

A.2 GENERAL RULES FOR DERIVATIVE CONTRACTS

A.2.1 GENERAL

A.2.1.1 Introduction

- (1) A.2.1 contains a summary of the contract types with primary listing on Oslo Børs, and also contains explanations of the concepts and terminology used in the contract specifications,¹ as well as providing references to more detailed provisions in other sections of the Derivatives Rules.
- (2) A.2.2 contains the terms and conditions for contract adjustments to stock derivative contracts with primary listing on Oslo Børs.
- (3) A.2.3 contains the rules and terms and conditions for contract adjustments to stock index derivative contracts with primary listing on Oslo Børs (OBX).
- (4) Oslo Børs also lists derivative contracts with primary listing on a co-operating exchange².

A.2.1.2 Categories of derivative contract

- (1) Derivative contracts are divided into the following categories on the basis of contract type (option, forward or futures) and form of settlement:
 - a) Option contract with delivery of the underlying instrument, cf. (2).
 - b) Option contract with expiration settlement, cf. (3).
 - c) Forward contract with expiration settlement and delivery of underlying instrument, cf. (4).
 - d) Futures contract with daily mark-to-market settlement, cf. (5).
 - e) Futures contract with daily mark-to-market settlement and delivery of underlying instrument, cf. (6).
- (2) An option contract with delivery of the underlying instrument is an option contract whereby on exercising the option the holder has the right to buy the underlying instrument from the writer of the option against payment of the exercise price in the case of a call option, or similarly a right to sell the underlying instrument to the writer against payment of the exercise price in the case of a put option.
- (3) An option contract with expiration settlement is an option contract whereby on exercising the option the holder is entitled to settlement in cash from the writer of the option.
 - a) Cash settlement shall take place for the positive difference calculated as the fixing value of the underlying instrument less the exercise price if it is a call option, and for the positive difference calculated as the exercise price less the fixing value if it is a put option.

¹ Appendix A3.

² See Appendix B2 and B4 for further information on the product range and related rules.

- b) For a call option, a fixed cash settlement shall take place if the fixing value for the underlying instrument is higher than the exercise price, and equivalent for a put option if the fixing value for the underlying instrument is lower than the exercise price.
- (4) A forward contract with expiration settlement and delivery of the underlying instrument is a contract where at the expiry of the contract the buyer has the right and obligation to buy the underlying instrument from the seller against payment of the fixing value thereof. The buyer has in addition the right to a cash settlement from the seller for the positive difference between the fixing value and the forward price, or an obligation to settle in cash the corresponding negative difference.
- (5) A futures contract with daily mark-to-market settlement is a contract where the buyer and seller on each trading day have the right to receive or an obligation to pay cash settlement in the form of a daily mark-to-market settlement.
- (6) A futures contract with daily mark-to-market settlement and delivery of underlying instrument is a contract where the buyer and seller on each trading day have the right to receive or an obligation to pay cash settlement in the form of a daily mark-to-market settlement, and where at the expiry of the contract the buyer has the right and obligation to buy the underlying instrument from the seller against payment of the fixing value thereof.

A.2.1.3 The parties to a derivative contract

- (1) The holder (buyer) is the party to an option contract that acquires a unilateral right to exercise the option contract, with a subsequent right and obligation to deliver the underlying instrument and/or cash payment, as further provided in the contract specifications and these Derivatives Rules. The writer (seller) is the party to the option contract that assumes the right and obligation to execute such settlement if the holder exercises the option contract.
- (2) The buyer is the party to a futures/forward contract that has the right and obligation to buy the underlying instrument and/or an obligation to make a cash settlement in the event of a fall in the price of the underlying instrument; the seller is the party to the futures/forward contract that has the right and obligation to sell the underlying instrument and/or an obligation to settle in cash in the event of a rise in the price of the underlying instrument.

A.2.1.4 Underlying instrument

The underlying instrument is a financial instrument as defined in the Securities Trading Act or an index that a derivative contract gives the right and/or obligation to deliver, and/or from which the expiration settlement or last daily mark-to-market settlement is calculated. The underlying instrument³ is defined in the series designation³.

A.2.1.5 Contract size

The contract size is the number of underlying instruments to which a derivative contract applies, or a nominal figure by which an underlying index shall be multiplied. The contract size is defined in the contract specification.

A.2.1.6 Option premium

³ As detailed in Appendix B2.

The option premium is the price which the holder and writer agree upon at the execution of an option contract, and which the holder shall pay to the writer for the option contract under the provisions of these Derivatives Rules. The option premium shall be quoted as further described in the contract specifications.

A.2.1.7 Exercise price

The exercise price is the trade price that is payable on delivery of the underlying instrument after exercise of an option contract, or the price from which an expiration settlement amount is calculated upon expiration. The exercise price is shown by the series designation.

A.2.1.8 Forward/futures price

The forward/futures price is the trade amount the buyer pays upon delivery of the underlying instrument, or the price used for cash settlement of a forward contract. The forward/futures price for a particular contract is defined in the contract specification.

A.2.1.9 Closing

Closing means the termination of the parties' rights and obligations under a derivative contract. The contract specifications state whether a derivative contract may be closed and, if closing is permitted, on which trading days.

A.2.1.10 Exercise

Exercise means that the holder exercises its right under an option contract. The contract specifications specify whether the contract type shall be subject to manual exercise and/or automatic exercise. The contract specifications also specify the days on which exercise may be executed, and any exercise restrictions. After exercise, settlement shall be performed as further specified in the contract specification.

A.2.1.11 Fixing value

- (1) The fixing value is a calculated value of the underlying instrument that is used for the calculation of the expiration settlement amount or the last daily mark-to-market settlement for derivative contracts, and as a basis for automatic exercise of option contracts and as the trading amount for stock settlement through VPS for stock forwards.
- (2) The fixing value is calculated in accordance with the provisions of A.2.2.14 for stock derivative contracts and in accordance with the provisions of A.2.3.5 for the OBX index.

