



Guidelines relating the

# Defense Opportunity Index

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This document contains the underlying principles and regulations regarding the structure and the operating of the Oil Opportunity Index (the “**Index**”). Solactive AG shall make every effort to implement regulations. Solactive AG does not offer any explicit or tacit guarantee or assurance, neither pertaining to the results from the use of the Index nor the Index value at any certain point in time nor in any other respect. The Index is merely calculated and published by Solactive AG and it strives to the best of its ability to ensure the correctness of the calculation. There is no obligation for Solactive AG – irrespective of possible obligations to issuers – to advise third parties, including investors and/or financial intermediaries, of any errors in the Index. The publication of the Index by Solactive AG is no recommendation for capital investment and does not contain any assurance or opinion of Solactive AG regarding a possible investment in a financial instrument based on this Index.

# Introduction

This document is to be used as a guideline with regard to the composition, calculation and management of the Index. Any changes made to the guideline are initiated by the Committee specified in section 1.6. The Index is calculated and published by Solactive AG. The name “Solactive” is copyrighted.

## 1 Index specifications

The Defense Opportunity Index (the “**Index**”) is an Index of Solactive AG and is calculated and distributed by Solactive AG.

The Index is a price return index, i.e. only special cash dividends will be reinvested.

The Index is published in EUR.

### 1.1 Short name and ISIN

The Index is distributed under ISIN DE000SLA19K3; the WKN is SLA19K. The Index is published in Reuters under the code <.DEFOPP> and in Bloomberg under the code DEFOPP <Index >.

### 1.2 Initial value

The Index is based on 100 at the close of trading on the start date, June 23, 2016 (the “**Start Date**”).

### 1.3 Distribution

The Index is published via the price marketing services of Boerse Stuttgart AG and is distributed to all affiliated vendors. Each vendor decides on an individual basis as to whether he will distribute/display the Index via his information systems.

### 1.4 Prices and calculation frequency

The price of the Index is calculated on each Business Day based on the prices on the respective Exchanges on which the Index Components are listed. The most recent prices of all Index Components are used. Prices of Index Components not listed in the Index Currency are translated using spot foreign exchange rates quoted by Reuters. Should there be no current price available on Reuters, the most recent price or the Trading Price on Reuters for the preceding Trading Day is used in the calculation. The daily Index Closing Level is calculated using Reuters/WMCO closing spot rates as at 4pm London time.

The Index is calculated every Business Day from 8:00am to 10:30pm, CET. In the event that data cannot be provided to Reuters or to the pricing services of Boerse Stuttgart AG the Index cannot be distributed.

Any incorrect calculation is adjusted on a retrospective basis.

## **1.5 Weighting**

On the Start Date the Index Components of the Index have the initial weights specified in Section 2.1.

## **1.6 Decision-making bodies**

A Committee composed of staff from Solactive AG is responsible for decisions regarding the composition of Index as well as any amendments to the rules (in this document referred to as the "**Committee**" or the "**Index Committee**"). The Committee shall only make adjustments to the composition of the Index if any Extraordinary Events should occur.

Members of the Committee can recommend changes to the guideline and submit them to the Committee for approval.

## **1.7 Publication**

All specifications and information relevant for calculating the Index are made available on the <http://www.solactive.com> web page and sub-pages.

## **1.8 Historical data**

Historical data will be maintained from the launch of the Index on the Start Date.

## **1.9 Licensing**

Licences to use the Index as the underlying value for derivative instruments are issued to stock exchanges, banks, financial services providers and investment houses by Solactive AG.

## 2 Composition of the Index

### 2.1 Selection of the Index Components

The composition of the Index is based on the following rules:

As of the Start Date, shares issued by 9 companies (each an “**Index Component**”) constitute the Index:

<b>Index Components</b>	<b>Bloomberg Ticker</b>	<b>Initial Weight*</b>
BAE SYSTEMS PLC	BA/ LN Equity	11.11%
BOEING CO/THE	BA UN Equity	11.11%
GENERAL DYNAMICS	GD UN Equity	11.11%
LOCKHEED MARTIN CORP	LMT UN Equity	11.11%
NORTHROP GRUMMAN CORP	NOC UN Equity	11.11%
RAYTHEON B	RTN UN Equity	11.11%
SAFRAN SA	SAF FP Equity	11.11%
THALES SA	HO FP Equity	11.11%
UNITED TECHNOLOGIES CORP	UTX UN Equity	11.11%

\*Values are rounded to 2 decimal places

### 2.2 Ordinary adjustment

There are no ordinary adjustments to the Index composition.

