \right)$$

Financial Component<sup>new</sup>:

$$Index_T \times \left( \frac{(Lev - 1) \times IR_T + ICF_T}{360} \right) \times D_{t,T}$$

Index Fixing value<sup>new</sup>:

$$Index_T^{new} = Leverage\ Component^{new} - Financial\ Component^{new}$$

### **New Reference Instrument Fixing value**

$$Stock_T^{new} = VWAP$$

After the calculation of the new fixing values, the suffix “new” shall be dropped from all relevant quantities, and the ongoing calculation of the new index values continues as described in Section 3.

Note the following: While calculating the new fixing values,  $D_{t,T}$  is still the difference in days between the actual calculation date  $t$  and the recent most fixing date  $T$ . After the ongoing fixing is completed, date  $T$  becomes the same date as the actual calculation date and therefore, when continuing the ongoing calculation, the value of  $D_{t,T}$  is 0.

Also note, that after an intraday adjustment, a potential correction of the Index level because of Dividend or corporate action (See Section 3.2 and Section 3.3 for more information) will be set to 0 for Parameter  $Div_t$  and 1 for Parameter  $RFactorSS_t$  after calculation of the new fixing values, because the newly calculated fixing is, for example, already Ex-Dividend.

## **3.2 Dividend Index Adjustments**

In case date  $t$  is an Ex-Dividend day, a Dividend Index Adjustment is triggered. Therefore, the index calculation described in Section 3 will be influenced by the parameters  $Div_t$  and  $WT$ . While the parameter  $Div_t$  represents the correction of the Reference Underlying price by the paid Dividend, the parameter  $WT$  represents the withholding-tax, being payed as a government requirement for the payer of an item of income to withhold or deduct tax from the payment, and pay that tax to the government.

If date  $t$  is not an Ex-Dividend day, the value of the Parameters  $Div_t$  and  $WT$  is 0.

### 3.3 Extraordinary Index Adjustments

On date  $t$ , for any “unforeseeable cases” not described under the present index rule, an extraordinary Index Adjustment is triggered. The Index Calculation Agent will generally modify the Index calculation by correcting at its due discretion the relevant Fixing Price for the Reference Instrument on Index Calculation Day  $t$ , taking into account all available information and client’s best interest, in order to factor into the Index calculation, the adjustments made on the Reference Exchange to the Reference Instrument traded there.

The Index Calculation Agent may also adapt the Index Calculation in some other manner if it deems this necessary in its due discretion in order to account for differences between this Factor Index and the Reference Instrument. Such adjustments may in particular relate to the Reference Instrument being replaced by a basket of shares, securities representing shares or other Dividend-bearing securities or in the event of a merger by an appropriate number of shares, securities representing shares or other Dividend-bearing securities issued by the absorbing or newly formed company and where necessary stipulating a different Reference Exchange and Reference Instrument Price.

The list of extraordinary adjustment events listed in section 2.1 is not exhaustive.

A deciding factor is whether the Derivatives Exchange considers it expedient to adjust the contract size, an underlying or involving the relevant Reference Exchange which determines the price of the Reference Instrument. If neither futures nor options linked to the Reference Instrument are traded on the Derivatives Exchange, the adjustment shall be made in such a manner in which the Derivatives Exchange would do so if corresponding futures or options were traded there. If doubts arise in this event relating to the application of the modification rules of the Derivatives Exchange, the Index Calculation Agent shall decide such questions in its reasonable discretion. The rules and regulations of the Derivatives Exchange shall apply in addition to the provisions set out above.

In the event the company issuing the Reference Instrument underlying the Factor Index is liquidated or insolvency, winding-up or similar proceedings are instituted against the assets of the company or of the possibility that such proceedings will be opened becomes known, the price of the Reference Instrument will continue to be factored into the Index Calculation for as long as the price of the Reference Instrument continues to be determined on the Reference Exchange. However, if pricing in such a case is temporarily or permanently suspended, the leverage component remains unchanged and the Index Level will be determined solely on the basis of the other components of the Index formula.

Therefore, the Index calculation described in Section 3 will be influenced by the parameter  $R_{FactorSS_t}$ . For example, if a split takes place with a stock split rate of 0.5, the Reference Instrument loses half of its value on date  $t$ . Therefore, to retain the Index level uninfluenced by the loss of value caused by the split, the parameter  $R_{FactorSS_t}$  has to hold a value of 0.5. In case date  $t$  holds an Extraordinary Index Adjustment and also a Corporate Action event, the Extraordinary Index Adjustment will always be performed before taking the Corporate Action event into calculation.

If date  $t$  is not an Ex-Dividend day, the value of the Parameters  $Div_t$  and  $WT$  is 0.

The Index Calculation Agent defines in its reasonable discretion the adjustment method to be applied and published it by the means of a notice on <https://icf-markets.de/>.

### 3.4 Index Split / Reverse Split Adjustments

On the 1<sup>st</sup> Friday of each month, the Index is reviewed regarding qualification for an Index Split or a Reverse Split. If the 1<sup>st</sup> Friday of the month is not a trading day, the following trading day after the 1<sup>st</sup> Friday of the month will be used for review.

If, on this trading day, the most recent Index fixing value has reached a level above 1000 Points, the Index qualifies for an Index split. If the Index has reached a level below 10, the Index qualifies for an Index Reverse Split.

In case of a qualification for an Index Split or an Index reverse split, the Index fixing value of the 3<sup>rd</sup> Friday, that is used for the ongoing calculation of the Index on the next trading day, will be unscaled, but will then be divided by 10 in case of Index Split (or multiplied by 10 for a reverse split) during the ongoing Index calculation of the next trading day. Therefore, the fixing value of the Index of the trading day after the 3<sup>rd</sup> Friday will be a scaled fixing value.

Modification of Index fixing value during a Split

$$Index_T = \frac{Index_T}{10}$$

Modification of Index fixing value during a Reverse-Split

$$Index_T = Index_T \times 10$$

In case the 3<sup>rd</sup> Friday of the month is not a trading day, the implementation will take place on the following trading day after the 3<sup>rd</sup> Friday of the month. Respectively, the Index fixing value of the next trading day after the 3<sup>rd</sup> Friday, that is used for the ongoing calculation of the Index on the second trading day after the 3<sup>rd</sup> Friday, will be divided by 10 in case of Index split (or multiplied by 10 for a reverse split) during the ongoing calculation of the Index. Therefore, the fixing value of the Index of the second trading day after the 3<sup>rd</sup> Friday will be the newly scaled fixing value.

### 3.5 Impossibility to complete intraday rebalancing:

In case the Index fixing value would become negative after an intraday rebalancing event, the Index level will be fixed at 0.0001. This Index level will continue to be broadcasted for 4 weeks after the reset occurred. Subsequently the Index will be discontinued.

The Index fixing value will become negative after an intraday rebalancing event, if the obtained VWAP (see Section 3.1) is significantly lower, so that the calculated Index fixing value will be negative and therefore, cannot reach a positive value anytime in the future.

#### Example:

Given the most recent fixing of the Reference Instrument  $Stock_T$  has a value of 100. Date  $t$  is not an Ex-Dividend day neither a corporate action date. The most recent calculated fixing value of the Index is 400 Points. During the 1-hour observation period calculated VWAP is 60. The leverage Factor is 2.

Calculating the Index fixing value (leaving aside the financial component):

$$Index_T = Index_T \times \left( Lev \times \frac{VWAP}{(Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t} - (Lev - 1) \right)$$
$$Index_T = 400 \times \left( 2 \times \frac{60}{(100 - (0 \times (1 - 0))) \times 1} - (2 - 1) \right) = 80$$

The newly calculated Index fixing is a positive value.

Now given the same values, except the value of the calculated VWAP, which is 20.

Calculating the Index fixing value (leaving aside the financial component):

$$Index_T = Index_T \times \left( Lev \times \frac{VWAP}{(Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t} - (Lev - 1) \right)$$
$$Index_T = 400 \times \left( 2 \times \frac{20}{(100 - (0 \times (1 - 0))) \times 1} - (2 - 1) \right) = -240$$

The newly calculated Index fixing value is negative and can therefore no longer become positive.

## 4. Index parameters

Parameter	Value
Index-ISIN	DE000A2BNM26
Index-WKN	A2BNM2
Reuters-RIC	.ICFG00L2
Index-Name	ASSICURAZIONI GENERALI S.p.A. Leva 2 Long Daily Net Return EUR
Index-Type	Net Return
Index-Leverage	2
Index-Currency	EUR
Index-Starting Value	100 Points
Index-Starting Date	26.08.2016
Index-Starting Time	09:00 a.m. CET
Index-Ending Time	05:35 p.m. CET
Index-Calculation Fee	0.7% p.a.
Index-Withholding Tax	26.00% (Timestamp: 18.08.2016)
Barrier	-30%
Reference Instrument-ISIN	IT0000062072
Reference Instrument-Name	ASSICURAZIONI GENERALI S.p.A., ordinary share

### 4.1 Publications

ICF BANK AG publishes the Index on its website at [www.icf-markets.de](http://www.icf-markets.de) and on Reuters. ICF BANK AG also publishes all information it deems relevant to the current calculation of the Index on its website.

### 4.2 Prices and frequency of Index calculation

ICF BANK AG calculates the Index each exchange trading day on the Reference Exchange, taking into account the last traded share price of the Reference Instrument, traded on the Reference Exchange at calculation time  $t$ . If no last traded share price is available during the calculation period, the Index is calculated using the most recently available last traded share price.

The Index is calculated each stock exchange day at a minimum of once per minute between 09:00 a.m. CET and 05:35 p.m. CET, except in the case of disruptions in ICF BANK AG's data or price feeds which prevent ICF BANK AG from calculating and/or publishing the Index. ICF BANK AG will promptly make any corrections to the Index deemed necessary and publish it on its website at [www.icf-markets.de](http://www.icf-markets.de) and on Reuters.

The Index is calculated in **points**.

## **5. Authorisation/licences**

Use of the Index as an underlying for derivative financial products must be authorised by separate agreement with the ICF BANK AG.

## **6. Rounding**

If the Index is below 10 Points, the Index will be rounded to four decimal points.

If the Index is above or equal 10 Points and below 100 Points, the Index will be rounded to three decimal points. If the Index is equal or above 100 Points, the Index will be rounded to two decimal points.

## **7. Interruption or suspension of trading**

The Index is not calculated in the event a Market Disruption Event occurs.

## **8. Annex**

Published by / Contact

ICF BANK AG  
Wertpapierhandelsbank  
Kaiserstrasse 1  
60311 Frankfurt am Main  
Germany

customized.indices@icfbank.de  
Phone +49 69 92877-0



## ***Index Methodology***

***ASSICURAZIONI GENERALI S.p.A.  
Leva 2 Short Daily Gross Return EUR***

*Timestamp: 02<sup>nd</sup> September 2016*

## Contents

1. General information .....	3
2. Description and functioning.....	4
2.1 Index definitions .....	5
2.2 Daily chaining.....	7
3. Index calculation.....	8
3.1 Intraday rebalancing.....	9
3.2 Dividend Index adjustments.....	10
3.3 Extraordinary Index adjustments .....	11
3.4 Index split / reverse split adjustments .....	12
3.5 Impossibility to complete intraday rebalancing: .....	13
4. Index parameters.....	14
4.1 Publications.....	14
4.2 Prices and frequency of Index calculation .....	14
5. Authorisation/licences.....	15
6. Rounding.....	15
7. Interruption or suspension of trading .....	15
8. Annex .....	15

## 1. General information

This Index Methodology outlines the general methodology used to calculate the ASSICURAZIONI GENERALI S.p.A. Leva 2 short Daily Gross Return EUR (hereinafter: the "Index"). It sets forth the parameters, composition and calculation of the Index as well as the relevant criteria in this respect. ICF BANK AG exercises the utmost diligence when calculating and publishing the Index, and in implementing the criteria set out in this Methodology.

ICF BANK AG neither warrants nor guarantees the accuracy of the Index or the parameters Reference Instrument its composition and calculation, nor does it assume any liability for losses resulting from the flawed configuration or calculation of the Index or any other ratios derived therefrom. ICF BANK AG is under no obligation to notify third parties, including investors and/or financial intermediaries, of any errors or omissions pertaining to the Index.

ICF BANK AG publishes the Index on its website at [www.icf-markets.de](http://www.icf-markets.de). Publication of the Index constitutes neither investment advice nor a recommendation issued by ICF BANK AG to buy, sell or hold a given financial product. Specifically, the composition and calculation of the Index in no way represent a recommendation issued by ICF BANK AG to buy or sell individual, several or all Reference Instruments. This information does not constitute financial analysis within the meaning of § 34 b of the German Securities Trading Act (*Wertpapierhandelsgesetz*, "WpHG").

The statements contained in the following provide information relating to the composition and calculation of the Index.

The Index is calculated and published by ICF BANK AG. All rights to this Index are reserved to ICF BANK AG.

### **Index Details:**

Index Name: ASSICURAZIONI GENERALI S.p.A. Leva 2 short Daily Gross Return EUR

ISIN: DE000A2BNM34

WKN: A2BNM3

REUTERS-RIC: .ICFG00S2

Reference Instrument: ASSICURAZIONI GENERALI S.p.A., common shares

Reference Instrument ISIN: IT0000062072

Index Calculation Agent: ICF BANK AG, Kaiserstrasse 1, 60311 Frankfurt, Germany

Information Page: <https://icf-markets.de/>

## 2. Description and functioning

The Index is a factor Index. A factor Index uses a constant factor to track the daily percentage change in the market price of an Reference Instrument (e.g., an equity, an Index or a commodity) as compared to the most recent Fixing Price (as defined in section 2.1) of that Reference Instrument. The factor defines in which direction (whether the same or inverse) and what degree of leverage the factor Index reflects the daily price change of the Reference Instrument. In this case, the Index Reference Instrument is represented by the ordinary share of ASSICURAZIONI GENERALI S.p.A., traded on the Reference Exchange, as defined in Section 2.1.

To calculate the increase or decrease of the Index, a leverage- and a financing-component is used.

The leverage component reflects the change in price of the Reference Instrument between two Fixing Prices and transfers this movement (either positive or negative) onto the Index by multiplying the percentage of change with the assigned leverage. Thereby, a disproportionate effect on the value of the Index occurs. This leverage effect inherits the risk of an over proportional capital loss (“downside risk”).

For example: (excluding the financial component and events like dividends, corporate actions, etc.)

If a factor short Index has a factor of 2:

- a 5% increase in the price of the Reference Instrument (as compared to the latest Fixing Price), will result in the value of the Index decreasing by  $2 \times 5\%$ .
- a 5% decrease in the price of the Reference Instrument (as compared to the latest Fixing Price), will result in the value of the Index increasing by  $2 \times 5\%$ .

The financial component contains the costs of borrowing money at a one-day rate (EONIA Rate, see Section 3 for more information) increased by a per annum rate (ICF Rate) that reflects the Index calculation fee.

The Index will be continuously calculated during the Reference Instrument trading hours on the Reference Exchange by the Index Calculation Agent. This means, that the Index will be re-calculated at every change in price of the Reference Instrument. The Index Calculation Agent will charge an annual fee of 0.7% p.a., which will be deducted daily (based on a year comprising 360 days), during the calculation of the Index.

For periods longer than one day, the compounding effect shall be taken into account. Indeed, returns on the Reference Instrument cannot simply be multiplied with the selected factor since the performance of the factor Index depends on each individual daily performance of the Reference Instrument. If the performance of a factor Index is compared against that of the Reference Instrument over a period longer than one day, the observed price trends will deviate not only for prices of the Reference Instrument which constantly rise or fall, but also for those which fluctuate.

## 2.1 Index definitions

The definitions below shall apply for the purposes of this Index description.

"**Barrier**" indicates the maximum permitted negative (in case of a long Index) or positive (in case of a short Index) change in price of the Reference Instrument compared to its most recent Fixing Value before an intraday Index adjustment takes place. In this Index, indicated by parameter P, the Barrier is +30%.

"**Derivatives Exchange**" are the main exchanges where options or futures of the Reference Instrument are traded.

"**Dividend**" shall mean the Dividend of the company, exclusive of which the Reference Instrument is traded on the reference exchange on the Ex-Dividend day.

"**Ex-Dividend Date**" means the Trading Day on which the Reference Instrument trades "Ex-Dividend" on the Reference Exchange.

"**Extraordinary Adjustment Event**" means any of the following events as they relate to the Reference Instrument:

- a. capital increase by way of the issue of new shares in return for contributions in cash or in kind with the grant of a subscription right, capital increase from retained earnings, issue of securities with option or conversion rights into shares, distribution of special Dividends, share split, subdivision, consolidation or reclassification of the shares
- b. probable or definitive discontinuation of stock exchange trading in the shares as a result of a merger by absorption or new company formation or takeover of the company of the Reference Instrument by another company
- c. spin-off of a division of the company in such a manner that a new independent company is created or the division is absorbed by a third company
- d. any other event, which the Index Calculation Agent may at its reasonable discretion deem to have a comparable or similar impact on the calculation of the Factor Index in the event no adjustments were to be made

In case of securities representing shares (ADR/GDR) as the Reference Instrument, the following provisions shall additionally apply:

- e. any modification of the terms and conditions of the securities representing shares by their issuers
- f. discontinuation of the stock exchange quotation of the securities representing shares or of the shares underlying them
- g. insolvency of the issuer of the securities representing shares
- h. end of the term of the securities representing shares as a result of termination by the issuer of the securities representing shares

For ADRs and GDRs or any other securities representing shares and other Dividend-bearing securities (e.g. profit participation rights, participation certificates) as the Reference Instrument the provisions specified under (a) to (c) shall apply mutatis mutandis with respect to the Reference Instrument and the issuing company.

"**Fixing Price**" of the Reference Instrument for an Index Calculation Day is – subject to an Extraordinary Adjustment to the calculation of the Index in accordance with section 3 – the official closing price, or for Italian stocks underlyings the reference closing price (“prezzo di riferimento”) of the Reference Instrument, as determined and published for that day by the Reference Exchange. If an Index Calculation Day falls on a day which is not a Trading Day, the Fixing Price of the immediately preceding Index Calculation Day shall continue to apply. If no Fixing Price for the Reference Instrument is determined or published on a Trading Day, the Index Calculation Agent shall determine the Fixing Price of the Reference Instrument for that day on the basis of the most recent prices set for the Reference Instrument at its due discretion.

"**Index Calculation Agent**" means ICF BANK AG, Kaiserstrasse 1, 60311 Frankfurt, Germany

"**Index Calculation Day**" means every day from Monday to Friday except holidays on which the Reference Exchange is closed

"**Index Calculation Fee**" is 0.7% per annum. The Index Calculation Fee is charged each calendar day, beginning as of the Index Start Date. It is calculated on the basis of a 360-day year and the most recently calculated Index Closing Value.

"**Index Currency**" means EUR

"**Index Fixing Value**" is calculated for each Index Calculation Day by the Index Calculation Agent in accordance with section 3 of this Index description on the basis of the Reference Price (“prezzo di riferimento”) of the Reference Instrument for this Index Calculation Day and published in accordance with section 4.1 of this Index description.

"**Information Page**" means <https://icf-markets.de/>

"**Index Start Date**" means 26<sup>th</sup> August 2016

"**Index Start Value**" is 100 Index points and represents the Index Closing Value on Index Calculation Day T=0 for the purposes of calculating the Index in accordance with Section 3 of this document

"**Interest Rate**" means EONIA. EONIA (Euro Over Night Index Average) is a weighted average interest rate for overnight interbank money calculated act/360 by the European Central Bank since 4 January 1999 on the basis of effective turnover. If the Interest Rate is not set or published on an Index Calculation Day, the Interest Rate applied on the immediately preceding Index Calculation Day is used to calculate the Index in accordance with section 3 of this document. If the Interest Rate has neither been set nor published for ten consecutive Index Calculation Days, the Index Calculation Agent has the right and obligation to stipulate in its reasonable discretion an alternative relevant Interest Rate which has functions comparable to the previous Interest Rate.

"**Leverage**" describes the impact, that a change in the price of the Reference Instrument has on the relevant factor Index. The leverage on this Index is 2. See Lev parameter in section 3.

"**Market Disruption Event**" means each of the following events:

- a) the failure of the Reference Exchange to open for trading during its regular trading sessions
- b) the suspension or restriction of trading in the Reference Instrument on the Reference Exchange
- c) in general the suspension or restriction of trading in a Derivative of the Reference Instrument on the Derivatives Exchange

**"Reference Exchange"** means Borsa Italiana S.p.A. – LSE Group

**"Reference Instrument "** means ASSICURAZIONI GENERALI S.p.A.

Asset Type: Ordinary Share

Currency: EUR

ISIN: IT0000062072

Bloomberg symbol: G IM EQUITY

**"Reference Instrument Price"** corresponds at any time during the trading period on the Reference Exchange to the price of the Reference Instrument

**"Trading Day"** means every day on which the Reference Instrument is traded on the Reference Exchange.

**"VWAP"** means volume weighted average price of the Reference Instrument. See section 3.1 of this document

**"Withholding-Tax"** shall be 26.00% on the Index Start Date. The Index Calculation Agent may change the Withholding-Tax Factor at its due discretion on any Index Calculation Day with prospective effect, if the relevant tax law applicable to the Index Calculation Agent changes, resulting in a change in the amount of the – after tax – Dividend virtually accruing to it. Check <https://icf-markets.de/> for current Withholding-Tax value.

## 2.2 Daily chaining

As mentioned in Section 2, the value of a factor Index is calculated by applying, on a daily basis, the corresponding leverage- and financial component to the daily change in the Reference Instrument. The Index is calculated on the basis of the change in the price of the Reference Instrument as compared to its most recent Fixing Price, which, in this case, will be represented by the “prezzo di riferimento” which is calculated at closing and published by the Reference Exchange. Thus every new fixing price for the Reference Instrument represents a new reference price, which serves as the basis for calculating the percentage variation in underlying Fixing Price and apply the daily constant leverage factor, according to the index calculation methodology described in the present document, in order to derive the fixing value of the index. This daily adjustment of the factor Index is automatic and is known as chaining.

### 3. Index calculation

The Index will be calculated on the basis of the following formula:

Leverage Component:

$$Index_T \times \left( -Lev \times \frac{Stock_t}{(Stock_T - (Div_t)) \times RFactorSS_t} + (Lev + 1) \right)$$

Financial Component:

$$Index_T \times \left( \frac{(Lev + 1) \times IR_T - ICF_T}{360} \right) \times D_{t,T}$$

Index Calculation:

$$Index_t = Leverage Component_t + Financial Component_t$$

The calculation formula is using the following parameters:

Parameter	Description
t	Represents the current calculation date
T	Represents the last fixing date, which is the date of the last closing price, represented by the “prezzo di riferimento”, as calculated and published by the Reference Exchange
Index <sub>t</sub>	Current Index level at calculation time t
Index <sub>T</sub>	Recent Index fixing level as described in Section 2.2
Stock <sub>t</sub>	Last traded share price of the Reference Instrument, traded on the Reference Exchange at calculation time t
Stock <sub>T</sub>	Last Reference Instrument Fixing Price as described in Section 2.2
D <sub>t,T</sub>	Number of calendar days between T and t
IR <sub>T</sub>	EONIA Rate (Euro Over Night Index Average), describes an overnight-loanrate that is determined by the European Central Bank. The value of IR <sub>T</sub> always equates the EONIA Rate of date T
ICF <sub>T</sub>	Index calculation fee which is charged by the Index Calculation Agent
Lev	Leverage (see definition in section 2.1)
Div <sub>t</sub>	Dividend correction, that equates the gross Dividend amount paid by the Reference Instrument on Ex-Dividend date t. If date t is not an Ex-Dividend date, this parameter has a value of 0. See Section 3.2 for more information
RFactorSS <sub>t</sub>	Represents the factor of a potential corporate action event of the Reference Instrument on date t. See Section 3.3 for more information. If date t is not a corporate action date, this parameter has a value of 1

### 3.1 Intraday rebalancing

If, for instance, the price of the Reference Instrument gains a 50% daily increase, the value of a factor short Index with a factor of 2 would have to drop to zero (total loss) since the factor Index would also double its losses. In order to counteract a total loss, factor indices feature a Barrier (represented by the parameter P), which triggers an intraday Index adjustment if the Reference Instrument reaches or falls below it.

In the event of an intraday rebalancing, new fixing values for the Index and the Reference Instrument calculated and therefore, a new day is simulated from which the ongoing calculation continues. The consequence is that the negative daily return for the factor Index is attenuated. However, if the calculated price of the index is significantly low, this can result in an intraday loss which, in economic terms, closely approximates a total loss.

The condition for triggering an intraday adjustment is as follows:

$$\frac{Stock_t}{((Stock_T - Div_t) \times RFactorSS_t)} - 1 \geq P$$

Whereby the parameter P represents the Barrier.

In this case, the value of P is +30% (+0.3).

In case of an intraday adjustment, the calculation of the Index is interrupted for half an hour (30 minutes) period, excluding the time of any Market Disruption Event. For this half an hour trading time calculation break, a volume weighted average price (VWAP) will be defined. The determined VWAP will then be used as new fixing value for the Reference Instrument in the continued calculation. Given the case, a rebalancing event occurs less than 30 minutes before market close, the calculation period for the VWAP will be prolonged into the next trading day, until the 30 minutes trading time window from the past trading day is completed. Note that the half an hour trading time window refers to 30 minutes of trading on the Reference Exchange. If the Reference Instrument is, for example, currently suspended, this does not add to the 30 minutes of trading time. Then the VWAP time will be prolonged until 30 minutes of trading time is reached.

For example, if an intraday adjustment is triggered at 03:28:15 p.m. CET (given that the Index calculation continues until 05:35:00 p.m. CET), the ongoing calculation of the Index immediately stops. The VWAP relevant calculation time then will include the timespan between 03:29:00 p.m. CET and 03:58:59 p.m. CET. At 03:59:00 p.m. CET the new fixing values for the Index and the Reference Instrument are calculated. Afterwards, the ongoing calculation will continue with the new fixing values.

For example, if an intraday adjustment is triggered at 05:21:15 p.m. CET (given that the Index calculation continues until 05:35:00 p.m. CET), the ongoing calculation of the Index immediately stops. The VWAP relevant calculation time then will include the timespan between 05:22:00 p.m. CET and 09:16:59 a.m. CET of the following trading day. At 09:17:00 a.m. CET the new fixing values for the Index and the Reference Instrument are calculated. Afterwards, the ongoing calculation will continue with the new fixing values. In case of an overnight rebalancing, there will not be the regular fixing described in Section 2.2

After the 30 minute calculation break, new fixing values will be calculated as follows:

### **New Index Fixing value**

Leverage Component<sup>new</sup>:

$$Index_T \times \left( -Lev \times \frac{VWAP}{(Stock_T - (Div_t)) \times RFactorSS_t} + (Lev + 1) \right)$$

Financial Component<sup>new</sup>:

$$Index_T \times \left( \frac{(Lev + 1) \times IR_T - ICF_T}{360} \right) \times D_{t,T}$$

Index Fixing value<sup>new</sup>:

$$Index_T^{new} = Leverage\ Component^{new} + Financial\ Component^{new}$$

### **New Reference Instrument Fixing value**

$$Stock_T^{new} = VWAP$$

After the calculation of the new fixing values, the suffix “new” shall be dropped from all relevant quantities, and the ongoing calculation of the new index values continues as described in Section 3.

Note the following: While calculating the new fixing values,  $D_{t,T}$  is still the difference in days between the actual calculation date  $t$  and the recent most fixing date  $T$ . After the ongoing fixing is completed, date  $T$  becomes the same date as the actual calculation date and therefore, when continuing the ongoing calculation, the value of  $D_{t,T}$  is 0.

Also note, that after an intraday adjustment, a potential correction of the Index level because of Dividend or corporate action (See Section 3.2 and Section 3.3 for more information) will be set to 0 for Parameter  $Div_t$  and 1 for Parameter  $RFactorSS_t$  after calculation of the new fixing values, because the newly calculated fixing is, for example, already Ex-Dividend.

## **3.2 Dividend Index Adjustments**

In case date  $t$  is an Ex-Dividend day, a Dividend Index Adjustment is triggered. Therefore, the index calculation described in Section 3 will be influenced by the parameters  $Div_t$  and  $WT$ . While the parameter  $Div_t$  represents the correction of the Reference Underlying price by the paid Dividend, the parameter  $WT$  represents the withholding-tax, being payed as a government requirement for the payer of an item of income to withhold or deduct tax from the payment, and pay that tax to the government.

If date  $t$  is not an Ex-Dividend day, the value of the Parameters  $Div_t$  and  $WT$  is 0.

### 3.3 Extraordinary Index Adjustments

On date  $t$ , for any “unforeseeable cases” not described under the present index rule, an extraordinary Index Adjustment is triggered. The Index Calculation Agent will generally modify the Index calculation by correcting at its due discretion the relevant Fixing Price for the Reference Instrument on Index Calculation Day  $t$ , taking into account all available information and client’s best interest, in order to factor into the Index calculation, the adjustments made on the Reference Exchange to the Reference Instrument traded there.

The Index Calculation Agent may also adapt the Index Calculation in some other manner if it deems this necessary in its due discretion in order to account for differences between this Factor Index and the Reference Instrument. Such adjustments may in particular relate to the Reference Instrument being replaced by a basket of shares, securities representing shares or other Dividend-bearing securities or in the event of a merger by an appropriate number of shares, securities representing shares or other Dividend-bearing securities issued by the absorbing or newly formed company and where necessary stipulating a different Reference Exchange and Reference Instrument Price.

The list of extraordinary adjustment events listed in section 2.1 is not exhaustive.

A deciding factor is whether the Derivatives Exchange considers it expedient to adjust the contract size, an underlying or involving the relevant Reference Exchange which determines the price of the Reference Instrument. If neither futures nor options linked to the Reference Instrument are traded on the Derivatives Exchange, the adjustment shall be made in such a manner in which the Derivatives Exchange would do so if corresponding futures or options were traded there. If doubts arise in this event relating to the application of the modification rules of the Derivatives Exchange, the Index Calculation Agent shall decide such questions in its reasonable discretion. The rules and regulations of the Derivatives Exchange shall apply in addition to the provisions set out above.

In the event the company issuing the Reference Instrument underlying the Factor Index is liquidated or insolvency, winding-up or similar proceedings are instituted against the assets of the company or of the possibility that such proceedings will be opened becomes known, the price of the Reference Instrument will continue to be factored into the Index Calculation for as long as the price of the Reference Instrument continues to be determined on the Reference Exchange. However, if pricing in such a case is temporarily or permanently suspended, the leverage component remains unchanged and the Index Level will be determined solely on the basis of the other components of the Index formula.

Therefore, the Index calculation described in Section 3 will be influenced by the parameter  $R_{FactorSS_t}$ . For example, if a split takes place with a stock split rate of 0.5, the Reference Instrument loses half of its value on date  $t$ . Therefore, to retain the Index level uninfluenced by the loss of value caused by the split, the parameter  $R_{FactorSS_t}$  has to hold a value of 0.5. In case date  $t$  holds an Extraordinary Index Adjustment and also a Corporate Action event, the Extraordinary Index Adjustment will always be performed before taking the Corporate Action event into calculation.

If date  $t$  is not an Ex-Dividend day, the value of the Parameters  $Div_t$  and  $WT$  is 0.

The Index Calculation Agent defines in its reasonable discretion the adjustment method to be applied and published it by the means of a notice on <https://icf-markets.de/>.

### 3.4 Index Split / Reverse Split Adjustments

On the 1<sup>st</sup> Friday of each month, the Index is reviewed regarding qualification for an Index Split or a Reverse Split. If the 1<sup>st</sup> Friday of the month is not a trading day, the following trading day after the 1<sup>st</sup> Friday of the month will be used for review.

If, on this trading day, the most recent Index fixing value has reached a level above 1000 Points, the Index qualifies for an Index split. If the Index has reached a level below 10, the Index qualifies for an Index Reverse Split.

In case of a qualification for an Index Split or an Index reverse split, the Index fixing value of the 3<sup>rd</sup> Friday, that is used for the ongoing calculation of the Index on the next trading day, will be unscaled, but will then be divided by 10 in case of Index Split (or multiplied by 10 for a reverse split) during the ongoing Index calculation of the next trading day. Therefore, the fixing value of the Index of the trading day after the 3<sup>rd</sup> Friday will be a scaled fixing value.

Modification of Index fixing value during a Split

$$Index_T = \frac{Index_T}{10}$$

Modification of Index fixing value during a Reverse-Split

$$Index_T = Index_T \times 10$$

In case the 3<sup>rd</sup> Friday of the month is not a trading day, the implementation will take place on the following trading day after the 3<sup>rd</sup> Friday of the month. Respectively, the Index fixing value of the next trading day after the 3<sup>rd</sup> Friday, that is used for the ongoing calculation of the Index on the second trading day after the 3<sup>rd</sup> Friday, will be divided by 10 in case of Index split (or multiplied by 10 for a reverse split) during the ongoing calculation of the Index. Therefore, the fixing value of the Index of the second trading day after the 3<sup>rd</sup> Friday will be the newly scaled fixing value.

### 3.5 Impossibility to complete intraday rebalancing:

In case the Index fixing value would become negative after an intraday rebalancing event, the Index level will be fixed at 0.0001. This Index level will continue to be broadcasted for 4 weeks after the reset occurred. Subsequently the Index will be discontinued.

The Index fixing value will become negative after an intraday rebalancing event, if the obtained VWAP (see Section 3.1) is significantly lower, so that the calculated Index fixing value will be negative and therefore, cannot reach a positive value anytime in the future.

#### Example:

Given the most recent fixing of the Reference Instrument  $Stock_T$  has a value of 100. Date  $t$  is not an Ex-Dividend day neither a corporate action date. The most recent calculated fixing value of the Index is 400 Points. During the 1-hour observation period calculated VWAP is 140. The leverage Factor is 2.

Calculating the Index fixing value (leaving aside the financial component):

$$Index_T = Index_T \times \left( -Lev \times \frac{VWAP}{(Stock_T - Div_t) \times RFactorSS_t} + (Lev + 1) \right)$$
$$Index_T = 400 \times \left( -2 \times \frac{140}{(100 - (0)) \times 1} + (2 + 1) \right) = 80$$

The newly calculated Index fixing is a positive value.

Now given the same values, except the value of the calculated VWAP, which is 180.

Calculating the Index fixing value (leaving aside the financial component):

$$Index_T = Index_T \times \left( -Lev \times \frac{VWAP}{(Stock_T - Div_t) \times RFactorSS_t} + (Lev + 1) \right)$$
$$Index_T = 400 \times \left( 2 \times \frac{180}{(100 - (0)) \times 1} + (2 + 1) \right) = -240$$

The newly calculated Index fixing value is negative and can therefore no longer become positive.

## 4. Index parameters

Parameter	Value
Index-ISIN	DE000A2BNM34
Index-WKN	A2BNM3
Reuters-RIC	.ICFG00S2
Index-Name	ASSICURAZIONI GENERALI S.p.A. Leva 2 Short Daily Gross Return EUR
Index-Type	Gross Return
Index-Leverage	2
Index-Currency	EUR
Index-Starting Value	100 Points
Index-Starting Date	26.08.2016
Index-Starting Time	09:00 a.m. CET
Index-Ending Time	05:35 p.m. CET
Index-Calculation Fee	0.7% p.a.
Index-Withholding Tax	26.00% (Timestamp: 18.08.2016)
Barrier	+30%
Reference Instrument-ISIN	IT0000062072
Reference Instrument-Name	ASSICURAZIONI GENERALI S.p.A., ordinary share

### 4.1 Publications

ICF BANK AG publishes the Index on its website at [www.icf-markets.de](http://www.icf-markets.de) and on Reuters. ICF BANK AG also publishes all information it deems relevant to the current calculation of the Index on its website.

### 4.2 Prices and frequency of Index calculation

ICF BANK AG calculates the Index each exchange trading day on the Reference Exchange, taking into account the last traded share price of the Reference Instrument, traded on the Reference Exchange at calculation time  $t$ . If no last traded share price is available during the calculation period, the Index is calculated using the most recently available last traded share price.

The Index is calculated each stock exchange day at a minimum of once per minute between 09:00 a.m. CET and 05:35 p.m. CET, except in the case of disruptions in ICF BANK AG's data or price feeds which prevent ICF BANK AG from calculating and/or publishing the Index. ICF BANK AG will promptly make any corrections to the Index deemed necessary and publish it on its website at [www.icf-markets.de](http://www.icf-markets.de) and on Reuters.

The Index is calculated in **points**.

## **5. Authorisation/licences**

Use of the Index as an underlying for derivative financial products must be authorised by separate agreement with the ICF BANK AG.

## **6. Rounding**

If the Index is below 10 Points, the Index will be rounded to four decimal points.

If the Index is above or equal 10 Points and below 100 Points, the Index will be rounded to Three decimal points. If the Index is equal or above 100 Points, the Index will be rounded to two decimal points.

## **7. Interruption or suspension of trading**

The Index is not calculated in the event a Market Disruption Event occurs.

## **8. Annex**

Published by / Contact

ICF BANK AG  
Wertpapierhandelsbank  
Kaiserstrasse 1  
60311 Frankfurt am Main  
Germany

customized.indices@icfbank.de  
Phone +49 69 92877-0



## ***Index Methodology***

***Enel S.p.A.  
Leva 2 Long Daily Net Return EUR***

*Timestamp: 02<sup>nd</sup> September 2016*

## Contents

1. General information .....	3
2. Description and functioning.....	4
2.1 Index definitions .....	5
2.2 Daily chaining.....	7
3. Index calculation.....	8
3.1 Intraday rebalancing.....	9
3.2 Dividend Index adjustments.....	10
3.3 Extraordinary Index adjustments .....	11
3.4 Index split / reverse split adjustments .....	12
3.5 Impossibility to complete intraday rebalancing: .....	13
4. Index parameters.....	14
4.1 Publications.....	14
4.2 Prices and frequency of Index calculation .....	14
5. Authorisation/licences.....	15
6. Rounding.....	15
7. Interruption or suspension of trading .....	15
8. Annex .....	15

## 1. General information

This Index Methodology outlines the general methodology used to calculate the Enel S.p.A. Leva 2 Long Daily Net Return EUR (hereinafter: the "Index"). It sets forth the parameters, composition and calculation of the Index as well as the relevant criteria in this respect. ICF BANK AG exercises the utmost diligence when calculating and publishing the Index, and in implementing the criteria set out in this Methodology.