A.2.1.12 Form of settlement and settlement days

- (1) The form of settlement states the manner in which the settlement shall take place between the parties to a derivative contract.
- (2) The settlement date is the date on which settlement shall take place, as further specified in the contract specification. Oslo Børs may stipulate a settlement date other than that provided in the contract specification if special circumstances so indicate, cf. A.2.2.

A.2.1.13 Term of option and forward/futures series

The term of an option or forward/futures series is the period from the first trading date for the series up to and including the expiration date, and is defined in the contract specifications.

A.2.1.14 Expiration date

The expiration date is the date in the expiration month when the holders' and writers' rights and obligations pursuant to an option contract lapse, or when the buyers' and sellers' rights and obligations to settlement arise on expiration of a forward/futures contract. The expiration date is defined in the contract specifications, whereas the expiration month and year appear from the series designation.

A.2.1.15 Series designation

- (1) The series designation is a designation of the respective option or futures/forward series, which at the same time indicates special conditions for the derivative contracts of the series. The series designation consists of certain standardised symbols explained below and in the contract specifications.
- (2) The expiration year is indicated as the last digit of the year in which the series expires.
- (3) The expiration month and option type are indicated in the series designation in accordance with the following rules:

| Expiration month | Call option | Put option |
|------------------|-------------|-------------|
| January | A (Alpha) | M (Mike) |
| February | B (Bravo) | N (Nils) |
| March | C (Charlie) | O (Oscar) |
| April | D (Delta) | P (Papa) |
| May | E (Echo) | Q (Quebec) |
| June | F (Fox) | R (Romeo) |
| July | G (Golf) | S (Sierra) |
| August | H (Hotel) | T (Tango) |
| September | I (India) | U (Uniform) |
| October | J (Juliet) | V (Victor) |
| November | K (Kilo) | W (Whisky) |
| December | L (Lima) | X (X-ray) |

- (4) The expiration month and settlement form for forward/futures contracts are indicated in the series designation in accordance with the following rules, grouped according to whether the forward/futures contract applies only to cash settlement, or delivery of the underlying instrument against payment of the forward/futures price with or without cash settlement in addition (other settlements).

| Expiration month | Cash settlement only | Other settlement |
|------------------|----------------------|------------------|
| January | A (Alpha) | M (Mike) |
| February | B (Bravo) | N (Nils) |
| March | C (Charlie) | O (Oscar) |
| April | D (Delta) | P (Papa) |
| May | E (Echo) | Q (Quebec) |
| June | F (Fox) | R (Romeo) |
| July | G (Golf) | S (Sierra) |

| | | |
|-----------|------------|-------------|
| August | H (Hotel) | T (Tango) |
| September | I (India) | U (Uniform) |
| October | J (Juliet) | V (Victor) |
| November | K (Kilo) | W (Whisky) |
| December | L (Lima) | X (X-ray) |

- (5) If an option or forward/futures series has been the object of contract adjustment pursuant to A.2.1.16, this shall be indicated by a special symbol. The same rule applies if a series designation diverges from the provisions of this section.

A.2.1.16 Contract adjustment

- (1) Contract adjustment refers to changes made by Oslo Børs to the terms and conditions of both derivative contracts that are currently trading and for future trades in the relevant option and futures/forward series. The contract specifications define the adjustments in the conditions that may be adopted, in accordance with the provisions of A.2.2 and A.2.3.
- (2) Derivatives members shall be notified by way of exchanges notices of any contract adjustments of derivative contracts with primary listing on Oslo Børs, and derivatives members are responsible for notifying such changes to their end-customers.

A.2.1.17 Listing of new options and forward/futures series

- (1) Oslo Børs lists new option and futures/forward series in accordance with the rules specified below and with the term and expiration month as stated in the quotation list⁴. Oslo Børs may decide that additional series shall be listed.
- a) On the first quotation date, at least seven call and put option series shall be listed. The exercise prices are determined on the basis of the closing price of the underlying instrument on the day before the first listing date. A call option and a put option shall be quoted with the exercise price closest to the closing price, and three series with exercise prices closest over and three series with exercise prices closest under the first defined exercise price. The intervals between the exercise prices are defined in the quotation list⁵. New series may be listed during the term with the same expiration month if the underlying instrument's closing price is higher or lower, respectively, than the third highest, or third lowest, exercise price. At least one new call or put option with the exercise price higher or lower, respectively, than the existing series with the same expiration month will in such case be listed the following trading day. Oslo Børs may set aside these rules if special circumstances so indicate.
- (2) Oslo Børs lists forward/futures series with term and expiration month as stated in the quotation list⁶.

A.2.1.18 Tick size

Tick size is the smallest option premium or forward/futures price interval for which an order or interest order can be registered in EMP. Tick size is shown in the contract specifications.

⁴ Appendix B2.

⁵ Appendix B2.

⁶ Appendix B2.

A.2.1.19 Final trade time

The final trade time is the last time at which a transaction can be executed on the expiration date. The final trade time is shown in the contract specifications.

A.2.1.20 Final registration time

The final registration time is the last time at which off-exchange trade can be registered on the expiration date. The last registration time for off-exchange trading is shown in the contract specifications.

A.2.1.21 Option type

- (1) A European option is an option contract that can only be exercised on the expiration date.
- (2) An American option is an option contract whereby the holder can choose to exercise the option on any trading day for the contract up to and including the expiration date.