### 2.3 Extraordinary adjustment

The Committee may, but is under no obligation to, substitute an Index Component with a successor Index Component upon the occurrence of an Extraordinary Event as determined by Solactive AG. Any such successor Index Component shall be included in the Index after the close of business on the day when an Extraordinary Event has been determined by Solactive AG.

### 3 Calculation of the Index

#### 3.1 Index formula

The “**Index Value**” on a Business Day at the relevant time is calculated in accordance with the following formula:

$$Index_t = \frac{\sum_{i=1}^n x_{i,t} * p_{i,t} * f_{i,t}}{D_t}$$

with:

$x_{i,t}$  = Number of Index Shares of the Index Component i on Trading Day t

$p_{i,t}$  = Trading Price of Index Component i on Trading Day t

$f_{i,t}$  = Foreign exchange rate to convert the Trading Price of Index Component i on Trading Day t into the Index Currency, where the Index Component is denominated in the Index Currency this value shall be 1

$D_t$  = Divisor on Trading Day t

The initial Divisor on the Start Date is calculated according to the following formula:

$$D_0 = \frac{\sum_{i=1}^n p_{i,0} * f_{i,0} * x_{i,0}}{IIL_0}$$

with:

$IIL_0$  = Initial index level as of the Start Date

$x_{i,0}$  = Number of Index Shares of the Index Component i on the Start Date

$p_{i,0}$  = Trading Price of Index Component i on the Start Date

$f_{i,0}$  = Foreign exchange rate to convert the Trading Price of Index Component i on the Start Date into the Index Currency, where the Index Component is denominated in the Index Currency this value shall be 1

$D_0$  = Divisor on the Start Date

#### 3.2 Accuracy

The value of the Index will be rounded to two decimal places.

The Number of Index Shares of the Index Components will be rounded to four decimal places.

Trading Prices will be rounded to four decimal places.

Divisors will be rounded to six decimal places.

### 3.3 Adjustments

The Index is adjusted for distributions, capital increases, rights issues, splits, par value conversions and capital reductions. This requires the new Number of Index Shares of the affected Index Component to be calculated on an ex-ante basis.

This procedure ensures that the first ex quote can be properly reflected in the calculation of the Index. This ex-ante procedure assumes the general acceptance of the Index calculation formula as well as open access to the parameter values used. The calculation parameters are provided by Solactive AG.

### 3.4 Dividends and other distributions

Only special cash dividend payments are included in the Index. They cause an adjustment of the Divisor. On any date  $t$  after the Start Date, which is subject to no Divisor adjustment, the new Divisor is calculated as follows:

$$D_{t+1} = D_t * \frac{\sum_{i=1}^n (p_{i,t} * f_{i,t} * x_{i,t}) - (x_{i,t} * y_{i,t} * g_{i,t})}{\sum_{i=1}^n (p_{i,t} * f_{i,t} * x_{i,t})}$$

with

$p_{i,t}$  = Trading Price of Index Component  $i$  on Trading Day  $t$

$f_{i,t}$  = Foreign exchange rate to convert the Trading Price of Index Component  $i$  on Trading Day  $t$  into the Index Currency, where the Index Component is denominated in the Index Currency this value shall be 1

$x_{i,t}$  = Number of Index Shares of the Index Component  $i$  on Trading Day  $t$

$y_{i,t}$  = Distribution of Index Component  $i$  with ex date  $t+1$  multiplied by the Dividend Correction Factor

$g_{i,t}$  = Foreign exchange rate to convert the amount of the distribution of Index Component  $i$  on Trading Day  $t$  into the Index Currency

$D_t$  = Divisor on Trading Day  $t$

$D_{t+1}$  = Divisor on Trading Day  $t+1$

### 3.5 Corporate actions

#### 3.5.1 Principles

Following the announcement by an Index Component of the terms and conditions of a corporate action the Index Calculator determines whether such corporate action will result in a dilution, concentration or have any other effect on the price of that Index Component.

If this should be the case the Index Calculator shall make the necessary adjustments to the affected Index Component and/or the formula for calculating the Index and/or to other terms and conditions of this document that it deems appropriate in order to take into account such dilution, concentration or other effect and shall also determine the date on which this adjustment shall come into effect.