ICF BANK AG neither warrants nor guarantees the accuracy of the Index or the parameters Reference Instrument its composition and calculation, nor does it assume any liability for losses resulting from the flawed configuration or calculation of the Index or any other ratios derived therefrom. ICF BANK AG is under no obligation to notify third parties, including investors and/or financial intermediaries, of any errors or omissions pertaining to the Index.

ICF BANK AG publishes the Index on its website at [www.icf-markets.de](http://www.icf-markets.de). Publication of the Index constitutes neither investment advice nor a recommendation issued by ICF BANK AG to buy, sell or hold a given financial product. Specifically, the composition and calculation of the Index in no way represent a recommendation issued by ICF BANK AG to buy or sell individual, several or all Reference Instruments. This information does not constitute financial analysis within the meaning of § 34 b of the German Securities Trading Act (*Wertpapierhandelsgesetz*, "WpHG").

The statements contained in the following provide information relating to the composition and calculation of the Index.

The Index is calculated and published by ICF BANK AG. All rights to this Index are reserved to ICF BANK AG.

### **Index Details:**

Index Name: Enel S.p.A. Leva 2 Long Daily Net Return EUR

ISIN: DE000A2BNM67

WKN: A2BNM6

REUTERS-RIC: .ICFENEL2

Reference Instrument: Enel S.p.A., common shares

Reference Instrument ISIN: IT0003128367

Index Calculation Agent: ICF BANK AG, Kaiserstrasse 1, 60311 Frankfurt, Germany

Information Page: <https://icf-markets.de/>

## 2. Description and functioning

The Index is a factor Index. A factor Index uses a constant factor to track the daily percentage change in the market price of an Reference Instrument (e.g., an equity, an Index or a commodity) as compared to the most recent Fixing Price (as defined in section 2.1) of that Reference Instrument. The factor defines in which direction (whether the same or inverse) and what degree of leverage the factor Index reflects the daily price change of the Reference Instrument. In this case, the Index Reference Instrument is represented by the ordinary share of Enel S.p.A, traded on the Reference Exchange, as defined in Section 2.1.

To calculate the increase or decrease of the Index, a leverage- and a financing-component is used.

The leverage component reflects the change in price of the Reference Instrument between two Fixing Prices and transfers this movement (either positive or negative) onto the Index by multiplying the percentage of change with the assigned leverage. Thereby, a disproportionate effect on the value of the Index occurs. This leverage effect inherits the risk of an over proportional capital loss (“downside risk”).

For example: (excluding the financial component and events like dividends, corporate actions, etc.)

If a factor long Index has a factor of 2:

- a 5% increase in the price of the Reference Instrument (as compared to the latest Fixing Price), will result in the value of the Index increasing by  $2 \times 5\%$ .
- a 5% decrease in the price of the Reference Instrument (as compared to the latest Fixing Price), will result in the value of the Index decreasing by  $2 \times 5\%$ .

The financial component contains the costs of borrowing money at a one-day rate (EONIA Rate, see Section 3 for more information) increased by a per annum rate (ICF Rate) that reflects the Index calculation fee.

The Index will be continuously calculated during the Reference Instrument trading hours on the Reference Exchange by the Index Calculation Agent. This means, that the Index will be re-calculated at every change in price of the Reference Instrument. The Index Calculation Agent will charge an annual fee of 0.7% p.a., which will be deducted daily (based on a year comprising 360 days), during the calculation of the Index.

For periods longer than one day, the compounding effect shall be taken into account. Indeed, returns on the Reference Instrument cannot simply be multiplied with the selected factor since the performance of the factor Index depends on each individual daily performance of the Reference Instrument. If the performance of a factor Index is compared against that of the Reference Instrument over a period longer than one day, the observed price trends will deviate not only for prices of the Reference Instrument which constantly rise or fall, but also for those which fluctuate.

## 2.1 Index definitions

The definitions below shall apply for the purposes of this Index description.

"**Barrier**" indicates the maximum permitted negative (in case of a long Index) or positive (in case of a short Index) change in price of the Reference Instrument compared to its most recent Fixing Value before an intraday Index adjustment takes place. In this Index, indicated by parameter P, the Barrier is -30%.

"**Derivatives Exchange**" are the main exchanges where options or futures of the Reference Instrument are traded.

"**Dividend**" shall mean the Dividend of the company, exclusive of which the Reference Instrument is traded on the reference exchange on the Ex-Dividend day.

"**Ex-Dividend Date**" means the Trading Day on which the Reference Instrument trades "Ex-Dividend" on the Reference Exchange.

"**Extraordinary Adjustment Event**" means any of the following events as they relate to the Reference Instrument:

- a. capital increase by way of the issue of new shares in return for contributions in cash or in kind with the grant of a subscription right, capital increase from retained earnings, issue of securities with option or conversion rights into shares, distribution of special Dividends, share split, subdivision, consolidation or reclassification of the shares
- b. probable or definitive discontinuation of stock exchange trading in the shares as a result of a merger by absorption or new company formation or takeover of the company of the Reference Instrument by another company
- c. spin-off of a division of the company in such a manner that a new independent company is created or the division is absorbed by a third company
- d. any other event, which the Index Calculation Agent may at its reasonable discretion deem to have a comparable or similar impact on the calculation of the Factor Index in the event no adjustments were to be made

In case of securities representing shares (ADR/GDR) as the Reference Instrument, the following provisions shall additionally apply:

- e. any modification of the terms and conditions of the securities representing shares by their issuers
- f. discontinuation of the stock exchange quotation of the securities representing shares or of the shares underlying them
- g. insolvency of the issuer of the securities representing shares
- h. end of the term of the securities representing shares as a result of termination by the issuer of the securities representing shares

For ADRs and GDRs or any other securities representing shares and other Dividend-bearing securities (e.g. profit participation rights, participation certificates) as the Reference Instrument the provisions specified under (a) to (c) shall apply mutatis mutandis with respect to the Reference Instrument and the issuing company.

**"Fixing Price"** of the Reference Instrument for an Index Calculation Day is – subject to an Extraordinary Adjustment to the calculation of the Index in accordance with section 3 – the official closing price, or for Italian stocks underlyings the reference closing price (“prezzo di riferimento”) of the Reference Instrument, as determined and published for that day by the Reference Exchange. If an Index Calculation Day falls on a day which is not a Trading Day, the Fixing Price of the immediately preceding Index Calculation Day shall continue to apply. If no Fixing Price for the Reference Instrument is determined or published on a Trading Day, the Index Calculation Agent shall determine the Fixing Price of the Reference Instrument for that day on the basis of the most recent prices set for the Reference Instrument at its due discretion.

**"Index Calculation Agent"** means ICF BANK AG, Kaiserstrasse 1, 60311 Frankfurt, Germany

**"Index Calculation Day"** means every day from Monday to Friday except holidays on which the Reference Exchange is closed

**"Index Calculation Fee"** is 0.7% per annum. The Index Calculation Fee is charged each calendar day, beginning as of the Index Start Date. It is calculated on the basis of a 360-day year and the most recently calculated Index Closing Value.

**"Index Currency"** means EUR

**"Index Fixing Value"** is calculated for each Index Calculation Day by the Index Calculation Agent in accordance with section 3 of this Index description on the basis of the Reference Price (“prezzo di riferimento”) of the Reference Instrument for this Index Calculation Day and published in accordance with section 4.1 of this Index description.

**"Information Page"** means <https://icf-markets.de/>

**"Index Start Date"** means 26<sup>th</sup> August 2016

**"Index Start Value"** is 100 Index points and represents the Index Closing Value on Index Calculation Day T=0 for the purposes of calculating the Index in accordance with Section 3 of this document

**"Interest Rate"** means EONIA. EONIA (Euro Over Night Index Average) is a weighted average interest rate for overnight interbank money calculated act/360 by the European Central Bank since 4 January 1999 on the basis of effective turnover. If the Interest Rate is not set or published on an Index Calculation Day, the Interest Rate applied on the immediately preceding Index Calculation Day is used to calculate the Index in accordance with section 3 of this document. If the Interest Rate has neither been set nor published for ten consecutive Index Calculation Days, the Index Calculation Agent has the right and obligation to stipulate in its reasonable discretion an alternative relevant Interest Rate which has functions comparable to the previous Interest Rate.

**"Leverage"** describes the impact, that a change in the price of the Reference Instrument has on the relevant factor Index. The leverage on this Index is 2. See Lev parameter in section 3.

**“Market Disruption Event”** means each of the following events:

- a) the failure of the Reference Exchange to open for trading during its regular trading sessions
- b) the suspension or restriction of trading in the Reference Instrument on the Reference Exchange
- c) in general the suspension or restriction of trading in a Derivative of the Reference Instrument on the Derivatives Exchange

"**Reference Exchange**" means Borsa Italiana S.p.A. – LSE Group

"**Reference Instrument**" means Enel S.p.A.

Asset Type: Ordinary Share

Currency: EUR

ISIN: IT0003128367

Bloomberg symbol: ENEL IM EQUITY

"**Reference Instrument Price**" corresponds at any time during the trading period on the Reference Exchange to the price of the Reference Instrument

"**Trading Day**" means every day on which the Reference Instrument is traded on the Reference Exchange.

"**VWAP**" means volume weighted average price of the Reference Instrument. See section 3.1 of this document

"**Withholding-Tax**" shall be 26.00% on the Index Start Date. The Index Calculation Agent may change the Withholding-Tax Factor at its due discretion on any Index Calculation Day with prospective effect, if the relevant tax law applicable to the Index Calculation Agent changes, resulting in a change in the amount of the – after tax – Dividend virtually accruing to it. Check <https://icf-markets.de/> for current Withholding-Tax value.

## 2.2 Daily chaining

As mentioned in Section 2, the value of a factor Index is calculated by applying, on a daily basis, the corresponding leverage- and financial component to the daily change in the Reference Instrument. The Index is calculated on the basis of the change in the price of the Reference Instrument as compared to its most recent Fixing Price, which, in this case, will be represented by the "prezzo di riferimento" which is calculated at closing and published by the Reference Exchange. Thus every new fixing price for the Reference Instrument represents a new reference price, which serves as the basis for calculating the percentage variation in underlying Fixing Price and apply the daily constant leverage factor, according to the index calculation methodology described in the present document, in order to derive the fixing value of the index. This daily adjustment of the factor Index is automatic and is known as chaining.

### 3. Index calculation

The Index will be calculated on the basis of the following formula:

Leverage Component:

$$Index_T \times \left( Lev \times \frac{Stock_t}{(Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t} - (Lev - 1) \right)$$

Financial Component:

$$Index_T \times \left( \frac{(Lev - 1) \times IR_T + ICF_T}{360} \right) \times D_{t,T}$$

Index Calculation:

$$Index_t = Leverage Component_t - Financial Component_t$$

The calculation formula is using the following parameters:

Parameter	Description
t	Represents the current calculation date
T	Represents the last fixing date, which is the date of the last closing price, represented by the “prezzo di riferimento”, as calculated and published by the Reference Exchange
Index <sub>t</sub>	Current Index level at calculation time t
Index <sub>T</sub>	Recent Index fixing level as described in Section 2.2
Stock <sub>t</sub>	Last traded share price of the Reference Instrument, traded on the Reference Exchange at calculation time t
Stock <sub>T</sub>	Last Reference Instrument Fixing Price as described in Section 2.2
D <sub>t,T</sub>	Number of calendar days between T and t
IR <sub>T</sub>	EONIA Rate (Euro Over Night Index Average), describes an overnight-loanrate that is determined by the European Central Bank. The value of IR <sub>T</sub> always equates the EONIA Rate of date T
ICF <sub>T</sub>	Index calculation fee which is charged by the Index Calculation Agent
Lev	Leverage (see definition in section 2.1)
Div <sub>t</sub>	Dividend correction, that equates the gross Dividend amount paid by the Reference Instrument on Ex-Dividend date t. If date t is not an Ex-Dividend date, this parameter has a value of 0. See Section 3.2 for more information
RFactorSS <sub>t</sub>	Represents the factor of a potential corporate action event of the Reference Instrument on date t. See Section 3.3 for more information. If date t is not a corporate action date, this parameter has a value of 1
WT	Withholding-Tax, that is subtracted from the Dividend correction in case date t is an Ex-Dividend date. See section 3.2 for more information

### 3.1 Intraday rebalancing

If, for instance, the price of the Reference Instrument suffers a 50% daily loss, the value of a factor long Index with a factor of 2 would have to drop to zero (total loss) since the factor Index would also double its losses. In order to counteract a total loss, factor indices feature a Barrier (represented by the parameter P), which triggers an intraday Index adjustment if the Reference Instrument reaches or falls below it.

In the event of an intraday rebalancing, new fixing values for the Index and the Reference Instrument calculated and therefore, a new day is simulated from which the ongoing calculation continues. The consequence is that the negative daily return for the factor Index is attenuated. However, if the calculated price of the index is significantly low, this can result in an intraday loss which, in economic terms, closely approximates a total loss.

The condition for triggering an intraday adjustment is as follows:

$$\frac{Stock_t}{\left( (Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t \right)} - 1 \leq P$$

Whereby the parameter P represents the Barrier.

In this case, the value of P is -30% (-0.3).

In case of an intraday adjustment, the calculation of the Index is interrupted for half an hour (30 minutes) period, excluding the time of any Market Disruption Event. For this half an hour trading time calculation break, a volume weighted average price (VWAP) will be defined. The determined VWAP will then be used as new fixing value for the Reference Instrument in the continued calculation. Given the case, a rebalancing event occurs less than 30 minutes before market close, the calculation period for the VWAP will be prolonged into the next trading day, until the 30 minutes trading time window from the past trading day is completed. Note that the half an hour trading time window refers to 30 minutes of trading on the Reference Exchange. If the Reference Instrument is, for example, currently suspended, this does not add to the 30 minutes of trading time. Then the VWAP time will be prolonged until 30 minutes of trading time is reached.

For example, if an intraday adjustment is triggered at 03:28:15 p.m. CET (given that the Index calculation continues until 05:35:00 p.m. CET), the ongoing calculation of the Index immediately stops. The VWAP relevant calculation time then will include the timespan between 03:29:00 p.m. CET and 03:58:59 p.m. CET. At 03:59:00 p.m. CET the new fixing values for the Index and the Reference Instrument are calculated. Afterwards, the ongoing calculation will continue with the new fixing values.

For example, if an intraday adjustment is triggered at 05:21:15 p.m. CET (given that the Index calculation continues until 05:35:00 p.m. CET), the ongoing calculation of the Index immediately stops. The VWAP relevant calculation time then will include the timespan between 05:22:00 p.m. CET and 09:16:59 a.m. CET of the following trading day. At 09:17:00 a.m. CET the new fixing values for the Index and the Reference Instrument are calculated. Afterwards, the ongoing calculation will continue with the new fixing values. In case of an overnight rebalancing, there will not be the regular fixing described in Section 2.2

After the 30 minute calculation break, new fixing values will be calculated as follows:

### **New Index Fixing value**

Leverage Component<sup>new</sup>:

$$Index_T \times \left( Lev \times \frac{VWAP}{(Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t} - (Lev - 1) \right)$$

Financial Component<sup>new</sup>:

$$Index_T \times \left( \frac{(Lev - 1) \times IR_T + ICF_T}{360} \right) \times D_{t,T}$$

Index Fixing value<sup>new</sup>:

$$Index_T^{new} = Leverage\ Component^{new} - Financial\ Component^{new}$$

### **New Reference Instrument Fixing value**

$$Stock_T^{new} = VWAP$$

After the calculation of the new fixing values, the suffix “new” shall be dropped from all relevant quantities, and the ongoing calculation of the new index values continues as described in Section 3.

Note the following: While calculating the new fixing values,  $D_{t,T}$  is still the difference in days between the actual calculation date  $t$  and the recent most fixing date  $T$ . After the ongoing fixing is completed, date  $T$  becomes the same date as the actual calculation date and therefore, when continuing the ongoing calculation, the value of  $D_{t,T}$  is 0.

Also note, that after an intraday adjustment, a potential correction of the Index level because of Dividend or corporate action (See Section 3.2 and Section 3.3 for more information) will be set to 0 for Parameter  $Div_t$  and 1 for Parameter  $RFactorSS_t$  after calculation of the new fixing values, because the newly calculated fixing is, for example, already Ex-Dividend.

## **3.2 Dividend Index Adjustments**

In case date  $t$  is an Ex-Dividend day, a Dividend Index Adjustment is triggered. Therefore, the index calculation described in Section 3 will be influenced by the parameters  $Div_t$  and  $WT$ . While the parameter  $Div_t$  represents the correction of the Reference Underlying price by the paid Dividend, the parameter  $WT$  represents the withholding-tax, being payed as a government requirement for the payer of an item of income to withhold or deduct tax from the payment, and pay that tax to the government.

If date  $t$  is not an Ex-Dividend day, the value of the Parameters  $Div_t$  and  $WT$  is 0.

### 3.3 Extraordinary Index Adjustments

On date  $t$ , for any “unforeseeable cases” not described under the present index rule, an extraordinary Index Adjustment is triggered. The Index Calculation Agent will generally modify the Index calculation by correcting at its due discretion the relevant Fixing Price for the Reference Instrument on Index Calculation Day  $t$ , taking into account all available information and client’s best interest, in order to factor into the Index calculation, the adjustments made on the Reference Exchange to the Reference Instrument traded there.

The Index Calculation Agent may also adapt the Index Calculation in some other manner if it deems this necessary in its due discretion in order to account for differences between this Factor Index and the Reference Instrument. Such adjustments may in particular relate to the Reference Instrument being replaced by a basket of shares, securities representing shares or other Dividend-bearing securities or in the event of a merger by an appropriate number of shares, securities representing shares or other Dividend-bearing securities issued by the absorbing or newly formed company and where necessary stipulating a different Reference Exchange and Reference Instrument Price.

The list of extraordinary adjustment events listed in section 2.1 is not exhaustive.

A deciding factor is whether the Derivatives Exchange considers it expedient to adjust the contract size, an underlying or involving the relevant Reference Exchange which determines the price of the Reference Instrument. If neither futures nor options linked to the Reference Instrument are traded on the Derivatives Exchange, the adjustment shall be made in such a manner in which the Derivatives Exchange would do so if corresponding futures or options were traded there. If doubts arise in this event relating to the application of the modification rules of the Derivatives Exchange, the Index Calculation Agent shall decide such questions in its reasonable discretion. The rules and regulations of the Derivatives Exchange shall apply in addition to the provisions set out above.

In the event the company issuing the Reference Instrument underlying the Factor Index is liquidated or insolvency, winding-up or similar proceedings are instituted against the assets of the company or of the possibility that such proceedings will be opened becomes known, the price of the Reference Instrument will continue to be factored into the Index Calculation for as long as the price of the Reference Instrument continues to be determined on the Reference Exchange. However, if pricing in such a case is temporarily or permanently suspended, the leverage component remains unchanged and the Index Level will be determined solely on the basis of the other components of the Index formula.

Therefore, the Index calculation described in Section 3 will be influenced by the parameter  $R_{FactorSS_t}$ . For example, if a split takes place with a stock split rate of 0.5, the Reference Instrument loses half of its value on date  $t$ . Therefore, to retain the Index level uninfluenced by the loss of value caused by the split, the parameter  $R_{FactorSS_t}$  has to hold a value of 0.5. In case date  $t$  holds an Extraordinary Index Adjustment and also a Corporate Action event, the Extraordinary Index Adjustment will always be performed before taking the Corporate Action event into calculation.

If date  $t$  is not an Ex-Dividend day, the value of the Parameters  $Div_t$  and  $WT$  is 0.

The Index Calculation Agent defines in its reasonable discretion the adjustment method to be applied and published it by the means of a notice on <https://icf-markets.de/>.

### 3.4 Index Split / Reverse Split Adjustments

On the 1<sup>st</sup> Friday of each month, the Index is reviewed regarding qualification for an Index Split or a Reverse Split. If the 1<sup>st</sup> Friday of the month is not a trading day, the following trading day after the 1<sup>st</sup> Friday of the month will be used for review.

If, on this trading day, the most recent Index fixing value has reached a level above 1000 Points, the Index qualifies for an Index split. If the Index has reached a level below 10, the Index qualifies for an Index Reverse Split.

In case of a qualification for an Index Split or an Index reverse split, the Index fixing value of the 3<sup>rd</sup> Friday, that is used for the ongoing calculation of the Index on the next trading day, will be unscaled, but will then be divided by 10 in case of Index Split (or multiplied by 10 for a reverse split) during the ongoing Index calculation of the next trading day. Therefore, the fixing value of the Index of the trading day after the 3<sup>rd</sup> Friday will be a scaled fixing value.

Modification of Index fixing value during a Split

$$Index_T = \frac{Index_T}{10}$$

Modification of Index fixing value during a Reverse-Split

$$Index_T = Index_T \times 10$$

In case the 3<sup>rd</sup> Friday of the month is not a trading day, the implementation will take place on the following trading day after the 3<sup>rd</sup> Friday of the month. Respectively, the Index fixing value of the next trading day after the 3<sup>rd</sup> Friday, that is used for the ongoing calculation of the Index on the second trading day after the 3<sup>rd</sup> Friday, will be divided by 10 in case of Index split (or multiplied by 10 for a reverse split) during the ongoing calculation of the Index. Therefore, the fixing value of the Index of the second trading day after the 3<sup>rd</sup> Friday will be the newly scaled fixing value.

### 3.5 Impossibility to complete intraday rebalancing:

In case the Index fixing value would become negative after an intraday rebalancing event, the Index level will be fixed at 0.0001. This Index level will continue to be broadcasted for 4 weeks after the reset occurred. Subsequently the Index will be discontinued.

The Index fixing value will become negative after an intraday rebalancing event, if the obtained VWAP (see Section 3.1) is significantly lower, so that the calculated Index fixing value will be negative and therefore, cannot reach a positive value anytime in the future.

#### Example:

Given the most recent fixing of the Reference Instrument  $Stock_T$  has a value of 100. Date  $t$  is not an Ex-Dividend day neither a corporate action date. The most recent calculated fixing value of the Index is 400 Points. During the 1-hour observation period calculated VWAP is 60. The leverage Factor is 2.

Calculating the Index fixing value (leaving aside the financial component):

$$Index_T = Index_T \times \left( Lev \times \frac{VWAP}{(Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t} - (Lev - 1) \right)$$
$$Index_T = 400 \times \left( 2 \times \frac{60}{(100 - (0 \times (1 - 0))) \times 1} - (2 - 1) \right) = 80$$

The newly calculated Index fixing is a positive value.

Now given the same values, except the value of the calculated VWAP, which is 20.

Calculating the Index fixing value (leaving aside the financial component):

$$Index_T = Index_T \times \left( Lev \times \frac{VWAP}{(Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t} - (Lev - 1) \right)$$
$$Index_T = 400 \times \left( 2 \times \frac{20}{(100 - (0 \times (1 - 0))) \times 1} - (2 - 1) \right) = -240$$

The newly calculated Index fixing value is negative and can therefore no longer become positive.

## 4. Index parameters

Parameter	Value
Index-ISIN	DE000A2BNM42
Index-WKN	A2BNM4
Reuters-RIC	.ICFENEL2
Index-Name	Enel S.p.A. Leva 2 Long Daily Net Return EUR
Index-Type	Net Return
Index-Leverage	2
Index-Currency	EUR
Index-Starting Value	100 Points
Index-Starting Date	26.08.2016
Index-Starting Time	09:00 a.m. CET
Index-Ending Time	05:35 p.m. CET
Index-Calculation Fee	0.7% p.a.
Index-Withholding Tax	26.00% (Timestamp: 18.08.2016)
Barrier	-30%
Reference Instrument-ISIN	IT0003128367
Reference Instrument-Name	Enel S.p.A., ordinary share

### 4.1 Publications

ICF BANK AG publishes the Index on its website at [www.icf-markets.de](http://www.icf-markets.de) and on Reuters. ICF BANK AG also publishes all information it deems relevant to the current calculation of the Index on its website.

### 4.2 Prices and frequency of Index calculation

ICF BANK AG calculates the Index each exchange trading day on the Reference Exchange, taking into account the last traded share price of the Reference Instrument, traded on the Reference Exchange at calculation time  $t$ . If no last traded share price is available during the calculation period, the Index is calculated using the most recently available last traded share price.

The Index is calculated each stock exchange day at a minimum of once per minute between 09:00 a.m. CET and 05:35 p.m. CET, except in the case of disruptions in ICF BANK AG's data or price feeds which prevent ICF BANK AG from calculating and/or publishing the Index. ICF BANK AG will promptly make any corrections to the Index deemed necessary and publish it on its website at [www.icf-markets.de](http://www.icf-markets.de) and on Reuters.

The Index is calculated in **points**.

## **5. Authorisation/licences**

Use of the Index as an underlying for derivative financial products must be authorised by separate agreement with the ICF BANK AG.

## **6. Rounding**

If the Index is below 10 Points, the Index will be rounded to four decimal points.

If the Index is above or equal 10 Points and below 100 Points, the Index will be rounded to three decimal points. If the Index is equal or above 100 Points, the Index will be rounded to two decimal points.

## **7. Interruption or suspension of trading**

The Index is not calculated in the event a Market Disruption Event occurs.

## **8. Annex**

Published by / Contact

ICF BANK AG  
Wertpapierhandelsbank  
Kaiserstrasse 1  
60311 Frankfurt am Main  
Germany

customized.indices@icfbank.de  
Phone +49 69 92877-0



## ***Index Methodology***

***Enel S.p.A.***  
***Leva 2 Short Daily Gross Return EUR***

*Timestamp: 02<sup>nd</sup> September 2016*

## Contents

1. General information .....	3
2. Description and functioning.....	4
2.1 Index definitions .....	5
2.2 Daily chaining.....	7
3. Index calculation.....	8
3.1 Intraday rebalancing.....	9
3.2 Dividend Index adjustments.....	10
3.3 Extraordinary Index adjustments .....	11
3.4 Index split / reverse split adjustments .....	12
3.5 Impossibility to complete intraday rebalancing: .....	13
4. Index parameters.....	14
4.1 Publications.....	14
4.2 Prices and frequency of Index calculation .....	14
5. Authorisation/licences.....	15
6. Rounding.....	15
7. Interruption or suspension of trading .....	15
8. Annex .....	15

## 1. General information

This Index Methodology outlines the general methodology used to calculate the Enel S.p.A. Leva 2 short Daily Gross Return EUR (hereinafter: the "Index"). It sets forth the parameters, composition and calculation of the Index as well as the relevant criteria in this respect. ICF BANK AG exercises the utmost diligence when calculating and publishing the Index, and in implementing the criteria set out in this Methodology.

ICF BANK AG neither warrants nor guarantees the accuracy of the Index or the parameters Reference Instrument its composition and calculation, nor does it assume any liability for losses resulting from the flawed configuration or calculation of the Index or any other ratios derived therefrom. ICF BANK AG is under no obligation to notify third parties, including investors and/or financial intermediaries, of any errors or omissions pertaining to the Index.

ICF BANK AG publishes the Index on its website at [www.icf-markets.de](http://www.icf-markets.de). Publication of the Index constitutes neither investment advice nor a recommendation issued by ICF BANK AG to buy, sell or hold a given financial product. Specifically, the composition and calculation of the Index in no way represent a recommendation issued by ICF BANK AG to buy or sell individual, several or all Reference Instruments. This information does not constitute financial analysis within the meaning of § 34 b of the German Securities Trading Act (*Wertpapierhandelsgesetz*, "WpHG").

The statements contained in the following provide information relating to the composition and calculation of the Index.

The Index is calculated and published by ICF BANK AG. All rights to this Index are reserved to ICF BANK AG.

### **Index Details:**

Index Name: Enel S.p.A. Leva 2 Short Daily Gross Return EUR

ISIN: DE000A2BNM75

WKN: A2BNM7

REUTERS-RIC: .ICFENES2

Reference Instrument: Enel S.p.A., common shares

Reference Instrument ISIN: IT0003128367

Index Calculation Agent: ICF BANK AG, Kaiserstrasse 1, 60311 Frankfurt, Germany

Information Page: <https://icf-markets.de/>

## 2. Description and functioning

The Index is a factor Index. A factor Index uses a constant factor to track the daily percentage change in the market price of an Reference Instrument (e.g., an equity, an Index or a commodity) as compared to the most recent Fixing Price (as defined in section 2.1) of that Reference Instrument. The factor defines in which direction (whether the same or inverse) and what degree of leverage the factor Index reflects the daily price change of the Reference Instrument. In this case, the Index Reference Instrument is represented by the ordinary share of Enel S.p.A., traded on the Reference Exchange, as defined in Section 2.1.

To calculate the increase or decrease of the Index, a leverage- and a financing-component is used.

The leverage component reflects the change in price of the Reference Instrument between two Fixing Prices and transfers this movement (either positive or negative) onto the Index by multiplying the percentage of change with the assigned leverage. Thereby, a disproportionate effect on the value of the Index occurs. This leverage effect inherits the risk of an over proportional capital loss (“downside risk”).

For example: (excluding the financial component and events like dividends, corporate actions, etc.)

If a factor short Index has a factor of 2:

- a 5% increase in the price of the Reference Instrument (as compared to the latest Fixing Price), will result in the value of the Index decreasing by  $2 \times 5\%$ .
- a 5% decrease in the price of the Reference Instrument (as compared to the latest Fixing Price), will result in the value of the Index increasing by  $2 \times 5\%$ .

The financial component contains the costs of borrowing money at a one-day rate (EONIA Rate, see Section 3 for more information) increased by a per annum rate (ICF Rate) that reflects the Index calculation fee.

The Index will be continuously calculated during the Reference Instrument trading hours on the Reference Exchange by the Index Calculation Agent. This means, that the Index will be re-calculated at every change in price of the Reference Instrument. The Index Calculation Agent will charge an annual fee of 0.7% p.a., which will be deducted daily (based on a year comprising 360 days), during the calculation of the Index.

For periods longer than one day, the compounding effect shall be taken into account. Indeed, returns on the Reference Instrument cannot simply be multiplied with the selected factor since the performance of the factor Index depends on each individual daily performance of the Reference Instrument. If the performance of a factor Index is compared against that of the Reference Instrument over a period longer than one day, the observed price trends will deviate not only for prices of the Reference Instrument which constantly rise or fall, but also for those which fluctuate.

## 2.1 Index definitions

The definitions below shall apply for the purposes of this Index description.

"**Barrier**" indicates the maximum permitted negative (in case of a long Index) or positive (in case of a short Index) change in price of the Reference Instrument compared to its most recent Fixing Value before an intraday Index adjustment takes place. In this Index, indicated by parameter P, the Barrier is +30%.

"**Derivatives Exchange**" are the main exchanges where options or futures of the Reference Instrument are traded.

"**Dividend**" shall mean the Dividend of the company, exclusive of which the Reference Instrument is traded on the reference exchange on the Ex-Dividend day.

"**Ex-Dividend Date**" means the Trading Day on which the Reference Instrument trades "Ex-Dividend" on the Reference Exchange.

"**Extraordinary Adjustment Event**" means any of the following events as they relate to the Reference Instrument:

- a. capital increase by way of the issue of new shares in return for contributions in cash or in kind with the grant of a subscription right, capital increase from retained earnings, issue of securities with option or conversion rights into shares, distribution of special Dividends, share split, subdivision, consolidation or reclassification of the shares
- b. probable or definitive discontinuation of stock exchange trading in the shares as a result of a merger by absorption or new company formation or takeover of the company of the Reference Instrument by another company
- c. spin-off of a division of the company in such a manner that a new independent company is created or the division is absorbed by a third company
- d. any other event, which the Index Calculation Agent may at its reasonable discretion deem to have a comparable or similar impact on the calculation of the Factor Index in the event no adjustments were to be made

In case of securities representing shares (ADR/GDR) as the Reference Instrument, the following provisions shall additionally apply:

- e. any modification of the terms and conditions of the securities representing shares by their issuers
- f. discontinuation of the stock exchange quotation of the securities representing shares or of the shares underlying them
- g. insolvency of the issuer of the securities representing shares
- h. end of the term of the securities representing shares as a result of termination by the issuer of the securities representing shares

For ADRs and GDRs or any other securities representing shares and other Dividend-bearing securities (e.g. profit participation rights, participation certificates) as the Reference Instrument the provisions specified under (a) to (c) shall apply mutatis mutandis with respect to the Reference Instrument and the issuing company.

**"Fixing Price"** of the Reference Instrument for an Index Calculation Day is – subject to an Extraordinary Adjustment to the calculation of the Index in accordance with section 3 – the official closing price, or for Italian stocks underlyings the reference closing price (“prezzo di riferimento”) of the Reference Instrument, as determined and published for that day by the Reference Exchange. If an Index Calculation Day falls on a day which is not a Trading Day, the Fixing Price of the immediately preceding Index Calculation Day shall continue to apply. If no Fixing Price for the Reference Instrument is determined or published on a Trading Day, the Index Calculation Agent shall determine the Fixing Price of the Reference Instrument for that day on the basis of the most recent prices set for the Reference Instrument at its due discretion.

**"Index Calculation Agent"** means ICF BANK AG, Kaiserstrasse 1, 60311 Frankfurt, Germany

**"Index Calculation Day"** means every day from Monday to Friday except holidays on which the Reference Exchange is closed

**"Index Calculation Fee"** is 0.7% per annum. The Index Calculation Fee is charged each calendar day, beginning as of the Index Start Date. It is calculated on the basis of a 360-day year and the most recently calculated Index Closing Value.

**"Index Currency"** means EUR

**"Index Fixing Value"** is calculated for each Index Calculation Day by the Index Calculation Agent in accordance with section 3 of this Index description on the basis of the Reference Price (“prezzo di riferimento”) of the Reference Instrument for this Index Calculation Day and published in accordance with section 4.1 of this Index description.

**"Information Page"** means <https://icf-markets.de/>

**"Index Start Date"** means 26<sup>th</sup> August 2016

**"Index Start Value"** is 100 Index points and represents the Index Closing Value on Index Calculation Day T=0 for the purposes of calculating the Index in accordance with Section 3 of this document

**"Interest Rate"** means EONIA. EONIA (Euro Over Night Index Average) is a weighted average interest rate for overnight interbank money calculated act/360 by the European Central Bank since 4 January 1999 on the basis of effective turnover. If the Interest Rate is not set or published on an Index Calculation Day, the Interest Rate applied on the immediately preceding Index Calculation Day is used to calculate the Index in accordance with section 3 of this document. If the Interest Rate has neither been set nor published for ten consecutive Index Calculation Days, the Index Calculation Agent has the right and obligation to stipulate in its reasonable discretion an alternative relevant Interest Rate which has functions comparable to the previous Interest Rate.

**"Leverage"** describes the impact, that a change in the price of the Reference Instrument has on the relevant factor Index. The leverage on this Index is 2. See Lev parameter in section 3.

**“Market Disruption Event”** means each of the following events:

- a) the failure of the Reference Exchange to open for trading during its regular trading sessions
- b) the suspension or restriction of trading in the Reference Instrument on the Reference Exchange
- c) in general the suspension or restriction of trading in a Derivative of the Reference Instrument on the Derivatives Exchange

"**Reference Exchange**" means Borsa Italiana S.p.A. – LSE Group

"**Reference Instrument**" means Enel S.p.A.

Asset Type: Ordinary Share

Currency: EUR

ISIN: IT0003128367

Bloomberg symbol: ENEL IM EQUITY

"**Reference Instrument Price**" corresponds at any time during the trading period on the Reference Exchange to the price of the Reference Instrument

"**Trading Day**" means every day on which the Reference Instrument is traded on the Reference Exchange.

"**VWAP**" means volume weighted average price of the Reference Instrument. See section 3.1 of this document

"**Withholding-Tax**" shall be 26.00% on the Index Start Date. The Index Calculation Agent may change the Withholding-Tax Factor at its due discretion on any Index Calculation Day with prospective effect, if the relevant tax law applicable to the Index Calculation Agent changes, resulting in a change in the amount of the – after tax – Dividend virtually accruing to it. Check <https://icf-markets.de/> for current Withholding-Tax value.

## 2.2 Daily chaining

As mentioned in Section 2, the value of a factor Index is calculated by applying, on a daily basis, the corresponding leverage- and financial component to the daily change in the Reference Instrument. The Index is calculated on the basis of the change in the price of the Reference Instrument as compared to its most recent Fixing Price, which, in this case, will be represented by the "prezzo di riferimento" which is calculated at closing and published by the Reference Exchange. Thus every new fixing price for the Reference Instrument represents a new reference price, which serves as the basis for calculating the percentage variation in underlying Fixing Price and apply the daily constant leverage factor, according to the index calculation methodology described in the present document, in order to derive the fixing value of the index. This daily adjustment of the factor Index is automatic and is known as chaining.