A.2.2 GENERAL RULES FOR STOCK DERIVATIVE CONTRACTS WITH PRIMARY LISTING ON OSLO BØRS**A.2.2.1 Introductory provisions on contract adjustments following changes in issued capital**

- (1) In the event of any changes in the share capital of a company that has issued stocks that are underlying instruments for stock derivative contracts, Oslo Børs shall adjust the conditions for the derivative contracts in accordance with the provisions of A.2.2.1 to A.2.2.14.
- (2) Where the following provisions include two or more alternatives, Oslo Børs shall decide which adjustment alternative to employ. Oslo Børs may also prolong or alter the calculation periods and the execution dates for adjustment in accordance with the following provisions if special reasons so indicate.
- (3) If Oslo Børs considers that an adjustment of derivative contracts in accordance with the following rules would give unreasonable results or if the change in capital is not covered by the following rules, Oslo Børs may issue other adjustment rules.
- (4) Adjustments shall not result in any increase in the exercise price or forward/futures price in cases other than described in A.2.2.4.
- (5) Oslo Børs shall publish the adjusted conditions.
- (6) Adjustment factors are rounded to six decimals, and adjusted exercise and forward/futures prices are rounded to two decimals. Adjusted contract sizes are rounded to the nearest whole integer.
- (7) In the event of a change in the currency in which the underlying instrument is listed, Oslo Børs may decide to convert existing derivative contracts to derivative contracts listed in the new currency. The conversion to the new currency shall be carried out by converting the exercise price, option premium and forward price, as well as any other monetary values, to the currency of the underlying instrument. The conversion of existing derivative contracts shall be carried out in accordance with conversion rates determined by Oslo Børs.

A.2.2.2 Contract adjustments following scrip issues

- (1) In the event of a scrip issue, the exercise price or forward/futures price and the contract size or number of derivative contracts shall be adjusted in accordance with Alternative 1 below if the company issues a whole number of stocks of the same type per outstanding stock prior to the scrip issue; in other cases adjustment shall be carried out according to Alternative 2 below.

Alternative 1

Under this alternative, the number of derivative contracts and the exercise prices and forward/futures prices are adjusted.

The adjusted number of derivative contracts is calculated as follows:

$$K_{ex} = \frac{K_{cum} * n_{ex}}{n_{cum}}$$

- K_{ex} = Adjusted number of derivative contracts
- K_{cum} = Number of derivative contracts before adjustment
- n_{ex} = Number of outstanding stocks in the stock class after the scrip issue
- n_{cum} = Number of outstanding stocks in the stock class before the scrip issue

Alternative 2

Under this alternative, the contract size and exercise prices or forward/futures prices are adjusted. The contract size is adjusted as follows:

$$N_{ex} = \frac{N_{cum} * n_{ex}}{n_{cum}}$$

- N_{ex} = Adjusted contract size
- N_{cum} = Contract size before adjustment
- n_{ex} = Number of outstanding stocks in the stock class after the scrip issue
- n_{cum} = Number of outstanding stocks in the stock class before the scrip issue

- (2) The adjusted exercise price or forward/futures price is calculated as follows in either alternative:

$$X_{ex} = \frac{X_{cum} * n_{cum}}{n_{ex}}$$

- X_{ex} = Adjusted exercise price or forward/futures price
- X_{cum} = Exercise price or forward/futures price before adjustment
- n_{cum} = Number of outstanding stocks in the stock class before the scrip issue
- n_{ex} = Number of outstanding stocks in the stock class after the scrip issue

- (3) If in a scrip issue stocks are issued in a stock class different from the underlying stocks, the provisions of A.2.2.3 (2) will similarly apply.

A.2.2.3 Contract adjustments following stock splits and division into several stock classes

- (1) In a stock split where the total nominal value of the underlying stock class remains unchanged, the adjustments shall be in accordance with the provisions of A.2.2.2.
- (2) Where underlying stocks are split into several stock classes without the total nominal value of the stock classes being changed, all stock classes after the split shall be underlying stocks corresponding to their respective proportions, provided all the stock classes are registered in VPS.
- (3) Fixing values for derivative contracts are calculated in accordance with A.2.2.14.
- (4) Contract adjustments are implemented from and including the ex-date.

A.2.2.4 Contract adjustments in the event of a reverse stock split and combining of stocks

When the number of stocks is reduced without the combined nominal value of the stock class being changed (combining of stocks), the adjustments shall be in accordance with the provisions of A.2.2.2. The adjustments are executed from and including the ex-date.

A.2.2.5 Contract adjustments in the event of a preferential rights issue with subscription of stocks in the same stock class

- (1) In the event of a preferential rights issue with subscription of new stocks in the same stock class against payment in cash at a subscription price which is below the volume-weighted average price of the underlying stock on the ex-date calculated according to the provisions of A.2.2.5 (2), the exercise price or forward/futures price, and the number of derivative contracts held or written or the contract size shall be adjusted in accordance with Alternative 1 or 2. The contract adjustments are executed from and including the ex-date.

Alternative 1

Under this alternative, the number of derivative contracts and the exercise price or forward/futures price are adjusted.

The exercise price and forward/futures price are adjusted as follows:

$$X_{\text{ex}} = \frac{X_{\text{cum}}}{A}$$

X_{ex} = Adjusted exercise price or forward/futures price
 X_{cum} = Exercise price or forward/futures price before adjustment
 A = Adjustment factor

The adjusted number of derivative contracts is calculated as follows:

$$K_{\text{ex}} = K_{\text{cum}} * A$$

K_{ex} = Adjusted number of derivative contracts
 K_{cum} = Number of derivative contracts before adjustment
 A = Adjustment factor

The adjustment factor is calculated as follows:

$$A = \frac{P_{\text{cum}}^{\text{vwap}}}{P_{\text{ex}}}$$

A = Adjustment factor
 $P_{\text{cum}}^{\text{vwap}}$ = The stock's volume-weighted average price before the issue, cf. (2)
 P_{ex} = The stock's theoretical value after the issue

The stock's theoretical value after the issue is calculated as follows:

$$P_{\text{ex}} = \frac{(n_{\text{cum}} * P_{\text{cum}}^{\text{vwap}}) + (n_{\text{new}} * E)}{n_{\text{cum}} + n_{\text{new}}}$$

P_{ex} = The stock's theoretical value after the issue

- n_{cum} = The number of outstanding stocks in the stock class before the issue
 P_{cum}^{vwap} = The stock's volume-weighted average price before the issue, cf. (2).
 n_{new} = The number of new stocks
 E = Subscription price

Alternative 2

Under this alternative, contract size and exercise price or forward/futures price are adjusted.

The adjusted exercise price or forward/futures price and the adjustment factor are calculated as in Alternative 1.

