Explanatory Note for ASX Option Adjustments

This is an Explanatory Note for ASX Market and ASX Clear (ASXCL) Participants. It does not replace, and is to be read subject to, the ASX Operating Rules, the ASXCL Operating Rules and the policies of ASX and ASXCL. If there is any inconsistency between the Explanatory Note and the ASX Operating Rules or the ASXCL Operating Rules, the Rules prevail.

The same adjustments calculations apply for OTC equity options cleared under the ASX Equity OTC Clear service. In unusual circumstances, there may be a difference arising from the OTC having a different expiry date to the ETO. This could arise from the OTC expiring during the trading halt for an underlying security on account of an accelerated entitlement offer announced by the listed entity.

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What is an "Adjustment" to an Option Contract?

An adjustment is a change made by ASX to one or more of the contract specifications of an Exchange Traded Option (in this note, referred to as or **"options"**) where the company announces a type of corporate event that affects shares (or other financial products) underlying the option in a specific way.

ASX Clear (ASXCL) will make a corresponding adjustment to Options contracts that have been novated to ASXCL pursuant to Rule 13.4.1 of the ASX Clear Operating Rules.

Why are Adjustments made?

An option holder has exposure to the shares (or other financial products) underlying the option. Sometimes a company that issues the shares (or other financial products) that underlie an option announces a corporate action that will have the effect of causing the share price to change, even though the underlying value of the company has not changed. For example, a bonus issue that results in an increased number of shares on issue will result in a dilution of the value of each share although the total value to the shareholder is unaffected.

If the original option terms were left unadjusted, any exercise would result in a delivery of shares worth less than what was originally contemplated in the contract between the taker and the writer. This would be unfair to the call option taker, and on the other side, the writer would obtain a windfall gain. Adjustments to the terms of an option contract are made to ensure that the value of open options positions (held by both taker, or buyer, of an option and writer, or seller) is, as far as practicable, the same as it would have been had the relevant corporate event not occurred.

In this example, the option contract would be adjusted to reflect the delivery of the original number of shares ***plus*** those now resulting from the bonus event. The original total exercise value of the option contract is then maintained by reducing the exercise price per share. Such reduction in the exercise price is also in parity with the reduced share price following the bonus issue. An option that was at-the-money before the event will then remain at-the-money after the adjustment.

The usual method of preserving the option value in an adjustment is to maintain the total contract exercise value whenever there is an adjustment to the number of shares per contract.

The most important criterion used by ASX in determining whether to make any option contract adjustment is whether the corporate action is a pro rata event (see p5).

Ordinary dividends paid by companies (being expected in the ordinary course of business) are not subject to an option adjustment. However, it should be noted that a "special" dividend will generally result in an adjustment on a basis similar to a return of capital (see p13).

Who advises the market about adjustments?

ASX and ASXCL issue a Derivatives Notice of a contract adjustment to ASX Market Participants and ASXCL Participants (i.e. brokers and clearers) as soon as it is practicable to do so. The notice is distributed outside of trading hours. In some situations, ASX may also impose a short trading halt in the options class prior to allowing options trading on an adjusted basis. Copies of these notices are also widely available to the general public via broker websites, the ASX emailed newsletter and on the ASX website.

Clients of brokers are expected to seek clarification from their brokers and not directly from ASX (even if the broker regards itself as "non advice").

ASX Market Control and ASXCL may also broadcast messages about adjustments to their participants' electronic trading terminals and clearing systems.

When does an adjustment become effective?

Adjustments are usually declared effective on the same day the underlying security is traded on an "ex" basis. When the corporate event giving rise to the adjustment involves exchanging or converting the original underlying share (or other financial product) to a new financial product, the effective date is generally the first day of trading of the new underlying financial product.

Which terms of the option contract specifications may be adjusted?

Generally all open positions in different option categories or products (calls, puts) are adjusted in the same way. Thus, a series with a non-standard expiry date or a European-styled option (e.g. a LEPO) will generally be subject to the same adjustment changes as the normal American-styled puts and calls.

Tax, trading impact and transactions costs (such as brokerage) are not taken into account in the determination of an adjustment.