### 3. Index calculation

The Index will be calculated on the basis of the following formula:

Leverage Component:

$$Index_T \times \left( -Lev \times \frac{Stock_t}{(Stock_T - (Div_t)) \times RFactorSS_t} + (Lev + 1) \right)$$

Financial Component:

$$Index_T \times \left( \frac{(Lev + 1) \times IR_T - ICF_T}{360} \right) \times D_{t,T}$$

Index Calculation:

$$Index_t = Leverage Component_t + Financial Component_t$$

The calculation formula is using the following parameters:

Parameter	Description
t	Represents the current calculation date
T	Represents the last fixing date, which is the date of the last closing price, represented by the “prezzo di riferimento”, as calculated and published by the Reference Exchange
Index <sub>t</sub>	Current Index level at calculation time t
Index <sub>T</sub>	Recent Index fixing level as described in Section 2.2
Stock <sub>t</sub>	Last traded share price of the Reference Instrument, traded on the Reference Exchange at calculation time t
Stock <sub>T</sub>	Last Reference Instrument Fixing Price as described in Section 2.2
D <sub>t,T</sub>	Number of calendar days between T and t
IR <sub>T</sub>	EONIA Rate (Euro Over Night Index Average), describes an overnight-loanrate that is determined by the European Central Bank. The value of IR <sub>T</sub> always equates the EONIA Rate of date T
ICF <sub>T</sub>	Index calculation fee which is charged by the Index Calculation Agent
Lev	Leverage (see definition in section 2.1)
Div <sub>t</sub>	Dividend correction, that equates the gross Dividend amount paid by the Reference Instrument on Ex-Dividend date t. If date t is not an Ex-Dividend date, this parameter has a value of 0. See Section 3.2 for more information
RFactorSS <sub>t</sub>	Represents the factor of a potential corporate action event of the Reference Instrument on date t. See Section 3.3 for more information. If date t is not a corporate action date, this parameter has a value of 1

### 3.1 Intraday rebalancing

If, for instance, the price of the Reference Instrument gains a 50% daily increase, the value of a factor short Index with a factor of 2 would have to drop to zero (total loss) since the factor Index would also double its losses. In order to counteract a total loss, factor indices feature a Barrier (represented by the parameter P), which triggers an intraday Index adjustment if the Reference Instrument reaches or falls below it.

In the event of an intraday rebalancing, new fixing values for the Index and the Reference Instrument calculated and therefore, a new day is simulated from which the ongoing calculation continues. The consequence is that the negative daily return for the factor Index is attenuated. However, if the calculated price of the index is significantly low, this can result in an intraday loss which, in economic terms, closely approximates a total loss.

The condition for triggering an intraday adjustment is as follows:

$$\frac{Stock_t}{((Stock_T - Div_t) \times RFactorSS_t)} - 1 \geq P$$

Whereby the parameter P represents the Barrier.

In this case, the value of P is +30% (+0.3).

In case of an intraday adjustment, the calculation of the Index is interrupted for half an hour (30 minutes) period, excluding the time of any Market Disruption Event. For this half an hour trading time calculation break, a volume weighted average price (VWAP) will be defined. The determined VWAP will then be used as new fixing value for the Reference Instrument in the continued calculation. Given the case, a rebalancing event occurs less than 30 minutes before market close, the calculation period for the VWAP will be prolonged into the next trading day, until the 30 minutes trading time window from the past trading day is completed. Note that the half an hour trading time window refers to 30 minutes of trading on the Reference Exchange. If the Reference Instrument is, for example, currently suspended, this does not add to the 30 minutes of trading time. Then the VWAP time will be prolonged until 30 minutes of trading time is reached.

For example, if an intraday adjustment is triggered at 03:28:15 p.m. CET (given that the Index calculation continues until 05:35:00 p.m. CET), the ongoing calculation of the Index immediately stops. The VWAP relevant calculation time then will include the timespan between 03:29:00 p.m. CET and 03:58:59 p.m. CET. At 03:59:00 p.m. CET the new fixing values for the Index and the Reference Instrument are calculated. Afterwards, the ongoing calculation will continue with the new fixing values.

For example, if an intraday adjustment is triggered at 05:21:15 p.m. CET (given that the Index calculation continues until 05:35:00 p.m. CET), the ongoing calculation of the Index immediately stops. The VWAP relevant calculation time then will include the timespan between 05:22:00 p.m. CET and 09:16:59 a.m. CET of the following trading day. At 09:17:00 a.m. CET the new fixing values for the Index and the Reference Instrument are calculated. Afterwards, the ongoing calculation will continue with the new fixing values. In case of an overnight rebalancing, there will not be the regular fixing described in Section 2.2

After the 30 minute calculation break, new fixing values will be calculated as follows:

### **New Index Fixing value**

Leverage Component<sup>new</sup>:

$$Index_T \times \left( -Lev \times \frac{VWAP}{(Stock_T - (Div_t)) \times RFactorSS_t} + (Lev + 1) \right)$$

Financial Component<sup>new</sup>:

$$Index_T \times \left( \frac{(Lev + 1) \times IR_T - ICF_T}{360} \right) \times D_{t,T}$$

Index Fixing value<sup>new</sup>:

$$Index_T^{new} = Leverage\ Component^{new} + Financial\ Component^{new}$$

### **New Reference Instrument Fixing value**

$$Stock_T^{new} = VWAP$$

After the calculation of the new fixing values, the suffix “new” shall be dropped from all relevant quantities, and the ongoing calculation of the new index values continues as described in Section 3.

Note the following: While calculating the new fixing values,  $D_{t,T}$  is still the difference in days between the actual calculation date  $t$  and the recent most fixing date  $T$ . After the ongoing fixing is completed, date  $T$  becomes the same date as the actual calculation date and therefore, when continuing the ongoing calculation, the value of  $D_{t,T}$  is 0.

Also note, that after an intraday adjustment, a potential correction of the Index level because of Dividend or corporate action (See Section 3.2 and Section 3.3 for more information) will be set to 0 for Parameter  $Div_t$  and 1 for Parameter  $RFactorSS_t$  after calculation of the new fixing values, because the newly calculated fixing is, for example, already Ex-Dividend.

## **3.2 Dividend Index Adjustments**

In case date  $t$  is an Ex-Dividend day, a Dividend Index Adjustment is triggered. Therefore, the index calculation described in Section 3 will be influenced by the parameters  $Div_t$  and  $WT$ . While the parameter  $Div_t$  represents the correction of the Reference Underlying price by the paid Dividend, the parameter  $WT$  represents the withholding-tax, being payed as a government requirement for the payer of an item of income to withhold or deduct tax from the payment, and pay that tax to the government.

If date  $t$  is not an Ex-Dividend day, the value of the Parameters  $Div_t$  and  $WT$  is 0.

### 3.3 Extraordinary Index Adjustments

On date  $t$ , for any “unforeseeable cases” not described under the present index rule, an extraordinary Index Adjustment is triggered. The Index Calculation Agent will generally modify the Index calculation by correcting at its due discretion the relevant Fixing Price for the Reference Instrument on Index Calculation Day  $t$ , taking into account all available information and client’s best interest, in order to factor into the Index calculation, the adjustments made on the Reference Exchange to the Reference Instrument traded there.

The Index Calculation Agent may also adapt the Index Calculation in some other manner if it deems this necessary in its due discretion in order to account for differences between this Factor Index and the Reference Instrument. Such adjustments may in particular relate to the Reference Instrument being replaced by a basket of shares, securities representing shares or other Dividend-bearing securities or in the event of a merger by an appropriate number of shares, securities representing shares or other Dividend-bearing securities issued by the absorbing or newly formed company and where necessary stipulating a different Reference Exchange and Reference Instrument Price.

The list of extraordinary adjustment events listed in section 2.1 is not exhaustive.

A deciding factor is whether the Derivatives Exchange considers it expedient to adjust the contract size, an underlying or involving the relevant Reference Exchange which determines the price of the Reference Instrument. If neither futures nor options linked to the Reference Instrument are traded on the Derivatives Exchange, the adjustment shall be made in such a manner in which the Derivatives Exchange would do so if corresponding futures or options were traded there. If doubts arise in this event relating to the application of the modification rules of the Derivatives Exchange, the Index Calculation Agent shall decide such questions in its reasonable discretion. The rules and regulations of the Derivatives Exchange shall apply in addition to the provisions set out above.

In the event the company issuing the Reference Instrument underlying the Factor Index is liquidated or insolvency, winding-up or similar proceedings are instituted against the assets of the company or of the possibility that such proceedings will be opened becomes known, the price of the Reference Instrument will continue to be factored into the Index Calculation for as long as the price of the Reference Instrument continues to be determined on the Reference Exchange. However, if pricing in such a case is temporarily or permanently suspended, the leverage component remains unchanged and the Index Level will be determined solely on the basis of the other components of the Index formula.

Therefore, the Index calculation described in Section 3 will be influenced by the parameter  $R_{FactorSS_t}$ . For example, if a split takes place with a stock split rate of 0.5, the Reference Instrument loses half of its value on date  $t$ . Therefore, to retain the Index level uninfluenced by the loss of value caused by the split, the parameter  $R_{FactorSS_t}$  has to hold a value of 0.5. In case date  $t$  holds an Extraordinary Index Adjustment and also a Corporate Action event, the Extraordinary Index Adjustment will always be performed before taking the Corporate Action event into calculation.

If date  $t$  is not an Ex-Dividend day, the value of the Parameters  $Div_t$  and  $WT$  is 0.

The Index Calculation Agent defines in its reasonable discretion the adjustment method to be applied and published it by the means of a notice on <https://icf-markets.de/>.

### 3.4 Index Split / Reverse Split Adjustments

On the 1<sup>st</sup> Friday of each month, the Index is reviewed regarding qualification for an Index Split or a Reverse Split. If the 1<sup>st</sup> Friday of the month is not a trading day, the following trading day after the 1<sup>st</sup> Friday of the month will be used for review.

If, on this trading day, the most recent Index fixing value has reached a level above 1000 Points, the Index qualifies for an Index split. If the Index has reached a level below 10, the Index qualifies for an Index Reverse Split.

In case of a qualification for an Index Split or an Index reverse split, the Index fixing value of the 3<sup>rd</sup> Friday, that is used for the ongoing calculation of the Index on the next trading day, will be unscaled, but will then be divided by 10 in case of Index Split (or multiplied by 10 for a reverse split) during the ongoing Index calculation of the next trading day. Therefore, the fixing value of the Index of the trading day after the 3<sup>rd</sup> Friday will be a scaled fixing value.

Modification of Index fixing value during a Split

$$Index_T = \frac{Index_T}{10}$$

Modification of Index fixing value during a Reverse-Split

$$Index_T = Index_T \times 10$$

In case the 3<sup>rd</sup> Friday of the month is not a trading day, the implementation will take place on the following trading day after the 3<sup>rd</sup> Friday of the month. Respectively, the Index fixing value of the next trading day after the 3<sup>rd</sup> Friday, that is used for the ongoing calculation of the Index on the second trading day after the 3<sup>rd</sup> Friday, will be divided by 10 in case of Index split (or multiplied by 10 for a reverse split) during the ongoing calculation of the Index. Therefore, the fixing value of the Index of the second trading day after the 3<sup>rd</sup> Friday will be the newly scaled fixing value.

### 3.5 Impossibility to complete intraday rebalancing:

In case the Index fixing value would become negative after an intraday rebalancing event, the Index level will be fixed at 0.0001. This Index level will continue to be broadcasted for 4 weeks after the reset occurred. Subsequently the Index will be discontinued.

The Index fixing value will become negative after an intraday rebalancing event, if the obtained VWAP (see Section 3.1) is significantly lower, so that the calculated Index fixing value will be negative and therefore, cannot reach a positive value anytime in the future.

#### Example:

Given the most recent fixing of the Reference Instrument  $Stock_T$  has a value of 100. Date  $t$  is not an Ex-Dividend day neither a corporate action date. The most recent calculated fixing value of the Index is 400 Points. During the 1-hour observation period calculated VWAP is 140. The leverage Factor is 2.

Calculating the Index fixing value (leaving aside the financial component):

$$Index_T = Index_T \times \left( -Lev \times \frac{VWAP}{(Stock_T - (Div_t)) \times RFactorSS_t} + (Lev + 1) \right)$$
$$Index_T = 400 \times \left( -2 \times \frac{140}{(100 - (0)) \times 1} + (2 + 1) \right) = 80$$

The newly calculated Index fixing is a positive value.

Now given the same values, except the value of the calculated VWAP, which is 180.

Calculating the Index fixing value (leaving aside the financial component):

$$Index_T = Index_T \times \left( -Lev \times \frac{VWAP}{(Stock_T - (Div_t)) \times RFactorSS_t} + (Lev + 1) \right)$$
$$Index_T = 400 \times \left( 2 \times \frac{180}{(100 - (0)) \times 1} + (2 + 1) \right) = -240$$

The newly calculated Index fixing value is negative and can therefore no longer become positive.

## 4. Index parameters

Parameter	Value
Index-ISIN	DE000A2BNM75
Index-WKN	A2BNM7
Reuters-RIC	.ICFENES2
Index-Name	Enel S.p.A. Leva 2 Short Daily Gross Return EUR
Index-Type	Gross Return
Index-Leverage	2
Index-Currency	EUR
Index-Starting Value	100 Points
Index-Starting Date	26.08.2016
Index-Starting Time	09:00 a.m. CET
Index-Ending Time	05:35 p.m. CET
Index-Calculation Fee	0.7% p.a.
Index-Withholding Tax	26.00% (Timestamp: 18.08.2016)
Barrier	+30%
Reference Instrument-ISIN	IT0003128367
Reference Instrument-Name	Enel S.p.A., ordinary share

### 4.1 Publications

ICF BANK AG publishes the Index on its website at [www.icf-markets.de](http://www.icf-markets.de) and on Reuters. ICF BANK AG also publishes all information it deems relevant to the current calculation of the Index on its website.

### 4.2 Prices and frequency of Index calculation

ICF BANK AG calculates the Index each exchange trading day on the Reference Exchange, taking into account the last traded share price of the Reference Instrument, traded on the Reference Exchange at calculation time  $t$ . If no last traded share price is available during the calculation period, the Index is calculated using the most recently available last traded share price.

The Index is calculated each stock exchange day at a minimum of once per minute between 09:00 a.m. CET and 05:35 p.m. CET, except in the case of disruptions in ICF BANK AG's data or price feeds which prevent ICF BANK AG from calculating and/or publishing the Index. ICF BANK AG will promptly make any corrections to the Index deemed necessary and publish it on its website at [www.icf-markets.de](http://www.icf-markets.de) and on Reuters.

The Index is calculated in **points**.

## **5. Authorisation/licences**

Use of the Index as an underlying for derivative financial products must be authorised by separate agreement with the ICF BANK AG.

## **6. Rounding**

If the Index is below 10 Points, the Index will be rounded to four decimal points.

If the Index is above or equal 10 Points and below 100 Points, the Index will be rounded to three decimal points. If the Index is equal or above 100 Points, the Index will be rounded to two decimal points.

## **7. Interruption or suspension of trading**

The Index is not calculated in the event a Market Disruption Event occurs.

## **8. Annex**

Published by / Contact

ICF BANK AG  
Wertpapierhandelsbank  
Kaiserstrasse 1  
60311 Frankfurt am Main  
Germany

customized.indices@icfbank.de  
Phone +49 69 92877-0



## ***Index Methodology***

***ENI S.p.A.  
Leva 2 Long Daily Net Return EUR***

*Timestamp: 02<sup>nd</sup> September 2016*

## Contents

1. General information .....	3
2. Description and functioning.....	4
2.1 Index definitions .....	5
2.2 Daily chaining.....	7
3. Index calculation.....	8
3.1 Intraday rebalancing.....	9
3.2 Dividend Index adjustments.....	10
3.3 Extraordinary Index adjustments .....	11
3.4 Index split / reverse split adjustments .....	12
3.5 Impossibility to complete intraday rebalancing: .....	13
4. Index parameters.....	14
4.1 Publications.....	14
4.2 Prices and frequency of Index calculation .....	14
5. Authorisation/licences.....	15
6. Rounding.....	15
7. Interruption or suspension of trading .....	15
8. Annex .....	15

## 1. General information

This Index Methodology outlines the general methodology used to calculate the ENI S.p.A. Leva 2 Long Daily Net Return EUR (hereinafter: the "Index"). It sets forth the parameters, composition and calculation of the Index as well as the relevant criteria in this respect. ICF BANK AG exercises the utmost diligence when calculating and publishing the Index, and in implementing the criteria set out in this Methodology.

ICF BANK AG neither warrants nor guarantees the accuracy of the Index or the parameters Reference Instrument its composition and calculation, nor does it assume any liability for losses resulting from the flawed configuration or calculation of the Index or any other ratios derived therefrom. ICF BANK AG is under no obligation to notify third parties, including investors and/or financial intermediaries, of any errors or omissions pertaining to the Index.

ICF BANK AG publishes the Index on its website at [www.icf-markets.de](http://www.icf-markets.de). Publication of the Index constitutes neither investment advice nor a recommendation issued by ICF BANK AG to buy, sell or hold a given financial product. Specifically, the composition and calculation of the Index in no way represent a recommendation issued by ICF BANK AG to buy or sell individual, several or all Reference Instruments. This information does not constitute financial analysis within the meaning of § 34 b of the German Securities Trading Act (*Wertpapierhandelsgesetz*, "WpHG").

The statements contained in the following provide information relating to the composition and calculation of the Index.

The Index is calculated and published by ICF BANK AG. All rights to this Index are reserved to ICF BANK AG.

### **Index Details:**

Index Name: ENI S.p.A. Leva 2 Long Daily Net Return EUR

ISIN: DE000A2BNM42

WKN: A2BNM4

REUTERS-RIC: .ICFENIL2

Reference Instrument: ENI S.p.A., common shares

Reference Instrument ISIN: IT0003132476

Index Calculation Agent: ICF BANK AG, Kaiserstrasse 1, 60311 Frankfurt, Germany

Information Page: <https://icf-markets.de/>

## 2. Description and functioning

The Index is a factor Index. A factor Index uses a constant factor to track the daily percentage change in the market price of an Reference Instrument (e.g., an equity, an Index or a commodity) as compared to the most recent Fixing Price (as defined in section 2.1) of that Reference Instrument. The factor defines in which direction (whether the same or inverse) and what degree of leverage the factor Index reflects the daily price change of the Reference Instrument. In this case, the Index Reference Instrument is represented by the ordinary share of ENI S.p.A, traded on the Reference Exchange, as defined in Section 2.1.

To calculate the increase or decrease of the Index, a leverage- and a financing-component is used.

The leverage component reflects the change in price of the Reference Instrument between two Fixing Prices and transfers this movement (either positive or negative) onto the Index by multiplying the percentage of change with the assigned leverage. Thereby, a disproportionate effect on the value of the Index occurs. This leverage effect inherits the risk of an over proportional capital loss (“downside risk”).

For example: (excluding the financial component and events like dividends, corporate actions, etc.)

If a factor long Index has a factor of 2:

- a 5% increase in the price of the Reference Instrument (as compared to the latest Fixing Price), will result in the value of the Index increasing by  $2 \times 5\%$ .
- a 5% decrease in the price of the Reference Instrument (as compared to the latest Fixing Price), will result in the value of the Index decreasing by  $2 \times 5\%$ .

The financial component contains the costs of borrowing money at a one-day rate (EONIA Rate, see Section 3 for more information) increased by a per annum rate (ICF Rate) that reflects the Index calculation fee.

The Index will be continuously calculated during the Reference Instrument trading hours on the Reference Exchange by the Index Calculation Agent. This means, that the Index will be re-calculated at every change in price of the Reference Instrument. The Index Calculation Agent will charge an annual fee of 0.7% p.a., which will be deducted daily (based on a year comprising 360 days), during the calculation of the Index.

For periods longer than one day, the compounding effect shall be taken into account. Indeed, returns on the Reference Instrument cannot simply be multiplied with the selected factor since the performance of the factor Index depends on each individual daily performance of the Reference Instrument. If the performance of a factor Index is compared against that of the Reference Instrument over a period longer than one day, the observed price trends will deviate not only for prices of the Reference Instrument which constantly rise or fall, but also for those which fluctuate.

## 2.1 Index definitions

The definitions below shall apply for the purposes of this Index description.

"**Barrier**" indicates the maximum permitted negative (in case of a long Index) or positive (in case of a short Index) change in price of the Reference Instrument compared to its most recent Fixing Value before an intraday Index adjustment takes place. In this Index, indicated by parameter P, the Barrier is -30%.

"**Derivatives Exchange**" are the main exchanges where options or futures of the Reference Instrument are traded.

"**Dividend**" shall mean the Dividend of the company, exclusive of which the Reference Instrument is traded on the reference exchange on the Ex-Dividend day.

"**Ex-Dividend Date**" means the Trading Day on which the Reference Instrument trades "Ex-Dividend" on the Reference Exchange.

"**Extraordinary Adjustment Event**" means any of the following events as they relate to the Reference Instrument:

- a. capital increase by way of the issue of new shares in return for contributions in cash or in kind with the grant of a subscription right, capital increase from retained earnings, issue of securities with option or conversion rights into shares, distribution of special Dividends, share split, subdivision, consolidation or reclassification of the shares
- b. probable or definitive discontinuation of stock exchange trading in the shares as a result of a merger by absorption or new company formation or takeover of the company of the Reference Instrument by another company
- c. spin-off of a division of the company in such a manner that a new independent company is created or the division is absorbed by a third company
- d. any other event, which the Index Calculation Agent may at its reasonable discretion deem to have a comparable or similar impact on the calculation of the Factor Index in the event no adjustments were to be made

In case of securities representing shares (ADR/GDR) as the Reference Instrument, the following provisions shall additionally apply:

- e. any modification of the terms and conditions of the securities representing shares by their issuers
- f. discontinuation of the stock exchange quotation of the securities representing shares or of the shares underlying them
- g. insolvency of the issuer of the securities representing shares
- h. end of the term of the securities representing shares as a result of termination by the issuer of the securities representing shares

For ADRs and GDRs or any other securities representing shares and other Dividend-bearing securities (e.g. profit participation rights, participation certificates) as the Reference Instrument the provisions specified under (a) to (c) shall apply mutatis mutandis with respect to the Reference Instrument and the issuing company.

**"Fixing Price"** of the Reference Instrument for an Index Calculation Day is – subject to an Extraordinary Adjustment to the calculation of the Index in accordance with section 3 – the official closing price, or for Italian stocks underlyings the reference closing price (“prezzo di riferimento”) of the Reference Instrument, as determined and published for that day by the Reference Exchange. If an Index Calculation Day falls on a day which is not a Trading Day, the Fixing Price of the immediately preceding Index Calculation Day shall continue to apply. If no Fixing Price for the Reference Instrument is determined or published on a Trading Day, the Index Calculation Agent shall determine the Fixing Price of the Reference Instrument for that day on the basis of the most recent prices set for the Reference Instrument at its due discretion.

**"Index Calculation Agent"** means ICF BANK AG, Kaiserstrasse 1, 60311 Frankfurt, Germany

**"Index Calculation Day"** means every day from Monday to Friday except holidays on which the Reference Exchange is closed

**"Index Calculation Fee"** is 0.7% per annum. The Index Calculation Fee is charged each calendar day, beginning as of the Index Start Date. It is calculated on the basis of a 360-day year and the most recently calculated Index Closing Value.

**"Index Currency"** means EUR

**"Index Fixing Value"** is calculated for each Index Calculation Day by the Index Calculation Agent in accordance with section 3 of this Index description on the basis of the Reference Price (“prezzo di riferimento”) of the Reference Instrument for this Index Calculation Day and published in accordance with section 4.1 of this Index description.

**"Information Page"** means <https://icf-markets.de/>

**"Index Start Date"** means 26<sup>th</sup> August 2016

**"Index Start Value"** is 100 Index points and represents the Index Closing Value on Index Calculation Day T=0 for the purposes of calculating the Index in accordance with Section 3 of this document

**"Interest Rate"** means EONIA. EONIA (Euro Over Night Index Average) is a weighted average interest rate for overnight interbank money calculated act/360 by the European Central Bank since 4 January 1999 on the basis of effective turnover. If the Interest Rate is not set or published on an Index Calculation Day, the Interest Rate applied on the immediately preceding Index Calculation Day is used to calculate the Index in accordance with section 3 of this document. If the Interest Rate has neither been set nor published for ten consecutive Index Calculation Days, the Index Calculation Agent has the right and obligation to stipulate in its reasonable discretion an alternative relevant Interest Rate which has functions comparable to the previous Interest Rate.

**"Leverage"** describes the impact, that a change in the price of the Reference Instrument has on the relevant factor Index. The leverage on this Index is 2. See Lev parameter in section 3.

**“Market Disruption Event”** means each of the following events:

- a) the failure of the Reference Exchange to open for trading during its regular trading sessions
- b) the suspension or restriction of trading in the Reference Instrument on the Reference Exchange
- c) in general the suspension or restriction of trading in a Derivative of the Reference Instrument on the Derivatives Exchange

**"Reference Exchange"** means Borsa Italiana S.p.A. – LSE Group

**"Reference Instrument "** means ENI S.p.A.

Asset Type: Ordinary Share

Currency: EUR

ISIN: IT0003132476

Bloomberg symbol: ENI IM EQUITY

**"Reference Instrument Price"** corresponds at any time during the trading period on the Reference Exchange to the price of the Reference Instrument

**"Trading Day"** means every day on which the Reference Instrument is traded on the Reference Exchange.

**"VWAP"** means volume weighted average price of the Reference Instrument. See section 3.1 of this document

**"Withholding-Tax"** shall be 26.00% on the Index Start Date. The Index Calculation Agent may change the Withholding-Tax Factor at its due discretion on any Index Calculation Day with prospective effect, if the relevant tax law applicable to the Index Calculation Agent changes, resulting in a change in the amount of the – after tax – Dividend virtually accruing to it. Check <https://icf-markets.de/> for current Withholding-Tax value.

## 2.2 Daily chaining

As mentioned in Section 2, the value of a factor Index is calculated by applying, on a daily basis, the corresponding leverage- and financial component to the daily change in the Reference Instrument. The Index is calculated on the basis of the change in the price of the Reference Instrument as compared to its most recent Fixing Price, which, in this case, will be represented by the “prezzo di riferimento” which is calculated at closing and published by the Reference Exchange. Thus every new fixing price for the Reference Instrument represents a new reference price, which serves as the basis for calculating the percentage variation in underlying Fixing Price and apply the daily constant leverage factor, according to the index calculation methodology described in the present document, in order to derive the fixing value of the index. This daily adjustment of the factor Index is automatic and is known as chaining.

### 3. Index calculation

The Index will be calculated on the basis of the following formula:

Leverage Component:

$$Index_T \times \left( Lev \times \frac{Stock_t}{(Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t} - (Lev - 1) \right)$$

Financial Component:

$$Index_T \times \left( \frac{(Lev - 1) \times IR_T + ICF_T}{360} \right) \times D_{t,T}$$

Index Calculation:

$$Index_t = Leverage Component_t - Financial Component_t$$

The calculation formula is using the following parameters:

Parameter	Description
t	Represents the current calculation date
T	Represents the last fixing date, which is the date of the last closing price, represented by the “prezzo di riferimento”, as calculated and published by the Reference Exchange
Index <sub>t</sub>	Current Index level at calculation time t
Index <sub>T</sub>	Recent Index fixing level as described in Section 2.2
Stock <sub>t</sub>	Last traded share price of the Reference Instrument, traded on the Reference Exchange at calculation time t
Stock <sub>T</sub>	Last Reference Instrument Fixing Price as described in Section 2.2
D <sub>t,T</sub>	Number of calendar days between T and t
IR <sub>T</sub>	EONIA Rate (Euro Over Night Index Average), describes an overnight-loanrate that is determined by the European Central Bank. The value of IR <sub>T</sub> always equates the EONIA Rate of date T
ICF <sub>T</sub>	Index calculation fee which is charged by the Index Calculation Agent
Lev	Leverage (see definition in section 2.1)
Div <sub>t</sub>	Dividend correction, that equates the gross Dividend amount paid by the Reference Instrument on Ex-Dividend date t. If date t is not an Ex-Dividend date, this parameter has a value of 0. See Section 3.2 for more information
RFactorSS <sub>t</sub>	Represents the factor of a potential corporate action event of the Reference Instrument on date t. See Section 3.3 for more information. If date t is not a corporate action date, this parameter has a value of 1
WT	Withholding-Tax, that is subtracted from the Dividend correction in case date t is an Ex-Dividend date. See section 3.2 for more information

### 3.1 Intraday rebalancing

If, for instance, the price of the Reference Instrument suffers a 50% daily loss, the value of a factor long Index with a factor of 2 would have to drop to zero (total loss) since the factor Index would also double its losses. In order to counteract a total loss, factor indices feature a Barrier (represented by the parameter P), which triggers an intraday Index adjustment if the Reference Instrument reaches or falls below it.

In the event of an intraday rebalancing, new fixing values for the Index and the Reference Instrument calculated and therefore, a new day is simulated from which the ongoing calculation continues. The consequence is that the negative daily return for the factor Index is attenuated. However, if the calculated price of the index is significantly low, this can result in an intraday loss which, in economic terms, closely approximates a total loss.

The condition for triggering an intraday adjustment is as follows:

$$\frac{Stock_t}{\left( (Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t \right)} - 1 \leq P$$

Whereby the parameter P represents the Barrier.

In this case, the value of P is -30% (-0.3).

In case of an intraday adjustment, the calculation of the Index is interrupted for half an hour (30 minutes) period, excluding the time of any Market Disruption Event. For this half an hour trading time calculation break, a volume weighted average price (VWAP) will be defined. The determined VWAP will then be used as new fixing value for the Reference Instrument in the continued calculation. Given the case, a rebalancing event occurs less than 30 minutes before market close, the calculation period for the VWAP will be prolonged into the next trading day, until the 30 minutes trading time window from the past trading day is completed. Note that the half an hour trading time window refers to 30 minutes of trading on the Reference Exchange. If the Reference Instrument is, for example, currently suspended, this does not add to the 30 minutes of trading time. Then the VWAP time will be prolonged until 30 minutes of trading time is reached.

For example, if an intraday adjustment is triggered at 03:28:15 p.m. CET (given that the Index calculation continues until 05:35:00 p.m. CET), the ongoing calculation of the Index immediately stops. The VWAP relevant calculation time then will include the timespan between 03:29:00 p.m. CET and 03:58:59 p.m. CET. At 03:59:00 p.m. CET the new fixing values for the Index and the Reference Instrument are calculated. Afterwards, the ongoing calculation will continue with the new fixing values.

For example, if an intraday adjustment is triggered at 05:21:15 p.m. CET (given that the Index calculation continues until 05:35:00 p.m. CET), the ongoing calculation of the Index immediately stops. The VWAP relevant calculation time then will include the timespan between 05:22:00 p.m. CET and 09:16:59 a.m. CET of the following trading day. At 09:17:00 a.m. CET the new fixing values for the Index and the Reference Instrument are calculated. Afterwards, the ongoing calculation will continue with the new fixing values. In case of an overnight rebalancing, there will not be the regular fixing described in Section 2.2

After the 30 minute calculation break, new fixing values will be calculated as follows:

### **New Index Fixing value**

Leverage Component<sup>new</sup>:

$$Index_T \times \left( Lev \times \frac{VWAP}{(Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t} - (Lev - 1) \right)$$

Financial Component<sup>new</sup>:

$$Index_T \times \left( \frac{(Lev - 1) \times IR_T + ICF_T}{360} \right) \times D_{t,T}$$

Index Fixing value<sup>new</sup>:

$$Index_T^{new} = Leverage\ Component^{new} - Financial\ Component^{new}$$

### **New Reference Instrument Fixing value**

$$Stock_T^{new} = VWAP$$

After the calculation of the new fixing values, the suffix “new” shall be dropped from all relevant quantities, and the ongoing calculation of the new index values continues as described in Section 3.

Note the following: While calculating the new fixing values,  $D_{t,T}$  is still the difference in days between the actual calculation date  $t$  and the recent most fixing date  $T$ . After the ongoing fixing is completed, date  $T$  becomes the same date as the actual calculation date and therefore, when continuing the ongoing calculation, the value of  $D_{t,T}$  is 0.

Also note, that after an intraday adjustment, a potential correction of the Index level because of Dividend or corporate action (See Section 3.2 and Section 3.3 for more information) will be set to 0 for Parameter  $Div_t$  and 1 for Parameter  $RFactorSS_t$  after calculation of the new fixing values, because the newly calculated fixing is, for example, already Ex-Dividend.

## **3.2 Dividend Index Adjustments**

In case date  $t$  is an Ex-Dividend day, a Dividend Index Adjustment is triggered. Therefore, the index calculation described in Section 3 will be influenced by the parameters  $Div_t$  and  $WT$ . While the parameter  $Div_t$  represents the correction of the Reference Underlying price by the paid Dividend, the parameter  $WT$  represents the withholding-tax, being payed as a government requirement for the payer of an item of income to withhold or deduct tax from the payment, and pay that tax to the government.

If date  $t$  is not an Ex-Dividend day, the value of the Parameters  $Div_t$  and  $WT$  is 0.

### 3.3 Extraordinary Index Adjustments

On date  $t$ , for any “unforeseeable cases” not described under the present index rule, an extraordinary Index Adjustment is triggered. The Index Calculation Agent will generally modify the Index calculation by correcting at its due discretion the relevant Fixing Price for the Reference Instrument on Index Calculation Day  $t$ , taking into account all available information and client’s best interest, in order to factor into the Index calculation, the adjustments made on the Reference Exchange to the Reference Instrument traded there.

The Index Calculation Agent may also adapt the Index Calculation in some other manner if it deems this necessary in its due discretion in order to account for differences between this Factor Index and the Reference Instrument. Such adjustments may in particular relate to the Reference Instrument being replaced by a basket of shares, securities representing shares or other Dividend-bearing securities or in the event of a merger by an appropriate number of shares, securities representing shares or other Dividend-bearing securities issued by the absorbing or newly formed company and where necessary stipulating a different Reference Exchange and Reference Instrument Price.

The list of extraordinary adjustment events listed in section 2.1 is not exhaustive.

A deciding factor is whether the Derivatives Exchange considers it expedient to adjust the contract size, an underlying or involving the relevant Reference Exchange which determines the price of the Reference Instrument. If neither futures nor options linked to the Reference Instrument are traded on the Derivatives Exchange, the adjustment shall be made in such a manner in which the Derivatives Exchange would do so if corresponding futures or options were traded there. If doubts arise in this event relating to the application of the modification rules of the Derivatives Exchange, the Index Calculation Agent shall decide such questions in its reasonable discretion. The rules and regulations of the Derivatives Exchange shall apply in addition to the provisions set out above.

In the event the company issuing the Reference Instrument underlying the Factor Index is liquidated or insolvency, winding-up or similar proceedings are instituted against the assets of the company or of the possibility that such proceedings will be opened becomes known, the price of the Reference Instrument will continue to be factored into the Index Calculation for as long as the price of the Reference Instrument continues to be determined on the Reference Exchange. However, if pricing in such a case is temporarily or permanently suspended, the leverage component remains unchanged and the Index Level will be determined solely on the basis of the other components of the Index formula.

Therefore, the Index calculation described in Section 3 will be influenced by the parameter  $R_{FactorSS_t}$ . For example, if a split takes place with a stock split rate of 0.5, the Reference Instrument loses half of its value on date  $t$ . Therefore, to retain the Index level uninfluenced by the loss of value caused by the split, the parameter  $R_{FactorSS_t}$  has to hold a value of 0.5. In case date  $t$  holds an Extraordinary Index Adjustment and also a Corporate Action event, the Extraordinary Index Adjustment will always be performed before taking the Corporate Action event into calculation.

If date  $t$  is not an Ex-Dividend day, the value of the Parameters  $Div_t$  and  $WT$  is 0.

The Index Calculation Agent defines in its reasonable discretion the adjustment method to be applied and published it by the means of a notice on <https://icf-markets.de/>.

### 3.4 Index Split / Reverse Split Adjustments

On the 1<sup>st</sup> Friday of each month, the Index is reviewed regarding qualification for an Index Split or a Reverse Split. If the 1<sup>st</sup> Friday of the month is not a trading day, the following trading day after the 1<sup>st</sup> Friday of the month will be used for review.

If, on this trading day, the most recent Index fixing value has reached a level above 1000 Points, the Index qualifies for an Index split. If the Index has reached a level below 10, the Index qualifies for an Index Reverse Split.

In case of a qualification for an Index Split or an Index reverse split, the Index fixing value of the 3<sup>rd</sup> Friday, that is used for the ongoing calculation of the Index on the next trading day, will be unscaled, but will then be divided by 10 in case of Index Split (or multiplied by 10 for a reverse split) during the ongoing Index calculation of the next trading day. Therefore, the fixing value of the Index of the trading day after the 3<sup>rd</sup> Friday will be a scaled fixing value.

Modification of Index fixing value during a Split

$$Index_T = \frac{Index_T}{10}$$

Modification of Index fixing value during a Reverse-Split

$$Index_T = Index_T \times 10$$

In case the 3<sup>rd</sup> Friday of the month is not a trading day, the implementation will take place on the following trading day after the 3<sup>rd</sup> Friday of the month. Respectively, the Index fixing value of the next trading day after the 3<sup>rd</sup> Friday, that is used for the ongoing calculation of the Index on the second trading day after the 3<sup>rd</sup> Friday, will be divided by 10 in case of Index split (or multiplied by 10 for a reverse split) during the ongoing calculation of the Index. Therefore, the fixing value of the Index of the second trading day after the 3<sup>rd</sup> Friday will be the newly scaled fixing value.

### 3.5 Impossibility to complete intraday rebalancing:

In case the Index fixing value would become negative after an intraday rebalancing event, the Index level will be fixed at 0.0001. This Index level will continue to be broadcasted for 4 weeks after the reset occurred. Subsequently the Index will be discontinued.

The Index fixing value will become negative after an intraday rebalancing event, if the obtained VWAP (see Section 3.1) is significantly lower, so that the calculated Index fixing value will be negative and therefore, cannot reach a positive value anytime in the future.

#### Example:

Given the most recent fixing of the Reference Instrument  $Stock_T$  has a value of 100. Date  $t$  is not an Ex-Dividend day neither a corporate action date. The most recent calculated fixing value of the Index is 400 Points. During the 1-hour observation period calculated VWAP is 60. The leverage Factor is 2.

Calculating the Index fixing value (leaving aside the financial component):

$$Index_T = Index_T \times \left( Lev \times \frac{VWAP}{(Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t} - (Lev - 1) \right)$$
$$Index_T = 400 \times \left( 2 \times \frac{60}{(100 - (0 \times (1 - 0))) \times 1} - (2 - 1) \right) = 80$$

The newly calculated Index fixing is a positive value.