The adjusted contract size is calculated as follows:

$$N_{ex} = N_{cum} * A$$

- N_{ex} = Adjusted contract size
 N_{cum} = Contract size before adjustment
 A = Adjustment factor

- (2) The stock's volume-weighted average price before the issue is calculated from the trading prices quoted on the last trading day before the ex-date (calculation period) in accordance with the following rules:
- a) The calculation for underlying stocks will include only automatically matched trades on Oslo Børs.
 - b) Oslo Børs may extend the calculation period and impose additional requirements as to the trading basis, and set aside the indicated calculation method if special circumstances exist.
- (3) Oslo Børs may choose to make the adjustment so that the exercise prices and forward/futures prices multiplied by the number of stocks before and after all contract adjustments are as far as possible unchanged.
- (4) If option contracts are exercised or if the expiration date for a derivative contract is such that the stock settlement will take place before a decision as mentioned in (1) above has been finally implemented, Oslo Børs may decide that both the underlying stocks and allotted preferential rights or paid-up interim stocks shall be underlying instruments, provided all instruments are registered in VPS. The provisions of A.2.2.14 are similarly applicable.

A.2.2.6 Contract adjustments in the event of preferential rights issues with subscription of new convertible bonds, bonds with the right to purchase common stocks or other stock types

- (1) In the event of a preferential rights issue with subscription of new convertible bonds, bonds conferring a right to buy stocks or other stock types against payment in cash, the terms and conditions of related derivative contracts shall be adjusted in accordance with Alternative 1 or Alternative 2 below ("contract adjustments"). "Other stock types" means stocks in a different stock class and stocks in the same stock class that Oslo Børs considers cannot be equated with the underlying stocks.

The contract adjustments are executed from and including the trading day after the ex-date.

Alternative 1

Under this alternative, the exercise price or forward/futures price is adjusted as follows:

$$X_{ex} = X_{cum} - T$$

T = Calculated value of the stockholders' preferential right in the issue.

The value of the preferential right in the issue (T) is calculated as follows:

$$T = P_{cum}^{vwap} - (P_{ex}^{vwap} + u)$$

P_{cum}^{vwap} = The stock's volume-weighted average price before the issue, cf. (2)

P_{ex}^{vwap} = The stock's volume-weighted average price after the issue, cf. (3)

u = Dividends in the calculation period for P_{ex}^{vwap} , cf. (3)

Alternative 2

Under this alternative, the exercise price or forward/futures price and contract size are adjusted as follows:

$$X_{ex} = \frac{X_{cum}}{A}$$

$$N_{ex} = N_{cum} * A$$

A = Adjustment factor

X_{ex} = Adjusted exercise price or forward price for the original derivative contracts

X_{cum} = Exercise price or forward price before adjustment

N_{ex} = Adjusted contract size

N_{cum} = Contract size before adjustment

The adjustment factor is calculated as follows:

$$A = \frac{P_{cum}^{vwap}}{P_{ex}^{vwap} + u}$$

(2) The stock's volume-weighted average price before the issue (P_{cum}^{vwap}) is calculated according to the provisions of A.2.2.5 (2).

(3) The stock's volume-weighted average price after the issue (P_{ex}^{vwap}) is calculated from the trading prices on the ex-date in accordance with the same rules as in (2). However, if the ex-date for a dividend occurs in the calculation period for P_{ex}^{vwap} , the calculations shall be adjusted by adding the amount of the dividend.

- (4) In the calculation period up to and including the date when contract adjustment is performed, option contracts may not be exercised. If the expiration date of a derivative contract falls within this period, the expiration date shall be brought forward to the last trading day before the start of the period.
- (5) If option contracts are exercised or the expiration date of derivative contracts is such that settlement shall take place before a decision as mentioned in (1) has been made, Oslo Børs may decide that both the underlying stocks and the allocated preferential rights or paid financial instruments shall be underlying instruments, provided they are all registered in VPS. The provisions of A.2.2.14 are similarly applicable.

A.2.2.7 Contract adjustments in the event of de-mergers and preferential rights issues other than as provided for in A.2.2.5 and A.2.2.6.

- (1) In case of de-mergers or preferential rights issues involving the issue of financial instruments other than those described in A.2.2.5 and A.2.2.6, the conditions for the derivative contracts shall be adjusted in accordance with Alternative 1 or 2 below:

Alternative 1

With effect from the ex-date, both the original underlying stocks and the newly issued financial instruments shall be underlying instruments for the derivative contract. The exercise price, forward/futures price, contract size and number of derivatives contracts shall continue unchanged.

Oslo Børs shall determine the number of original stocks and newly issued financial instruments to which the derivative contracts shall apply. The number so calculated shall be equivalent to the relationship between the original stocks and the newly issued financial instruments following the issue.

In the case of stock derivative contracts, this adjustment alternative can only be applied if the new stocks are registered with VPS and are either listed on Oslo Børs or are expected to be listed on Oslo Børs in the near future. Oslo Børs may impose requirements for the expected liquidity in the new stocks, and require that the derivative contracts apply to a satisfactory number of stocks.

Alternative 2

With effect from and including the trading day following the ex-date, the contracts shall be adjusted in accordance with A.2.2.6 (1), Alternative 1.

Alternative 3

Oslo Børs may decide that each original derivative contract shall be converted to new free-standing derivative contracts with the original stocks and the new stocks respectively as the underlying instruments for the new contracts in accordance with the following rules.

In the case of stock derivative contracts, this adjustment alternative can only be applied if the new stocks are registered with VPS and are either listed on Oslo Børs or expected to be listed on Oslo Børs in the near future. Oslo Børs may impose requirements for the expected liquidity in the new stocks, and require that the derivative contracts apply to a satisfactory number of stocks.