Amongst other things the Index Calculator can take into account the adjustment made by an Affiliated Exchange as a result of the corporate action with regard to option and futures contracts on the respective share traded on this Affiliated Exchange.

### 3.5.2 Capital increases

In the case of capital increases with ex date t+1 the Index is adjusted as follows:

$$x_{i,t+1} = x_i * \frac{1+B}{1}$$

with:

- $x_{i,t+1}$  = Number of Index Shares of Index Component i on Trading Day t+1
- $x_{i,t}$  = Number of Index Shares of Index Component i on Trading Day t
- B = Number of additional Index Shares per every Index Shares held with respect to Index Component i

$$p_{i,t+1} = \frac{p_{i,t} + s * B}{1+B} \quad \text{with:}$$

- $p_{i,t}$  = Trading Price of Index Component i on Trading Day t
- $p_{i,t+1}$  = Hypothetical price of Index Component i on Trading Day t+1
- s = Subscription price per additional unit of the Index Component, denominated in the Index Currency

### 3.5.3 Capital reductions

In the case of capital reductions the new Number of Index Shares is determined as follows:

$$x_{i,t+1} = x_{i,t} * \frac{1}{H_{i,t+1}}$$

- $H_{i,t+1}$  = Reduction ratio of the Index Component on day t+1
- $x_{i,t+1}$  = Number of Index Shares of the affected Index Component on the day of the distribution
- $x_{i,t}$  = Number of Index Shares of the affected Index Component on the day prior to the distribution

$$p_{i,t+1} = p_{i,t} * H_{i,t+1} \quad \text{with:}$$

- $p_{i,t}$  = Trading Price of Index Component i on Trading Day t
- $p_{i,t+1}$  = Hypothetical price of Index Component i on Trading Day t+1

### 3.5.4 Corporate Actions: Others

#### (i) Share splits

In the case of a share split of an Index Component effective on Trading Day t+1 it is assumed that the prices change in the same proportion as the ratio of such split. The new Number of Index Shares in relation to such affected Index Component is calculated as follows:

$$x_{i,t+1} = x_{i,t} * B$$

- $x_{i,t}$  = Number of Index Shares of the affected Index Component on Trading Day t
- $x_{i,t+1}$  = Number of Index Shares of the affected Index Component on Trading Day t+1
- B = Number of Index Shares of the affected Index Component after the share split for every share held before the split



## (ii) Stock distributions

In the case of stock distributions relating to an Index Component effective on Trading Day t+1 it is assumed that the prices change according to the terms of the distribution. The new Number of Index Shares in relation to such affected Index Component is calculated as follows:

$$x_{i,t+1} = x_{i,t} * (1 + B)$$

$x_{i,t}$  = Number of Index Shares of the affected Index Component on Trading Day t  
 $x_{i,t+1}$  = Number of Index Shares of the affected Index Component on Trading Day t+1  
B = Number of Index Shares additional to the Number of Index Shares already in the Index for every share held with respect to the affected Index Component.

### 3.5.5 Divisor Adjustments

The corporate actions outlined in the previous sections lead to divisor adjustments:

$$D_{t+1} = D_t * \frac{\sum_{i=1}^n (p_{i,t} * f_{i,t} * x_{i,t}) + \sum_{i=1}^n [(x_{i,t+1} * p_{i,t+1} * f_{i,t}) - (x_{i,t} * p_{i,t} * f_{i,t})]}{\sum_{i=1}^n (p_{i,t} * f_{i,t} * x_{i,t})}$$

with

$p_{i,t}$  = Trading Price of Index Component i on Trading Day t

$f_{i,t}$  = Foreign exchange rate to convert the Trading Price of Index Component i on Trading Day t into the Index Currency, where the Index Component is denominated in the Index Currency this value shall be 1

$x_{i,t}$  = Number of Index Shares of the Index Component i on Trading Day t

$p_{i,t+1}$  = Hypothetical price of Index Component i on Trading Day t+1

$x_{i,t+1}$  = Number of Index Shares of the Index Component i on Trading Day t+1

$D_t$  = Divisor on Trading Day t

$D_{t+1}$  = Divisor on Trading Day t+1

## 3.6 Calculation of the Index in the event of a Market Disruption Event

In the event of a Market Disruption Event, Solactive AG calculates the Index Value, taking into account the market conditions prevailing at this point in time, the Trading Price prevailing in relation to each of the Index Components immediately prior to the Market Disruption Event as well as any other conditions that it deems relevant for calculating the Index Value.