Now given the same values, except the value of the calculated VWAP, which is 20.

Calculating the Index fixing value (leaving aside the financial component):

$$Index_T = Index_T \times \left( Lev \times \frac{VWAP}{(Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t} - (Lev - 1) \right)$$
$$Index_T = 400 \times \left( 2 \times \frac{20}{(100 - (0 \times (1 - 0))) \times 1} - (2 - 1) \right) = -240$$

The newly calculated Index fixing value is negative and can therefore no longer become positive.

## 4. Index parameters

Parameter	Value
Index-ISIN	DE000A2BNM42
Index-WKN	A2BNM4
Reuters-RIC	.ICFENIL2
Index-Name	ENI S.p.A. Leva 2 Long Daily Net Return EUR
Index-Type	Net Return
Index-Leverage	2
Index-Currency	EUR
Index-Starting Value	100 Points
Index-Starting Date	26.08.2016
Index-Starting Time	09:00 a.m. CET
Index-Ending Time	05:35 p.m. CET
Index-Calculation Fee	0.7% p.a.
Index-Withholding Tax	26.00% (Timestamp: 18.08.2016)
Barrier	-30%
Reference Instrument-ISIN	IT0003132476
Reference Instrument-Name	ENI S.p.A., ordinary share

### 4.1 Publications

ICF BANK AG publishes the Index on its website at [www.icf-markets.de](http://www.icf-markets.de) and on Reuters. ICF BANK AG also publishes all information it deems relevant to the current calculation of the Index on its website.

### 4.2 Prices and frequency of Index calculation

ICF BANK AG calculates the Index each exchange trading day on the Reference Exchange, taking into account the last traded share price of the Reference Instrument, traded on the Reference Exchange at calculation time  $t$ . If no last traded share price is available during the calculation period, the Index is calculated using the most recently available last traded share price.

The Index is calculated each stock exchange day at a minimum of once per minute between 09:00 a.m. CET and 05:35 p.m. CET, except in the case of disruptions in ICF BANK AG's data or price feeds which prevent ICF BANK AG from calculating and/or publishing the Index. ICF BANK AG will promptly make any corrections to the Index deemed necessary and publish it on its website at [www.icf-markets.de](http://www.icf-markets.de) and on Reuters.

The Index is calculated in **points**.

## **5. Authorisation/licences**

Use of the Index as an underlying for derivative financial products must be authorised by separate agreement with the ICF BANK AG.

## **6. Rounding**

If the Index is below 10 Points, the Index will be rounded to four decimal points.

If the Index is above or equal 10 Points and below 100 Points, the Index will be rounded to three decimal points. If the Index is equal or above 100 Points, the Index will be rounded to two decimal points.

## **7. Interruption or suspension of trading**

The Index is not calculated in the event a Market Disruption Event occurs.

## **8. Annex**

Published by / Contact

ICF BANK AG  
Wertpapierhandelsbank  
Kaiserstrasse 1  
60311 Frankfurt am Main  
Germany

customized.indices@icfbank.de  
Phone +49 69 92877-0



## ***Index Methodology***

***ENI S.p.A.***

***Leva 2 Short Daily Gross Return EUR***

*Timestamp: 02<sup>nd</sup> September 2016*

## Contents

1. General information .....	3
2. Description and functioning.....	4
2.1 Index definitions .....	5
2.2 Daily chaining.....	7
3. Index calculation.....	8
3.1 Intraday rebalancing.....	9
3.2 Dividend Index adjustments.....	10
3.3 Extraordinary Index adjustments .....	11
3.4 Index split / reverse split adjustments .....	12
3.5 Impossibility to complete intraday rebalancing: .....	13
4. Index parameters.....	14
4.1 Publications.....	14
4.2 Prices and frequency of Index calculation .....	14
5. Authorisation/licences.....	15
6. Rounding.....	15
7. Interruption or suspension of trading .....	15
8. Annex .....	15

## 1. General information

This Index Methodology outlines the general methodology used to calculate the ENI S.p.A. Leva 2 short Daily Gross Return EUR (hereinafter: the "Index"). It sets forth the parameters, composition and calculation of the Index as well as the relevant criteria in this respect. ICF BANK AG exercises the utmost diligence when calculating and publishing the Index, and in implementing the criteria set out in this Methodology.

ICF BANK AG neither warrants nor guarantees the accuracy of the Index or the parameters Reference Instrument its composition and calculation, nor does it assume any liability for losses resulting from the flawed configuration or calculation of the Index or any other ratios derived therefrom. ICF BANK AG is under no obligation to notify third parties, including investors and/or financial intermediaries, of any errors or omissions pertaining to the Index.

ICF BANK AG publishes the Index on its website at [www.icf-markets.de](http://www.icf-markets.de). Publication of the Index constitutes neither investment advice nor a recommendation issued by ICF BANK AG to buy, sell or hold a given financial product. Specifically, the composition and calculation of the Index in no way represent a recommendation issued by ICF BANK AG to buy or sell individual, several or all Reference Instruments. This information does not constitute financial analysis within the meaning of § 34 b of the German Securities Trading Act (*Wertpapierhandelsgesetz*, "WpHG").

The statements contained in the following provide information relating to the composition and calculation of the Index.

The Index is calculated and published by ICF BANK AG. All rights to this Index are reserved to ICF BANK AG.

### **Index Details:**

Index Name: ENI S.p.A. Leva 2 short Daily Gross Return EUR

ISIN: DE000A2BNM59

WKN: A2BNM5

REUTERS-RIC: .ICFENIS2

Reference Instrument: ENI S.p.A., common shares

Reference Instrument ISIN: IT0003132476

Index Calculation Agent: ICF BANK AG, Kaiserstrasse 1, 60311 Frankfurt, Germany

Information Page: <https://icf-markets.de/>

## 2. Description and functioning

The Index is a factor Index. A factor Index uses a constant factor to track the daily percentage change in the market price of an Reference Instrument (e.g., an equity, an Index or a commodity) as compared to the most recent Fixing Price (as defined in section 2.1) of that Reference Instrument. The factor defines in which direction (whether the same or inverse) and what degree of leverage the factor Index reflects the daily price change of the Reference Instrument. In this case, the Index Reference Instrument is represented by the ordinary share of ENI S.p.A., traded on the Reference Exchange, as defined in Section 2.1.

To calculate the increase or decrease of the Index, a leverage- and a financing-component is used.

The leverage component reflects the change in price of the Reference Instrument between two Fixing Prices and transfers this movement (either positive or negative) onto the Index by multiplying the percentage of change with the assigned leverage. Thereby, a disproportionate effect on the value of the Index occurs. This leverage effect inherits the risk of an over proportional capital loss (“downside risk”).

For example: (excluding the financial component and events like dividends, corporate actions, etc.)

If a factor short Index has a factor of 2:

- a 5% increase in the price of the Reference Instrument (as compared to the latest Fixing Price), will result in the value of the Index decreasing by  $2 \times 5\%$ .
- a 5% decrease in the price of the Reference Instrument (as compared to the latest Fixing Price), will result in the value of the Index increasing by  $2 \times 5\%$ .

The financial component contains the costs of borrowing money at a one-day rate (EONIA Rate, see Section 3 for more information) increased by a per annum rate (ICF Rate) that reflects the Index calculation fee.

The Index will be continuously calculated during the Reference Instrument trading hours on the Reference Exchange by the Index Calculation Agent. This means, that the Index will be re-calculated at every change in price of the Reference Instrument. The Index Calculation Agent will charge an annual fee of 0.7% p.a., which will be deducted daily (based on a year comprising 360 days), during the calculation of the Index.

For periods longer than one day, the compounding effect shall be taken into account. Indeed, returns on the Reference Instrument cannot simply be multiplied with the selected factor since the performance of the factor Index depends on each individual daily performance of the Reference Instrument. If the performance of a factor Index is compared against that of the Reference Instrument over a period longer than one day, the observed price trends will deviate not only for prices of the Reference Instrument which constantly rise or fall, but also for those which fluctuate.

## 2.1 Index definitions

The definitions below shall apply for the purposes of this Index description.

"**Barrier**" indicates the maximum permitted negative (in case of a long Index) or positive (in case of a short Index) change in price of the Reference Instrument compared to its most recent Fixing Value before an intraday Index adjustment takes place. In this Index, indicated by parameter P, the Barrier is +30%.

"**Derivatives Exchange**" are the main exchanges where options or futures of the Reference Instrument are traded.

"**Dividend**" shall mean the Dividend of the company, exclusive of which the Reference Instrument is traded on the reference exchange on the Ex-Dividend day.

"**Ex-Dividend Date**" means the Trading Day on which the Reference Instrument trades "Ex-Dividend" on the Reference Exchange.

"**Extraordinary Adjustment Event**" means any of the following events as they relate to the Reference Instrument:

- a. capital increase by way of the issue of new shares in return for contributions in cash or in kind with the grant of a subscription right, capital increase from retained earnings, issue of securities with option or conversion rights into shares, distribution of special Dividends, share split, subdivision, consolidation or reclassification of the shares
- b. probable or definitive discontinuation of stock exchange trading in the shares as a result of a merger by absorption or new company formation or takeover of the company of the Reference Instrument by another company
- c. spin-off of a division of the company in such a manner that a new independent company is created or the division is absorbed by a third company
- d. any other event, which the Index Calculation Agent may at its reasonable discretion deem to have a comparable or similar impact on the calculation of the Factor Index in the event no adjustments were to be made

In case of securities representing shares (ADR/GDR) as the Reference Instrument, the following provisions shall additionally apply:

- e. any modification of the terms and conditions of the securities representing shares by their issuers
- f. discontinuation of the stock exchange quotation of the securities representing shares or of the shares underlying them
- g. insolvency of the issuer of the securities representing shares
- h. end of the term of the securities representing shares as a result of termination by the issuer of the securities representing shares

For ADRs and GDRs or any other securities representing shares and other Dividend-bearing securities (e.g. profit participation rights, participation certificates) as the Reference Instrument the provisions specified under (a) to (c) shall apply mutatis mutandis with respect to the Reference Instrument and the issuing company.

**"Fixing Price"** of the Reference Instrument for an Index Calculation Day is – subject to an Extraordinary Adjustment to the calculation of the Index in accordance with section 3 – the official closing price, or for Italian stocks underlyings the reference closing price (“prezzo di riferimento”) of the Reference Instrument, as determined and published for that day by the Reference Exchange. If an Index Calculation Day falls on a day which is not a Trading Day, the Fixing Price of the immediately preceding Index Calculation Day shall continue to apply. If no Fixing Price for the Reference Instrument is determined or published on a Trading Day, the Index Calculation Agent shall determine the Fixing Price of the Reference Instrument for that day on the basis of the most recent prices set for the Reference Instrument at its due discretion.

**"Index Calculation Agent"** means ICF BANK AG, Kaiserstrasse 1, 60311 Frankfurt, Germany

**"Index Calculation Day"** means every day from Monday to Friday except holidays on which the Reference Exchange is closed

**"Index Calculation Fee"** is 0.7% per annum. The Index Calculation Fee is charged each calendar day, beginning as of the Index Start Date. It is calculated on the basis of a 360-day year and the most recently calculated Index Closing Value.

**"Index Currency"** means EUR

**"Index Fixing Value"** is calculated for each Index Calculation Day by the Index Calculation Agent in accordance with section 3 of this Index description on the basis of the Reference Price (“prezzo di riferimento”) of the Reference Instrument for this Index Calculation Day and published in accordance with section 4.1 of this Index description.

**"Information Page"** means <https://icf-markets.de/>

**"Index Start Date"** means 26<sup>th</sup> August 2016

**"Index Start Value"** is 100 Index points and represents the Index Closing Value on Index Calculation Day T=0 for the purposes of calculating the Index in accordance with Section 3 of this document

**"Interest Rate"** means EONIA. EONIA (Euro Over Night Index Average) is a weighted average interest rate for overnight interbank money calculated act/360 by the European Central Bank since 4 January 1999 on the basis of effective turnover. If the Interest Rate is not set or published on an Index Calculation Day, the Interest Rate applied on the immediately preceding Index Calculation Day is used to calculate the Index in accordance with section 3 of this document. If the Interest Rate has neither been set nor published for ten consecutive Index Calculation Days, the Index Calculation Agent has the right and obligation to stipulate in its reasonable discretion an alternative relevant Interest Rate which has functions comparable to the previous Interest Rate.

**"Leverage"** describes the impact, that a change in the price of the Reference Instrument has on the relevant factor Index. The leverage on this Index is 2. See Lev parameter in section 3.

**“Market Disruption Event”** means each of the following events:

- a) the failure of the Reference Exchange to open for trading during its regular trading sessions
- b) the suspension or restriction of trading in the Reference Instrument on the Reference Exchange
- c) in general the suspension or restriction of trading in a Derivative of the Reference Instrument on the Derivatives Exchange

**"Reference Exchange"** means Borsa Italiana S.p.A. – LSE Group

**"Reference Instrument "** means ENI S.p.A.

Asset Type: Ordinary Share

Currency: EUR

ISIN: IT0003132476

Bloomberg symbol: ENI IM EQUITY

**"Reference Instrument Price"** corresponds at any time during the trading period on the Reference Exchange to the price of the Reference Instrument

**"Trading Day"** means every day on which the Reference Instrument is traded on the Reference Exchange.

**"VWAP"** means volume weighted average price of the Reference Instrument. See section 3.1 of this document

**"Withholding-Tax"** shall be 26.00% on the Index Start Date. The Index Calculation Agent may change the Withholding-Tax Factor at its due discretion on any Index Calculation Day with prospective effect, if the relevant tax law applicable to the Index Calculation Agent changes, resulting in a change in the amount of the – after tax – Dividend virtually accruing to it. Check <https://icf-markets.de/> for current Withholding-Tax value.

## 2.2 Daily chaining

As mentioned in Section 2, the value of a factor Index is calculated by applying, on a daily basis, the corresponding leverage- and financial component to the daily change in the Reference Instrument. The Index is calculated on the basis of the change in the price of the Reference Instrument as compared to its most recent Fixing Price, which, in this case, will be represented by the “prezzo di riferimento” which is calculated at closing and published by the Reference Exchange. Thus every new fixing price for the Reference Instrument represents a new reference price, which serves as the basis for calculating the percentage variation in underlying Fixing Price and apply the daily constant leverage factor, according to the index calculation methodology described in the present document, in order to derive the fixing value of the index. This daily adjustment of the factor Index is automatic and is known as chaining.

### 3. Index calculation

The Index will be calculated on the basis of the following formula:

Leverage Component:

$$Index_T \times \left( -Lev \times \frac{Stock_t}{(Stock_T - (Div_t)) \times RFactorSS_t} + (Lev + 1) \right)$$

Financial Component:

$$Index_T \times \left( \frac{(Lev + 1) \times IR_T - ICF_T}{360} \right) \times D_{t,T}$$

Index Calculation:

$$Index_t = Leverage Component_t + Financial Component_t$$

The calculation formula is using the following parameters:

Parameter	Description
t	Represents the current calculation date
T	Represents the last fixing date, which is the date of the last closing price, represented by the “prezzo di riferimento”, as calculated and published by the Reference Exchange
Index <sub>t</sub>	Current Index level at calculation time t
Index <sub>T</sub>	Recent Index fixing level as described in Section 2.2
Stock <sub>t</sub>	Last traded share price of the Reference Instrument, traded on the Reference Exchange at calculation time t
Stock <sub>T</sub>	Last Reference Instrument Fixing Price as described in Section 2.2
D <sub>t,T</sub>	Number of calendar days between T and t
IR <sub>T</sub>	EONIA Rate (Euro Over Night Index Average), describes an overnight-loanrate that is determined by the European Central Bank. The value of IR <sub>T</sub> always equates the EONIA Rate of date T
ICF <sub>T</sub>	Index calculation fee which is charged by the Index Calculation Agent
Lev	Leverage (see definition in section 2.1)
Div <sub>t</sub>	Dividend correction, that equates the gross Dividend amount paid by the Reference Instrument on Ex-Dividend date t. If date t is not an Ex-Dividend date, this parameter has a value of 0. See Section 3.2 for more information
RFactorSS <sub>t</sub>	Represents the factor of a potential corporate action event of the Reference Instrument on date t. See Section 3.3 for more information. If date t is not a corporate action date, this parameter has a value of 1

### 3.1 Intraday rebalancing

If, for instance, the price of the Reference Instrument gains a 50% daily increase, the value of a factor short Index with a factor of 2 would have to drop to zero (total loss) since the factor Index would also double its losses. In order to counteract a total loss, factor indices feature a Barrier (represented by the parameter P), which triggers an intraday Index adjustment if the Reference Instrument reaches or falls below it.

In the event of an intraday rebalancing, new fixing values for the Index and the Reference Instrument calculated and therefore, a new day is simulated from which the ongoing calculation continues. The consequence is that the negative daily return for the factor Index is attenuated. However, if the calculated price of the index is significantly low, this can result in an intraday loss which, in economic terms, closely approximates a total loss.

The condition for triggering an intraday adjustment is as follows:

$$\frac{Stock_t}{((Stock_T - Div_t) \times RFactorSS_t)} - 1 \geq P$$

Whereby the parameter P represents the Barrier.

In this case, the value of P is +30% (+0.3).

In case of an intraday adjustment, the calculation of the Index is interrupted for half an hour (30 minutes) period, excluding the time of any Market Disruption Event. For this half an hour trading time calculation break, a volume weighted average price (VWAP) will be defined. The determined VWAP will then be used as new fixing value for the Reference Instrument in the continued calculation. Given the case, a rebalancing event occurs less than 30 minutes before market close, the calculation period for the VWAP will be prolonged into the next trading day, until the 30 minutes trading time window from the past trading day is completed. Note that the half an hour trading time window refers to 30 minutes of trading on the Reference Exchange. If the Reference Instrument is, for example, currently suspended, this does not add to the 30 minutes of trading time. Then the VWAP time will be prolonged until 30 minutes of trading time is reached.

For example, if an intraday adjustment is triggered at 03:28:15 p.m. CET (given that the Index calculation continues until 05:35:00 p.m. CET), the ongoing calculation of the Index immediately stops. The VWAP relevant calculation time then will include the timespan between 03:29:00 p.m. CET and 03:58:59 p.m. CET. At 03:59:00 p.m. CET the new fixing values for the Index and the Reference Instrument are calculated. Afterwards, the ongoing calculation will continue with the new fixing values.

For example, if an intraday adjustment is triggered at 05:21:15 p.m. CET (given that the Index calculation continues until 05:35:00 p.m. CET), the ongoing calculation of the Index immediately stops. The VWAP relevant calculation time then will include the timespan between 05:22:00 p.m. CET and 09:16:59 a.m. CET of the following trading day. At 09:17:00 a.m. CET the new fixing values for the Index and the Reference Instrument are calculated. Afterwards, the ongoing calculation will continue with the new fixing values. In case of an overnight rebalancing, there will not be the regular fixing described in Section 2.2

After the 30 minute calculation break, new fixing values will be calculated as follows:

### **New Index Fixing value**

Leverage Component<sup>new</sup>:

$$Index_T \times \left( -Lev \times \frac{VWAP}{(Stock_T - (Div_t)) \times RFactorSS_t} + (Lev + 1) \right)$$

Financial Component<sup>new</sup>:

$$Index_T \times \left( \frac{(Lev + 1) \times IR_T - ICF_T}{360} \right) \times D_{t,T}$$

Index Fixing value<sup>new</sup>:

$$Index_T^{new} = Leverage\ Component^{new} + Financial\ Component^{new}$$

### **New Reference Instrument Fixing value**

$$Stock_T^{new} = VWAP$$

After the calculation of the new fixing values, the suffix “new” shall be dropped from all relevant quantities, and the ongoing calculation of the new index values continues as described in Section 3.

Note the following: While calculating the new fixing values,  $D_{t,T}$  is still the difference in days between the actual calculation date  $t$  and the recent most fixing date  $T$ . After the ongoing fixing is completed, date  $T$  becomes the same date as the actual calculation date and therefore, when continuing the ongoing calculation, the value of  $D_{t,T}$  is 0.

Also note, that after an intraday adjustment, a potential correction of the Index level because of Dividend or corporate action (See Section 3.2 and Section 3.3 for more information) will be set to 0 for Parameter  $Div_t$  and 1 for Parameter  $RFactorSS_t$  after calculation of the new fixing values, because the newly calculated fixing is, for example, already Ex-Dividend.

## **3.2 Dividend Index Adjustments**

In case date  $t$  is an Ex-Dividend day, a Dividend Index Adjustment is triggered. Therefore, the index calculation described in Section 3 will be influenced by the parameters  $Div_t$  and  $WT$ . While the parameter  $Div_t$  represents the correction of the Reference Underlying price by the paid Dividend, the parameter  $WT$  represents the withholding-tax, being payed as a government requirement for the payer of an item of income to withhold or deduct tax from the payment, and pay that tax to the government.

If date  $t$  is not an Ex-Dividend day, the value of the Parameters  $Div_t$  and  $WT$  is 0.

### 3.3 Extraordinary Index Adjustments

On date  $t$ , for any “unforeseeable cases” not described under the present index rule, an extraordinary Index Adjustment is triggered. The Index Calculation Agent will generally modify the Index calculation by correcting at its due discretion the relevant Fixing Price for the Reference Instrument on Index Calculation Day  $t$ , taking into account all available information and client’s best interest, in order to factor into the Index calculation, the adjustments made on the Reference Exchange to the Reference Instrument traded there.

The Index Calculation Agent may also adapt the Index Calculation in some other manner if it deems this necessary in its due discretion in order to account for differences between this Factor Index and the Reference Instrument. Such adjustments may in particular relate to the Reference Instrument being replaced by a basket of shares, securities representing shares or other Dividend-bearing securities or in the event of a merger by an appropriate number of shares, securities representing shares or other Dividend-bearing securities issued by the absorbing or newly formed company and where necessary stipulating a different Reference Exchange and Reference Instrument Price.

The list of extraordinary adjustment events listed in section 2.1 is not exhaustive.

A deciding factor is whether the Derivatives Exchange considers it expedient to adjust the contract size, an underlying or involving the relevant Reference Exchange which determines the price of the Reference Instrument. If neither futures nor options linked to the Reference Instrument are traded on the Derivatives Exchange, the adjustment shall be made in such a manner in which the Derivatives Exchange would do so if corresponding futures or options were traded there. If doubts arise in this event relating to the application of the modification rules of the Derivatives Exchange, the Index Calculation Agent shall decide such questions in its reasonable discretion. The rules and regulations of the Derivatives Exchange shall apply in addition to the provisions set out above.

In the event the company issuing the Reference Instrument underlying the Factor Index is liquidated or insolvency, winding-up or similar proceedings are instituted against the assets of the company or of the possibility that such proceedings will be opened becomes known, the price of the Reference Instrument will continue to be factored into the Index Calculation for as long as the price of the Reference Instrument continues to be determined on the Reference Exchange. However, if pricing in such a case is temporarily or permanently suspended, the leverage component remains unchanged and the Index Level will be determined solely on the basis of the other components of the Index formula.

Therefore, the Index calculation described in Section 3 will be influenced by the parameter  $R_{FactorSS_t}$ . For example, if a split takes place with a stock split rate of 0.5, the Reference Instrument loses half of its value on date  $t$ . Therefore, to retain the Index level uninfluenced by the loss of value caused by the split, the parameter  $R_{FactorSS_t}$  has to hold a value of 0.5. In case date  $t$  holds an Extraordinary Index Adjustment and also a Corporate Action event, the Extraordinary Index Adjustment will always be performed before taking the Corporate Action event into calculation.

If date  $t$  is not an Ex-Dividend day, the value of the Parameters  $Div_t$  and  $WT$  is 0.

The Index Calculation Agent defines in its reasonable discretion the adjustment method to be applied and published it by the means of a notice on <https://icf-markets.de/>.

### 3.4 Index Split / Reverse Split Adjustments

On the 1<sup>st</sup> Friday of each month, the Index is reviewed regarding qualification for an Index Split or a Reverse Split. If the 1<sup>st</sup> Friday of the month is not a trading day, the following trading day after the 1<sup>st</sup> Friday of the month will be used for review.

If, on this trading day, the most recent Index fixing value has reached a level above 1000 Points, the Index qualifies for an Index split. If the Index has reached a level below 10, the Index qualifies for an Index Reverse Split.

In case of a qualification for an Index Split or an Index reverse split, the Index fixing value of the 3<sup>rd</sup> Friday, that is used for the ongoing calculation of the Index on the next trading day, will be unscaled, but will then be divided by 10 in case of Index Split (or multiplied by 10 for a reverse split) during the ongoing Index calculation of the next trading day. Therefore, the fixing value of the Index of the trading day after the 3<sup>rd</sup> Friday will be a scaled fixing value.

Modification of Index fixing value during a Split

$$Index_T = \frac{Index_T}{10}$$

Modification of Index fixing value during a Reverse-Split

$$Index_T = Index_T \times 10$$

In case the 3<sup>rd</sup> Friday of the month is not a trading day, the implementation will take place on the following trading day after the 3<sup>rd</sup> Friday of the month. Respectively, the Index fixing value of the next trading day after the 3<sup>rd</sup> Friday, that is used for the ongoing calculation of the Index on the second trading day after the 3<sup>rd</sup> Friday, will be divided by 10 in case of Index split (or multiplied by 10 for a reverse split) during the ongoing calculation of the Index. Therefore, the fixing value of the Index of the second trading day after the 3<sup>rd</sup> Friday will be the newly scaled fixing value.

### 3.5 Impossibility to complete intraday rebalancing:

In case the Index fixing value would become negative after an intraday rebalancing event, the Index level will be fixed at 0.0001. This Index level will continue to be broadcasted for 4 weeks after the reset occurred. Subsequently the Index will be discontinued.

The Index fixing value will become negative after an intraday rebalancing event, if the obtained VWAP (see Section 3.1) is significantly lower, so that the calculated Index fixing value will be negative and therefore, cannot reach a positive value anytime in the future.

#### Example:

Given the most recent fixing of the Reference Instrument  $Stock_T$  has a value of 100. Date  $t$  is not an Ex-Dividend day neither a corporate action date. The most recent calculated fixing value of the Index is 400 Points. During the 1-hour observation period calculated VWAP is 140. The leverage Factor is 2.

Calculating the Index fixing value (leaving aside the financial component):

$$Index_T = Index_T \times \left( -Lev \times \frac{VWAP}{(Stock_T - Div_t) \times RFactorSS_t} + (Lev + 1) \right)$$
$$Index_T = 400 \times \left( -2 \times \frac{140}{(100 - (0)) \times 1} + (2 + 1) \right) = 80$$

The newly calculated Index fixing is a positive value.

Now given the same values, except the value of the calculated VWAP, which is 180.

Calculating the Index fixing value (leaving aside the financial component):

$$Index_T = Index_T \times \left( -Lev \times \frac{VWAP}{(Stock_T - Div_t) \times RFactorSS_t} + (Lev + 1) \right)$$
$$Index_T = 400 \times \left( 2 \times \frac{180}{(100 - (0)) \times 1} + (2 + 1) \right) = -240$$

The newly calculated Index fixing value is negative and can therefore no longer become positive.

## 4. Index parameters

Parameter	Value
Index-ISIN	DE000A2BNM59
Index-WKN	A2BNM5
Reuters-RIC	.ICFG00S2
Index-Name	ENI S.p.A. Leva 2 Short Daily Gross Return EUR
Index-Type	Gross Return
Index-Leverage	2
Index-Currency	EUR
Index-Starting Value	100 Points
Index-Starting Date	26.08.2016
Index-Starting Time	09:00 a.m. CET
Index-Ending Time	05:35 p.m. CET
Index-Calculation Fee	0.7% p.a.
Index-Withholding Tax	26.00% (Timestamp: 18.08.2016)
Barrier	+30%
Reference Instrument-ISIN	IT0003132476
Reference Instrument-Name	ENI S.p.A., ordinary share

### 4.1 Publications

ICF BANK AG publishes the Index on its website at [www.icf-markets.de](http://www.icf-markets.de) and on Reuters. ICF BANK AG also publishes all information it deems relevant to the current calculation of the Index on its website.

### 4.2 Prices and frequency of Index calculation

ICF BANK AG calculates the Index each exchange trading day on the Reference Exchange, taking into account the last traded share price of the Reference Instrument, traded on the Reference Exchange at calculation time  $t$ . If no last traded share price is available during the calculation period, the Index is calculated using the most recently available last traded share price.

The Index is calculated each stock exchange day at a minimum of once per minute between 09:00 a.m. CET and 05:35 p.m. CET, except in the case of disruptions in ICF BANK AG's data or price feeds which prevent ICF BANK AG from calculating and/or publishing the Index. ICF BANK AG will promptly make any corrections to the Index deemed necessary and publish it on its website at [www.icf-markets.de](http://www.icf-markets.de) and on Reuters.

The Index is calculated in **points**.

## **5. Authorisation/licences**

Use of the Index as an underlying for derivative financial products must be authorised by separate agreement with the ICF BANK AG.

## **6. Rounding**

If the Index is below 10 Points, the Index will be rounded to four decimal points.

If the Index is above or equal 10 Points and below 100 Points, the Index will be rounded to Three decimal points. If the Index is equal or above 100 Points, the Index will be rounded to two decimal points.

## **7. Interruption or suspension of trading**

The Index is not calculated in the event a Market Disruption Event occurs.

## **8. Annex**

Published by / Contact

ICF BANK AG  
Wertpapierhandelsbank  
Kaiserstrasse 1  
60311 Frankfurt am Main  
Germany

customized.indices@icfbank.de  
Phone +49 69 92877-0



## ***Index Methodology***

***Fiat Chrysler Automobiles N.V.  
Leva 2 Long Daily Net Return EUR***

*Timestamp: 02<sup>nd</sup> September 2016*

## Contents

1. General information .....	3
2. Description and functioning.....	4
2.1 Index definitions .....	5
2.2 Daily chaining.....	7
3. Index calculation.....	8
3.1 Intraday rebalancing.....	9
3.2 Dividend Index adjustments.....	10
3.3 Extraordinary Index adjustments .....	11
3.4 Index split / reverse split adjustments .....	12
3.5 Impossibility to complete intraday rebalancing: .....	13
4. Index parameters.....	14
4.1 Publications.....	14
4.2 Prices and frequency of Index calculation .....	14
5. Authorisation/licences.....	15
6. Rounding.....	15
7. Interruption or suspension of trading .....	15
8. Annex .....	15

## 1. General information

This Index Methodology outlines the general methodology used to calculate the Fiat Chrysler Automobiles N.V. Leva 2 Long Daily Net Return EUR (hereinafter: the "Index"). It sets forth the parameters, composition and calculation of the Index as well as the relevant criteria in this respect. ICF BANK AG exercises the utmost diligence when calculating and publishing the Index, and in implementing the criteria set out in this Methodology.

ICF BANK AG neither warrants nor guarantees the accuracy of the Index or the parameters Reference Instrument its composition and calculation, nor does it assume any liability for losses resulting from the flawed configuration or calculation of the Index or any other ratios derived therefrom. ICF BANK AG is under no obligation to notify third parties, including investors and/or financial intermediaries, of any errors or omissions pertaining to the Index.

ICF BANK AG publishes the Index on its website at [www.icf-markets.de](http://www.icf-markets.de). Publication of the Index constitutes neither investment advice nor a recommendation issued by ICF BANK AG to buy, sell or hold a given financial product. Specifically, the composition and calculation of the Index in no way represent a recommendation issued by ICF BANK AG to buy or sell individual, several or all Reference Instruments. This information does not constitute financial analysis within the meaning of § 34 b of the German Securities Trading Act (*Wertpapierhandelsgesetz*, "WpHG").

The statements contained in the following provide information relating to the composition and calculation of the Index.

The Index is calculated and published by ICF BANK AG. All rights to this Index are reserved to ICF BANK AG.

### **Index Details:**

Index Name: Fiat Chrysler Automobiles N.V. Leva 2 Long Daily Net Return EUR

ISIN: DE000A2BNM00

WKN: A2BNM0

REUTERS-RIC: .ICFFCAL2

Reference Instrument: Fiat Chrysler Automobiles N.V., common shares

Reference Instrument ISIN: NL0010877643

Index Calculation Agent: ICF BANK AG, Kaiserstrasse 1, 60311 Frankfurt, Germany

Information Page: <https://icf-markets.de/>

## 2. Description and functioning

The Index is a factor Index. A factor Index uses a constant factor to track the daily percentage change in the market price of an Reference Instrument (e.g., an equity, an Index or a commodity) as compared to the most recent Fixing Price (as defined in section 2.1) of that Reference Instrument. The factor defines in which direction (whether the same or inverse) and what degree of leverage the factor Index reflects the daily price change of the Reference Instrument. In this case, the Index Reference Instrument is represented by the ordinary share of Fiat Chrysler Automobiles N.V., traded on the Reference Exchange, as defined in Section 2.1.

To calculate the increase or decrease of the Index, a leverage- and a financing-component is used.

The leverage component reflects the change in price of the Reference Instrument between two Fixing Prices and transfers this movement (either positive or negative) onto the Index by multiplying the percentage of change with the assigned leverage. Thereby, a disproportionate effect on the value of the Index occurs. This leverage effect inherits the risk of an over proportional capital loss (“downside risk”).

For example: (excluding the financial component and events like dividends, corporate actions, etc.)

If a factor long Index has a factor of 2:

- a 5% increase in the price of the Reference Instrument (as compared to the latest Fixing Price), will result in the value of the Index increasing by  $2 \times 5\%$ .
- a 5% decrease in the price of the Reference Instrument (as compared to the latest Fixing Price), will result in the value of the Index decreasing by  $2 \times 5\%$ .

The financial component contains the costs of borrowing money at a one-day rate (EONIA Rate, see Section 3 for more information) increased by a per annum rate (ICF Rate) that reflects the Index calculation fee.

The Index will be continuously calculated during the Reference Instrument trading hours on the Reference Exchange by the Index Calculation Agent. This means, that the Index will be re-calculated at every change in price of the Reference Instrument. The Index Calculation Agent will charge an annual fee of 0.7% p.a., which will be deducted daily (based on a year comprising 360 days), during the calculation of the Index.

For periods longer than one day, the compounding effect shall be taken into account. Indeed, returns on the Reference Instrument cannot simply be multiplied with the selected factor since the performance of the factor Index depends on each individual daily performance of the Reference Instrument. If the performance of a factor Index is compared against that of the Reference Instrument over a period longer than one day, the observed price trends will deviate not only for prices of the Reference Instrument which constantly rise or fall, but also for those which fluctuate.

## 2.1 Index definitions

The definitions below shall apply for the purposes of this Index description.

"**Barrier**" indicates the maximum permitted negative (in case of a long Index) or positive (in case of a short Index) change in price of the Reference Instrument compared to its most recent Fixing Value before an intraday Index adjustment takes place. In this Index, indicated by parameter P, the Barrier is -30%.

"**Derivatives Exchange**" are the main exchanges where options or futures of the Reference Instrument are traded.

"**Dividend**" shall mean the Dividend of the company, exclusive of which the Reference Instrument is traded on the reference exchange on the Ex-Dividend day.

"**Ex-Dividend Date**" means the Trading Day on which the Reference Instrument trades "Ex-Dividend" on the Reference Exchange.

"**Extraordinary Adjustment Event**" means any of the following events as they relate to the Reference Instrument:

- a. capital increase by way of the issue of new shares in return for contributions in cash or in kind with the grant of a subscription right, capital increase from retained earnings, issue of securities with option or conversion rights into shares, distribution of special Dividends, share split, subdivision, consolidation or reclassification of the shares
- b. probable or definitive discontinuation of stock exchange trading in the shares as a result of a merger by absorption or new company formation or takeover of the company of the Reference Instrument by another company
- c. spin-off of a division of the company in such a manner that a new independent company is created or the division is absorbed by a third company
- d. any other event, which the Index Calculation Agent may at its reasonable discretion deem to have a comparable or similar impact on the calculation of the Factor Index in the event no adjustments were to be made

In case of securities representing shares (ADR/GDR) as the Reference Instrument, the following provisions shall additionally apply:

- e. any modification of the terms and conditions of the securities representing shares by their issuers
- f. discontinuation of the stock exchange quotation of the securities representing shares or of the shares underlying them
- g. insolvency of the issuer of the securities representing shares
- h. end of the term of the securities representing shares as a result of termination by the issuer of the securities representing shares

For ADRs and GDRs or any other securities representing shares and other Dividend-bearing securities (e.g. profit participation rights, participation certificates) as the Reference Instrument the provisions specified under (a) to (c) shall apply mutatis mutandis with respect to the Reference Instrument and the issuing company.

**"Fixing Price"** of the Reference Instrument for an Index Calculation Day is – subject to an Extraordinary Adjustment to the calculation of the Index in accordance with section 3 – the official closing price, or for Italian stocks underlyings the reference closing price (“prezzo di riferimento”) of the Reference Instrument, as determined and published for that day by the Reference Exchange. If an Index Calculation Day falls on a day which is not a Trading Day, the Fixing Price of the immediately preceding Index Calculation Day shall continue to apply. If no Fixing Price for the Reference Instrument is determined or published on a Trading Day, the Index Calculation Agent shall determine the Fixing Price of the Reference Instrument for that day on the basis of the most recent prices set for the Reference Instrument at its due discretion.

**"Index Calculation Agent"** means ICF BANK AG, Kaiserstrasse 1, 60311 Frankfurt, Germany

**"Index Calculation Day"** means every day from Monday to Friday except holidays on which the Reference Exchange is closed

**"Index Calculation Fee"** is 0.7% per annum. The Index Calculation Fee is charged each calendar day, beginning as of the Index Start Date. It is calculated on the basis of a 360-day year and the most recently calculated Index Closing Value.

**"Index Currency"** means EUR

**"Index Fixing Value"** is calculated for each Index Calculation Day by the Index Calculation Agent in accordance with section 3 of this Index description on the basis of the Reference Price (“prezzo di riferimento”) of the Reference Instrument for this Index Calculation Day and published in accordance with section 4.1 of this Index description.