The exercise price and forward/futures price for the original derivative contracts are adjusted as follows:

$$X_{\text{ex}} = \frac{P_{\text{ex}}^{\text{vwap}} + u}{P_{\text{cum}}^{\text{vwap}}} * X_{\text{cum}}$$

- X_{ex} = Adjusted exercise price or forward/futures price for the original contracts
 X_{cum} = Exercise price or forward/futures price before adjustment
 $P_{\text{ex}}^{\text{vwap}}$ = The stock's volume-weighted average price on the ex-date
 $P_{\text{cum}}^{\text{vwap}}$ = The stock's volume-weighted average price before the ex-date
 u = Dividends in the calculation period for $P_{\text{ex}}^{\text{vwap}}$

The exercise price or forward/futures price for the new derivative contracts is determined as follows:

$$X_{\text{new}} = (X_{\text{cum}} - X_{\text{ex}}) * n_x$$

- X_{new} = Adjusted exercise or forward/futures price for new derivative contracts
 X_{ex} = Adjusted exercise or forward/futures price for the original derivative contracts
 X_{cum} = Unadjusted exercise or forward/futures price for the original derivative contracts
 n_x = Number of original stocks required for subscription of a new financial instrument

The contract size of new derivative contracts is calculated as follows:

$$N_{\text{ex}} = \frac{N_{\text{cum}}}{n_x}$$

- N_{ex} = Contract size of new derivative contracts
 N_{cum} = Contract size of original derivative contracts
 n_x = Number of original stocks required for the subscription of a new financial instrument

The volume-weighted average prices are determined in accordance with the provisions of A.2.2.6 (2) and (3).

The contract adjustments are executed on the trading day after the ex-date.

Alternative 4

This alternative provides for the exercise price or forward/futures price and the contract size to be adjusted as follows:

$$X_{\text{ex}} = \frac{X_{\text{cum}}}{A}$$

$$N_{\text{ex}} = N_{\text{cum}} * A$$

- A = Adjustment factor

- X_{ex} = Adjusted exercise price or forward price for the original derivative contracts
 X_{cum} = Exercise price or forward price before adjustment
 N_{ex} = Adjusted contract size
 N_{cum} = Contract size before adjustment

The adjustment factor is calculated as follows:

$$A = \frac{P_{cum}^{vwap}}{P_{ex}^{vwap} + u}$$

- P_{cum}^{vwap} = The stock's volume-weighted average price before the ex-date, cf. A.2.2.6 (2)
 P_{ex}^{vwap} = The stock's volume-weighted average price on the ex-date, cf. A.2.2.6 (3)
 u = Dividend in the calculation period for P_{ex}^{vwap} , cf. A.2.2.6 (3)

Option contracts may not be exercised in the calculation period up to and including the date when contract adjustment is performed. If the expiration date of a derivative contract falls within this period, the expiration date shall be brought forward to the last trading day before the start of the period.

The contract adjustments are applied on the trading day following the ex-date.

Alternative 5:

Contract adjustments shall take place in accordance with the provisions of a), b), or c) below.

- a) With effect from and including the ex-date, both the original underlying stocks and the new financial instruments shall be underlying instruments for the derivative contract. Oslo Børs stipulates the number of original stocks and new financial instruments to which the derivative contracts shall apply. This number shall, after rounding, correspond to the ratio of the original stocks to the new financial instruments after the decision. Trading amounts for stock settlements are determined in accordance with the provisions of Alternative 3.
- b) With effect from and including the ex-date, the exercise price and forward/futures price shall be adjusted in accordance with the following formula:

$$X_{ex} = X_{cum} - F$$

- X_{ex} = Adjusted exercise price or forward/futures price
 X_{cum} = Exercise price or forward/futures price before adjustment
 F = Value of the stockholder's preferential right

The value of the stockholder's preferential right is calculated in accordance with the following formula:

$$F = \frac{P_x^{\text{vwap}} - E_{\text{new}}}{n_x}$$

- F = Value of the stockholder's preferential right
- P_x^{vwap} = The volume-weighted average price for the new financial instruments, cf. A.2.2.5 (2)
- E_{new} = The subscription price for the new financial instruments
- n_x = The number of original stocks required to subscribe for the new financial instrument

c) With effect from and including the trading day after the ex-date, the exercise prices and forward/futures prices are adjusted in accordance with the principles described in A.2.2.5, adapted as appropriate.

(2) If option contracts are exercised or if the expiration date of derivative contracts is such that settlement will take place before a decision as stated in (1) above has been made, Oslo Børs may decide that both allotted preferential rights or interim certificates for issued financial instruments, and the original underlying stocks, shall be underlying instruments. The provisions of A.2.2.14 are similarly applicable.

A.2.2.8 Dividends

(1) Adjustments will be carried out following the rules in class a) or class b) below. The exercise and forward/futures prices are adjusted with effect from and including the ex-date.

a) On payment of a dividend to the stockholders in excess of 5% of the calculated stock value (excess dividend), the calculations shall be as follows:

$$A = \frac{P_{\text{cum}}^{\text{vwap}} - D_{5\%} - D_o}{P_{\text{cum}}^{\text{vwap}} - D_{5\%}}$$

- A = Adjustment factor
- $P_{\text{cum}}^{\text{vwap}}$ = The stock's volume-weighted average price before the ex-date
- $D_{5\%}$ = Dividend (5% of $P_{\text{cum}}^{\text{vwap}}$)
- D_o = Excess dividend (dividend that exceeds 5% of $P_{\text{cum}}^{\text{vwap}}$)

$$X_{\text{ex}} = X_{\text{cum}} * A$$

- X_{ex} = Adjusted exercise price or forward/futures price
- X_{cum} = Exercise price or forward/futures price before adjustment
- A = Adjustment factor

$$N_{\text{ex}} = \frac{N_{\text{cum}}}{A}$$

- N_{ex} = Adjusted contract size
- N_{cum} = Contract size before adjustment
- A = Adjustment factor

- b) On payment of a dividend to the stockholders, the whole dividend amount shall be adjusted for. Derivatives governed by this rule are listed in the quotation list⁷ and are recognized by the letters AD in the series designation, for instance *ABCAD9L100*. Oslo Børs will consider which derivatives are to be included in this class when needed. The calculations shall be as follows:

$$A = \frac{P_{cum}^{vwap} - D}{P_{cum}^{vwap}}$$

- A = Adjustment factor
 P_{cum}^{vwap} = The stock's volume-weighted average price before the ex-date
 D = Dividend

The exercise and forward/futures prices are adjusted as in a).