ASX has the power under the ASX Operating Rules to make an adjustment to any of the terms or specifications of the option in question, including without limitation, one or more of the following:

i. The number of contracts of each open position and the contract size (number of shares per contract)

Usually, the number of contracts of each open position is unaffected under an adjustment. But in some situations, e.g. a bonus issue, the number of contracts may be increased so that the contract size per option lot is kept as close to the standard contract size (100), as far as is practicable.

After an adjustment to existing series (e.g. where the contract size is changed to say 105 shares per contract), ASX will revert to listing any new expiries subsequent to the farthest dated adjusted series at the standard contract size (100 shares).

It may be noted that the number of contracts multiplied by the contract size equals the total number of shares represented by the option position.

ii. Exercise Price

Usually, any adjustment to the option contract size is accompanied by a corresponding inverse adjustment to the option strike price, so that the total exercise value of the contract remains the same before and after the adjustment event, as far as is practicable.

In certain circumstances however, an adjustment may be applied where the total value of exercise is not maintained. For instance, where the relevant corporate event is a takeover and the adjustment is based on an offer that is a mixture of scrip and cash (see item 13, p14).

In all cases, ASX will endeavour to make adjustments in such a way as to be fair to both takers and writers, as far as it is practicable to do so.

iii. The Underlying Financial Products

If a corporate event results in the exchange or conversion of existing underlying financial products for (or the issue of) new financial products, ASX will only adjust the terms or relevant options so as to identify those new products as underlying financial products if they are eligible to be Underlying Financial Products under the Operating Rules of ASX.

For example, a takeover offer involving scrip moving to compulsory acquisition will generally involve an adjustment using a straightforward substitution of the old underlying securities by the number of the new underlying securities (under the offer ratio), and the total exercise value of the option contract will remain unchanged. This involves a corresponding adjustment to the strike price per share, taking into account the new number of shares compared to the original number of shares.

Types of Adjustments

ASX divides adjustments into standard and non-standard types.

Standard Adjustments

These are prescribed under the ASX Operating Rules with a specific formula approach (See Appendix 2230 to the ASX Operating Rules Procedures). They relate to straightforward corporate events, such as renounceable rights issues. Examples of prescribed normal events for which an adjustment may be determined are:

- Reorganisation of capital into one or more classes of financial products each of which is eligible to be determined as an Underlying Financial Product

- Cash return of capital not involving cancellation or repurchase of Underlying Financial Products
- Cash return of capital involving cancellation or repurchase of Underlying Financial Products
- Rights issue
- Bonus issue of securities in the same class
- Bonus issue of securities in one or more different classes

Non-Standard Adjustments

Because of continuing innovation in the equity markets, not all forms of corporate event can be dealt with by current standard adjustments. Accordingly, ASX retains the ability to adjust the terms of options in a way different to a standard adjustment as it considers appropriate so as to ensure that the value of open options (held by takers and writers) is, as far as practicable, the same as it would have been had the event not occurred.

Examples of adjustment events for which an adjustment method has NOT been prescribed:

- Payment of Final Installment of Underlying Financial Products that are "Installment Securities"
- Decoupling of stapled Underlying Financial Products
- Mergers
- Takeovers involving full scrip or part-scrip alternatives
- Special dividends
- Distributions by issuers of stapled Underlying Financial Products (unless also falling within one of the standard categories)
- Buybacks using a pro-rata entitlement issue of share put rights
- Changing of company name (affecting ASX security code)

What is meant by pro-rata?

Pro-rata events are corporate actions that affect each individual share in a proportional way.

For illustration, a rights issue of 1 new share for every 5 ordinary shares held on books close date is a pro-rata event, whereas an issue of 50 special class shares to each shareholder (but not in proportion to the number of shares held) is not a pro-rata issue.

Only pro-rata events allow ASX to make an adjustment that is fair to both takers and writers.
However, ASX does not usually make any standard adjustment for ordinary dividends, although these payments are effectively pro-rata. Market convention for pricing of options allows for shares to trade lower on the ex-dividend date.

What are adjustment events and what are not?