**"Information Page"** means <https://icf-markets.de/>

**"Index Start Date"** means 26<sup>th</sup> August 2016

**"Index Start Value"** is 100 Index points and represents the Index Closing Value on Index Calculation Day T=0 for the purposes of calculating the Index in accordance with Section 3 of this document

**"Interest Rate"** means EONIA. EONIA (Euro Over Night Index Average) is a weighted average interest rate for overnight interbank money calculated act/360 by the European Central Bank since 4 January 1999 on the basis of effective turnover. If the Interest Rate is not set or published on an Index Calculation Day, the Interest Rate applied on the immediately preceding Index Calculation Day is used to calculate the Index in accordance with section 3 of this document. If the Interest Rate has neither been set nor published for ten consecutive Index Calculation Days, the Index Calculation Agent has the right and obligation to stipulate in its reasonable discretion an alternative relevant Interest Rate which has functions comparable to the previous Interest Rate.

**"Leverage"** describes the impact, that a change in the price of the Reference Instrument has on the relevant factor Index. The leverage on this Index is 2. See Lev parameter in section 3.

**“Market Disruption Event”** means each of the following events:

- a) the failure of the Reference Exchange to open for trading during its regular trading sessions
- b) the suspension or restriction of trading in the Reference Instrument on the Reference Exchange
- c) in general the suspension or restriction of trading in a Derivative of the Reference Instrument on the Derivatives Exchange

**"Reference Exchange"** means Borsa Italiana S.p.A. – LSE Group

**"Reference Instrument"** means Fiat Chrysler Automobiles N.V.

Asset Type: Ordinary Share

Currency: EUR

ISIN: NL0010877643

Bloomberg symbol: FCA IM EQUITY

**"Reference Instrument Price"** corresponds at any time during the trading period on the Reference Exchange to the price of the Reference Instrument

**"Trading Day"** means every day on which the Reference Instrument is traded on the Reference Exchange.

**"VWAP"** means volume weighted average price of the Reference Instrument. See section 3.1 of this document

**"Withholding-Tax"** shall be 26.00% on the Index Start Date. The Index Calculation Agent may change the Withholding-Tax Factor at its due discretion on any Index Calculation Day with prospective effect, if the relevant tax law applicable to the Index Calculation Agent changes, resulting in a change in the amount of the – after tax – Dividend virtually accruing to it. Check <https://icf-markets.de/> for current Withholding-Tax value.

## 2.2 Daily chaining

As mentioned in Section 2, the value of a factor Index is calculated by applying, on a daily basis, the corresponding leverage- and financial component to the daily change in the Reference Instrument. The Index is calculated on the basis of the change in the price of the Reference Instrument as compared to its most recent Fixing Price, which, in this case, will be represented by the “prezzo di riferimento” which is calculated at closing and published by the Reference Exchange. Thus every new fixing price for the Reference Instrument represents a new reference price, which serves as the basis for calculating the percentage variation in underlying Fixing Price and apply the daily constant leverage factor, according to the index calculation methodology described in the present document, in order to derive the fixing value of the index. This daily adjustment of the factor Index is automatic and is known as chaining.

### 3. Index calculation

The Index will be calculated on the basis of the following formula:

Leverage Component:

$$Index_T \times \left( Lev \times \frac{Stock_t}{(Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t} - (Lev - 1) \right)$$

Financial Component:

$$Index_T \times \left( \frac{(Lev - 1) \times IR_T + ICF_T}{360} \right) \times D_{t,T}$$

Index Calculation:

$$Index_t = Leverage Component_t - Financial Component_t$$

The calculation formula is using the following parameters:

Parameter	Description
t	Represents the current calculation date
T	Represents the last fixing date, which is the date of the last closing price, represented by the “prezzo di riferimento”, as calculated and published by the Reference Exchange
Index <sub>t</sub>	Current Index level at calculation time t
Index <sub>T</sub>	Recent Index fixing level as described in Section 2.2
Stock <sub>t</sub>	Last traded share price of the Reference Instrument, traded on the Reference Exchange at calculation time t
Stock <sub>T</sub>	Last Reference Instrument Fixing Price as described in Section 2.2
D <sub>t,T</sub>	Number of calendar days between T and t
IR <sub>T</sub>	EONIA Rate (Euro Over Night Index Average), describes an overnight-loanrate that is determined by the European Central Bank. The value of IR <sub>T</sub> always equates the EONIA Rate of date T
ICF <sub>T</sub>	Index calculation fee which is charged by the Index Calculation Agent
Lev	Leverage (see definition in section 2.1)
Div <sub>t</sub>	Dividend correction, that equates the gross Dividend amount paid by the Reference Instrument on Ex-Dividend date t. If date t is not an Ex-Dividend date, this parameter has a value of 0. See Section 3.2 for more information
RFactorSS <sub>t</sub>	Represents the factor of a potential corporate action event of the Reference Instrument on date t. See Section 3.3 for more information. If date t is not a corporate action date, this parameter has a value of 1
WT	Withholding-Tax, that is subtracted from the Dividend correction in case date t is an Ex-Dividend date. See section 3.2 for more information

### 3.1 Intraday rebalancing

If, for instance, the price of the Reference Instrument suffers a 50% daily loss, the value of a factor long Index with a factor of 2 would have to drop to zero (total loss) since the factor Index would also double its losses. In order to counteract a total loss, factor indices feature a Barrier (represented by the parameter P), which triggers an intraday Index adjustment if the Reference Instrument reaches or falls below it.

In the event of an intraday rebalancing, new fixing values for the Index and the Reference Instrument calculated and therefore, a new day is simulated from which the ongoing calculation continues. The consequence is that the negative daily return for the factor Index is attenuated. However, if the calculated price of the index is significantly low, this can result in an intraday loss which, in economic terms, closely approximates a total loss.

The condition for triggering an intraday adjustment is as follows:

$$\frac{Stock_t}{\left( (Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t \right)} - 1 \leq P$$

Whereby the parameter P represents the Barrier.

In this case, the value of P is -30% (-0.3).

In case of an intraday adjustment, the calculation of the Index is interrupted for half an hour (30 minutes) period, excluding the time of any Market Disruption Event. For this half an hour trading time calculation break, a volume weighted average price (VWAP) will be defined. The determined VWAP will then be used as new fixing value for the Reference Instrument in the continued calculation. Given the case, a rebalancing event occurs less than 30 minutes before market close, the calculation period for the VWAP will be prolonged into the next trading day, until the 30 minutes trading time window from the past trading day is completed. Note that the half an hour trading time window refers to 30 minutes of trading on the Reference Exchange. If the Reference Instrument is, for example, currently suspended, this does not add to the 30 minutes of trading time. Then the VWAP time will be prolonged until 30 minutes of trading time is reached.

For example, if an intraday adjustment is triggered at 03:28:15 p.m. CET (given that the Index calculation continues until 05:35:00 p.m. CET), the ongoing calculation of the Index immediately stops. The VWAP relevant calculation time then will include the timespan between 03:29:00 p.m. CET and 03:58:59 p.m. CET. At 03:59:00 p.m. CET the new fixing values for the Index and the Reference Instrument are calculated. Afterwards, the ongoing calculation will continue with the new fixing values.

For example, if an intraday adjustment is triggered at 05:21:15 p.m. CET (given that the Index calculation continues until 05:35:00 p.m. CET), the ongoing calculation of the Index immediately stops. The VWAP relevant calculation time then will include the timespan between 05:22:00 p.m. CET and 09:16:59 a.m. CET of the following trading day. At 09:17:00 a.m. CET the new fixing values for the Index and the Reference Instrument are calculated. Afterwards, the ongoing calculation will continue with the new fixing values. In case of an overnight rebalancing, there will not be the regular fixing described in Section 2.2

After the 30 minute calculation break, new fixing values will be calculated as follows:

### **New Index Fixing value**

Leverage Component<sup>new</sup>:

$$Index_T \times \left( Lev \times \frac{VWAP}{(Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t} - (Lev - 1) \right)$$

Financial Component<sup>new</sup>:

$$Index_T \times \left( \frac{(Lev - 1) \times IR_T + ICF_T}{360} \right) \times D_{t,T}$$

Index Fixing value<sup>new</sup>:

$$Index_T^{new} = Leverage\ Component^{new} - Financial\ Component^{new}$$

### **New Reference Instrument Fixing value**

$$Stock_T^{new} = VWAP$$

After the calculation of the new fixing values, the suffix “new” shall be dropped from all relevant quantities, and the ongoing calculation of the new index values continues as described in Section 3.

Note the following: While calculating the new fixing values,  $D_{t,T}$  is still the difference in days between the actual calculation date  $t$  and the recent most fixing date  $T$ . After the ongoing fixing is completed, date  $T$  becomes the same date as the actual calculation date and therefore, when continuing the ongoing calculation, the value of  $D_{t,T}$  is 0.

Also note, that after an intraday adjustment, a potential correction of the Index level because of Dividend or corporate action (See Section 3.2 and Section 3.3 for more information) will be set to 0 for Parameter  $Div_t$  and 1 for Parameter  $RFactorSS_t$  after calculation of the new fixing values, because the newly calculated fixing is, for example, already Ex-Dividend.

## **3.2 Dividend Index Adjustments**

In case date  $t$  is an Ex-Dividend day, a Dividend Index Adjustment is triggered. Therefore, the index calculation described in Section 3 will be influenced by the parameters  $Div_t$  and  $WT$ . While the parameter  $Div_t$  represents the correction of the Reference Underlying price by the paid Dividend, the parameter  $WT$  represents the withholding-tax, being payed as a government requirement for the payer of an item of income to withhold or deduct tax from the payment, and pay that tax to the government.

If date  $t$  is not an Ex-Dividend day, the value of the Parameters  $Div_t$  and  $WT$  is 0.

### 3.3 Extraordinary Index Adjustments

On date  $t$ , for any “unforeseeable cases” not described under the present index rule, an extraordinary Index Adjustment is triggered. The Index Calculation Agent will generally modify the Index calculation by correcting at its due discretion the relevant Fixing Price for the Reference Instrument on Index Calculation Day  $t$ , taking into account all available information and client’s best interest, in order to factor into the Index calculation, the adjustments made on the Reference Exchange to the Reference Instrument traded there.

The Index Calculation Agent may also adapt the Index Calculation in some other manner if it deems this necessary in its due discretion in order to account for differences between this Factor Index and the Reference Instrument. Such adjustments may in particular relate to the Reference Instrument being replaced by a basket of shares, securities representing shares or other Dividend-bearing securities or in the event of a merger by an appropriate number of shares, securities representing shares or other Dividend-bearing securities issued by the absorbing or newly formed company and where necessary stipulating a different Reference Exchange and Reference Instrument Price.

The list of extraordinary adjustment events listed in section 2.1 is not exhaustive.

A deciding factor is whether the Derivatives Exchange considers it expedient to adjust the contract size, an underlying or involving the relevant Reference Exchange which determines the price of the Reference Instrument. If neither futures nor options linked to the Reference Instrument are traded on the Derivatives Exchange, the adjustment shall be made in such a manner in which the Derivatives Exchange would do so if corresponding futures or options were traded there. If doubts arise in this event relating to the application of the modification rules of the Derivatives Exchange, the Index Calculation Agent shall decide such questions in its reasonable discretion. The rules and regulations of the Derivatives Exchange shall apply in addition to the provisions set out above.

In the event the company issuing the Reference Instrument underlying the Factor Index is liquidated or insolvency, winding-up or similar proceedings are instituted against the assets of the company or of the possibility that such proceedings will be opened becomes known, the price of the Reference Instrument will continue to be factored into the Index Calculation for as long as the price of the Reference Instrument continues to be determined on the Reference Exchange. However, if pricing in such a case is temporarily or permanently suspended, the leverage component remains unchanged and the Index Level will be determined solely on the basis of the other components of the Index formula.

Therefore, the Index calculation described in Section 3 will be influenced by the parameter  $R_{FactorSS_t}$ . For example, if a split takes place with a stock split rate of 0.5, the Reference Instrument loses half of its value on date  $t$ . Therefore, to retain the Index level uninfluenced by the loss of value caused by the split, the parameter  $R_{FactorSS_t}$  has to hold a value of 0.5. In case date  $t$  holds an Extraordinary Index Adjustment and also a Corporate Action event, the Extraordinary Index Adjustment will always be performed before taking the Corporate Action event into calculation.

If date  $t$  is not an Ex-Dividend day, the value of the Parameters  $Div_t$  and  $WT$  is 0.

The Index Calculation Agent defines in its reasonable discretion the adjustment method to be applied and published it by the means of a notice on <https://icf-markets.de/>.

### 3.4 Index Split / Reverse Split Adjustments

On the 1<sup>st</sup> Friday of each month, the Index is reviewed regarding qualification for an Index Split or a Reverse Split. If the 1<sup>st</sup> Friday of the month is not a trading day, the following trading day after the 1<sup>st</sup> Friday of the month will be used for review.

If, on this trading day, the most recent Index fixing value has reached a level above 1000 Points, the Index qualifies for an Index split. If the Index has reached a level below 10, the Index qualifies for an Index Reverse Split.

In case of a qualification for an Index Split or an Index reverse split, the Index fixing value of the 3<sup>rd</sup> Friday, that is used for the ongoing calculation of the Index on the next trading day, will be unscaled, but will then be divided by 10 in case of Index Split (or multiplied by 10 for a reverse split) during the ongoing Index calculation of the next trading day. Therefore, the fixing value of the Index of the trading day after the 3<sup>rd</sup> Friday will be a scaled fixing value.

Modification of Index fixing value during a Split

$$Index_T = \frac{Index_T}{10}$$

Modification of Index fixing value during a Reverse-Split

$$Index_T = Index_T \times 10$$

In case the 3<sup>rd</sup> Friday of the month is not a trading day, the implementation will take place on the following trading day after the 3<sup>rd</sup> Friday of the month. Respectively, the Index fixing value of the next trading day after the 3<sup>rd</sup> Friday, that is used for the ongoing calculation of the Index on the second trading day after the 3<sup>rd</sup> Friday, will be divided by 10 in case of Index split (or multiplied by 10 for a reverse split) during the ongoing calculation of the Index. Therefore, the fixing value of the Index of the second trading day after the 3<sup>rd</sup> Friday will be the newly scaled fixing value.

### 3.5 Impossibility to complete intraday rebalancing:

In case the Index fixing value would become negative after an intraday rebalancing event, the Index level will be fixed at 0.0001. This Index level will continue to be broadcasted for 4 weeks after the reset occurred. Subsequently the Index will be discontinued.

The Index fixing value will become negative after an intraday rebalancing event, if the obtained VWAP (see Section 3.1) is significantly lower, so that the calculated Index fixing value will be negative and therefore, cannot reach a positive value anytime in the future.

#### Example:

Given the most recent fixing of the Reference Instrument  $Stock_T$  has a value of 100. Date  $t$  is not an Ex-Dividend day neither a corporate action date. The most recent calculated fixing value of the Index is 400 Points. During the 1-hour observation period calculated VWAP is 60. The leverage Factor is 2.

Calculating the Index fixing value (leaving aside the financial component):

$$Index_T = Index_T \times \left( Lev \times \frac{VWAP}{(Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t} - (Lev - 1) \right)$$
$$Index_T = 400 \times \left( 2 \times \frac{60}{(100 - (0 \times (1 - 0))) \times 1} - (2 - 1) \right) = 80$$

The newly calculated Index fixing is a positive value.

Now given the same values, except the value of the calculated VWAP, which is 20.

Calculating the Index fixing value (leaving aside the financial component):

$$Index_T = Index_T \times \left( Lev \times \frac{VWAP}{(Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t} - (Lev - 1) \right)$$
$$Index_T = 400 \times \left( 2 \times \frac{20}{(100 - (0 \times (1 - 0))) \times 1} - (2 - 1) \right) = -240$$

The newly calculated Index fixing value is negative and can therefore no longer become positive.

## 4. Index parameters

Parameter	Value
Index-ISIN	DE000A2BNM00
Index-WKN	A2BNM0
Reuters-RIC	.ICFFCAL2
Index-Name	Fiat Chrysler Automobiles N.V. Leva 2 Long Daily Net Return EUR
Index-Type	Net Return
Index-Leverage	2
Index-Currency	EUR
Index-Starting Value	100 Points
Index-Starting Date	26.08.2016
Index-Starting Time	09:00 a.m. CET
Index-Ending Time	05:35 p.m. CET
Index-Calculation Fee	0.7% p.a.
Index-Withholding Tax	26.00% (Timestamp: 18.08.2016)
Barrier	-30%
Reference Instrument-ISIN	NL0010877643
Reference Instrument-Name	Fiat Chrysler Automobiles N.V., ordinary share

### 4.1 Publications

ICF BANK AG publishes the Index on its website at [www.icf-markets.de](http://www.icf-markets.de) and on Reuters. ICF BANK AG also publishes all information it deems relevant to the current calculation of the Index on its website.

### 4.2 Prices and frequency of Index calculation

ICF BANK AG calculates the Index each exchange trading day on the Reference Exchange, taking into account the last traded share price of the Reference Instrument, traded on the Reference Exchange at calculation time  $t$ . If no last traded share price is available during the calculation period, the Index is calculated using the most recently available last traded share price.

The Index is calculated each stock exchange day at a minimum of once per minute between 09:00 a.m. CET and 05:35 p.m. CET, except in the case of disruptions in ICF BANK AG's data or price feeds which prevent ICF BANK AG from calculating and/or publishing the Index. ICF BANK AG will promptly make any corrections to the Index deemed necessary and publish it on its website at [www.icf-markets.de](http://www.icf-markets.de) and on Reuters.

The Index is calculated in **points**.

## **5. Authorisation/licences**

Use of the Index as an underlying for derivative financial products must be authorised by separate agreement with the ICF BANK AG.

## **6. Rounding**

If the Index is below 10 Points, the Index will be rounded to four decimal points.

If the Index is above or equal 10 Points and below 100 Points, the Index will be rounded to Three decimal points. If the Index is equal or above 100 Points, the Index will be rounded to two decimal points.

## **7. Interruption or suspension of trading**

The Index is not calculated in the event a Market Disruption Event occurs.

## **8. Annex**

Published by / Contact

ICF BANK AG  
Wertpapierhandelsbank  
Kaiserstrasse 1  
60311 Frankfurt am Main  
Germany

customized.indices@icfbank.de  
Phone +49 69 92877-0



## ***Index Methodology***

***Fiat Chrysler Automobiles N.V.  
Leva 2 Short Daily Gross Return EUR***

*Timestamp: 02<sup>nd</sup> September 2016*

## Contents

1. General information .....	3
2. Description and functioning.....	4
2.1 Index definitions .....	5
2.2 Daily chaining.....	7
3. Index calculation.....	8
3.1 Intraday rebalancing.....	9
3.2 Dividend Index adjustments.....	10
3.3 Extraordinary Index adjustments .....	11
3.4 Index split / reverse split adjustments .....	12
3.5 Impossibility to complete intraday rebalancing: .....	13
4. Index parameters.....	14
4.1 Publications.....	14
4.2 Prices and frequency of Index calculation .....	14
5. Authorisation/licences.....	15
6. Rounding.....	15
7. Interruption or suspension of trading .....	15
8. Annex .....	15

## 1. General information

This Index Methodology outlines the general methodology used to calculate the Fiat Chrysler Automobiles N.V. Leva 2 short Daily Gross Return EUR (hereinafter: the "Index"). It sets forth the parameters, composition and calculation of the Index as well as the relevant criteria in this respect. ICF BANK AG exercises the utmost diligence when calculating and publishing the Index, and in implementing the criteria set out in this Methodology.

ICF BANK AG neither warrants nor guarantees the accuracy of the Index or the parameters Reference Instrument its composition and calculation, nor does it assume any liability for losses resulting from the flawed configuration or calculation of the Index or any other ratios derived therefrom. ICF BANK AG is under no obligation to notify third parties, including investors and/or financial intermediaries, of any errors or omissions pertaining to the Index.

ICF BANK AG publishes the Index on its website at [www.icf-markets.de](http://www.icf-markets.de). Publication of the Index constitutes neither investment advice nor a recommendation issued by ICF BANK AG to buy, sell or hold a given financial product. Specifically, the composition and calculation of the Index in no way represent a recommendation issued by ICF BANK AG to buy or sell individual, several or all Reference Instruments. This information does not constitute financial analysis within the meaning of § 34 b of the German Securities Trading Act (*Wertpapierhandelsgesetz*, "WpHG").

The statements contained in the following provide information relating to the composition and calculation of the Index.

The Index is calculated and published by ICF BANK AG. All rights to this Index are reserved to ICF BANK AG.

### **Index Details:**

Index Name: Fiat Chrysler Automobiles N.V. Leva 2 Short Daily Gross Return EUR

ISIN: DE000A2BNM18

WKN: A2BNM1

REUTERS-RIC: .ICFFCAS2

Reference Instrument: Fiat Chrysler Automobiles N.V., common shares

Reference Instrument ISIN: NL0010877643

Index Calculation Agent: ICF BANK AG, Kaiserstrasse 1, 60311 Frankfurt, Germany

Information Page: <https://icf-markets.de/>

## 2. Description and functioning

The Index is a factor Index. A factor Index uses a constant factor to track the daily percentage change in the market price of an Reference Instrument (e.g., an equity, an Index or a commodity) as compared to the most recent Fixing Price (as defined in section 2.1) of that Reference Instrument. The factor defines in which direction (whether the same or inverse) and what degree of leverage the factor Index reflects the daily price change of the Reference Instrument. In this case, the Index Reference Instrument is represented by the ordinary share of Fiat Chrysler Automobiles N.V. , traded on the Reference Exchange, as defined in Section 2.1.

To calculate the increase or decrease of the Index, a leverage- and a financing-component is used.

The leverage component reflects the change in price of the Reference Instrument between two Fixing Prices and transfers this movement (either positive or negative) onto the Index by multiplying the percentage of change with the assigned leverage. Thereby, a disproportionate effect on the value of the Index occurs. This leverage effect inherits the risk of an over proportional capital loss (“downside risk”).

For example: (excluding the financial component and events like dividends, corporate actions, etc.)

If a factor short Index has a factor of 2:

- a 5% increase in the price of the Reference Instrument (as compared to the latest Fixing Price), will result in the value of the Index decreasing by  $2 \times 5\%$ .
- a 5% decrease in the price of the Reference Instrument (as compared to the latest Fixing Price), will result in the value of the Index increasing by  $2 \times 5\%$ .

The financial component contains the costs of borrowing money at a one-day rate (EONIA Rate, see Section 3 for more information) increased by a per annum rate (ICF Rate) that reflects the Index calculation fee.

The Index will be continuously calculated during the Reference Instrument trading hours on the Reference Exchange by the Index Calculation Agent. This means, that the Index will be re-calculated at every change in price of the Reference Instrument. The Index Calculation Agent will charge an annual fee of 0.7% p.a., which will be deducted daily (based on a year comprising 360 days), during the calculation of the Index.

For periods longer than one day, the compounding effect shall be taken into account. Indeed, returns on the Reference Instrument cannot simply be multiplied with the selected factor since the performance of the factor Index depends on each individual daily performance of the Reference Instrument. If the performance of a factor Index is compared against that of the Reference Instrument over a period longer than one day, the observed price trends will deviate not only for prices of the Reference Instrument which constantly rise or fall, but also for those which fluctuate.

## 2.1 Index definitions

The definitions below shall apply for the purposes of this Index description.

"**Barrier**" indicates the maximum permitted negative (in case of a long Index) or positive (in case of a short Index) change in price of the Reference Instrument compared to its most recent Fixing Value before an intraday Index adjustment takes place. In this Index, indicated by parameter P, the Barrier is +30%.

"**Derivatives Exchange**" are the main exchanges where options or futures of the Reference Instrument are traded.

"**Dividend**" shall mean the Dividend of the company, exclusive of which the Reference Instrument is traded on the reference exchange on the Ex-Dividend day.

"**Ex-Dividend Date**" means the Trading Day on which the Reference Instrument trades "Ex-Dividend" on the Reference Exchange.

"**Extraordinary Adjustment Event**" means any of the following events as they relate to the Reference Instrument:

- a. capital increase by way of the issue of new shares in return for contributions in cash or in kind with the grant of a subscription right, capital increase from retained earnings, issue of securities with option or conversion rights into shares, distribution of special Dividends, share split, subdivision, consolidation or reclassification of the shares
- b. probable or definitive discontinuation of stock exchange trading in the shares as a result of a merger by absorption or new company formation or takeover of the company of the Reference Instrument by another company
- c. spin-off of a division of the company in such a manner that a new independent company is created or the division is absorbed by a third company
- d. any other event, which the Index Calculation Agent may at its reasonable discretion deem to have a comparable or similar impact on the calculation of the Factor Index in the event no adjustments were to be made

In case of securities representing shares (ADR/GDR) as the Reference Instrument, the following provisions shall additionally apply:

- e. any modification of the terms and conditions of the securities representing shares by their issuers
- f. discontinuation of the stock exchange quotation of the securities representing shares or of the shares underlying them
- g. insolvency of the issuer of the securities representing shares
- h. end of the term of the securities representing shares as a result of termination by the issuer of the securities representing shares

For ADRs and GDRs or any other securities representing shares and other Dividend-bearing securities (e.g. profit participation rights, participation certificates) as the Reference Instrument the provisions specified under (a) to (c) shall apply mutatis mutandis with respect to the Reference Instrument and the issuing company.

**"Fixing Price"** of the Reference Instrument for an Index Calculation Day is – subject to an Extraordinary Adjustment to the calculation of the Index in accordance with section 3 – the official closing price, or for Italian stocks underlyings the reference closing price (“prezzo di riferimento”) of the Reference Instrument, as determined and published for that day by the Reference Exchange. If an Index Calculation Day falls on a day which is not a Trading Day, the Fixing Price of the immediately preceding Index Calculation Day shall continue to apply. If no Fixing Price for the Reference Instrument is determined or published on a Trading Day, the Index Calculation Agent shall determine the Fixing Price of the Reference Instrument for that day on the basis of the most recent prices set for the Reference Instrument at its due discretion.

**"Index Calculation Agent"** means ICF BANK AG, Kaiserstrasse 1, 60311 Frankfurt, Germany

**"Index Calculation Day"** means every day from Monday to Friday except holidays on which the Reference Exchange is closed

**"Index Calculation Fee"** is 0.7% per annum. The Index Calculation Fee is charged each calendar day, beginning as of the Index Start Date. It is calculated on the basis of a 360-day year and the most recently calculated Index Closing Value.

**"Index Currency"** means EUR

**"Index Fixing Value"** is calculated for each Index Calculation Day by the Index Calculation Agent in accordance with section 3 of this Index description on the basis of the Reference Price (“prezzo di riferimento”) of the Reference Instrument for this Index Calculation Day and published in accordance with section 4.1 of this Index description.

**"Information Page"** means <https://icf-markets.de/>

**"Index Start Date"** means 26<sup>th</sup> August 2016

**"Index Start Value"** is 100 Index points and represents the Index Closing Value on Index Calculation Day T=0 for the purposes of calculating the Index in accordance with Section 3 of this document

**"Interest Rate"** means EONIA. EONIA (Euro Over Night Index Average) is a weighted average interest rate for overnight interbank money calculated act/360 by the European Central Bank since 4 January 1999 on the basis of effective turnover. If the Interest Rate is not set or published on an Index Calculation Day, the Interest Rate applied on the immediately preceding Index Calculation Day is used to calculate the Index in accordance with section 3 of this document. If the Interest Rate has neither been set nor published for ten consecutive Index Calculation Days, the Index Calculation Agent has the right and obligation to stipulate in its reasonable discretion an alternative relevant Interest Rate which has functions comparable to the previous Interest Rate.

**"Leverage"** describes the impact, that a change in the price of the Reference Instrument has on the relevant factor Index. The leverage on this Index is 2. See Lev parameter in section 3.

**“Market Disruption Event”** means each of the following events:

- a) the failure of the Reference Exchange to open for trading during its regular trading sessions
- b) the suspension or restriction of trading in the Reference Instrument on the Reference Exchange
- c) in general the suspension or restriction of trading in a Derivative of the Reference Instrument on the Derivatives Exchange

**"Reference Exchange"** means Borsa Italiana S.p.A. – LSE Group

**"Reference Instrument"** means Fiat Chrysler Automobiles N.V.

Asset Type: Ordinary Share

Currency: EUR

ISIN: NL0010877643

Bloomberg symbol: FCA IM EQUITY

**"Reference Instrument Price"** corresponds at any time during the trading period on the Reference Exchange to the price of the Reference Instrument

**"Trading Day"** means every day on which the Reference Instrument is traded on the Reference Exchange.

**"VWAP"** means volume weighted average price of the Reference Instrument. See section 3.1 of this document

**"Withholding-Tax"** shall be 26.00% on the Index Start Date. The Index Calculation Agent may change the Withholding-Tax Factor at its due discretion on any Index Calculation Day with prospective effect, if the relevant tax law applicable to the Index Calculation Agent changes, resulting in a change in the amount of the – after tax – Dividend virtually accruing to it. Check <https://icf-markets.de/> for current Withholding-Tax value.

## 2.2 Daily chaining

As mentioned in Section 2, the value of a factor Index is calculated by applying, on a daily basis, the corresponding leverage- and financial component to the daily change in the Reference Instrument. The Index is calculated on the basis of the change in the price of the Reference Instrument as compared to its most recent Fixing Price, which, in this case, will be represented by the “prezzo di riferimento” which is calculated at closing and published by the Reference Exchange. Thus every new fixing price for the Reference Instrument represents a new reference price, which serves as the basis for calculating the percentage variation in underlying Fixing Price and apply the daily constant leverage factor, according to the index calculation methodology described in the present document, in order to derive the fixing value of the index. This daily adjustment of the factor Index is automatic and is known as chaining.

### 3. Index calculation

The Index will be calculated on the basis of the following formula:

Leverage Component:

$$Index_T \times \left( -Lev \times \frac{Stock_t}{(Stock_T - (Div_t)) \times RFactorSS_t} + (Lev + 1) \right)$$

Financial Component:

$$Index_T \times \left( \frac{(Lev + 1) \times IR_T - ICF_T}{360} \right) \times D_{t,T}$$

Index Calculation:

$$Index_t = Leverage Component_t + Financial Component_t$$

The calculation formula is using the following parameters:

Parameter	Description
t	Represents the current calculation date
T	Represents the last fixing date, which is the date of the last closing price, represented by the “prezzo di riferimento”, as calculated and published by the Reference Exchange
Index <sub>t</sub>	Current Index level at calculation time t
Index <sub>T</sub>	Recent Index fixing level as described in Section 2.2
Stock <sub>t</sub>	Last traded share price of the Reference Instrument, traded on the Reference Exchange at calculation time t
Stock <sub>T</sub>	Last Reference Instrument Fixing Price as described in Section 2.2
D <sub>t,T</sub>	Number of calendar days between T and t
IR <sub>T</sub>	EONIA Rate (Euro Over Night Index Average), describes an overnight-loanrate that is determined by the European Central Bank. The value of IR <sub>T</sub> always equates the EONIA Rate of date T
ICF <sub>T</sub>	Index calculation fee which is charged by the Index Calculation Agent
Lev	Leverage (see definition in section 2.1)
Div <sub>t</sub>	Dividend correction, that equates the gross Dividend amount paid by the Reference Instrument on Ex-Dividend date t. If date t is not an Ex-Dividend date, this parameter has a value of 0. See Section 3.2 for more information
RFactorSS <sub>t</sub>	Represents the factor of a potential corporate action event of the Reference Instrument on date t. See Section 3.3 for more information. If date t is not a corporate action date, this parameter has a value of 1

### 3.1 Intraday rebalancing

If, for instance, the price of the Reference Instrument gains a 50% daily increase, the value of a factor short Index with a factor of 2 would have to drop to zero (total loss) since the factor Index would also double its losses. In order to counteract a total loss, factor indices feature a Barrier (represented by the parameter P), which triggers an intraday Index adjustment if the Reference Instrument reaches or falls below it.

In the event of an intraday rebalancing, new fixing values for the Index and the Reference Instrument calculated and therefore, a new day is simulated from which the ongoing calculation continues. The consequence is that the negative daily return for the factor Index is attenuated. However, if the calculated price of the index is significantly low, this can result in an intraday loss which, in economic terms, closely approximates a total loss.

The condition for triggering an intraday adjustment is as follows:

$$\frac{Stock_t}{((Stock_T - Div_t) \times RFactorSS_t)} - 1 \geq P$$

Whereby the parameter P represents the Barrier.

In this case, the value of P is +30% (+0.3).

In case of an intraday adjustment, the calculation of the Index is interrupted for half an hour (30 minutes) period, excluding the time of any Market Disruption Event. For this half an hour trading time calculation break, a volume weighted average price (VWAP) will be defined. The determined VWAP will then be used as new fixing value for the Reference Instrument in the continued calculation. Given the case, a rebalancing event occurs less than 30 minutes before market close, the calculation period for the VWAP will be prolonged into the next trading day, until the 30 minutes trading time window from the past trading day is completed. Note that the half an hour trading time window refers to 30 minutes of trading on the Reference Exchange. If the Reference Instrument is, for example, currently suspended, this does not add to the 30 minutes of trading time. Then the VWAP time will be prolonged until 30 minutes of trading time is reached.

For example, if an intraday adjustment is triggered at 03:28:15 p.m. CET (given that the Index calculation continues until 05:35:00 p.m. CET), the ongoing calculation of the Index immediately stops. The VWAP relevant calculation time then will include the timespan between 03:29:00 p.m. CET and 03:58:59 p.m. CET. At 03:59:00 p.m. CET the new fixing values for the Index and the Reference Instrument are calculated. Afterwards, the ongoing calculation will continue with the new fixing values.

For example, if an intraday adjustment is triggered at 05:21:15 p.m. CET (given that the Index calculation continues until 05:35:00 p.m. CET), the ongoing calculation of the Index immediately stops. The VWAP relevant calculation time then will include the timespan between 05:22:00 p.m. CET and 09:16:59 a.m. CET of the following trading day. At 09:17:00 a.m. CET the new fixing values for the Index and the Reference Instrument are calculated. Afterwards, the ongoing calculation will continue with the new fixing values. In case of an overnight rebalancing, there will not be the regular fixing described in Section 2.2

After the 30 minute calculation break, new fixing values will be calculated as follows:

### **New Index Fixing value**

Leverage Component<sup>new</sup>:

$$Index_T \times \left( -Lev \times \frac{VWAP}{(Stock_T - (Div_t)) \times RFactorSS_t} + (Lev + 1) \right)$$

Financial Component<sup>new</sup>:

$$Index_T \times \left( \frac{(Lev + 1) \times IR_T - ICF_T}{360} \right) \times D_{t,T}$$

Index Fixing value<sup>new</sup>:

$$Index_T^{new} = Leverage\ Component^{new} + Financial\ Component^{new}$$

### **New Reference Instrument Fixing value**

$$Stock_T^{new} = VWAP$$

After the calculation of the new fixing values, the suffix “new” shall be dropped from all relevant quantities, and the ongoing calculation of the new index values continues as described in Section 3.

Note the following: While calculating the new fixing values,  $D_{t,T}$  is still the difference in days between the actual calculation date  $t$  and the recent most fixing date  $T$ . After the ongoing fixing is completed, date  $T$  becomes the same date as the actual calculation date and therefore, when continuing the ongoing calculation, the value of  $D_{t,T}$  is 0.

Also note, that after an intraday adjustment, a potential correction of the Index level because of Dividend or corporate action (See Section 3.2 and Section 3.3 for more information) will be set to 0 for Parameter  $Div_t$  and 1 for Parameter  $RFactorSS_t$  after calculation of the new fixing values, because the newly calculated fixing is, for example, already Ex-Dividend.

## **3.2 Dividend Index Adjustments**

In case date  $t$  is an Ex-Dividend day, a Dividend Index Adjustment is triggered. Therefore, the index calculation described in Section 3 will be influenced by the parameters  $Div_t$  and  $WT$ . While the parameter  $Div_t$  represents the correction of the Reference Underlying price by the paid Dividend, the parameter  $WT$  represents the withholding-tax, being payed as a government requirement for the payer of an item of income to withhold or deduct tax from the payment, and pay that tax to the government.

If date  $t$  is not an Ex-Dividend day, the value of the Parameters  $Div_t$  and  $WT$  is 0.

### 3.3 Extraordinary Index Adjustments

On date  $t$ , for any “unforeseeable cases” not described under the present index rule, an extraordinary Index Adjustment is triggered. The Index Calculation Agent will generally modify the Index calculation by correcting at its due discretion the relevant Fixing Price for the Reference Instrument on Index Calculation Day  $t$ , taking into account all available information and client’s best interest, in order to factor into the Index calculation, the adjustments made on the Reference Exchange to the Reference Instrument traded there.

The Index Calculation Agent may also adapt the Index Calculation in some other manner if it deems this necessary in its due discretion in order to account for differences between this Factor Index and the Reference Instrument. Such adjustments may in particular relate to the Reference Instrument being replaced by a basket of shares, securities representing shares or other Dividend-bearing securities or in the event of a merger by an appropriate number of shares, securities representing shares or other Dividend-bearing securities issued by the absorbing or newly formed company and where necessary stipulating a different Reference Exchange and Reference Instrument Price.

The list of extraordinary adjustment events listed in section 2.1 is not exhaustive.

A deciding factor is whether the Derivatives Exchange considers it expedient to adjust the contract size, an underlying or involving the relevant Reference Exchange which determines the price of the Reference Instrument. If neither futures nor options linked to the Reference Instrument are traded on the Derivatives Exchange, the adjustment shall be made in such a manner in which the Derivatives Exchange would do so if corresponding futures or options were traded there. If doubts arise in this event relating to the application of the modification rules of the Derivatives Exchange, the Index Calculation Agent shall decide such questions in its reasonable discretion. The rules and regulations of the Derivatives Exchange shall apply in addition to the provisions set out above.