- (2) The stock value in (1) is calculated in accordance with the principles, duly adapted, for volume-weighted average price as described in A.2.2.5 (2).

A.2.2.9 Capital reduction

- (1) If the share capital in the stock class is reduced by repayment to the stockholders, the calculations shall be as follows:

$$A = \frac{P_{cum}^{vwap} - b}{P_{cum}^{vwap}}$$

- A = Adjustment factor
 P_{cum}^{vwap} = The stock's volume-weighted average price before the ex-date
 b = Amount repayable per stock

$$X_{ex} = X_{cum} * A$$

- X_{ex} = Adjusted exercise price or forward/futures price
 X_{cum} = Exercise price or forward/futures price before adjustment
 A = Adjustment factor

$$N_{ex} = \frac{N_{cum}}{A}$$

- N_{ex} = Adjusted contract size
 N_{cum} = Contract size before adjustment
 A = Adjustment factor

- (2) The contract adjustments take effect from and including the ex-date.

A.2.2.10 Compulsory redemption, liquidation or insolvency

⁷ Appendix B2.

If an underlying stock is subject to compulsory redemption, liquidation or insolvency, Oslo Børs may fix a new expiration date or a new settlement form for the derivative contracts, cf. also the provisions of A.2.2.12.

A.2.2.11 Merger

If a company whose stocks are currently the underlying instrument for listed derivative contracts decides to merge with another company, with the latter being the acquiring company, Oslo Børs may convert the original derivative contracts to new derivative contracts with the merged company as the underlying stock. A new exercise price and number of stocks shall be calculated by adapting the provisions of A.2.2.5 appropriately, but using the conversion ratio as the adjustment factor. If the acquiring company is not listed on Oslo Børs, Oslo Børs may determine a new expiration date or form of settlement, cf. also the provisions of A.2.2.12.

A.2.2.12 Other contract adjustments

Oslo Børs may decide to impose a temporary exercise ban or alter the expiration date or settlement form if special circumstances so necessitate, including a decision that cash settlement based on a fixing value determined by Oslo Børs shall be the only form of settlement.

A.2.2.13 Contract adjustments in the event of suspension or deletion of underlying stocks for derivative contracts

- (1) In the event of suspension of the underlying stock, the following rules shall apply:
- a) The expiration date of the derivative contracts shall not be changed, unless this follows from the above rules of this section.
 - b) Automatic exercise will not take place, i.e. exercise requests must be registered manually with the co-operating clearing house. Oslo Børs may impose an exercise ban for the whole or parts of the suspension period.
 - c) For futures/forward contracts with expiration settlement and delivery of underlying stocks, stock settlement may be performed only with delivery of the underlying instrument at the futures/forward price, cf. A.2.1.2 (4).
 - d) Registration of the stock settlement in TradElect is postponed until the first trading day the stock is re-admitted for quotation. The stock settlement date for derivative contracts is the third trading day after the registration in TradElect.
- (2) In the event of deletion or long-term suspension of the underlying stock, Oslo Børs may decide to alter the expiration date or rule that only cash settlement may be made, in which case Oslo Børs shall determine the fixing value.
- (3) For contracts with expiration from and including October 2012: In the event of successful public offer for the purchase of the underlying the options contracts is made, the derivative contracts shall be adjusted according to this paragraph.
- a) Option contracts shall be settled by its theoretical value. This value shall be determined by the Cox-Ross Options model. The volatility utilized in this calculation will be estimated from the implied volatility 10 days preceding the

public offer. Oslo Børs will publish the implied volatility on the day of settlement.

- b) Future & forward contracts shall be settled according to their fair values. Such valuation shall take into account the expected value of future dividends.

A.2.2.14 Fixing value

- (1) Fixing values under these Derivatives Rules is the last official price of automatically matched trading prices on Oslo Børs in the underlying stock on the expiration date.
- (2) If a contract adjustment has been made in accordance with A.2.2.3 (2), A.2.2.5 (4), A.2.2.6 (5) or A.2.2.7 (2) so that the new underlying instrument consists of both original stocks and new financial instruments, the fixing value shall be calculated as follows:

$$\text{Fixing value} = k_0 + n_1 * k_1 + n_2 * k_2 \dots$$

$n_{1,2,\dots}$ = Number of new instruments per original stock

k_0 = Last official price of automatically matched trading prices in the original stock on Oslo Børs

$k_{1,2,\dots}$ = Last official price of automatically matched trading prices in the new financial instruments on Oslo Børs

Oslo Børs will determine the fixing value if the new financial instruments are not stock exchange listed.

- (3) Oslo Børs may set aside the rules at (1) and (2) and stipulate another fixing value if special reasons so indicate, including if Oslo Børs considers the trading basis to be unsatisfactory.
- (4) The daily fixing of stock futures is calculated as the average of the bid and offer prices. If these prices are not available, the average of the bid and offer prices for the corresponding stock forward will be used. In case none of these prices are available or the average price is considered unsuitable, Oslo Børs will establish a fixing price.

A.2.3 GENERAL RULES FOR DERIVATIVE CONTRACTS WITH PRIMARY LISTING ON OSLO BØRS (OBX)**A.2.3.1 Introduction**

- (1) Oslo Børs is the sole proprietor of the OBX index.
- (2) The constituents of the OBX are chosen to enable the index to follow as closely as possible the development of OSEBX. The OBX index shall be calculated to reflect as far as possible the value development of a portfolio consisting of the index stocks.
- (3) Oslo Børs shall continuously calculate and publish the OBX value for EMP during trading hours. The calculation shall be based on the last quoted stock prices of the stock index stocks, weighted according to the trading value of each company's share capital in accordance with the provisions of A.2.3.3.
- (4) On the expiration date of option and futures contracts with the OBX index as the underlying instrument, Oslo Børs shall calculate and publish the fixing value of the OBX index for use in the expiration settlement and daily mark-to-market settlements. The fixing value is calculated in accordance with the provisions of A.2.3.5.
- (5) Any objection regarding the calculation of the index shall be presented within 30 minutes of the publication of the calculated OBX value. Any objection regarding the calculation of the fixing value shall be made before 11.00 hrs on the trading day after the expiration date. If the periods allowed for objections to the index calculations are exceeded, Oslo Børs shall not be liable for any loss resulting from an incorrect calculation or publication.
- (6) If the listing of one or more index stocks is changed to a different currency, Oslo Børs may resolve to convert bid and offer prices and trade prices as well as other forms of price to a common currency to allow the calculation of OBX to continue.