Not all corporate events that affect the value of Underlying Financial Products will result in an option adjustment. Adjustment of options is for protection of option takers and writers where there is a need to and where ASX considers that the value of open option positions may and should, as far as practicable, be made the same as they would have been had the relevant corporate event not occurred, and not for neutralizing equity risk.

If the corporate event is not a strictly pro-rata event (i.e. proportional entitlement), adjustments are unlikely to provide an equitable solution for options holders because one cannot be certain that each option holder is affected the same.

For example, share placements could dilute (under a heavily discounted price placement) the value of non-participating shareholdings, but because a placement is not pro-rata, the event does not result in an adjustment to the option.

Similarly, buyback offers are usually not compulsory, and the amount of shares bought back from each shareholder can be different. It is left to the shareholder to tender an amount of their shares under the buyback. So the value of the buyback generalized across a holding of 100 shares per option contract is indeterminate.

Other events and announcements that are unlikely to result in an adjustment even though there may be an impact on the share price include:

- Priority issues (e.g. to an initial public offering)
- On-market buybacks
- Equal access buybacks
- Off-market buybacks with scale-back provisions
- Non-pro rata entitlement issues
- Employee share purchase plans
- Placement of shares
- Ordinary dividends declared
- Regular ordinary distributions involving trusts
- Offer to take over another company
- Conversion of convertible notes into more ordinary shares
- Share price reaction to a profit or loss announcement or other price sensitive announcements by the company

Note, however, that ASX reserves the power to determine an adjustment in any instance (including the above where ASX may determine not to) if ASX considers it appropriate.

Note that expected regular ordinary distributions, by underlying securities involving trusts (such as trust units or stapled securities), do not result in an ETO adjustment although the distribution may not be paid out of accounting profits and may not be a "dividend".

(Follow the hyperlink to Derivatives Notice 172 dated 29 September 2005 for Regular Ordinary distributions for ETOs)
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_025169.pdf

How many forms of adjustments are employed?

Broadly speaking, there are two methods of adjustment that are commonly used depending on the way the underlying securities are affected by the corporate action. Conceptually, a package is delivered under an exercise, whether or not the corporate action has altered the contents of the package:

Adjustment maintaining One Underlying Financial Product

The simplest form of corporate action deals with pro-rata events or new issues of the same class of Underlying Financial Product. The Underlying Financial Product remains unchanged under the option adjustment, while the number of such Underlying Financial Products in the package under a delivery may be changed where appropriate.

Where a corporate event involves an issue of other Traded Products, the adjustment may be based on a notional reinvestment of these into more of the original Underlying Financial Products (on an ex-entitlement basis) so that the option remains a simple type over just one type of Underlying Financial Product.

Adjustment into a Basket Option of more than one underlying securities

If a corporate action may give rise to holders of the original Underlying Financial Product holding one or more of a multiple number of types of Financial Products, depending on the circumstances, it may sometimes be more appropriate to leave the exercise package to represent the "basket" of different types of Financial Products. Upon exercise however, it will not be known which component was sold at what prices.

Are all similar corporate events adjusted the same way?

Adjustments to options are determined on a case-by-case basis. For more common events, such as bonus and rights issues, standard adjustments usually apply, however ASX has the power to consider each corporate event and make an alternative adjustment.

ASX may also terminate a series and adjust other series in the same class.

LEPO cash adjustments for roundings

Broadly speaking, LEPOs may involve a cash compensation adjustment for the rounding of the LEPO strike back to 1 cent, and a separate cash compensation adjustment for the rounding of the calculated contract size to the nearest whole security. In these situations, either the taker or writer of the LEPO may be required to be debited or credited a net cash compensation adjustment for the roundings as the case may be.

Terminations

As with adjustments, termination is always on a case-by-case basis under the Operating Rules. ***Termination of an option is generally effected by a cash settlement at intrinsic value, currently. Therefore, termination of an option position by ASX is considered only as a last resort and only if ASX considers any other adjustment method is not appropriate.***

(Follow the hyperlink to Derivatives Notice 005 dated 13 January 2003) Full Cash Offers)
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_025908.pdf

For instance, termination may occur when the underlying securities are not available for trading at the time of an expiry.