In the event the company issuing the Reference Instrument underlying the Factor Index is liquidated or insolvency, winding-up or similar proceedings are instituted against the assets of the company or of the possibility that such proceedings will be opened becomes known, the price of the Reference Instrument will continue to be factored into the Index Calculation for as long as the price of the Reference Instrument continues to be determined on the Reference Exchange. However, if pricing in such a case is temporarily or permanently suspended, the leverage component remains unchanged and the Index Level will be determined solely on the basis of the other components of the Index formula.

Therefore, the Index calculation described in Section 3 will be influenced by the parameter  $R_{FactorSS_t}$ . For example, if a split takes place with a stock split rate of 0.5, the Reference Instrument loses half of its value on date  $t$ . Therefore, to retain the Index level uninfluenced by the loss of value caused by the split, the parameter  $R_{FactorSS_t}$  has to hold a value of 0.5. In case date  $t$  holds an Extraordinary Index Adjustment and also a Corporate Action event, the Extraordinary Index Adjustment will always be performed before taking the Corporate Action event into calculation.

If date  $t$  is not an Ex-Dividend day, the value of the Parameters  $Div_t$  and  $WT$  is 0.

The Index Calculation Agent defines in its reasonable discretion the adjustment method to be applied and published it by the means of a notice on <https://icf-markets.de/>.

### 3.4 Index Split / Reverse Split Adjustments

On the 1<sup>st</sup> Friday of each month, the Index is reviewed regarding qualification for an Index Split or a Reverse Split. If the 1<sup>st</sup> Friday of the month is not a trading day, the following trading day after the 1<sup>st</sup> Friday of the month will be used for review.

If, on this trading day, the most recent Index fixing value has reached a level above 1000 Points, the Index qualifies for an Index split. If the Index has reached a level below 10, the Index qualifies for an Index Reverse Split.

In case of a qualification for an Index Split or an Index reverse split, the Index fixing value of the 3<sup>rd</sup> Friday, that is used for the ongoing calculation of the Index on the next trading day, will be unscaled, but will then be divided by 10 in case of Index Split (or multiplied by 10 for a reverse split) during the ongoing Index calculation of the next trading day. Therefore, the fixing value of the Index of the trading day after the 3<sup>rd</sup> Friday will be a scaled fixing value.

Modification of Index fixing value during a Split

$$Index_T = \frac{Index_T}{10}$$

Modification of Index fixing value during a Reverse-Split

$$Index_T = Index_T \times 10$$

In case the 3<sup>rd</sup> Friday of the month is not a trading day, the implementation will take place on the following trading day after the 3<sup>rd</sup> Friday of the month. Respectively, the Index fixing value of the next trading day after the 3<sup>rd</sup> Friday, that is used for the ongoing calculation of the Index on the second trading day after the 3<sup>rd</sup> Friday, will be divided by 10 in case of Index split (or multiplied by 10 for a reverse split) during the ongoing calculation of the Index. Therefore, the fixing value of the Index of the second trading day after the 3<sup>rd</sup> Friday will be the newly scaled fixing value.

### 3.5 Impossibility to complete intraday rebalancing:

In case the Index fixing value would become negative after an intraday rebalancing event, the Index level will be fixed at 0.0001. This Index level will continue to be broadcasted for 4 weeks after the reset occurred. Subsequently the Index will be discontinued.

The Index fixing value will become negative after an intraday rebalancing event, if the obtained VWAP (see Section 3.1) is significantly lower, so that the calculated Index fixing value will be negative and therefore, cannot reach a positive value anytime in the future.

#### Example:

Given the most recent fixing of the Reference Instrument  $Stock_T$  has a value of 100. Date  $t$  is not an Ex-Dividend day neither a corporate action date. The most recent calculated fixing value of the Index is 400 Points. During the 1-hour observation period calculated VWAP is 140. The leverage Factor is 2.

Calculating the Index fixing value (leaving aside the financial component):

$$Index_T = Index_T \times \left( -Lev \times \frac{VWAP}{(Stock_T - Div_t) \times RFactorSS_t} + (Lev + 1) \right)$$
$$Index_T = 400 \times \left( -2 \times \frac{140}{(100 - (0)) \times 1} + (2 + 1) \right) = 80$$

The newly calculated Index fixing is a positive value.

Now given the same values, except the value of the calculated VWAP, which is 180.

Calculating the Index fixing value (leaving aside the financial component):

$$Index_T = Index_T \times \left( -Lev \times \frac{VWAP}{(Stock_T - Div_t) \times RFactorSS_t} + (Lev + 1) \right)$$
$$Index_T = 400 \times \left( 2 \times \frac{180}{(100 - (0)) \times 1} + (2 + 1) \right) = -240$$

The newly calculated Index fixing value is negative and can therefore no longer become positive.

## 4. Index parameters

Parameter	Value
Index-ISIN	DE000A2BNM18
Index-WKN	A2BNM1
Reuters-RIC	.ICFFCAS2
Index-Name	Fiat Chrysler Automobiles N.V. Leva 2 Short Daily Gross Return EUR
Index-Type	Gross Return
Index-Leverage	2
Index-Currency	EUR
Index-Starting Value	100 Points
Index-Starting Date	26.08.2016
Index-Starting Time	09:00 a.m. CET
Index-Ending Time	05:35 p.m. CET
Index-Calculation Fee	0.7% p.a.
Index-Withholding Tax	26.00% (Timestamp: 18.08.2016)
Barrier	+30%
Reference Instrument-ISIN	NL0010877643
Reference Instrument-Name	Fiat Chrysler Automobiles N.V., ordinary share

### 4.1 Publications

ICF BANK AG publishes the Index on its website at [www.icf-markets.de](http://www.icf-markets.de) and on Reuters. ICF BANK AG also publishes all information it deems relevant to the current calculation of the Index on its website.

### 4.2 Prices and frequency of Index calculation

ICF BANK AG calculates the Index each exchange trading day on the Reference Exchange, taking into account the last traded share price of the Reference Instrument, traded on the Reference Exchange at calculation time  $t$ . If no last traded share price is available during the calculation period, the Index is calculated using the most recently available last traded share price.

The Index is calculated each stock exchange day at a minimum of once per minute between 09:00 a.m. CET and 05:35 p.m. CET, except in the case of disruptions in ICF BANK AG's data or price feeds which prevent ICF BANK AG from calculating and/or publishing the Index. ICF BANK AG will promptly make any corrections to the Index deemed necessary and publish it on its website at [www.icf-markets.de](http://www.icf-markets.de) and on Reuters.

The Index is calculated in **points**.

## **5. Authorisation/licences**

Use of the Index as an underlying for derivative financial products must be authorised by separate agreement with the ICF BANK AG.

## **6. Rounding**

If the Index is below 10 Points, the Index will be rounded to four decimal points.

If the Index is above or equal 10 Points and below 100 Points, the Index will be rounded to Three decimal points. If the Index is equal or above 100 Points, the Index will be rounded to two decimal points.

## **7. Interruption or suspension of trading**

The Index is not calculated in the event a Market Disruption Event occurs.

## **8. Annex**

Published by / Contact

ICF BANK AG  
Wertpapierhandelsbank  
Kaiserstrasse 1  
60311 Frankfurt am Main  
Germany

customized.indices@icfbank.de  
Phone +49 69 92877-0



## ***Index Methodology***

***Intesa Sanpaolo S.p.A.  
Leva 2 Long Daily Net Return EUR***

*Timestamp: 02<sup>nd</sup> September 2016*

## Contents

1. General information .....	3
2. Description and functioning.....	4
2.1 Index definitions .....	5
2.2 Daily chaining.....	7
3. Index calculation.....	8
3.1 Intraday rebalancing.....	9
3.2 Dividend Index adjustments.....	10
3.3 Extraordinary Index adjustments .....	11
3.4 Index split / reverse split adjustments .....	12
3.5 Impossibility to complete intraday rebalancing: .....	13
4. Index parameters.....	14
4.1 Publications.....	14
4.2 Prices and frequency of Index calculation .....	14
5. Authorisation/licences.....	15
6. Rounding.....	15
7. Interruption or suspension of trading .....	15
8. Annex .....	15

## 1. General information

This Index Methodology outlines the general methodology used to calculate the Intesa Sanpaolo S.p.A. Leva 2 Long Daily Net Return EUR (hereinafter: the "Index"). It sets forth the parameters, composition and calculation of the Index as well as the relevant criteria in this respect. ICF BANK AG exercises the utmost diligence when calculating and publishing the Index, and in implementing the criteria set out in this Methodology.

ICF BANK AG neither warrants nor guarantees the accuracy of the Index or the parameters Reference Instrument its composition and calculation, nor does it assume any liability for losses resulting from the flawed configuration or calculation of the Index or any other ratios derived therefrom. ICF BANK AG is under no obligation to notify third parties, including investors and/or financial intermediaries, of any errors or omissions pertaining to the Index.

ICF BANK AG publishes the Index on its website at [www.icf-markets.de](http://www.icf-markets.de). Publication of the Index constitutes neither investment advice nor a recommendation issued by ICF BANK AG to buy, sell or hold a given financial product. Specifically, the composition and calculation of the Index in no way represent a recommendation issued by ICF BANK AG to buy or sell individual, several or all Reference Instruments. This information does not constitute financial analysis within the meaning of § 34 b of the German Securities Trading Act (*Wertpapierhandelsgesetz*, "WpHG").

The statements contained in the following provide information relating to the composition and calculation of the Index.

The Index is calculated and published by ICF BANK AG. All rights to this Index are reserved to ICF BANK AG.

### **Index Details:**

Index Name: Intesa Sanpaolo S.p.A. Leva 2 Long Daily Net Return EUR

ISIN: DE000A2BNNB8

WKN: A2BNNB

REUTERS-RIC: .ICFISPL2

Reference Instrument: Intesa Sanpaolo S.p.A., common shares

Reference Instrument ISIN: IT0000072618

Index Calculation Agent: ICF BANK AG, Kaiserstrasse 1, 60311 Frankfurt, Germany

Information Page: <https://icf-markets.de/>

## 2. Description and functioning

The Index is a factor Index. A factor Index uses a constant factor to track the daily percentage change in the market price of an Reference Instrument (e.g., an equity, an Index or a commodity) as compared to the most recent Fixing Price (as defined in section 2.1) of that Reference Instrument. The factor defines in which direction (whether the same or inverse) and what degree of leverage the factor Index reflects the daily price change of the Reference Instrument. In this case, the Index Reference Instrument is represented by the ordinary share of Intesa Sanpaolo S.p.A, traded on the Reference Exchange, as defined in Section 2.1.

To calculate the increase or decrease of the Index, a leverage- and a financing-component is used.

The leverage component reflects the change in price of the Reference Instrument between two Fixing Prices and transfers this movement (either positive or negative) onto the Index by multiplying the percentage of change with the assigned leverage. Thereby, a disproportionate effect on the value of the Index occurs. This leverage effect inherits the risk of an over proportional capital loss (“downside risk”).

For example: (excluding the financial component and events like dividends, corporate actions, etc.)

If a factor long Index has a factor of 2:

- a 5% increase in the price of the Reference Instrument (as compared to the latest Fixing Price), will result in the value of the Index increasing by  $2 \times 5\%$ .
- a 5% decrease in the price of the Reference Instrument (as compared to the latest Fixing Price), will result in the value of the Index decreasing by  $2 \times 5\%$ .

The financial component contains the costs of borrowing money at a one-day rate (EONIA Rate, see Section 3 for more information) increased by a per annum rate (ICF Rate) that reflects the Index calculation fee.

The Index will be continuously calculated during the Reference Instrument trading hours on the Reference Exchange by the Index Calculation Agent. This means, that the Index will be re-calculated at every change in price of the Reference Instrument. The Index Calculation Agent will charge an annual fee of 0.7% p.a., which will be deducted daily (based on a year comprising 360 days), during the calculation of the Index.

For periods longer than one day, the compounding effect shall be taken into account. Indeed, returns on the Reference Instrument cannot simply be multiplied with the selected factor since the performance of the factor Index depends on each individual daily performance of the Reference Instrument. If the performance of a factor Index is compared against that of the Reference Instrument over a period longer than one day, the observed price trends will deviate not only for prices of the Reference Instrument which constantly rise or fall, but also for those which fluctuate.

## 2.1 Index definitions

The definitions below shall apply for the purposes of this Index description.

"**Barrier**" indicates the maximum permitted negative (in case of a long Index) or positive (in case of a short Index) change in price of the Reference Instrument compared to its most recent Fixing Value before an intraday Index adjustment takes place. In this Index, indicated by parameter P, the Barrier is -30%.

"**Derivatives Exchange**" are the main exchanges where options or futures of the Reference Instrument are traded.

"**Dividend**" shall mean the Dividend of the company, exclusive of which the Reference Instrument is traded on the reference exchange on the Ex-Dividend day.

"**Ex-Dividend Date**" means the Trading Day on which the Reference Instrument trades "Ex-Dividend" on the Reference Exchange.

"**Extraordinary Adjustment Event**" means any of the following events as they relate to the Reference Instrument:

- a. capital increase by way of the issue of new shares in return for contributions in cash or in kind with the grant of a subscription right, capital increase from retained earnings, issue of securities with option or conversion rights into shares, distribution of special Dividends, share split, subdivision, consolidation or reclassification of the shares
- b. probable or definitive discontinuation of stock exchange trading in the shares as a result of a merger by absorption or new company formation or takeover of the company of the Reference Instrument by another company
- c. spin-off of a division of the company in such a manner that a new independent company is created or the division is absorbed by a third company
- d. any other event, which the Index Calculation Agent may at its reasonable discretion deem to have a comparable or similar impact on the calculation of the Factor Index in the event no adjustments were to be made

In case of securities representing shares (ADR/GDR) as the Reference Instrument, the following provisions shall additionally apply:

- e. any modification of the terms and conditions of the securities representing shares by their issuers
- f. discontinuation of the stock exchange quotation of the securities representing shares or of the shares underlying them
- g. insolvency of the issuer of the securities representing shares
- h. end of the term of the securities representing shares as a result of termination by the issuer of the securities representing shares

For ADRs and GDRs or any other securities representing shares and other Dividend-bearing securities (e.g. profit participation rights, participation certificates) as the Reference Instrument the provisions specified under (a) to (c) shall apply mutatis mutandis with respect to the Reference Instrument and the issuing company.

**"Fixing Price"** of the Reference Instrument for an Index Calculation Day is – subject to an Extraordinary Adjustment to the calculation of the Index in accordance with section 3 – the official closing price, or for Italian stocks underlyings the reference closing price (“prezzo di riferimento”) of the Reference Instrument, as determined and published for that day by the Reference Exchange. If an Index Calculation Day falls on a day which is not a Trading Day, the Fixing Price of the immediately preceding Index Calculation Day shall continue to apply. If no Fixing Price for the Reference Instrument is determined or published on a Trading Day, the Index Calculation Agent shall determine the Fixing Price of the Reference Instrument for that day on the basis of the most recent prices set for the Reference Instrument at its due discretion.

**"Index Calculation Agent"** means ICF BANK AG, Kaiserstrasse 1, 60311 Frankfurt, Germany

**"Index Calculation Day"** means every day from Monday to Friday except holidays on which the Reference Exchange is closed

**"Index Calculation Fee"** is 0.7% per annum. The Index Calculation Fee is charged each calendar day, beginning as of the Index Start Date. It is calculated on the basis of a 360-day year and the most recently calculated Index Closing Value.

**"Index Currency"** means EUR

**"Index Fixing Value"** is calculated for each Index Calculation Day by the Index Calculation Agent in accordance with section 3 of this Index description on the basis of the Reference Price (“prezzo di riferimento”) of the Reference Instrument for this Index Calculation Day and published in accordance with section 4.1 of this Index description.

**"Information Page"** means <https://icf-markets.de/>

**"Index Start Date"** means 26<sup>th</sup> August 2016

**"Index Start Value"** is 100 Index points and represents the Index Closing Value on Index Calculation Day T=0 for the purposes of calculating the Index in accordance with Section 3 of this document

**"Interest Rate"** means EONIA. EONIA (Euro Over Night Index Average) is a weighted average interest rate for overnight interbank money calculated act/360 by the European Central Bank since 4 January 1999 on the basis of effective turnover. If the Interest Rate is not set or published on an Index Calculation Day, the Interest Rate applied on the immediately preceding Index Calculation Day is used to calculate the Index in accordance with section 3 of this document. If the Interest Rate has neither been set nor published for ten consecutive Index Calculation Days, the Index Calculation Agent has the right and obligation to stipulate in its reasonable discretion an alternative relevant Interest Rate which has functions comparable to the previous Interest Rate.

**"Leverage"** describes the impact, that a change in the price of the Reference Instrument has on the relevant factor Index. The leverage on this Index is 2. See Lev parameter in section 3.

**“Market Disruption Event”** means each of the following events:

- a) the failure of the Reference Exchange to open for trading during its regular trading sessions
- b) the suspension or restriction of trading in the Reference Instrument on the Reference Exchange
- c) in general the suspension or restriction of trading in a Derivative of the Reference Instrument on the Derivatives Exchange

"**Reference Exchange**" means Borsa Italiana S.p.A. – LSE Group

"**Reference Instrument**" means Intesa Sanpaolo S.p.A.

Asset Type: Ordinary Share

Currency: EUR

ISIN: IT0000072618

Bloomberg symbol: ISP IM EQUITY

"**Reference Instrument Price**" corresponds at any time during the trading period on the Reference Exchange to the price of the Reference Instrument

"**Trading Day**" means every day on which the Reference Instrument is traded on the Reference Exchange.

"**VWAP**" means volume weighted average price of the Reference Instrument. See section 3.1 of this document

"**Withholding-Tax**" shall be 26.00% on the Index Start Date. The Index Calculation Agent may change the Withholding-Tax Factor at its due discretion on any Index Calculation Day with prospective effect, if the relevant tax law applicable to the Index Calculation Agent changes, resulting in a change in the amount of the – after tax – Dividend virtually accruing to it. Check <https://icf-markets.de/> for current Withholding-Tax value.

## 2.2 Daily chaining

As mentioned in Section 2, the value of a factor Index is calculated by applying, on a daily basis, the corresponding leverage- and financial component to the daily change in the Reference Instrument. The Index is calculated on the basis of the change in the price of the Reference Instrument as compared to its most recent Fixing Price, which, in this case, will be represented by the "prezzo di riferimento" which is calculated at closing and published by the Reference Exchange. Thus every new fixing price for the Reference Instrument represents a new reference price, which serves as the basis for calculating the percentage variation in underlying Fixing Price and apply the daily constant leverage factor, according to the index calculation methodology described in the present document, in order to derive the fixing value of the index. This daily adjustment of the factor Index is automatic and is known as chaining.

### 3. Index calculation

The Index will be calculated on the basis of the following formula:

Leverage Component:

$$Index_T \times \left( Lev \times \frac{Stock_t}{(Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t} - (Lev - 1) \right)$$

Financial Component:

$$Index_T \times \left( \frac{(Lev - 1) \times IR_T + ICF_T}{360} \right) \times D_{t,T}$$

Index Calculation:

$$Index_t = Leverage Component_t - Financial Component_t$$

The calculation formula is using the following parameters:

Parameter	Description
t	Represents the current calculation date
T	Represents the last fixing date, which is the date of the last closing price, represented by the “prezzo di riferimento”, as calculated and published by the Reference Exchange
Index <sub>t</sub>	Current Index level at calculation time t
Index <sub>T</sub>	Recent Index fixing level as described in Section 2.2
Stock <sub>t</sub>	Last traded share price of the Reference Instrument, traded on the Reference Exchange at calculation time t
Stock <sub>T</sub>	Last Reference Instrument Fixing Price as described in Section 2.2
D <sub>t,T</sub>	Number of calendar days between T and t
IR <sub>T</sub>	EONIA Rate (Euro Over Night Index Average), describes an overnight-loanrate that is determined by the European Central Bank. The value of IR <sub>T</sub> always equates the EONIA Rate of date T
ICF <sub>T</sub>	Index calculation fee which is charged by the Index Calculation Agent
Lev	Leverage (see definition in section 2.1)
Div <sub>t</sub>	Dividend correction, that equates the gross Dividend amount paid by the Reference Instrument on Ex-Dividend date t. If date t is not an Ex-Dividend date, this parameter has a value of 0. See Section 3.2 for more information
RFactorSS <sub>t</sub>	Represents the factor of a potential corporate action event of the Reference Instrument on date t. See Section 3.3 for more information. If date t is not a corporate action date, this parameter has a value of 1
WT	Withholding-Tax, that is subtracted from the Dividend correction in case date t is an Ex-Dividend date. See section 3.2 for more information

### 3.1 Intraday rebalancing

If, for instance, the price of the Reference Instrument suffers a 50% daily loss, the value of a factor long Index with a factor of 2 would have to drop to zero (total loss) since the factor Index would also double its losses. In order to counteract a total loss, factor indices feature a Barrier (represented by the parameter P), which triggers an intraday Index adjustment if the Reference Instrument reaches or falls below it.

In the event of an intraday rebalancing, new fixing values for the Index and the Reference Instrument calculated and therefore, a new day is simulated from which the ongoing calculation continues. The consequence is that the negative daily return for the factor Index is attenuated. However, if the calculated price of the index is significantly low, this can result in an intraday loss which, in economic terms, closely approximates a total loss.

The condition for triggering an intraday adjustment is as follows:

$$\frac{Stock_t}{\left( (Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t \right)} - 1 \leq P$$

Whereby the parameter P represents the Barrier.

In this case, the value of P is -30% (-0.3).

In case of an intraday adjustment, the calculation of the Index is interrupted for half an hour (30 minutes) period, excluding the time of any Market Disruption Event. For this half an hour trading time calculation break, a volume weighted average price (VWAP) will be defined. The determined VWAP will then be used as new fixing value for the Reference Instrument in the continued calculation. Given the case, a rebalancing event occurs less than 30 minutes before market close, the calculation period for the VWAP will be prolonged into the next trading day, until the 30 minutes trading time window from the past trading day is completed. Note that the half an hour trading time window refers to 30 minutes of trading on the Reference Exchange. If the Reference Instrument is, for example, currently suspended, this does not add to the 30 minutes of trading time. Then the VWAP time will be prolonged until 30 minutes of trading time is reached.

For example, if an intraday adjustment is triggered at 03:28:15 p.m. CET (given that the Index calculation continues until 05:35:00 p.m. CET), the ongoing calculation of the Index immediately stops. The VWAP relevant calculation time then will include the timespan between 03:29:00 p.m. CET and 03:58:59 p.m. CET. At 03:59:00 p.m. CET the new fixing values for the Index and the Reference Instrument are calculated. Afterwards, the ongoing calculation will continue with the new fixing values.

For example, if an intraday adjustment is triggered at 05:21:15 p.m. CET (given that the Index calculation continues until 05:35:00 p.m. CET), the ongoing calculation of the Index immediately stops. The VWAP relevant calculation time then will include the timespan between 05:22:00 p.m. CET and 09:16:59 a.m. CET of the following trading day. At 09:17:00 a.m. CET the new fixing values for the Index and the Reference Instrument are calculated. Afterwards, the ongoing calculation will continue with the new fixing values. In case of an overnight rebalancing, there will not be the regular fixing described in Section 2.2

After the 30 minute calculation break, new fixing values will be calculated as follows:

### **New Index Fixing value**

Leverage Component<sup>new</sup>:

$$Index_T \times \left( Lev \times \frac{VWAP}{(Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t} - (Lev - 1) \right)$$

Financial Component<sup>new</sup>:

$$Index_T \times \left( \frac{(Lev - 1) \times IR_T + ICF_T}{360} \right) \times D_{t,T}$$

Index Fixing value<sup>new</sup>:

$$Index_T^{new} = Leverage\ Component^{new} - Financial\ Component^{new}$$

### **New Reference Instrument Fixing value**

$$Stock_T^{new} = VWAP$$

After the calculation of the new fixing values, the suffix “new” shall be dropped from all relevant quantities, and the ongoing calculation of the new index values continues as described in Section 3.

Note the following: While calculating the new fixing values,  $D_{t,T}$  is still the difference in days between the actual calculation date  $t$  and the recent most fixing date  $T$ . After the ongoing fixing is completed, date  $T$  becomes the same date as the actual calculation date and therefore, when continuing the ongoing calculation, the value of  $D_{t,T}$  is 0.

Also note, that after an intraday adjustment, a potential correction of the Index level because of Dividend or corporate action (See Section 3.2 and Section 3.3 for more information) will be set to 0 for Parameter  $Div_t$  and 1 for Parameter  $RFactorSS_t$  after calculation of the new fixing values, because the newly calculated fixing is, for example, already Ex-Dividend.

## **3.2 Dividend Index Adjustments**

In case date  $t$  is an Ex-Dividend day, a Dividend Index Adjustment is triggered. Therefore, the index calculation described in Section 3 will be influenced by the parameters  $Div_t$  and  $WT$ . While the parameter  $Div_t$  represents the correction of the Reference Underlying price by the paid Dividend, the parameter  $WT$  represents the withholding-tax, being payed as a government requirement for the payer of an item of income to withhold or deduct tax from the payment, and pay that tax to the government.

If date  $t$  is not an Ex-Dividend day, the value of the Parameters  $Div_t$  and  $WT$  is 0.

### 3.3 Extraordinary Index Adjustments

On date  $t$ , for any “unforeseeable cases” not described under the present index rule, an extraordinary Index Adjustment is triggered. The Index Calculation Agent will generally modify the Index calculation by correcting at its due discretion the relevant Fixing Price for the Reference Instrument on Index Calculation Day  $t$ , taking into account all available information and client’s best interest, in order to factor into the Index calculation, the adjustments made on the Reference Exchange to the Reference Instrument traded there.

The Index Calculation Agent may also adapt the Index Calculation in some other manner if it deems this necessary in its due discretion in order to account for differences between this Factor Index and the Reference Instrument. Such adjustments may in particular relate to the Reference Instrument being replaced by a basket of shares, securities representing shares or other Dividend-bearing securities or in the event of a merger by an appropriate number of shares, securities representing shares or other Dividend-bearing securities issued by the absorbing or newly formed company and where necessary stipulating a different Reference Exchange and Reference Instrument Price.

The list of extraordinary adjustment events listed in section 2.1 is not exhaustive.

A deciding factor is whether the Derivatives Exchange considers it expedient to adjust the contract size, an underlying or involving the relevant Reference Exchange which determines the price of the Reference Instrument. If neither futures nor options linked to the Reference Instrument are traded on the Derivatives Exchange, the adjustment shall be made in such a manner in which the Derivatives Exchange would do so if corresponding futures or options were traded there. If doubts arise in this event relating to the application of the modification rules of the Derivatives Exchange, the Index Calculation Agent shall decide such questions in its reasonable discretion. The rules and regulations of the Derivatives Exchange shall apply in addition to the provisions set out above.

In the event the company issuing the Reference Instrument underlying the Factor Index is liquidated or insolvency, winding-up or similar proceedings are instituted against the assets of the company or of the possibility that such proceedings will be opened becomes known, the price of the Reference Instrument will continue to be factored into the Index Calculation for as long as the price of the Reference Instrument continues to be determined on the Reference Exchange. However, if pricing in such a case is temporarily or permanently suspended, the leverage component remains unchanged and the Index Level will be determined solely on the basis of the other components of the Index formula.

Therefore, the Index calculation described in Section 3 will be influenced by the parameter  $R_{FactorSS_t}$ . For example, if a split takes place with a stock split rate of 0.5, the Reference Instrument loses half of its value on date  $t$ . Therefore, to retain the Index level uninfluenced by the loss of value caused by the split, the parameter  $R_{FactorSS_t}$  has to hold a value of 0.5. In case date  $t$  holds an Extraordinary Index Adjustment and also a Corporate Action event, the Extraordinary Index Adjustment will always be performed before taking the Corporate Action event into calculation.

If date  $t$  is not an Ex-Dividend day, the value of the Parameters  $Div_t$  and  $WT$  is 0.

The Index Calculation Agent defines in its reasonable discretion the adjustment method to be applied and published it by the means of a notice on <https://icf-markets.de/>.

### 3.4 Index Split / Reverse Split Adjustments

On the 1<sup>st</sup> Friday of each month, the Index is reviewed regarding qualification for an Index Split or a Reverse Split. If the 1<sup>st</sup> Friday of the month is not a trading day, the following trading day after the 1<sup>st</sup> Friday of the month will be used for review.

If, on this trading day, the most recent Index fixing value has reached a level above 1000 Points, the Index qualifies for an Index split. If the Index has reached a level below 10, the Index qualifies for an Index Reverse Split.

In case of a qualification for an Index Split or an Index reverse split, the Index fixing value of the 3<sup>rd</sup> Friday, that is used for the ongoing calculation of the Index on the next trading day, will be unscaled, but will then be divided by 10 in case of Index Split (or multiplied by 10 for a reverse split) during the ongoing Index calculation of the next trading day. Therefore, the fixing value of the Index of the trading day after the 3<sup>rd</sup> Friday will be a scaled fixing value.

Modification of Index fixing value during a Split

$$Index_T = \frac{Index_T}{10}$$

Modification of Index fixing value during a Reverse-Split

$$Index_T = Index_T \times 10$$

In case the 3<sup>rd</sup> Friday of the month is not a trading day, the implementation will take place on the following trading day after the 3<sup>rd</sup> Friday of the month. Respectively, the Index fixing value of the next trading day after the 3<sup>rd</sup> Friday, that is used for the ongoing calculation of the Index on the second trading day after the 3<sup>rd</sup> Friday, will be divided by 10 in case of Index split (or multiplied by 10 for a reverse split) during the ongoing calculation of the Index. Therefore, the fixing value of the Index of the second trading day after the 3<sup>rd</sup> Friday will be the newly scaled fixing value.

### 3.5 Impossibility to complete intraday rebalancing:

In case the Index fixing value would become negative after an intraday rebalancing event, the Index level will be fixed at 0.0001. This Index level will continue to be broadcasted for 4 weeks after the reset occurred. Subsequently the Index will be discontinued.

The Index fixing value will become negative after an intraday rebalancing event, if the obtained VWAP (see Section 3.1) is significantly lower, so that the calculated Index fixing value will be negative and therefore, cannot reach a positive value anytime in the future.

#### Example:

Given the most recent fixing of the Reference Instrument  $Stock_T$  has a value of 100. Date  $t$  is not an Ex-Dividend day neither a corporate action date. The most recent calculated fixing value of the Index is 400 Points. During the 1-hour observation period calculated VWAP is 60. The leverage Factor is 2.

Calculating the Index fixing value (leaving aside the financial component):

$$Index_T = Index_T \times \left( Lev \times \frac{VWAP}{(Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t} - (Lev - 1) \right)$$
$$Index_T = 400 \times \left( 2 \times \frac{60}{(100 - (0 \times (1 - 0))) \times 1} - (2 - 1) \right) = 80$$

The newly calculated Index fixing is a positive value.

Now given the same values, except the value of the calculated VWAP, which is 20.

Calculating the Index fixing value (leaving aside the financial component):

$$Index_T = Index_T \times \left( Lev \times \frac{VWAP}{(Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t} - (Lev - 1) \right)$$
$$Index_T = 400 \times \left( 2 \times \frac{20}{(100 - (0 \times (1 - 0))) \times 1} - (2 - 1) \right) = -240$$

The newly calculated Index fixing value is negative and can therefore no longer become positive.

## 4. Index parameters

Parameter	Value
Index-ISIN	DE000A2BNN A8
Index-WKN	A2BNN A
Reuters-RIC	.ICFISPL2
Index-Name	Intesa Sanpaolo S.p.A. Leva 2 Long Daily Net Return EUR
Index-Type	Net Return
Index-Leverage	2
Index-Currency	EUR
Index-Starting Value	100 Points
Index-Starting Date	26.08.2016
Index-Starting Time	09:00 a.m. CET
Index-Ending Time	05:35 p.m. CET
Index-Calculation Fee	0.7% p.a.
Index-Withholding Tax	26.00% (Timestamp: 18.08.2016)
Barrier	-30%
Reference Instrument-ISIN	IT0000072618
Reference Instrument-Name	Intesa Sanpaolo S.p.A., ordinary share

### 4.1 Publications

ICF BANK AG publishes the Index on its website at [www.icf-markets.de](http://www.icf-markets.de) and on Reuters. ICF BANK AG also publishes all information it deems relevant to the current calculation of the Index on its website.

### 4.2 Prices and frequency of Index calculation

ICF BANK AG calculates the Index each exchange trading day on the Reference Exchange, taking into account the last traded share price of the Reference Instrument, traded on the Reference Exchange at calculation time  $t$ . If no last traded share price is available during the calculation period, the Index is calculated using the most recently available last traded share price.

The Index is calculated each stock exchange day at a minimum of once per minute between 09:00 a.m. CET and 05:35 p.m. CET, except in the case of disruptions in ICF BANK AG's data or price feeds which prevent ICF BANK AG from calculating and/or publishing the Index. ICF BANK AG will promptly make any corrections to the Index deemed necessary and publish it on its website at [www.icf-markets.de](http://www.icf-markets.de) and on Reuters.

The Index is calculated in **points**.

## **5. Authorisation/licences**

Use of the Index as an underlying for derivative financial products must be authorised by separate agreement with the ICF BANK AG.

## **6. Rounding**

If the Index is below 10 Points, the Index will be rounded to four decimal points.

If the Index is above or equal 10 Points and below 100 Points, the Index will be rounded to three decimal points. If the Index is equal or above 100 Points, the Index will be rounded to two decimal points.

## **7. Interruption or suspension of trading**

The Index is not calculated in the event a Market Disruption Event occurs.

## **8. Annex**

Published by / Contact

ICF BANK AG  
Wertpapierhandelsbank  
Kaiserstrasse 1  
60311 Frankfurt am Main  
Germany

customized.indices@icfbank.de  
Phone +49 69 92877-0



## ***Index Methodology***

***Intesa Sanpaolo S.p.A.  
Leva 2 Short Daily Gross Return EUR***

*Timestamp: 02<sup>nd</sup> September 2016*

## Contents

1. General information .....	3
2. Description and functioning.....	4
2.1 Index definitions .....	5
2.2 Daily chaining.....	7
3. Index calculation.....	8
3.1 Intraday rebalancing.....	9
3.2 Dividend Index adjustments.....	10
3.3 Extraordinary Index adjustments .....	11
3.4 Index split / reverse split adjustments .....	12
3.5 Impossibility to complete intraday rebalancing: .....	13
4. Index parameters.....	14
4.1 Publications.....	14
4.2 Prices and frequency of Index calculation .....	14
5. Authorisation/licences.....	15
6. Rounding.....	15
7. Interruption or suspension of trading .....	15
8. Annex .....	15

## 1. General information

This Index Methodology outlines the general methodology used to calculate the Intesa Sanpaolo S.p.A. Leva 2 short Daily Gross Return EUR (hereinafter: the "Index"). It sets forth the parameters, composition and calculation of the Index as well as the relevant criteria in this respect. ICF BANK AG exercises the utmost diligence when calculating and publishing the Index, and in implementing the criteria set out in this Methodology.

ICF BANK AG neither warrants nor guarantees the accuracy of the Index or the parameters Reference Instrument its composition and calculation, nor does it assume any liability for losses resulting from the flawed configuration or calculation of the Index or any other ratios derived therefrom. ICF BANK AG is under no obligation to notify third parties, including investors and/or financial intermediaries, of any errors or omissions pertaining to the Index.

ICF BANK AG publishes the Index on its website at [www.icf-markets.de](http://www.icf-markets.de). Publication of the Index constitutes neither investment advice nor a recommendation issued by ICF BANK AG to buy, sell or hold a given financial product. Specifically, the composition and calculation of the Index in no way represent a recommendation issued by ICF BANK AG to buy or sell individual, several or all Reference Instruments. This information does not constitute financial analysis within the meaning of § 34 b of the German Securities Trading Act (*Wertpapierhandelsgesetz*, "WpHG").

The statements contained in the following provide information relating to the composition and calculation of the Index.

The Index is calculated and published by ICF BANK AG. All rights to this Index are reserved to ICF BANK AG.

### **Index Details:**

Index Name: Intesa Sanpaolo S.p.A. Leva 2 short Daily Gross Return EUR

ISIN: DE000A2BNNB6

WKN: A2BNNB

REUTERS-RIC: .ICFISPS2

Reference Instrument: Intesa Sanpaolo S.p.A., common shares

Reference Instrument ISIN: IT0000072618

Index Calculation Agent: ICF BANK AG, Kaiserstrasse 1, 60311 Frankfurt, Germany

Information Page: <https://icf-markets.de/>

## 2. Description and functioning

The Index is a factor Index. A factor Index uses a constant factor to track the daily percentage change in the market price of an Reference Instrument (e.g., an equity, an Index or a commodity) as compared to the most recent Fixing Price (as defined in section 2.1) of that Reference Instrument. The factor defines in which direction (whether the same or inverse) and what degree of leverage the factor Index reflects the daily price change of the Reference Instrument. In this case, the Index Reference Instrument is represented by the ordinary share of Intesa Sanpaolo S.p.A., traded on the Reference Exchange, as defined in Section 2.1.

To calculate the increase or decrease of the Index, a leverage- and a financing-component is used.

The leverage component reflects the change in price of the Reference Instrument between two Fixing Prices and transfers this movement (either positive or negative) onto the Index by multiplying the percentage of change with the assigned leverage. Thereby, a disproportionate effect on the value of the Index occurs. This leverage effect inherits the risk of an over proportional capital loss (“downside risk”).

For example: (excluding the financial component and events like dividends, corporate actions, etc.)

If a factor short Index has a factor of 2:

- a 5% increase in the price of the Reference Instrument (as compared to the latest Fixing Price), will result in the value of the Index decreasing by  $2 \times 5\%$ .
- a 5% decrease in the price of the Reference Instrument (as compared to the latest Fixing Price), will result in the value of the Index increasing by  $2 \times 5\%$ .