If the listing of OBX is changed to another currency, Oslo Børs may resolve to convert existing derivative contracts to derivative contracts listed in the new currency. The conversion will be carried out by converting the exercise prices, option premiums and futures prices as well as other forms of price to the same currency as the underlying instrument. The conversion of existing derivative contracts will take place at the conversion factor determined by Oslo Børs.

A.2.3.2 Index composition

- (1) OBX shall consist of the 25 most traded stock classes on Oslo Børs in the calculation period, except that Oslo Børs may set aside this number when so permitted by the provisions of A.2.3.2 (3), A.2.3.6 (2) and A.2.3.7 (2).
- (2) The calculation period is the six months prior to the selection of a new OBX composition. Only officially registered trades shall be included in the calculation. To be included in the new index group, stocks shall be traded on at least 60% of all trading days in the calculation period. A new OBX composition shall be defined at the start of June and December of each calendar year.
- (3) Oslo Børs may set aside the provisions of (1) and (2) and choose index stocks other than the 25 most traded stock classes in defining the OBX composition if special circumstances so indicate. If in special circumstances Oslo Børs considers

that an index stock is unsuitable, Oslo Børs may decide to remove it from the OBX, and to enter a new stock in its place in the OBX.

- (4) The new OBX composition shall be applied in the calculation of OBX from and including the first trading day after expiration of the option and futures series that expire the earliest after the new OBX composition has been defined – normally the first Friday after the third Thursday in June and December each calendar year. After that date, the new OBX composition, including any cappings in accordance with the provisions of A.2.3.4, also applies to option and futures series that were quoted before the new OBX composition was defined.

A.2.3.3 Formula for calculating the OBX index value

- (1) The OBX index value is calculated as follows:

$I(1) = I(0) \times (MV(1) / MV(0))$
 $I(1)$ = New index value.
 $I(0)$ = Index value at the close of the preceding trading day.
 $MV(1)$ = Index stocks' market capitalisation at the time of calculation.
 $MV(0)$ = Index stocks' adjusted market capitalisation at the close of the preceding trading day.

- (2) The market value of the index stocks at the time of calculation and at the close of the previous trading day is the sum of the market capitalisation of the index stocks calculated in accordance with the following formula:

$MV(0) = \text{Sum of } ((PI(0) \times A) \times AI(1))$
 $MV(1) = \text{Sum of } (PI(1) \times AI(1))$
 $PI(0)$ = Last quoted official price for the stock at the close of the previous trading day.
 $PI(1)$ = Most recent quoted official price for the stock at the time of calculation.
 $AI(1)$ = Adjusted number of stocks issued in the stock class.
 A = Adjustment factor resulting from changes in capital.

- (3) If a bid has been quoted that is higher than the last quoted trading price, the bid price shall be applied in the calculation. If an offer has been quoted that is lower than the last quoted trading price, the offer price shall be applied in the calculation. If either the closing bid or offer price is used as the closing value, this price will be deemed to be the last traded price in the calculation of the index on the following day until a new official trade price is registered.
- (4) Only that part of each issuer's share capital that is registered with VPS is included in the number of stocks outstanding. Stocks that may be assumed, on a continuing basis, not to be subject to ordinary trading shall not be included in the number of stocks outstanding. This includes stocks held by the State, cross-ownership, stocks owned by insiders and the proportion of stocks that may be assumed to be held by controlling interests. Stocks in a company owned by the company itself or by a company belonging to the same group of companies, cf. Section 1-3 of the Public Limited Liability Companies Act of 13 June 1997 No. 45, are not included in the index calculation
- (5) The last stock index figure on each trading day shall be corrected for cancelled trades before it is applied to the calculation of OBX values on the next trading day.

A.2.3.4 Capping

- (1) The following index weight restrictions must be met by index funds tracking indices in order to comply with UCITS III/ Vpfl. § 4-8a:
- The market value of the largest constituent may not exceed 35% of the index total market value.
 - The market value of each constituent other than the largest may not exceed 20% of the index total market value
- (2) Oslo Børs is maintaining the weighting restrictions by using a semi-annual and an "as needed" procedure.

a) Semi-annual adjustment:

Adjustments will come into effect on the first trading day after expiration in June and December. The largest stock, if exceeding 30% of the OBX total market value, will be capped at 30%.

The extra weight removed from the largest stock will be distributed amongst the remaining stocks in proportion to their relative weights.

Stocks registered in countries outside the EEA (European Economic Area) will as a group be capped at 10% if the sum of the market value of these stocks exceeds 10% of the OBX total market value.

The stocks registered outside the EEA will be capped in proportion to their relative weights.

Oslo Børs will base its assessment on the ISIN of the stock to determine if the stock is registered within the EEA or not.

Oslo Børs may in some cases decide that a stock, regardless of ISIN, shall be considered to be a part of the EEA or not.

The extra weight removed from the stocks registered outside EEA will be distributed amongst the remaining stocks in proportion to their relative weights.

Other stocks, if exceeding 15% of the OBX total market value, will be capped at 15%. The capping is repeated if necessary until all stocks are within the capping limits of 30%, 10% and 15%.

b) "As needed" adjustment:

The index may be recapped on an "as needed" basis in between rebalancing times.

The "as needed" adjustment will be activated if the largest stock exceeds 35% and/or other stocks exceed 20% of the OBX total market value.