Numerical Illustration of an Adjustment:

A company - Australian Manufacturing Limited "XYZ" - has 100 million shares on issue worth $10 each. The company announces a 1:1 bonus issue. For 200 million shares now following the bonus issue, the share price falls to $5 ex-bonus and the company retains a market capitalization of $1000 million.

a. XYZ Options	**Old contract specifications**	
	Exercise price	= $10
	Contract Size (Quantity per contract)	= 100 shares
	Number of contracts held	= 1 contract
	Outlay for shares on exercise	= $1,000

Originally, on the exercise of the call option, the holder receives a parcel of 100 shares worth $1,000 (1 parcel of 100 shares valued at $10 each) for which the holder outlays $1,000 (1 contract times 100 shares per contract times $10 exercise price).

b. XYZ options	**New contract specifications**	
	Exercise price	= $5
	Contract Size (Quantity per contract)	= 100 shares
	Number of contracts held	= 2 contracts
	Outlay for shares on exercise	= $1,000

The option holder now holds 2 contracts of 100 shares per contract= 200 shares. The old strike price is proportionally reduced by multiplying by a factor of 100/200. That is, the new strike price is $10 (old exercise price) times 0.5 = $5

On exercise of the two call options, the holder receives a parcel of 200 shares worth $1,000 (2 parcels of 100 shares valued at $5 each) for which the holder still outlays $1,000 (2 contracts times 100 shares per contract times $5 exercise price). The total exercise value of the adjusted option remains the same.

Delivery Obligations: The writer of the call option now has to deliver a package of 200 XYZ shares. But the writer who is holding the shares entitled to the bonus actually has a basket of 100 XYZ old shares plus 100 XYZ new bonus shares. The new bonus shares are usually trading on a deferred delivery basis until such time that the XYZ new shares trade on a normal basis and merge with the old XYZ shares.

It is important to remember that because the contract is specified in terms of XYZ shares, any exercise by the taker within the deferred delivery period will involve deferred delivery of the new shares.

Cover Arrangements: In the interim, temporary cover may be extended by ASXCL depending on how the securities registration activity in CHESS is affected by the event. For example, in a bonus scenario such as depicted above, the calculated bonus shares for every ordinary share held for collateral is temporarily credited as bonus shares. Then, usually two days after despatch date (giving the brokers time to lodge them) the credited shares are replaced by the brokers by actual lodgement.

Past Adjustments Examples

The ETO market was migrated from a standard contract size of 1,000 shares per contract to 100 shares per contract, phased from 2 May to 13 May 2011 in ten tranches. In the actual case examples that follow, those cases that occurred pre-13 May 2011 (when the final tranche of ETO contracts were migrated from a standard contract size of 1,000 to 100) would have been based on the historical standard contract size of 1,000 shares per contract.

New case examples post-migration are based on the new standard contract size of 100. Where the actual case examples below were based on the historical standard contract size, the principles illustrated may be read as to apply to the new standard 100 contract size.

Over time, it would be expected that the actual case adjustment examples will be updated to show new cases post-May 2011 as they become available for illustration.

1. Consolidation

Item 1 of Appendix 2230 (Adjustment Circumstances) to the ASX Operating Rules Procedures

A recent example of this event was the Elders Limited consolidation of a 1 new share for 10 old shares. In this situation, the contract size was decreased to 100 shares per contract, with the strike price increased ten fold:

(Follow the hyperlink to the Derivatives Notice 158, 24 November 2009, ELD Limited share consolidation)
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_025491.pdf

2. Share Split

Item 10 of Appendix 2230 (Adjustment Circumstances) to the ASX Operating Rules Procedures

The adjustment method generally employed for a share split is the bonus form of adjustment.

An example of this event is the 3:1 share split employed by CSL Limited in October 2007. On the effective date, the contract size was left unchanged at 1000 shares per contract (as applied at that time) and the number of option contracts registered as open contracts (i.e. lots) in the name of each writer and taker was increased threefold. The strike price was reduced proportionately to one third.