The financial component contains the costs of borrowing money at a one-day rate (EONIA Rate, see Section 3 for more information) increased by a per annum rate (ICF Rate) that reflects the Index calculation fee.

The Index will be continuously calculated during the Reference Instrument trading hours on the Reference Exchange by the Index Calculation Agent. This means, that the Index will be re-calculated at every change in price of the Reference Instrument. The Index Calculation Agent will charge an annual fee of 0.7% p.a., which will be deducted daily (based on a year comprising 360 days), during the calculation of the Index.

For periods longer than one day, the compounding effect shall be taken into account. Indeed, returns on the Reference Instrument cannot simply be multiplied with the selected factor since the performance of the factor Index depends on each individual daily performance of the Reference Instrument. If the performance of a factor Index is compared against that of the Reference Instrument over a period longer than one day, the observed price trends will deviate not only for prices of the Reference Instrument which constantly rise or fall, but also for those which fluctuate.

## 2.1 Index definitions

The definitions below shall apply for the purposes of this Index description.

"**Barrier**" indicates the maximum permitted negative (in case of a long Index) or positive (in case of a short Index) change in price of the Reference Instrument compared to its most recent Fixing Value before an intraday Index adjustment takes place. In this Index, indicated by parameter P, the Barrier is +30%.

"**Derivatives Exchange**" are the main exchanges where options or futures of the Reference Instrument are traded.

"**Dividend**" shall mean the Dividend of the company, exclusive of which the Reference Instrument is traded on the reference exchange on the Ex-Dividend day.

"**Ex-Dividend Date**" means the Trading Day on which the Reference Instrument trades "Ex-Dividend" on the Reference Exchange.

"**Extraordinary Adjustment Event**" means any of the following events as they relate to the Reference Instrument:

- a. capital increase by way of the issue of new shares in return for contributions in cash or in kind with the grant of a subscription right, capital increase from retained earnings, issue of securities with option or conversion rights into shares, distribution of special Dividends, share split, subdivision, consolidation or reclassification of the shares
- b. probable or definitive discontinuation of stock exchange trading in the shares as a result of a merger by absorption or new company formation or takeover of the company of the Reference Instrument by another company
- c. spin-off of a division of the company in such a manner that a new independent company is created or the division is absorbed by a third company
- d. any other event, which the Index Calculation Agent may at its reasonable discretion deem to have a comparable or similar impact on the calculation of the Factor Index in the event no adjustments were to be made

In case of securities representing shares (ADR/GDR) as the Reference Instrument, the following provisions shall additionally apply:

- e. any modification of the terms and conditions of the securities representing shares by their issuers
- f. discontinuation of the stock exchange quotation of the securities representing shares or of the shares underlying them
- g. insolvency of the issuer of the securities representing shares
- h. end of the term of the securities representing shares as a result of termination by the issuer of the securities representing shares

For ADRs and GDRs or any other securities representing shares and other Dividend-bearing securities (e.g. profit participation rights, participation certificates) as the Reference Instrument the provisions specified under (a) to (c) shall apply mutatis mutandis with respect to the Reference Instrument and the issuing company.

"**Fixing Price**" of the Reference Instrument for an Index Calculation Day is – subject to an Extraordinary Adjustment to the calculation of the Index in accordance with section 3 – the official closing price, or for Italian stocks underlyings the reference closing price (“prezzo di riferimento”) of the Reference Instrument, as determined and published for that day by the Reference Exchange. If an Index Calculation Day falls on a day which is not a Trading Day, the Fixing Price of the immediately preceding Index Calculation Day shall continue to apply. If no Fixing Price for the Reference Instrument is determined or published on a Trading Day, the Index Calculation Agent shall determine the Fixing Price of the Reference Instrument for that day on the basis of the most recent prices set for the Reference Instrument at its due discretion.

"**Index Calculation Agent**" means ICF BANK AG, Kaiserstrasse 1, 60311 Frankfurt, Germany

"**Index Calculation Day**" means every day from Monday to Friday except holidays on which the Reference Exchange is closed

"**Index Calculation Fee**" is 0.7% per annum. The Index Calculation Fee is charged each calendar day, beginning as of the Index Start Date. It is calculated on the basis of a 360-day year and the most recently calculated Index Closing Value.

"**Index Currency**" means EUR

"**Index Fixing Value**" is calculated for each Index Calculation Day by the Index Calculation Agent in accordance with section 3 of this Index description on the basis of the Reference Price (“prezzo di riferimento”) of the Reference Instrument for this Index Calculation Day and published in accordance with section 4.1 of this Index description.

"**Information Page**" means <https://icf-markets.de/>

"**Index Start Date**" means 26<sup>th</sup> August 2016

"**Index Start Value**" is 100 Index points and represents the Index Closing Value on Index Calculation Day T=0 for the purposes of calculating the Index in accordance with Section 3 of this document

"**Interest Rate**" means EONIA. EONIA (Euro Over Night Index Average) is a weighted average interest rate for overnight interbank money calculated act/360 by the European Central Bank since 4 January 1999 on the basis of effective turnover. If the Interest Rate is not set or published on an Index Calculation Day, the Interest Rate applied on the immediately preceding Index Calculation Day is used to calculate the Index in accordance with section 3 of this document. If the Interest Rate has neither been set nor published for ten consecutive Index Calculation Days, the Index Calculation Agent has the right and obligation to stipulate in its reasonable discretion an alternative relevant Interest Rate which has functions comparable to the previous Interest Rate.

"**Leverage**" describes the impact, that a change in the price of the Reference Instrument has on the relevant factor Index. The leverage on this Index is 2. See Lev parameter in section 3.

"**Market Disruption Event**" means each of the following events:

- a) the failure of the Reference Exchange to open for trading during its regular trading sessions
- b) the suspension or restriction of trading in the Reference Instrument on the Reference Exchange
- c) in general the suspension or restriction of trading in a Derivative of the Reference Instrument on the Derivatives Exchange

**"Reference Exchange"** means Borsa Italiana S.p.A. – LSE Group

**"Reference Instrument "** means Intesa Sanpaolo S.p.A.

Asset Type: Ordinary Share

Currency: EUR

ISIN: IT0000072618

Bloomberg symbol: ISP IM EQUITY

**"Reference Instrument Price"** corresponds at any time during the trading period on the Reference Exchange to the price of the Reference Instrument

**"Trading Day"** means every day on which the Reference Instrument is traded on the Reference Exchange.

**"VWAP"** means volume weighted average price of the Reference Instrument. See section 3.1 of this document

**"Withholding-Tax"** shall be 26.00% on the Index Start Date. The Index Calculation Agent may change the Withholding-Tax Factor at its due discretion on any Index Calculation Day with prospective effect, if the relevant tax law applicable to the Index Calculation Agent changes, resulting in a change in the amount of the – after tax – Dividend virtually accruing to it. Check <https://icf-markets.de/> for current Withholding-Tax value.

## 2.2 Daily chaining

As mentioned in Section 2, the value of a factor Index is calculated by applying, on a daily basis, the corresponding leverage- and financial component to the daily change in the Reference Instrument. The Index is calculated on the basis of the change in the price of the Reference Instrument as compared to its most recent Fixing Price, which, in this case, will be represented by the “prezzo di riferimento” which is calculated at closing and published by the Reference Exchange. Thus every new fixing price for the Reference Instrument represents a new reference price, which serves as the basis for calculating the percentage variation in underlying Fixing Price and apply the daily constant leverage factor, according to the index calculation methodology described in the present document, in order to derive the fixing value of the index. This daily adjustment of the factor Index is automatic and is known as chaining.

### 3. Index calculation

The Index will be calculated on the basis of the following formula:

Leverage Component:

$$Index_T \times \left( -Lev \times \frac{Stock_t}{(Stock_T - (Div_t)) \times RFactorSS_t} + (Lev + 1) \right)$$

Financial Component:

$$Index_T \times \left( \frac{(Lev + 1) \times IR_T - ICF_T}{360} \right) \times D_{t,T}$$

Index Calculation:

$$Index_t = Leverage Component_t + Financial Component_t$$

The calculation formula is using the following parameters:

Parameter	Description
t	Represents the current calculation date
T	Represents the last fixing date, which is the date of the last closing price, represented by the “prezzo di riferimento”, as calculated and published by the Reference Exchange
Index <sub>t</sub>	Current Index level at calculation time t
Index <sub>T</sub>	Recent Index fixing level as described in Section 2.2
Stock <sub>t</sub>	Last traded share price of the Reference Instrument, traded on the Reference Exchange at calculation time t
Stock <sub>T</sub>	Last Reference Instrument Fixing Price as described in Section 2.2
D <sub>t,T</sub>	Number of calendar days between T and t
IR <sub>T</sub>	EONIA Rate (Euro Over Night Index Average), describes an overnight-loanrate that is determined by the European Central Bank. The value of IR <sub>T</sub> always equates the EONIA Rate of date T
ICF <sub>T</sub>	Index calculation fee which is charged by the Index Calculation Agent
Lev	Leverage (see definition in section 2.1)
Div <sub>t</sub>	Dividend correction, that equates the gross Dividend amount paid by the Reference Instrument on Ex-Dividend date t. If date t is not an Ex-Dividend date, this parameter has a value of 0. See Section 3.2 for more information
RFactorSS <sub>t</sub>	Represents the factor of a potential corporate action event of the Reference Instrument on date t. See Section 3.3 for more information. If date t is not a corporate action date, this parameter has a value of 1

### 3.1 Intraday rebalancing

If, for instance, the price of the Reference Instrument gains a 50% daily increase, the value of a factor short Index with a factor of 2 would have to drop to zero (total loss) since the factor Index would also double its losses. In order to counteract a total loss, factor indices feature a Barrier (represented by the parameter P), which triggers an intraday Index adjustment if the Reference Instrument reaches or falls below it.

In the event of an intraday rebalancing, new fixing values for the Index and the Reference Instrument calculated and therefore, a new day is simulated from which the ongoing calculation continues. The consequence is that the negative daily return for the factor Index is attenuated. However, if the calculated price of the index is significantly low, this can result in an intraday loss which, in economic terms, closely approximates a total loss.

The condition for triggering an intraday adjustment is as follows:

$$\frac{Stock_t}{((Stock_T - Div_t) \times RFactorSS_t)} - 1 \geq P$$

Whereby the parameter P represents the Barrier.

In this case, the value of P is +30% (+0.3).

In case of an intraday adjustment, the calculation of the Index is interrupted for half an hour (30 minutes) period, excluding the time of any Market Disruption Event. For this half an hour trading time calculation break, a volume weighted average price (VWAP) will be defined. The determined VWAP will then be used as new fixing value for the Reference Instrument in the continued calculation. Given the case, a rebalancing event occurs less than 30 minutes before market close, the calculation period for the VWAP will be prolonged into the next trading day, until the 30 minutes trading time window from the past trading day is completed. Note that the half an hour trading time window refers to 30 minutes of trading on the Reference Exchange. If the Reference Instrument is, for example, currently suspended, this does not add to the 30 minutes of trading time. Then the VWAP time will be prolonged until 30 minutes of trading time is reached.

For example, if an intraday adjustment is triggered at 03:28:15 p.m. CET (given that the Index calculation continues until 05:35:00 p.m. CET), the ongoing calculation of the Index immediately stops. The VWAP relevant calculation time then will include the timespan between 03:29:00 p.m. CET and 03:58:59 p.m. CET. At 03:59:00 p.m. CET the new fixing values for the Index and the Reference Instrument are calculated. Afterwards, the ongoing calculation will continue with the new fixing values.

For example, if an intraday adjustment is triggered at 05:21:15 p.m. CET (given that the Index calculation continues until 05:35:00 p.m. CET), the ongoing calculation of the Index immediately stops. The VWAP relevant calculation time then will include the timespan between 05:22:00 p.m. CET and 09:16:59 a.m. CET of the following trading day. At 09:17:00 a.m. CET the new fixing values for the Index and the Reference Instrument are calculated. Afterwards, the ongoing calculation will continue with the new fixing values. In case of an overnight rebalancing, there will not be the regular fixing described in Section 2.2

After the 30 minute calculation break, new fixing values will be calculated as follows:

### **New Index Fixing value**

Leverage Component<sup>new</sup>:

$$Index_T \times \left( -Lev \times \frac{VWAP}{(Stock_T - (Div_t)) \times RFactorSS_t} + (Lev + 1) \right)$$

Financial Component<sup>new</sup>:

$$Index_T \times \left( \frac{(Lev + 1) \times IR_T - ICF_T}{360} \right) \times D_{t,T}$$

Index Fixing value<sup>new</sup>:

$$Index_T^{new} = Leverage\ Component^{new} + Financial\ Component^{new}$$

### **New Reference Instrument Fixing value**

$$Stock_T^{new} = VWAP$$

After the calculation of the new fixing values, the suffix “new” shall be dropped from all relevant quantities, and the ongoing calculation of the new index values continues as described in Section 3.

Note the following: While calculating the new fixing values,  $D_{t,T}$  is still the difference in days between the actual calculation date  $t$  and the recent most fixing date  $T$ . After the ongoing fixing is completed, date  $T$  becomes the same date as the actual calculation date and therefore, when continuing the ongoing calculation, the value of  $D_{t,T}$  is 0.

Also note, that after an intraday adjustment, a potential correction of the Index level because of Dividend or corporate action (See Section 3.2 and Section 3.3 for more information) will be set to 0 for Parameter  $Div_t$  and 1 for Parameter  $RFactorSS_t$  after calculation of the new fixing values, because the newly calculated fixing is, for example, already Ex-Dividend.

## **3.2 Dividend Index Adjustments**

In case date  $t$  is an Ex-Dividend day, a Dividend Index Adjustment is triggered. Therefore, the index calculation described in Section 3 will be influenced by the parameters  $Div_t$  and  $WT$ . While the parameter  $Div_t$  represents the correction of the Reference Underlying price by the paid Dividend, the parameter  $WT$  represents the withholding-tax, being payed as a government requirement for the payer of an item of income to withhold or deduct tax from the payment, and pay that tax to the government.

If date  $t$  is not an Ex-Dividend day, the value of the Parameters  $Div_t$  and  $WT$  is 0.

### 3.3 Extraordinary Index Adjustments

On date  $t$ , for any “unforeseeable cases” not described under the present index rule, an extraordinary Index Adjustment is triggered. The Index Calculation Agent will generally modify the Index calculation by correcting at its due discretion the relevant Fixing Price for the Reference Instrument on Index Calculation Day  $t$ , taking into account all available information and client’s best interest, in order to factor into the Index calculation, the adjustments made on the Reference Exchange to the Reference Instrument traded there.

The Index Calculation Agent may also adapt the Index Calculation in some other manner if it deems this necessary in its due discretion in order to account for differences between this Factor Index and the Reference Instrument. Such adjustments may in particular relate to the Reference Instrument being replaced by a basket of shares, securities representing shares or other Dividend-bearing securities or in the event of a merger by an appropriate number of shares, securities representing shares or other Dividend-bearing securities issued by the absorbing or newly formed company and where necessary stipulating a different Reference Exchange and Reference Instrument Price.

The list of extraordinary adjustment events listed in section 2.1 is not exhaustive.

A deciding factor is whether the Derivatives Exchange considers it expedient to adjust the contract size, an underlying or involving the relevant Reference Exchange which determines the price of the Reference Instrument. If neither futures nor options linked to the Reference Instrument are traded on the Derivatives Exchange, the adjustment shall be made in such a manner in which the Derivatives Exchange would do so if corresponding futures or options were traded there. If doubts arise in this event relating to the application of the modification rules of the Derivatives Exchange, the Index Calculation Agent shall decide such questions in its reasonable discretion. The rules and regulations of the Derivatives Exchange shall apply in addition to the provisions set out above.

In the event the company issuing the Reference Instrument underlying the Factor Index is liquidated or insolvency, winding-up or similar proceedings are instituted against the assets of the company or of the possibility that such proceedings will be opened becomes known, the price of the Reference Instrument will continue to be factored into the Index Calculation for as long as the price of the Reference Instrument continues to be determined on the Reference Exchange. However, if pricing in such a case is temporarily or permanently suspended, the leverage component remains unchanged and the Index Level will be determined solely on the basis of the other components of the Index formula.

Therefore, the Index calculation described in Section 3 will be influenced by the parameter  $R_{FactorSS_t}$ . For example, if a split takes place with a stock split rate of 0.5, the Reference Instrument loses half of its value on date  $t$ . Therefore, to retain the Index level uninfluenced by the loss of value caused by the split, the parameter  $R_{FactorSS_t}$  has to hold a value of 0.5. In case date  $t$  holds an Extraordinary Index Adjustment and also a Corporate Action event, the Extraordinary Index Adjustment will always be performed before taking the Corporate Action event into calculation.

If date  $t$  is not an Ex-Dividend day, the value of the Parameters  $Div_t$  and  $WT$  is 0.

The Index Calculation Agent defines in its reasonable discretion the adjustment method to be applied and published it by the means of a notice on <https://icf-markets.de/>.

### 3.4 Index Split / Reverse Split Adjustments

On the 1<sup>st</sup> Friday of each month, the Index is reviewed regarding qualification for an Index Split or a Reverse Split. If the 1<sup>st</sup> Friday of the month is not a trading day, the following trading day after the 1<sup>st</sup> Friday of the month will be used for review.

If, on this trading day, the most recent Index fixing value has reached a level above 1000 Points, the Index qualifies for an Index split. If the Index has reached a level below 10, the Index qualifies for an Index Reverse Split.

In case of a qualification for an Index Split or an Index reverse split, the Index fixing value of the 3<sup>rd</sup> Friday, that is used for the ongoing calculation of the Index on the next trading day, will be unscaled, but will then be divided by 10 in case of Index Split (or multiplied by 10 for a reverse split) during the ongoing Index calculation of the next trading day. Therefore, the fixing value of the Index of the trading day after the 3<sup>rd</sup> Friday will be a scaled fixing value.

Modification of Index fixing value during a Split

$$Index_T = \frac{Index_T}{10}$$

Modification of Index fixing value during a Reverse-Split

$$Index_T = Index_T \times 10$$

In case the 3<sup>rd</sup> Friday of the month is not a trading day, the implementation will take place on the following trading day after the 3<sup>rd</sup> Friday of the month. Respectively, the Index fixing value of the next trading day after the 3<sup>rd</sup> Friday, that is used for the ongoing calculation of the Index on the second trading day after the 3<sup>rd</sup> Friday, will be divided by 10 in case of Index split (or multiplied by 10 for a reverse split) during the ongoing calculation of the Index. Therefore, the fixing value of the Index of the second trading day after the 3<sup>rd</sup> Friday will be the newly scaled fixing value.

### 3.5 Impossibility to complete intraday rebalancing:

In case the Index fixing value would become negative after an intraday rebalancing event, the Index level will be fixed at 0.0001. This Index level will continue to be broadcasted for 4 weeks after the reset occurred. Subsequently the Index will be discontinued.

The Index fixing value will become negative after an intraday rebalancing event, if the obtained VWAP (see Section 3.1) is significantly lower, so that the calculated Index fixing value will be negative and therefore, cannot reach a positive value anytime in the future.

#### Example:

Given the most recent fixing of the Reference Instrument  $Stock_T$  has a value of 100. Date  $t$  is not an Ex-Dividend day neither a corporate action date. The most recent calculated fixing value of the Index is 400 Points. During the 1-hour observation period calculated VWAP is 140. The leverage Factor is 2.

Calculating the Index fixing value (leaving aside the financial component):

$$Index_T = Index_T \times \left( -Lev \times \frac{VWAP}{(Stock_T - Div_t) \times RFactorSS_t} + (Lev + 1) \right)$$
$$Index_T = 400 \times \left( -2 \times \frac{140}{(100 - (0)) \times 1} + (2 + 1) \right) = 80$$

The newly calculated Index fixing is a positive value.

Now given the same values, except the value of the calculated VWAP, which is 180.

Calculating the Index fixing value (leaving aside the financial component):

$$Index_T = Index_T \times \left( -Lev \times \frac{VWAP}{(Stock_T - Div_t) \times RFactorSS_t} + (Lev + 1) \right)$$
$$Index_T = 400 \times \left( 2 \times \frac{180}{(100 - (0)) \times 1} + (2 + 1) \right) = -240$$

The newly calculated Index fixing value is negative and can therefore no longer become positive.

## 4. Index parameters

Parameter	Value
Index-ISIN	DE000A2BNNB6
Index-WKN	A2BNNB
Reuters-RIC	.ICFISPS2
Index-Name	Intesa Sanpaolo S.p.A. Leva 2 Short Daily Gross Return EUR
Index-Type	Gross Return
Index-Leverage	2
Index-Currency	EUR
Index-Starting Value	100 Points
Index-Starting Date	26.08.2016
Index-Starting Time	09:00 a.m. CET
Index-Ending Time	05:35 p.m. CET
Index-Calculation Fee	0.7% p.a.
Index-Withholding Tax	26.00% (Timestamp: 18.08.2016)
Barrier	+30%
Reference Instrument-ISIN	IT00000072618
Reference Instrument-Name	Intesa Sanpaolo S.p.A., ordinary share

### 4.1 Publications

ICF BANK AG publishes the Index on its website at [www.icf-markets.de](http://www.icf-markets.de) and on Reuters. ICF BANK AG also publishes all information it deems relevant to the current calculation of the Index on its website.

### 4.2 Prices and frequency of Index calculation

ICF BANK AG calculates the Index each exchange trading day on the Reference Exchange, taking into account the last traded share price of the Reference Instrument, traded on the Reference Exchange at calculation time  $t$ . If no last traded share price is available during the calculation period, the Index is calculated using the most recently available last traded share price.

The Index is calculated each stock exchange day at a minimum of once per minute between 09:00 a.m. CET and 05:35 p.m. CET, except in the case of disruptions in ICF BANK AG's data or price feeds which prevent ICF BANK AG from calculating and/or publishing the Index. ICF BANK AG will promptly make any corrections to the Index deemed necessary and publish it on its website at [www.icf-markets.de](http://www.icf-markets.de) and on Reuters.

The Index is calculated in **points**.

## **5. Authorisation/licences**

Use of the Index as an underlying for derivative financial products must be authorised by separate agreement with the ICF BANK AG.

## **6. Rounding**

If the Index is below 10 Points, the Index will be rounded to four decimal points.

If the Index is above or equal 10 Points and below 100 Points, the Index will be rounded to Three decimal points. If the Index is equal or above 100 Points, the Index will be rounded to two decimal points.

## **7. Interruption or suspension of trading**

The Index is not calculated in the event a Market Disruption Event occurs.

## **8. Annex**

Published by / Contact

ICF BANK AG  
Wertpapierhandelsbank  
Kaiserstrasse 1  
60311 Frankfurt am Main  
Germany

customized.indices@icfbank.de  
Phone +49 69 92877-0



## ***Index Methodology***

***Telecom Italia S.p.A.  
Leva 2 Long Daily Net Return EUR***

*Timestamp: 02<sup>nd</sup> September 2016*

## Contents

1. General information .....	3
2. Description and functioning.....	4
2.1 Index definitions .....	5
2.2 Daily chaining.....	7
3. Index calculation.....	8
3.1 Intraday rebalancing.....	9
3.2 Dividend Index adjustments.....	10
3.3 Extraordinary Index adjustments .....	11
3.4 Index split / reverse split adjustments .....	12
3.5 Impossibility to complete intraday rebalancing: .....	13
4. Index parameters.....	14
4.1 Publications.....	14
4.2 Prices and frequency of Index calculation .....	14
5. Authorisation/licences.....	15
6. Rounding.....	15
7. Interruption or suspension of trading .....	15
8. Annex .....	15

## 1. General information

This Index Methodology outlines the general methodology used to calculate the Telecom Italia S.p.A. Leva 2 Long Daily Net Return EUR (hereinafter: the "Index"). It sets forth the parameters, composition and calculation of the Index as well as the relevant criteria in this respect. ICF BANK AG exercises the utmost diligence when calculating and publishing the Index, and in implementing the criteria set out in this Methodology.

ICF BANK AG neither warrants nor guarantees the accuracy of the Index or the parameters Reference Instrument its composition and calculation, nor does it assume any liability for losses resulting from the flawed configuration or calculation of the Index or any other ratios derived therefrom. ICF BANK AG is under no obligation to notify third parties, including investors and/or financial intermediaries, of any errors or omissions pertaining to the Index.

ICF BANK AG publishes the Index on its website at [www.icf-markets.de](http://www.icf-markets.de). Publication of the Index constitutes neither investment advice nor a recommendation issued by ICF BANK AG to buy, sell or hold a given financial product. Specifically, the composition and calculation of the Index in no way represent a recommendation issued by ICF BANK AG to buy or sell individual, several or all Reference Instruments. This information does not constitute financial analysis within the meaning of § 34 b of the German Securities Trading Act (*Wertpapierhandelsgesetz*, "WpHG").

The statements contained in the following provide information relating to the composition and calculation of the Index.

The Index is calculated and published by ICF BANK AG. All rights to this Index are reserved to ICF BANK AG.

### **Index Details:**

Index Name: Telecom Italia S.p.A. Leva 2 Long Daily Net Return EUR

ISIN: DE000A2BNM83

WKN: A2BNM8

REUTERS-RIC: .ICFTITL2

Reference Instrument: Telecom Italia S.p.A., common shares

Reference Instrument ISIN: IT0003497168

Index Calculation Agent: ICF BANK AG, Kaiserstrasse 1, 60311 Frankfurt, Germany

Information Page: <https://icf-markets.de/>

## 2. Description and functioning

The Index is a factor Index. A factor Index uses a constant factor to track the daily percentage change in the market price of an Reference Instrument (e.g., an equity, an Index or a commodity) as compared to the most recent Fixing Price (as defined in section 2.1) of that Reference Instrument. The factor defines in which direction (whether the same or inverse) and what degree of leverage the factor Index reflects the daily price change of the Reference Instrument. In this case, the Index Reference Instrument is represented by the ordinary share of Telecom Italia S.p.A, traded on the Reference Exchange, as defined in Section 2.1.

To calculate the increase or decrease of the Index, a leverage- and a financing-component is used.

The leverage component reflects the change in price of the Reference Instrument between two Fixing Prices and transfers this movement (either positive or negative) onto the Index by multiplying the percentage of change with the assigned leverage. Thereby, a disproportionate effect on the value of the Index occurs. This leverage effect inherits the risk of an over proportional capital loss (“downside risk”).

For example: (excluding the financial component and events like dividends, corporate actions, etc.)

If a factor long Index has a factor of 2:

- a 5% increase in the price of the Reference Instrument (as compared to the latest Fixing Price), will result in the value of the Index increasing by  $2 \times 5\%$ .
- a 5% decrease in the price of the Reference Instrument (as compared to the latest Fixing Price), will result in the value of the Index decreasing by  $2 \times 5\%$ .

The financial component contains the costs of borrowing money at a one-day rate (EONIA Rate, see Section 3 for more information) increased by a per annum rate (ICF Rate) that reflects the Index calculation fee.

The Index will be continuously calculated during the Reference Instrument trading hours on the Reference Exchange by the Index Calculation Agent. This means, that the Index will be re-calculated at every change in price of the Reference Instrument. The Index Calculation Agent will charge an annual fee of 0.7% p.a., which will be deducted daily (based on a year comprising 360 days), during the calculation of the Index.

For periods longer than one day, the compounding effect shall be taken into account. Indeed, returns on the Reference Instrument cannot simply be multiplied with the selected factor since the performance of the factor Index depends on each individual daily performance of the Reference Instrument. If the performance of a factor Index is compared against that of the Reference Instrument over a period longer than one day, the observed price trends will deviate not only for prices of the Reference Instrument which constantly rise or fall, but also for those which fluctuate.

## 2.1 Index definitions

The definitions below shall apply for the purposes of this Index description.

"**Barrier**" indicates the maximum permitted negative (in case of a long Index) or positive (in case of a short Index) change in price of the Reference Instrument compared to its most recent Fixing Value before an intraday Index adjustment takes place. In this Index, indicated by parameter P, the Barrier is -30%.

"**Derivatives Exchange**" are the main exchanges where options or futures of the Reference Instrument are traded.

"**Dividend**" shall mean the Dividend of the company, exclusive of which the Reference Instrument is traded on the reference exchange on the Ex-Dividend day.

"**Ex-Dividend Date**" means the Trading Day on which the Reference Instrument trades "Ex-Dividend" on the Reference Exchange.

"**Extraordinary Adjustment Event**" means any of the following events as they relate to the Reference Instrument:

- a. capital increase by way of the issue of new shares in return for contributions in cash or in kind with the grant of a subscription right, capital increase from retained earnings, issue of securities with option or conversion rights into shares, distribution of special Dividends, share split, subdivision, consolidation or reclassification of the shares
- b. probable or definitive discontinuation of stock exchange trading in the shares as a result of a merger by absorption or new company formation or takeover of the company of the Reference Instrument by another company
- c. spin-off of a division of the company in such a manner that a new independent company is created or the division is absorbed by a third company
- d. any other event, which the Index Calculation Agent may at its reasonable discretion deem to have a comparable or similar impact on the calculation of the Factor Index in the event no adjustments were to be made

In case of securities representing shares (ADR/GDR) as the Reference Instrument, the following provisions shall additionally apply:

- e. any modification of the terms and conditions of the securities representing shares by their issuers
- f. discontinuation of the stock exchange quotation of the securities representing shares or of the shares underlying them
- g. insolvency of the issuer of the securities representing shares
- h. end of the term of the securities representing shares as a result of termination by the issuer of the securities representing shares

For ADRs and GDRs or any other securities representing shares and other Dividend-bearing securities (e.g. profit participation rights, participation certificates) as the Reference Instrument the provisions specified under (a) to (c) shall apply mutatis mutandis with respect to the Reference Instrument and the issuing company.

**"Fixing Price"** of the Reference Instrument for an Index Calculation Day is – subject to an Extraordinary Adjustment to the calculation of the Index in accordance with section 3 – the official closing price, or for Italian stocks underlyings the reference closing price (“prezzo di riferimento”) of the Reference Instrument, as determined and published for that day by the Reference Exchange. If an Index Calculation Day falls on a day which is not a Trading Day, the Fixing Price of the immediately preceding Index Calculation Day shall continue to apply. If no Fixing Price for the Reference Instrument is determined or published on a Trading Day, the Index Calculation Agent shall determine the Fixing Price of the Reference Instrument for that day on the basis of the most recent prices set for the Reference Instrument at its due discretion.

**"Index Calculation Agent"** means ICF BANK AG, Kaiserstrasse 1, 60311 Frankfurt, Germany

**"Index Calculation Day"** means every day from Monday to Friday except holidays on which the Reference Exchange is closed

**"Index Calculation Fee"** is 0.7% per annum. The Index Calculation Fee is charged each calendar day, beginning as of the Index Start Date. It is calculated on the basis of a 360-day year and the most recently calculated Index Closing Value.

**"Index Currency"** means EUR

**"Index Fixing Value"** is calculated for each Index Calculation Day by the Index Calculation Agent in accordance with section 3 of this Index description on the basis of the Reference Price (“prezzo di riferimento”) of the Reference Instrument for this Index Calculation Day and published in accordance with section 4.1 of this Index description.

**"Information Page"** means <https://icf-markets.de/>

**"Index Start Date"** means 26<sup>th</sup> August 2016

**"Index Start Value"** is 100 Index points and represents the Index Closing Value on Index Calculation Day T=0 for the purposes of calculating the Index in accordance with Section 3 of this document

**"Interest Rate"** means EONIA. EONIA (Euro Over Night Index Average) is a weighted average interest rate for overnight interbank money calculated act/360 by the European Central Bank since 4 January 1999 on the basis of effective turnover. If the Interest Rate is not set or published on an Index Calculation Day, the Interest Rate applied on the immediately preceding Index Calculation Day is used to calculate the Index in accordance with section 3 of this document. If the Interest Rate has neither been set nor published for ten consecutive Index Calculation Days, the Index Calculation Agent has the right and obligation to stipulate in its reasonable discretion an alternative relevant Interest Rate which has functions comparable to the previous Interest Rate.

**"Leverage"** describes the impact, that a change in the price of the Reference Instrument has on the relevant factor Index. The leverage on this Index is 2. See Lev parameter in section 3.

**“Market Disruption Event”** means each of the following events:

- a) the failure of the Reference Exchange to open for trading during its regular trading sessions
- b) the suspension or restriction of trading in the Reference Instrument on the Reference Exchange
- c) in general the suspension or restriction of trading in a Derivative of the Reference Instrument on the Derivatives Exchange

**"Reference Exchange"** means Borsa Italiana S.p.A. – LSE Group

**"Reference Instrument"** means Telecom Italia S.p.A.

Asset Type: Ordinary Share

Currency: EUR

ISIN: IT0003497168

Bloomberg symbol: TIT IM EQUITY

**"Reference Instrument Price"** corresponds at any time during the trading period on the Reference Exchange to the price of the Reference Instrument

**"Trading Day"** means every day on which the Reference Instrument is traded on the Reference Exchange.

**"VWAP"** means volume weighted average price of the Reference Instrument. See section 3.1 of this document

**"Withholding-Tax"** shall be 26.00% on the Index Start Date. The Index Calculation Agent may change the Withholding-Tax Factor at its due discretion on any Index Calculation Day with prospective effect, if the relevant tax law applicable to the Index Calculation Agent changes, resulting in a change in the amount of the – after tax – Dividend virtually accruing to it. Check <https://icf-markets.de/> for current Withholding-Tax value.

## 2.2 Daily chaining

As mentioned in Section 2, the value of a factor Index is calculated by applying, on a daily basis, the corresponding leverage- and financial component to the daily change in the Reference Instrument. The Index is calculated on the basis of the change in the price of the Reference Instrument as compared to its most recent Fixing Price, which, in this case, will be represented by the “prezzo di riferimento” which is calculated at closing and published by the Reference Exchange. Thus every new fixing price for the Reference Instrument represents a new reference price, which serves as the basis for calculating the percentage variation in underlying Fixing Price and apply the daily constant leverage factor, according to the index calculation methodology described in the present document, in order to derive the fixing value of the index. This daily adjustment of the factor Index is automatic and is known as chaining.

### 3. Index calculation

The Index will be calculated on the basis of the following formula:

Leverage Component:

$$Index_T \times \left( Lev \times \frac{Stock_t}{(Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t} - (Lev - 1) \right)$$

Financial Component:

$$Index_T \times \left( \frac{(Lev - 1) \times IR_T + ICF_T}{360} \right) \times D_{t,T}$$

Index Calculation:

$$Index_t = Leverage Component_t - Financial Component_t$$

The calculation formula is using the following parameters:

Parameter	Description
t	Represents the current calculation date
T	Represents the last fixing date, which is the date of the last closing price, represented by the “prezzo di riferimento”, as calculated and published by the Reference Exchange
Index <sub>t</sub>	Current Index level at calculation time t
Index <sub>T</sub>	Recent Index fixing level as described in Section 2.2
Stock <sub>t</sub>	Last traded share price of the Reference Instrument, traded on the Reference Exchange at calculation time t
Stock <sub>T</sub>	Last Reference Instrument Fixing Price as described in Section 2.2
D <sub>t,T</sub>	Number of calendar days between T and t
IR <sub>T</sub>	EONIA Rate (Euro Over Night Index Average), describes an overnight-loanrate that is determined by the European Central Bank. The value of IR <sub>T</sub> always equates the EONIA Rate of date T
ICF <sub>T</sub>	Index calculation fee which is charged by the Index Calculation Agent
Lev	Leverage (see definition in section 2.1)
Div <sub>t</sub>	Dividend correction, that equates the gross Dividend amount paid by the Reference Instrument on Ex-Dividend date t. If date t is not an Ex-Dividend date, this parameter has a value of 0. See Section 3.2 for more information
RFactorSS <sub>t</sub>	Represents the factor of a potential corporate action event of the Reference Instrument on date t. See Section 3.3 for more information. If date t is not a corporate action date, this parameter has a value of 1
WT	Withholding-Tax, that is subtracted from the Dividend correction in case date t is an Ex-Dividend date. See section 3.2 for more information

### 3.1 Intraday rebalancing

If, for instance, the price of the Reference Instrument suffers a 50% daily loss, the value of a factor long Index with a factor of 2 would have to drop to zero (total loss) since the factor Index would also double its losses. In order to counteract a total loss, factor indices feature a Barrier (represented by the parameter P), which triggers an intraday Index adjustment if the Reference Instrument reaches or falls below it.

In the event of an intraday rebalancing, new fixing values for the Index and the Reference Instrument calculated and therefore, a new day is simulated from which the ongoing calculation continues. The consequence is that the negative daily return for the factor Index is attenuated. However, if the calculated price of the index is significantly low, this can result in an intraday loss which, in economic terms, closely approximates a total loss.

The condition for triggering an intraday adjustment is as follows:

$$\frac{Stock_t}{\left( (Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t \right)} - 1 \leq P$$

Whereby the parameter P represents the Barrier.

In this case, the value of P is -30% (-0.3).

In case of an intraday adjustment, the calculation of the Index is interrupted for half an hour (30 minutes) period, excluding the time of any Market Disruption Event. For this half an hour trading time calculation break, a volume weighted average price (VWAP) will be defined. The determined VWAP will then be used as new fixing value for the Reference Instrument in the continued calculation. Given the case, a rebalancing event occurs less than 30 minutes before market close, the calculation period for the VWAP will be prolonged into the next trading day, until the 30 minutes trading time window from the past trading day is completed. Note that the half an hour trading time window refers to 30 minutes of trading on the Reference Exchange. If the Reference Instrument is, for example, currently suspended, this does not add to the 30 minutes of trading time. Then the VWAP time will be prolonged until 30 minutes of trading time is reached.

For example, if an intraday adjustment is triggered at 03:28:15 p.m. CET (given that the Index calculation continues until 05:35:00 p.m. CET), the ongoing calculation of the Index immediately stops. The VWAP relevant calculation time then will include the timespan between 03:29:00 p.m. CET and 03:58:59 p.m. CET. At 03:59:00 p.m. CET the new fixing values for the Index and the Reference Instrument are calculated. Afterwards, the ongoing calculation will continue with the new fixing values.