In that case the largest stock will be capped at 30% of the OBX total market value. Other stocks will be capped at 15% of the OBX total market value. The capping is repeated if necessary until all stocks are within the capping limits of 30% and 15%.

The stocks will be recapped until the weight restrictions are satisfied as in a).

Corporate actions and fast entry/exit may result in additional adjustments.

- (3) Stocks are ranked by their free float adjusted market value.

All cappings will be done based on the uncapped OBX (OBXU).

The weighting restrictions will be imposed by adjusting the number of shares of the constituents. The number of shares used is based on the closing prices 2 trading days before the capping comes into effect.

The extra weight removed from the overweight stock(s) will be distributed amongst the remaining stocks in proportion to their relative weights.

A.2.3.5 Fixing value

- (1) The fixing value is calculated in accordance with the provisions of A.2.3.3, except that PI(1) is calculated as a volume-weighted average of automatically matched trading prices of the index stocks quoted on Oslo Børs on the expiration date. The calculation shall be corrected for cancelled trades. The fixing value shall be distributed via EMP.
- (2) If Oslo Børs cannot make a satisfactory calculation of the fixing value because of an inadequate trading basis in one or more index stocks, the trading basis on the last preceding trading day shall be applied in the calculation.
- (3) If Oslo Børs considers the price of an index stock to be influenced to the extent that a representative fixing value cannot be calculated, the volume-weighted average of trading prices of the index stock from the last preceding trading day may be applied in the calculation.
- (4) If all the stocks included in the OBX index are suspended from trading on the expiration date, the fixing value shall be calculated based on the prices on the first trading day after the end of the suspension, cf. (2).
- (5) The daily fixing value for the OBX futures is calculated by Oslo Børs.

A.2.3.6 Matching halt, suspension and deletion of index stocks

- (1) Index stocks that are the subject of a matching halt or are suspended from quotation on Oslo Børs shall be included in subsequent index calculations at the last quoted price, calculated in accordance with the provisions of A.2.3.3 (2) and (3).
- (2) Stocks that are deleted from quotation on Oslo Børs shall be removed from the OBX index. The calculation of the OBX index value will be adjusted by deducting the market capitalisation of the deleted stocks on the last quotation from the calculated MV(0). Oslo Børs may decide that new stocks shall be included in the OBX index.

A.2.3.7 Changes in the share capital of an index company

- (1) In cases where the share capital of an index company is changed and where existing stockholders have preferential rights, the OBX index values are changed in accordance with the rules below.
- (2) In the event of any changes in the number of stocks issued by an index company, Oslo Børs shall decide whether the number of stocks included in the index calculation shall be increased or reduced, and may include stocks in the calculation that have been de-merged from the index stock during the index period.

- (3) In the event that an index company pays a dividend, the whole dividend amount shall be deducted from PI(0). This adjustment shall be implemented from and including the ex-date.
- (4) Stock issues are treated as follows:
- a) In the event of a dividend issue, an adjustment factor (A) is calculated by applying the provisions of A.2.2.5 to the calculation of A as appropriate, with the stock price adjusted for the dividend. This value is used in the calculation on the ex-date.
 - b) In the event of the issue of new stocks (ordinary issue) an adjustment factor (A) is calculated by applying the provisions of A.2.2.5 to the calculation of A as appropriate. This value is used in the calculation on the ex-date.
 - c) In the event of a combination of an ordinary issue and a dividend issue, MV(0) is adjusted on the ex-date by the maximum issue amount. If the subscription percent is less than 90%, the number of stocks is adjusted either on the payment date or when Oslo Børs is notified of the adjusted number.
 - d) In the event of a scrip issue an adjustment factor (A) is calculated by applying the provisions of A.2.2.5 to the calculation of A as appropriate, with E (the subscription price) set at 0. This value is used in the calculation on the ex-date.
- (5) After a stock split in an index stock, an adjustment factor (A) is calculated as follows:

$$A = \frac{n_{ex}}{n_{cum}}$$

n_{ex} = Number of issued stocks in the stock class after the split

n_{cum} = Number of issued stocks in the stock class before the split

The adjustment factor is implemented from and including the ex-date.

- (6) In the event of changes in the number of issued stocks in an index stock as a result of subscription for new stocks where existing stockholders have preferential rights, dividend issues, scrip issues or stock splits, the new number of stocks shall be included in the index calculation from and including the ex-date.
- (7) In the event of reductions in the share capital with subsequent repayments to stockholders, an amount equal to the repayment per stock made to stockholders shall be deducted from PI(0). This adjustment shall be implemented from and including the ex-date.
- (8) In the event of a demerger the following rules shall be applied:
- a) In the event of a demerger where both the original and the de-merged stocks are to be included in the OBX index, the stocks shall be included in such a manner that the index value reflects changes in the prices of both stocks.
 - b) In the event of a de-merger where either the original or de-merged stock is not to be included in the OBX index, all the stocks affected by the de-merger shall be removed from the OBX index from and including the ex-date. The index calculation shall be adjusted by deducting the market value of the stocks from MV(0). The stocks that are to continue as index stocks are returned to the OBX index from and including the day after the de-merger affects the stock price.

The index stock's previous market value, $MV(0)$, shall be adjusted by adding the re-instated index stock's market value at the same point in time to $MV(0)$. If the ex-date for the dividend coincides with the period in which the index stock is withdrawn from the OBX index, the index calculation shall be adjusted so that the dividend rights affect the index value.

- c) In the event of a de-merger where neither the original nor the de-merged stock is to be included in the OBX index, the index calculation is adjusted by deducting the stocks' market value from $MV(0)$.
- (9) Interim stocks, other time-limited stocks and subscription rights shall not be included in the OBX index.

A.2.3.8 Other adjustments

- (1) Oslo Børs may in the cases described above make other adjustments than those stated if special circumstances so indicate. The index adjustments shall wherever possible be in accordance with the calculation principles of A.2.3.1 (2).
- (2) Oslo Børs may also adjust the OBX index in cases other than those stated above, including deflating the OBX value or similar adjustments.