## 4. Definitions

An “**Affiliated Exchange**” is with regard to an Index Component an exchange, a trading or quotation system on which options and futures contracts on the Index Component in question are traded, as specified by the Index Calculator.

“**Applicable Withholding Tax Rate**” is, with respect to Index Component i, the tax rate as determined by the respective country of incorporation of such Index Component. The Applicable Withholding Tax Rate table is publicly available on the Solactive website and can be accessed using the following URL:  
<http://www.solactive.com/news/documents/>

A “**Business Day**” is any weekday of the year.

“**Dividend Correction Factor**” is calculated as 1 minus the Applicable Withholding Tax Rate and/or other applicable tax rate currently prevalent in the respective country.

“**Exchange**” is, in respect of Index and every Index Component, the respective primary exchange where the Index Component has its primary listing. The Committee may decide to declare a different stock exchange the “Exchange” for trading reasons, even if the company is only listed there via a Stock Substitute.

In particular an “**Extraordinary Event**” is

- (i) a Merger
- (ii) a Takeover bid
- (iii) a Delisting
- (iv) the Nationalisation of a company
- (v) Insolvency
- (vi) Tax Event

In case an Extraordinary Event comes into effect, the Trading Price for Index Component i is the last quoted price on the Exchange that is available prior to such Extraordinary Event.

With regard to an Index Component a “**Merger**” is

- (i) a change in the security class or a conversion of this share class that results in a transfer or an ultimate definite obligation to transfer all the shares in circulation to another legal person,
- (ii) a merger (either by acquisition or through forming a new structure) or a binding obligation on the part of the issuer to exchange shares with another legal person (except in a merger or share exchange under which the issuer of this Index Component is the acquiring or remaining company and which does not involve a change in security class or a conversion of all the shares in circulation),
- (iii) a takeover offer, exchange offer, other offer or another act of a legal person for the purposes of acquiring or otherwise obtaining from the issuer 100% of the shares issued that entails a transfer or the irrevocable obligation to transfer all shares (with the exception of shares which are held and controlled by the legal person), or
- (iv) a merger (either by acquisition or through forming a new structure) or a binding obligation on the part of the issuer of the share or its subsidiaries to exchange shares with another legal person, whereby the issuer of the share is the acquiring or remaining company and it does not involve a change in the class or a conversion of the shares issued, but the shares in circulation directly prior to such an event (except for shares held and controlled by the legal person) represent in total less than 50% of the shares in circulation directly subsequent to such an event.

The “**Merger Date**” is the date on which a Merger is concluded or the date specified by the Index Calculator if such a date cannot be determined under the law applicable to the Merger.

A “**Takeover bid**” is a bid to acquire, an exchange offer or any other offer or act of a legal person that results in the related legal person acquiring as part of an exchange or otherwise more than 10% and less than 100% of the voting shares in circulation from the issuer of the Index Component or the right to acquire these shares, as determined by the Index Calculator based on notices submitted to public or self-regulatory authorities or other information considered by the Index Calculator to be relevant.

An Index Component is “**delisted**” if the applicable Exchange announces pursuant to its regulations that the listing of, the trading in or the issuing of public quotes on the Index Component at the Exchange has ceased immediately or will cease at a later date, for whatever reason (provided delisting is not because of a Merger or a Takeover bid), and the Index Component is not immediately listed, traded or quoted again on an exchange, trading or listing system, in a manner acceptable to the Index Calculator.

“**Nationalisation**” is a process whereby all shares or the majority of the assets of the issuer of the shares are nationalised or are expropriated or otherwise must be transferred to public bodies, authorities or institutions.

“**Insolvency**” occurs with regard to an Index Component if (A) all shares of the respective issuer must be transferred to a trustee, liquidator, insolvency administrator or a similar public officer as result of a voluntary or compulsory liquidation, bankruptcy, insolvency, dissolution or winding-up proceedings or comparable proceedings affecting the issuer of the Index Components or (B) the holders of the shares of this issuer are legally prohibited from transferring the shares.