For example, if an intraday adjustment is triggered at 05:21:15 p.m. CET (given that the Index calculation continues until 05:35:00 p.m. CET), the ongoing calculation of the Index immediately stops. The VWAP relevant calculation time then will include the timespan between 05:22:00 p.m. CET and 09:16:59 a.m. CET of the following trading day. At 09:17:00 a.m. CET the new fixing values for the Index and the Reference Instrument are calculated. Afterwards, the ongoing calculation will continue with the new fixing values. In case of an overnight rebalancing, there will not be the regular fixing described in Section 2.2

After the 30 minute calculation break, new fixing values will be calculated as follows:

### **New Index Fixing value**

Leverage Component<sup>new</sup>:

$$Index_T \times \left( Lev \times \frac{VWAP}{(Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t} - (Lev - 1) \right)$$

Financial Component<sup>new</sup>:

$$Index_T \times \left( \frac{(Lev - 1) \times IR_T + ICF_T}{360} \right) \times D_{t,T}$$

Index Fixing value<sup>new</sup>:

$$Index_T^{new} = Leverage\ Component^{new} - Financial\ Component^{new}$$

### **New Reference Instrument Fixing value**

$$Stock_T^{new} = VWAP$$

After the calculation of the new fixing values, the suffix “new” shall be dropped from all relevant quantities, and the ongoing calculation of the new index values continues as described in Section 3.

Note the following: While calculating the new fixing values,  $D_{t,T}$  is still the difference in days between the actual calculation date  $t$  and the recent most fixing date  $T$ . After the ongoing fixing is completed, date  $T$  becomes the same date as the actual calculation date and therefore, when continuing the ongoing calculation, the value of  $D_{t,T}$  is 0.

Also note, that after an intraday adjustment, a potential correction of the Index level because of Dividend or corporate action (See Section 3.2 and Section 3.3 for more information) will be set to 0 for Parameter  $Div_t$  and 1 for Parameter  $RFactorSS_t$  after calculation of the new fixing values, because the newly calculated fixing is, for example, already Ex-Dividend.

## **3.2 Dividend Index Adjustments**

In case date  $t$  is an Ex-Dividend day, a Dividend Index Adjustment is triggered. Therefore, the index calculation described in Section 3 will be influenced by the parameters  $Div_t$  and  $WT$ . While the parameter  $Div_t$  represents the correction of the Reference Underlying price by the paid Dividend, the parameter  $WT$  represents the withholding-tax, being payed as a government requirement for the payer of an item of income to withhold or deduct tax from the payment, and pay that tax to the government.

If date  $t$  is not an Ex-Dividend day, the value of the Parameters  $Div_t$  and  $WT$  is 0.

### 3.3 Extraordinary Index Adjustments

On date  $t$ , for any “unforeseeable cases” not described under the present index rule, an extraordinary Index Adjustment is triggered. The Index Calculation Agent will generally modify the Index calculation by correcting at its due discretion the relevant Fixing Price for the Reference Instrument on Index Calculation Day  $t$ , taking into account all available information and client’s best interest, in order to factor into the Index calculation, the adjustments made on the Reference Exchange to the Reference Instrument traded there.

The Index Calculation Agent may also adapt the Index Calculation in some other manner if it deems this necessary in its due discretion in order to account for differences between this Factor Index and the Reference Instrument. Such adjustments may in particular relate to the Reference Instrument being replaced by a basket of shares, securities representing shares or other Dividend-bearing securities or in the event of a merger by an appropriate number of shares, securities representing shares or other Dividend-bearing securities issued by the absorbing or newly formed company and where necessary stipulating a different Reference Exchange and Reference Instrument Price.

The list of extraordinary adjustment events listed in section 2.1 is not exhaustive.

A deciding factor is whether the Derivatives Exchange considers it expedient to adjust the contract size, an underlying or involving the relevant Reference Exchange which determines the price of the Reference Instrument. If neither futures nor options linked to the Reference Instrument are traded on the Derivatives Exchange, the adjustment shall be made in such a manner in which the Derivatives Exchange would do so if corresponding futures or options were traded there. If doubts arise in this event relating to the application of the modification rules of the Derivatives Exchange, the Index Calculation Agent shall decide such questions in its reasonable discretion. The rules and regulations of the Derivatives Exchange shall apply in addition to the provisions set out above.

In the event the company issuing the Reference Instrument underlying the Factor Index is liquidated or insolvency, winding-up or similar proceedings are instituted against the assets of the company or of the possibility that such proceedings will be opened becomes known, the price of the Reference Instrument will continue to be factored into the Index Calculation for as long as the price of the Reference Instrument continues to be determined on the Reference Exchange. However, if pricing in such a case is temporarily or permanently suspended, the leverage component remains unchanged and the Index Level will be determined solely on the basis of the other components of the Index formula.

Therefore, the Index calculation described in Section 3 will be influenced by the parameter  $R_{FactorSS_t}$ . For example, if a split takes place with a stock split rate of 0.5, the Reference Instrument loses half of its value on date  $t$ . Therefore, to retain the Index level uninfluenced by the loss of value caused by the split, the parameter  $R_{FactorSS_t}$  has to hold a value of 0.5. In case date  $t$  holds an Extraordinary Index Adjustment and also a Corporate Action event, the Extraordinary Index Adjustment will always be performed before taking the Corporate Action event into calculation.

If date  $t$  is not an Ex-Dividend day, the value of the Parameters  $Div_t$  and  $WT$  is 0.

The Index Calculation Agent defines in its reasonable discretion the adjustment method to be applied and published it by the means of a notice on <https://icf-markets.de/>.

### 3.4 Index Split / Reverse Split Adjustments

On the 1<sup>st</sup> Friday of each month, the Index is reviewed regarding qualification for an Index Split or a Reverse Split. If the 1<sup>st</sup> Friday of the month is not a trading day, the following trading day after the 1<sup>st</sup> Friday of the month will be used for review.

If, on this trading day, the most recent Index fixing value has reached a level above 1000 Points, the Index qualifies for an Index split. If the Index has reached a level below 10, the Index qualifies for an Index Reverse Split.

In case of a qualification for an Index Split or an Index reverse split, the Index fixing value of the 3<sup>rd</sup> Friday, that is used for the ongoing calculation of the Index on the next trading day, will be unscaled, but will then be divided by 10 in case of Index Split (or multiplied by 10 for a reverse split) during the ongoing Index calculation of the next trading day. Therefore, the fixing value of the Index of the trading day after the 3<sup>rd</sup> Friday will be a scaled fixing value.

Modification of Index fixing value during a Split

$$Index_T = \frac{Index_T}{10}$$

Modification of Index fixing value during a Reverse-Split

$$Index_T = Index_T \times 10$$

In case the 3<sup>rd</sup> Friday of the month is not a trading day, the implementation will take place on the following trading day after the 3<sup>rd</sup> Friday of the month. Respectively, the Index fixing value of the next trading day after the 3<sup>rd</sup> Friday, that is used for the ongoing calculation of the Index on the second trading day after the 3<sup>rd</sup> Friday, will be divided by 10 in case of Index split (or multiplied by 10 for a reverse split) during the ongoing calculation of the Index. Therefore, the fixing value of the Index of the second trading day after the 3<sup>rd</sup> Friday will be the newly scaled fixing value.

### 3.5 Impossibility to complete intraday rebalancing:

In case the Index fixing value would become negative after an intraday rebalancing event, the Index level will be fixed at 0.0001. This Index level will continue to be broadcasted for 4 weeks after the reset occurred. Subsequently the Index will be discontinued.

The Index fixing value will become negative after an intraday rebalancing event, if the obtained VWAP (see Section 3.1) is significantly lower, so that the calculated Index fixing value will be negative and therefore, cannot reach a positive value anytime in the future.

#### Example:

Given the most recent fixing of the Reference Instrument  $Stock_T$  has a value of 100. Date  $t$  is not an Ex-Dividend day neither a corporate action date. The most recent calculated fixing value of the Index is 400 Points. During the 1-hour observation period calculated VWAP is 60. The leverage Factor is 2.

Calculating the Index fixing value (leaving aside the financial component):

$$Index_T = Index_T \times \left( Lev \times \frac{VWAP}{(Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t} - (Lev - 1) \right)$$
$$Index_T = 400 \times \left( 2 \times \frac{60}{(100 - (0 \times (1 - 0))) \times 1} - (2 - 1) \right) = 80$$

The newly calculated Index fixing is a positive value.

Now given the same values, except the value of the calculated VWAP, which is 20.

Calculating the Index fixing value (leaving aside the financial component):

$$Index_T = Index_T \times \left( Lev \times \frac{VWAP}{(Stock_T - (Div_t \times (1 - WT))) \times RFactorSS_t} - (Lev - 1) \right)$$
$$Index_T = 400 \times \left( 2 \times \frac{20}{(100 - (0 \times (1 - 0))) \times 1} - (2 - 1) \right) = -240$$

The newly calculated Index fixing value is negative and can therefore no longer become positive.

## 4. Index parameters

Parameter	Value
Index-ISIN	DE000A2BNM83
Index-WKN	A2BNM8
Reuters-RIC	.ICFTITL2
Index-Name	Telecom Italia S.p.A. Leva 2 Long Daily Net Return EUR
Index-Type	Net Return
Index-Leverage	2
Index-Currency	EUR
Index-Starting Value	100 Points
Index-Starting Date	26.08.2016
Index-Starting Time	09:00 a.m. CET
Index-Ending Time	05:35 p.m. CET
Index-Calculation Fee	0.7% p.a.
Index-Withholding Tax	26.00% (Timestamp: 18.08.2016)
Barrier	-30%
Reference Instrument-ISIN	IT0003497168
Reference Instrument-Name	Telecom Italia S.p.A., ordinary share

### 4.1 Publications

ICF BANK AG publishes the Index on its website at [www.icf-markets.de](http://www.icf-markets.de) and on Reuters. ICF BANK AG also publishes all information it deems relevant to the current calculation of the Index on its website.

### 4.2 Prices and frequency of Index calculation

ICF BANK AG calculates the Index each exchange trading day on the Reference Exchange, taking into account the last traded share price of the Reference Instrument, traded on the Reference Exchange at calculation time  $t$ . If no last traded share price is available during the calculation period, the Index is calculated using the most recently available last traded share price.

The Index is calculated each stock exchange day at a minimum of once per minute between 09:00 a.m. CET and 05:35 p.m. CET, except in the case of disruptions in ICF BANK AG's data or price feeds which prevent ICF BANK AG from calculating and/or publishing the Index. ICF BANK AG will promptly make any corrections to the Index deemed necessary and publish it on its website at [www.icf-markets.de](http://www.icf-markets.de) and on Reuters.

The Index is calculated in **points**.

## **5. Authorisation/licences**

Use of the Index as an underlying for derivative financial products must be authorised by separate agreement with the ICF BANK AG.

## **6. Rounding**

If the Index is below 10 Points, the Index will be rounded to four decimal points.

If the Index is above or equal 10 Points and below 100 Points, the Index will be rounded to three decimal points. If the Index is equal or above 100 Points, the Index will be rounded to two decimal points.

## **7. Interruption or suspension of trading**

The Index is not calculated in the event a Market Disruption Event occurs.

## **8. Annex**

Published by / Contact

ICF BANK AG  
Wertpapierhandelsbank  
Kaiserstrasse 1  
60311 Frankfurt am Main  
Germany

customized.indices@icfbank.de  
Phone +49 69 92877-0



## ***Index Methodology***

***Telecom Italia S.p.A.  
Leva 2 Short Daily Gross Return EUR***

*Timestamp: 02<sup>nd</sup> September 2016*

## Contents

1. General information .....	3
2. Description and functioning.....	4
2.1 Index definitions .....	5
2.2 Daily chaining.....	7
3. Index calculation.....	8
3.1 Intraday rebalancing.....	9
3.2 Dividend Index adjustments.....	10
3.3 Extraordinary Index adjustments .....	11
3.4 Index split / reverse split adjustments .....	12
3.5 Impossibility to complete intraday rebalancing: .....	13
4. Index parameters.....	14
4.1 Publications.....	14
4.2 Prices and frequency of Index calculation .....	14
5. Authorisation/licences.....	15
6. Rounding.....	15
7. Interruption or suspension of trading .....	15
8. Annex .....	15

## 1. General information

This Index Methodology outlines the general methodology used to calculate the Telecom Italia S.p.A. Leva 2 short Daily Gross Return EUR (hereinafter: the "Index"). It sets forth the parameters, composition and calculation of the Index as well as the relevant criteria in this respect. ICF BANK AG exercises the utmost diligence when calculating and publishing the Index, and in implementing the criteria set out in this Methodology.

ICF BANK AG neither warrants nor guarantees the accuracy of the Index or the parameters Reference Instrument its composition and calculation, nor does it assume any liability for losses resulting from the flawed configuration or calculation of the Index or any other ratios derived therefrom. ICF BANK AG is under no obligation to notify third parties, including investors and/or financial intermediaries, of any errors or omissions pertaining to the Index.

ICF BANK AG publishes the Index on its website at [www.icf-markets.de](http://www.icf-markets.de). Publication of the Index constitutes neither investment advice nor a recommendation issued by ICF BANK AG to buy, sell or hold a given financial product. Specifically, the composition and calculation of the Index in no way represent a recommendation issued by ICF BANK AG to buy or sell individual, several or all Reference Instruments. This information does not constitute financial analysis within the meaning of § 34 b of the German Securities Trading Act (*Wertpapierhandelsgesetz*, "WpHG").

The statements contained in the following provide information relating to the composition and calculation of the Index.

The Index is calculated and published by ICF BANK AG. All rights to this Index are reserved to ICF BANK AG.

### **Index Details:**

Index Name: Telecom Italia S.p.A. Leva 2 short Daily Gross Return EUR

ISIN: DE000A2BNM91

WKN: A2BNM9

REUTERS-RIC: .ICFTITS2

Reference Instrument: Telecom Italia S.p.A., common shares

Reference Instrument ISIN: IT0003497168

Index Calculation Agent: ICF BANK AG, Kaiserstrasse 1, 60311 Frankfurt, Germany

Information Page: <https://icf-markets.de/>

## 2. Description and functioning

The Index is a factor Index. A factor Index uses a constant factor to track the daily percentage change in the market price of an Reference Instrument (e.g., an equity, an Index or a commodity) as compared to the most recent Fixing Price (as defined in section 2.1) of that Reference Instrument. The factor defines in which direction (whether the same or inverse) and what degree of leverage the factor Index reflects the daily price change of the Reference Instrument. In this case, the Index Reference Instrument is represented by the ordinary share of Telecom Italia S.p.A., traded on the Reference Exchange, as defined in Section 2.1.

To calculate the increase or decrease of the Index, a leverage- and a financing-component is used.

The leverage component reflects the change in price of the Reference Instrument between two Fixing Prices and transfers this movement (either positive or negative) onto the Index by multiplying the percentage of change with the assigned leverage. Thereby, a disproportionate effect on the value of the Index occurs. This leverage effect inherits the risk of an over proportional capital loss (“downside risk”).

For example: (excluding the financial component and events like dividends, corporate actions, etc.)

If a factor short Index has a factor of 2:

- a 5% increase in the price of the Reference Instrument (as compared to the latest Fixing Price), will result in the value of the Index decreasing by  $2 \times 5\%$ .
- a 5% decrease in the price of the Reference Instrument (as compared to the latest Fixing Price), will result in the value of the Index increasing by  $2 \times 5\%$ .

The financial component contains the costs of borrowing money at a one-day rate (EONIA Rate, see Section 3 for more information) increased by a per annum rate (ICF Rate) that reflects the Index calculation fee.

The Index will be continuously calculated during the Reference Instrument trading hours on the Reference Exchange by the Index Calculation Agent. This means, that the Index will be re-calculated at every change in price of the Reference Instrument. The Index Calculation Agent will charge an annual fee of 0.7% p.a., which will be deducted daily (based on a year comprising 360 days), during the calculation of the Index.

For periods longer than one day, the compounding effect shall be taken into account. Indeed, returns on the Reference Instrument cannot simply be multiplied with the selected factor since the performance of the factor Index depends on each individual daily performance of the Reference Instrument. If the performance of a factor Index is compared against that of the Reference Instrument over a period longer than one day, the observed price trends will deviate not only for prices of the Reference Instrument which constantly rise or fall, but also for those which fluctuate.

## 2.1 Index definitions

The definitions below shall apply for the purposes of this Index description.

"**Barrier**" indicates the maximum permitted negative (in case of a long Index) or positive (in case of a short Index) change in price of the Reference Instrument compared to its most recent Fixing Value before an intraday Index adjustment takes place. In this Index, indicated by parameter P, the Barrier is +30%.

"**Derivatives Exchange**" are the main exchanges where options or futures of the Reference Instrument are traded.

"**Dividend**" shall mean the Dividend of the company, exclusive of which the Reference Instrument is traded on the reference exchange on the Ex-Dividend day.

"**Ex-Dividend Date**" means the Trading Day on which the Reference Instrument trades "Ex-Dividend" on the Reference Exchange.

"**Extraordinary Adjustment Event**" means any of the following events as they relate to the Reference Instrument:

- a. capital increase by way of the issue of new shares in return for contributions in cash or in kind with the grant of a subscription right, capital increase from retained earnings, issue of securities with option or conversion rights into shares, distribution of special Dividends, share split, subdivision, consolidation or reclassification of the shares
- b. probable or definitive discontinuation of stock exchange trading in the shares as a result of a merger by absorption or new company formation or takeover of the company of the Reference Instrument by another company
- c. spin-off of a division of the company in such a manner that a new independent company is created or the division is absorbed by a third company
- d. any other event, which the Index Calculation Agent may at its reasonable discretion deem to have a comparable or similar impact on the calculation of the Factor Index in the event no adjustments were to be made

In case of securities representing shares (ADR/GDR) as the Reference Instrument, the following provisions shall additionally apply:

- e. any modification of the terms and conditions of the securities representing shares by their issuers
- f. discontinuation of the stock exchange quotation of the securities representing shares or of the shares underlying them
- g. insolvency of the issuer of the securities representing shares
- h. end of the term of the securities representing shares as a result of termination by the issuer of the securities representing shares

For ADRs and GDRs or any other securities representing shares and other Dividend-bearing securities (e.g. profit participation rights, participation certificates) as the Reference Instrument the provisions specified under (a) to (c) shall apply mutatis mutandis with respect to the Reference Instrument and the issuing company.

**"Fixing Price"** of the Reference Instrument for an Index Calculation Day is – subject to an Extraordinary Adjustment to the calculation of the Index in accordance with section 3 – the official closing price, or for Italian stocks underlyings the reference closing price (“prezzo di riferimento”) of the Reference Instrument, as determined and published for that day by the Reference Exchange. If an Index Calculation Day falls on a day which is not a Trading Day, the Fixing Price of the immediately preceding Index Calculation Day shall continue to apply. If no Fixing Price for the Reference Instrument is determined or published on a Trading Day, the Index Calculation Agent shall determine the Fixing Price of the Reference Instrument for that day on the basis of the most recent prices set for the Reference Instrument at its due discretion.

**"Index Calculation Agent"** means ICF BANK AG, Kaiserstrasse 1, 60311 Frankfurt, Germany

**"Index Calculation Day"** means every day from Monday to Friday except holidays on which the Reference Exchange is closed

**"Index Calculation Fee"** is 0.7% per annum. The Index Calculation Fee is charged each calendar day, beginning as of the Index Start Date. It is calculated on the basis of a 360-day year and the most recently calculated Index Closing Value.

**"Index Currency"** means EUR

**"Index Fixing Value"** is calculated for each Index Calculation Day by the Index Calculation Agent in accordance with section 3 of this Index description on the basis of the Reference Price (“prezzo di riferimento”) of the Reference Instrument for this Index Calculation Day and published in accordance with section 4.1 of this Index description.

**"Information Page"** means <https://icf-markets.de/>

**"Index Start Date"** means 26<sup>th</sup> August 2016

**"Index Start Value"** is 100 Index points and represents the Index Closing Value on Index Calculation Day T=0 for the purposes of calculating the Index in accordance with Section 3 of this document

**"Interest Rate"** means EONIA. EONIA (Euro Over Night Index Average) is a weighted average interest rate for overnight interbank money calculated act/360 by the European Central Bank since 4 January 1999 on the basis of effective turnover. If the Interest Rate is not set or published on an Index Calculation Day, the Interest Rate applied on the immediately preceding Index Calculation Day is used to calculate the Index in accordance with section 3 of this document. If the Interest Rate has neither been set nor published for ten consecutive Index Calculation Days, the Index Calculation Agent has the right and obligation to stipulate in its reasonable discretion an alternative relevant Interest Rate which has functions comparable to the previous Interest Rate.

**"Leverage"** describes the impact, that a change in the price of the Reference Instrument has on the relevant factor Index. The leverage on this Index is 2. See Lev parameter in section 3.

**“Market Disruption Event”** means each of the following events:

- a) the failure of the Reference Exchange to open for trading during its regular trading sessions
- b) the suspension or restriction of trading in the Reference Instrument on the Reference Exchange
- c) in general the suspension or restriction of trading in a Derivative of the Reference Instrument on the Derivatives Exchange

**"Reference Exchange"** means Borsa Italiana S.p.A. – LSE Group

**"Reference Instrument "** means Telecom Italia S.p.A.

Asset Type: Ordinary Share

Currency: EUR

ISIN: IT0003497168

Bloomberg symbol: TIT IM EQUITY

**"Reference Instrument Price"** corresponds at any time during the trading period on the Reference Exchange to the price of the Reference Instrument

**"Trading Day"** means every day on which the Reference Instrument is traded on the Reference Exchange.

**"VWAP"** means volume weighted average price of the Reference Instrument. See section 3.1 of this document

**"Withholding-Tax"** shall be 26.00% on the Index Start Date. The Index Calculation Agent may change the Withholding-Tax Factor at its due discretion on any Index Calculation Day with prospective effect, if the relevant tax law applicable to the Index Calculation Agent changes, resulting in a change in the amount of the – after tax – Dividend virtually accruing to it. Check <https://icf-markets.de/> for current Withholding-Tax value.

## 2.2 Daily chaining

As mentioned in Section 2, the value of a factor Index is calculated by applying, on a daily basis, the corresponding leverage- and financial component to the daily change in the Reference Instrument. The Index is calculated on the basis of the change in the price of the Reference Instrument as compared to its most recent Fixing Price, which, in this case, will be represented by the “prezzo di riferimento” which is calculated at closing and published by the Reference Exchange. Thus every new fixing price for the Reference Instrument represents a new reference price, which serves as the basis for calculating the percentage variation in underlying Fixing Price and apply the daily constant leverage factor, according to the index calculation methodology described in the present document, in order to derive the fixing value of the index. This daily adjustment of the factor Index is automatic and is known as chaining.

### 3. Index calculation

The Index will be calculated on the basis of the following formula:

Leverage Component:

$$Index_T \times \left( -Lev \times \frac{Stock_t}{(Stock_T - (Div_t)) \times RFactorSS_t} + (Lev + 1) \right)$$

Financial Component:

$$Index_T \times \left( \frac{(Lev + 1) \times IR_T - ICF_T}{360} \right) \times D_{t,T}$$

Index Calculation:

$$Index_t = Leverage Component_t + Financial Component_t$$

The calculation formula is using the following parameters:

Parameter	Description
t	Represents the current calculation date
T	Represents the last fixing date, which is the date of the last closing price, represented by the “prezzo di riferimento”, as calculated and published by the Reference Exchange
Index <sub>t</sub>	Current Index level at calculation time t
Index <sub>T</sub>	Recent Index fixing level as described in Section 2.2
Stock <sub>t</sub>	Last traded share price of the Reference Instrument, traded on the Reference Exchange at calculation time t
Stock <sub>T</sub>	Last Reference Instrument Fixing Price as described in Section 2.2
D <sub>t,T</sub>	Number of calendar days between T and t
IR <sub>T</sub>	EONIA Rate (Euro Over Night Index Average), describes an overnight-loanrate that is determined by the European Central Bank. The value of IR <sub>T</sub> always equates the EONIA Rate of date T
ICF <sub>T</sub>	Index calculation fee which is charged by the Index Calculation Agent
Lev	Leverage (see definition in section 2.1)
Div <sub>t</sub>	Dividend correction, that equates the gross Dividend amount paid by the Reference Instrument on Ex-Dividend date t. If date t is not an Ex-Dividend date, this parameter has a value of 0. See Section 3.2 for more information
RFactorSS <sub>t</sub>	Represents the factor of a potential corporate action event of the Reference Instrument on date t. See Section 3.3 for more information. If date t is not a corporate action date, this parameter has a value of 1

### 3.1 Intraday rebalancing

If, for instance, the price of the Reference Instrument gains a 50% daily increase, the value of a factor short Index with a factor of 2 would have to drop to zero (total loss) since the factor Index would also double its losses. In order to counteract a total loss, factor indices feature a Barrier (represented by the parameter P), which triggers an intraday Index adjustment if the Reference Instrument reaches or falls below it.

In the event of an intraday rebalancing, new fixing values for the Index and the Reference Instrument calculated and therefore, a new day is simulated from which the ongoing calculation continues. The consequence is that the negative daily return for the factor Index is attenuated. However, if the calculated price of the index is significantly low, this can result in an intraday loss which, in economic terms, closely approximates a total loss.

The condition for triggering an intraday adjustment is as follows:

$$\frac{Stock_t}{((Stock_T - Div_t) \times RFactorSS_t)} - 1 \geq P$$

Whereby the parameter P represents the Barrier.

In this case, the value of P is +30% (+0.3).

In case of an intraday adjustment, the calculation of the Index is interrupted for half an hour (30 minutes) period, excluding the time of any Market Disruption Event. For this half an hour trading time calculation break, a volume weighted average price (VWAP) will be defined. The determined VWAP will then be used as new fixing value for the Reference Instrument in the continued calculation. Given the case, a rebalancing event occurs less than 30 minutes before market close, the calculation period for the VWAP will be prolonged into the next trading day, until the 30 minutes trading time window from the past trading day is completed. Note that the half an hour trading time window refers to 30 minutes of trading on the Reference Exchange. If the Reference Instrument is, for example, currently suspended, this does not add to the 30 minutes of trading time. Then the VWAP time will be prolonged until 30 minutes of trading time is reached.

For example, if an intraday adjustment is triggered at 03:28:15 p.m. CET (given that the Index calculation continues until 05:35:00 p.m. CET), the ongoing calculation of the Index immediately stops. The VWAP relevant calculation time then will include the timespan between 03:29:00 p.m. CET and 03:58:59 p.m. CET. At 03:59:00 p.m. CET the new fixing values for the Index and the Reference Instrument are calculated. Afterwards, the ongoing calculation will continue with the new fixing values.

For example, if an intraday adjustment is triggered at 05:21:15 p.m. CET (given that the Index calculation continues until 05:35:00 p.m. CET), the ongoing calculation of the Index immediately stops. The VWAP relevant calculation time then will include the timespan between 05:22:00 p.m. CET and 09:16:59 a.m. CET of the following trading day. At 09:17:00 a.m. CET the new fixing values for the Index and the Reference Instrument are calculated. Afterwards, the ongoing calculation will continue with the new fixing values. In case of an overnight rebalancing, there will not be the regular fixing described in Section 2.2

After the 30 minute calculation break, new fixing values will be calculated as follows:

### **New Index Fixing value**

Leverage Component<sup>new</sup>:

$$Index_T \times \left( -Lev \times \frac{VWAP}{(Stock_T - (Div_t)) \times RFactorSS_t} + (Lev + 1) \right)$$

Financial Component<sup>new</sup>:

$$Index_T \times \left( \frac{(Lev + 1) \times IR_T - ICF_T}{360} \right) \times D_{t,T}$$

Index Fixing value<sup>new</sup>:

$$Index_T^{new} = Leverage\ Component^{new} + Financial\ Component^{new}$$

### **New Reference Instrument Fixing value**

$$Stock_T^{new} = VWAP$$

After the calculation of the new fixing values, the suffix “new” shall be dropped from all relevant quantities, and the ongoing calculation of the new index values continues as described in Section 3.

Note the following: While calculating the new fixing values,  $D_{t,T}$  is still the difference in days between the actual calculation date  $t$  and the recent most fixing date  $T$ . After the ongoing fixing is completed, date  $T$  becomes the same date as the actual calculation date and therefore, when continuing the ongoing calculation, the value of  $D_{t,T}$  is 0.

Also note, that after an intraday adjustment, a potential correction of the Index level because of Dividend or corporate action (See Section 3.2 and Section 3.3 for more information) will be set to 0 for Parameter  $Div_t$  and 1 for Parameter  $RFactorSS_t$  after calculation of the new fixing values, because the newly calculated fixing is, for example, already Ex-Dividend.

## **3.2 Dividend Index Adjustments**

In case date  $t$  is an Ex-Dividend day, a Dividend Index Adjustment is triggered. Therefore, the index calculation described in Section 3 will be influenced by the parameters  $Div_t$  and  $WT$ . While the parameter  $Div_t$  represents the correction of the Reference Underlying price by the paid Dividend, the parameter  $WT$  represents the withholding-tax, being payed as a government requirement for the payer of an item of income to withhold or deduct tax from the payment, and pay that tax to the government.

If date  $t$  is not an Ex-Dividend day, the value of the Parameters  $Div_t$  and  $WT$  is 0.

### 3.3 Extraordinary Index Adjustments

On date  $t$ , for any “unforeseeable cases” not described under the present index rule, an extraordinary Index Adjustment is triggered. The Index Calculation Agent will generally modify the Index calculation by correcting at its due discretion the relevant Fixing Price for the Reference Instrument on Index Calculation Day  $t$ , taking into account all available information and client’s best interest, in order to factor into the Index calculation, the adjustments made on the Reference Exchange to the Reference Instrument traded there.

The Index Calculation Agent may also adapt the Index Calculation in some other manner if it deems this necessary in its due discretion in order to account for differences between this Factor Index and the Reference Instrument. Such adjustments may in particular relate to the Reference Instrument being replaced by a basket of shares, securities representing shares or other Dividend-bearing securities or in the event of a merger by an appropriate number of shares, securities representing shares or other Dividend-bearing securities issued by the absorbing or newly formed company and where necessary stipulating a different Reference Exchange and Reference Instrument Price.

The list of extraordinary adjustment events listed in section 2.1 is not exhaustive.

A deciding factor is whether the Derivatives Exchange considers it expedient to adjust the contract size, an underlying or involving the relevant Reference Exchange which determines the price of the Reference Instrument. If neither futures nor options linked to the Reference Instrument are traded on the Derivatives Exchange, the adjustment shall be made in such a manner in which the Derivatives Exchange would do so if corresponding futures or options were traded there. If doubts arise in this event relating to the application of the modification rules of the Derivatives Exchange, the Index Calculation Agent shall decide such questions in its reasonable discretion. The rules and regulations of the Derivatives Exchange shall apply in addition to the provisions set out above.

In the event the company issuing the Reference Instrument underlying the Factor Index is liquidated or insolvency, winding-up or similar proceedings are instituted against the assets of the company or of the possibility that such proceedings will be opened becomes known, the price of the Reference Instrument will continue to be factored into the Index Calculation for as long as the price of the Reference Instrument continues to be determined on the Reference Exchange. However, if pricing in such a case is temporarily or permanently suspended, the leverage component remains unchanged and the Index Level will be determined solely on the basis of the other components of the Index formula.

Therefore, the Index calculation described in Section 3 will be influenced by the parameter  $R_{FactorSS_t}$ . For example, if a split takes place with a stock split rate of 0.5, the Reference Instrument loses half of its value on date  $t$ . Therefore, to retain the Index level uninfluenced by the loss of value caused by the split, the parameter  $R_{FactorSS_t}$  has to hold a value of 0.5. In case date  $t$  holds an Extraordinary Index Adjustment and also a Corporate Action event, the Extraordinary Index Adjustment will always be performed before taking the Corporate Action event into calculation.

If date  $t$  is not an Ex-Dividend day, the value of the Parameters  $Div_t$  and  $WT$  is 0.

The Index Calculation Agent defines in its reasonable discretion the adjustment method to be applied and published it by the means of a notice on <https://icf-markets.de/>.

### 3.4 Index Split / Reverse Split Adjustments

On the 1<sup>st</sup> Friday of each month, the Index is reviewed regarding qualification for an Index Split or a Reverse Split. If the 1<sup>st</sup> Friday of the month is not a trading day, the following trading day after the 1<sup>st</sup> Friday of the month will be used for review.

If, on this trading day, the most recent Index fixing value has reached a level above 1000 Points, the Index qualifies for an Index split. If the Index has reached a level below 10, the Index qualifies for an Index Reverse Split.

In case of a qualification for an Index Split or an Index reverse split, the Index fixing value of the 3<sup>rd</sup> Friday, that is used for the ongoing calculation of the Index on the next trading day, will be unscaled, but will then be divided by 10 in case of Index Split (or multiplied by 10 for a reverse split) during the ongoing Index calculation of the next trading day. Therefore, the fixing value of the Index of the trading day after the 3<sup>rd</sup> Friday will be a scaled fixing value.

Modification of Index fixing value during a Split

$$Index_T = \frac{Index_T}{10}$$

Modification of Index fixing value during a Reverse-Split

$$Index_T = Index_T \times 10$$

In case the 3<sup>rd</sup> Friday of the month is not a trading day, the implementation will take place on the following trading day after the 3<sup>rd</sup> Friday of the month. Respectively, the Index fixing value of the next trading day after the 3<sup>rd</sup> Friday, that is used for the ongoing calculation of the Index on the second trading day after the 3<sup>rd</sup> Friday, will be divided by 10 in case of Index split (or multiplied by 10 for a reverse split) during the ongoing calculation of the Index. Therefore, the fixing value of the Index of the second trading day after the 3<sup>rd</sup> Friday will be the newly scaled fixing value.

### 3.5 Impossibility to complete intraday rebalancing:

In case the Index fixing value would become negative after an intraday rebalancing event, the Index level will be fixed at 0.0001. This Index level will continue to be broadcasted for 4 weeks after the reset occurred. Subsequently the Index will be discontinued.

The Index fixing value will become negative after an intraday rebalancing event, if the obtained VWAP (see Section 3.1) is significantly lower, so that the calculated Index fixing value will be negative and therefore, cannot reach a positive value anytime in the future.

#### Example:

Given the most recent fixing of the Reference Instrument  $Stock_T$  has a value of 100. Date  $t$  is not an Ex-Dividend day neither a corporate action date. The most recent calculated fixing value of the Index is 400 Points. During the 1-hour observation period calculated VWAP is 140. The leverage Factor is 2.

Calculating the Index fixing value (leaving aside the financial component):

$$Index_T = Index_T \times \left( -Lev \times \frac{VWAP}{(Stock_T - Div_t) \times RFactorSS_t} + (Lev + 1) \right)$$
$$Index_T = 400 \times \left( -2 \times \frac{140}{(100 - (0)) \times 1} + (2 + 1) \right) = 80$$

The newly calculated Index fixing is a positive value.

Now given the same values, except the value of the calculated VWAP, which is 180.

Calculating the Index fixing value (leaving aside the financial component):

$$Index_T = Index_T \times \left( -Lev \times \frac{VWAP}{(Stock_T - Div_t) \times RFactorSS_t} + (Lev + 1) \right)$$
$$Index_T = 400 \times \left( 2 \times \frac{180}{(100 - (0)) \times 1} + (2 + 1) \right) = -240$$

The newly calculated Index fixing value is negative and can therefore no longer become positive.

## 4. Index parameters

Parameter	Value
Index-ISIN	DE000A2BNM91
Index-WKN	A2BNM9
Reuters-RIC	.ICFTITS2
Index-Name	Telecom Italia S.p.A. Leva 2 Short Daily Gross Return EUR
Index-Type	Gross Return
Index-Leverage	2
Index-Currency	EUR
Index-Starting Value	100 Points
Index-Starting Date	26.08.2016
Index-Starting Time	09:00 a.m. CET
Index-Ending Time	05:35 p.m. CET
Index-Calculation Fee	0.7% p.a.
Index-Withholding Tax	26.00% (Timestamp: 18.08.2016)
Barrier	+30%
Reference Instrument-ISIN	IT0003497168
Reference Instrument-Name	Telecom Italia S.p.A., ordinary share

### 4.1 Publications

ICF BANK AG publishes the Index on its website at [www.icf-markets.de](http://www.icf-markets.de) and on Reuters. ICF BANK AG also publishes all information it deems relevant to the current calculation of the Index on its website.

### 4.2 Prices and frequency of Index calculation

ICF BANK AG calculates the Index each exchange trading day on the Reference Exchange, taking into account the last traded share price of the Reference Instrument, traded on the Reference Exchange at calculation time  $t$ . If no last traded share price is available during the calculation period, the Index is calculated using the most recently available last traded share price.

The Index is calculated each stock exchange day at a minimum of once per minute between 09:00 a.m. CET and 05:35 p.m. CET, except in the case of disruptions in ICF BANK AG's data or price feeds which prevent ICF BANK AG from calculating and/or publishing the Index. ICF BANK AG will promptly make any corrections to the Index deemed necessary and publish it on its website at [www.icf-markets.de](http://www.icf-markets.de) and on Reuters.

The Index is calculated in **points**.

## **5. Authorisation/licences**

Use of the Index as an underlying for derivative financial products must be authorised by separate agreement with the ICF BANK AG.

## **6. Rounding**

If the Index is below 10 Points, the Index will be rounded to four decimal points.

If the Index is above or equal 10 Points and below 100 Points, the Index will be rounded to Three decimal points. If the Index is equal or above 100 Points, the Index will be rounded to two decimal points.

## **7. Interruption or suspension of trading**

The Index is not calculated in the event a Market Disruption Event occurs.

## **8. Annex**

Published by / Contact

ICF BANK AG  
Wertpapierhandelsbank  
Kaiserstrasse 1  
60311 Frankfurt am Main  
Germany

customized.indices@icfbank.de  
Phone +49 69 92877-0