In the event of the Insolvency of an issuer of an Index Component the Committee may decide to eliminate the respective Index Component from the index. As long as a market price for the affected Index Component is available on a Business Day, this shall be applied as the Trading Price for this Index Component on the relevant Business Day, as determined in each case by the Index Calculator. If a market price is not available on a Business Day the Trading Price for this Index Component is set to zero.

“**Tax Event**” occurs when the applicable withholding tax relevant to the calculation of the Dividend Calculation Factor in relation to an Index Component(s) changes.

The “**Index Calculator**” is Solactive AG or any other appropriately appointed successor in this function.

“**Index Component**” is each share currently included in the Index.

The “**Index Currency**” is the currency in which the Index is denominated and shall be Euro (“EUR”).

A “**Market Disruption Event**” occurs if, in the opinion of the Index Calculator:

1. one of the following events occurs or exists on any Trading Day in relation to an Index Component, the applicable Exchange and/or Affiliate Exchange:
  - A) trading is suspended or restricted (due to price movements that exceed the limits allowed by the Exchange or an Affiliated Exchange, or for other reasons):
    - 1.1. across the whole Exchange; or
    - 1.2. in options or futures contracts on, or with regard to, an Index Component or an Index Component that is itself quoted on an Affiliated Exchange; or
    - 1.3. on an Exchange or in a trading or quotation system (as determined by the Index Calculator) in which an Index Component is listed or quoted; or
  - B) an event that (in the assessment of the Index Calculator) generally disrupts and affects the opportunities of market participants to execute on the Exchange transactions in respect of an Index Component or to determine the Trading Price of an Index Component or to execute on an Affiliated Exchange transactions in options and futures contracts referencing such Index Component or to determine market values for such options or futures contracts; or
2. trading on the applicable Exchange and/or Affiliated Exchange is ceased prior to the Normal Exchange Closing Time (as defined below), unless the early cessation of trading is announced by the Exchange or Affiliated Exchange on this Trading Day at least one hour before:
  - 2.1 the actual closing time for normal trading on the Exchange or Affiliated Exchange on the Trading Day in question or, if earlier.
  - 2.2 the closing time (if given) of the Exchange or Affiliated Exchange for the execution of orders at the time the quote is given.

**“Normal Exchange Closing Time”** is the time at which the Exchange or an Affiliated Exchange is normally closed on working days without taking into account after-hours trading or other trading activities carried out outside the normal trading hours; or

3. a general moratorium is imposed on banking transactions in the country where the applicable Exchange is located;

**“Number of Index Shares”** is in respect of an Index Component and any given Business Day the number or fraction of shares included in the Index. It is calculated for any Index Component on any date t (subject to no capital increases, no capital reductions, no share splits and no stock distributions) as the ratio of (A) the Initial Weight of an Index Component multiplied by the Index Value on the Start Date and (B) its Trading Price on the Start Date.

**“Stock Substitute”** includes in particular American Depository Receipts (ADR) and Global Depository Receipts (GDR).

A **“Trading Day”** is in relation to the Index or an Index Component a trading day on the Exchange (or a day that would have been such a day if a market disruption had not occurred), excluding days on which trading may be ceased prior to the Normal Exchange Closing time. The Index Calculator is ultimately responsible as to whether a certain day is a Trading Day with regard to the Index or an Index Component or in any other connection relating to this document.

With regard to an Index Component (subject to the provisions given above under “Extraordinary Events”) the **“Trading Price”** in respect of a Trading Day is the closing price on this Trading Day determined in accordance with the Exchange regulations. If the Exchange has no closing price for an Index Component, the Index Calculator shall determine the Trading Price and the time of the quote for the share in question in a manner that appears reasonable to him.

## **5 Appendix**

### **5.1 Contact data**

#### **Information regarding the Index concept**

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### **5.2 Calculation of the Index – change in calculation method**

The application by the Index Calculator of the method described in this document is final and binding. The Index Calculator shall apply the method described above for the composition and calculation of the Index. However it cannot be excluded that the market environment, supervisory, legal, financial or tax reasons may require changes to be made to this method. The Index Calculator may also make changes to the terms and conditions of the Index and the method applied to calculate the Index, which it deems to be necessary and desirable in order to prevent obvious or demonstrable error or to remedy, correct or supplement incorrect terms and conditions. The Index Calculator is not obliged to provide information on any such modifications or changes. Despite the modifications and changes the Index Calculator will take the appropriate steps to ensure a calculation method is applied that is consistent with the method described above.