(Follow the hyperlink to the Derivatives Notice 175, 8 October 2007, CSL Limited share split)
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_024778.pdf

3. Reorganisation of Capital

Item 1 of Appendix 2230 (Adjustment Circumstances) to the ASX Operating Rules Procedures

The adjustment method generally employed for a reorganization of capital is the simple substitution of the "new" financial products (i.e.; those held by holders subsequent to the relevant corporate action) (essentially a “basket” of only one type of Underlying Financial Product) applying the ratio method to the exercise price to maintain the total exercise value of the option over the ex-date.

An example of this event was the change of domicile of News Corporation Limited to the United States of America, via a 1 CDI for 2 ordinary share swap.

(Follow the hyperlink to the Derivatives Notice 154/04, 30 September 2004- The News Corporation Limited – Proposal to Re-incorporate in the United States)
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_025785.pdf

4. Demerger or Spin-Off or Bonus Issue involving Different Shares:

Item 2 of Appendix 2230 (Adjustment Circumstances) to the ASX Operating Rules Procedures

The following notice details the policy applied by the ASX since 13 August 2001 to demerger thresholds, set by ASX at 15%. If the spun-out entity is small enough, the adjusted contract will relate to just one Underlying Financial Product rather than having a basket of two (or more).

(Follow the hyperlink to the Derivatives Notice 100 dated 7 August 2001) Threshold Test for Option Adjustment Policy for Demergers)
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_026012.pdf

Regarding basket options adjustments in general, ASX usually uses a different security code to describe the new share. For instance, the code for an adjusted option over a basket of shares will have to be created so as to represent that basket of shares. An example of a synthetic code is the use of XY8 (where XYZ is the hypothetical name of the listed entity) to describe an option basket as a result of an adjustment.

Generally, equity transactions arising from the exercise/assignment process over a basket option will be sent to ASX Trade for each of the components of the basket option. The closing prices of the individual components are generally used to fix the ratios for calculating the notional prices that will be assigned by DCS. The ratios will remain fixed for the life of the basket series (subject to further corporate actions). Although DCS will send the individual component prices to ASX Trade automatically, participants can elect to amend these component prices.

An example of the basket option method was the demerger of Rinker Group Limited from CSR Limited. The listed company achieved the demerger by way of a scheme of arrangement to effect a pro-rata capital reduction, in conjunction with a pro-rata issue of bonus shares in Rinker. Effectively the holder of 1000 CSR shares prior to the corporate event held 1000 CSR and 1000 RIN shares (as applied at that time) after the ex-date.

(Follow the hyperlink to the Derivatives Notice 45 dated 26 March 2003, CSR Limited Demerger)
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_025868.pdf

An example of the reinvestment method was the demerger of Virgin Blue Holdings Limited from Toll Holdings Limited via an in-specie distribution (a type of bonus shares in a different security to the parent security)***.***

(Follow the hyperlink to the Derivatives Notice 105 dated 15 July 2008, TOL Demerger)
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_024577.pdf

5. Cash return of capital to ordinary shareholders

Item 3 of Appendix 2230 (Adjustment Circumstances) to the ASX Operating Rules Procedures

The method of adjustment for a cash return is generally: the contract size will be adjusted to the quantity determined in using the formula applied under Procedure 3 (which will generally be based on the volume weighted average price (VWAP), as determined by ASX), on the last cum-capital return date. The exercise price will be adjusted to maintain the total exercise value for the options. Under this Rule, the cash return of capital is notionally reinvested.

The formulae to be used in the application of *Procedure 3* are:
Contract Size:
New Size = Old size +
value of return for each old contract size/(VWAP – return per share)

Strike Price:
New Strike = Old strike times (Old Contract Size/New Contract Size)

(Follow the hyperlink to the Derivatives Notice 031, dated 20 February 2006: AMP Limited capital return)
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_024954.pdf

The above procedure applies the reinvestment adjustment approach. A threshold test applies from 9 November 2009 where the strike minus cash method may be used instead if the capital return amount is estimated to be greater than 50% of the total market value.

(Follow the hyperlink to the Derivatives Notice 148, dated 6 November 2009: Threshold Test for Capital Return Adjustment Methods)
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_025353.pdf

6. Cash return of capital involving cancellation of shares

Item 4 of Appendix 2230 (Adjustment Circumstances) to the ASX Operating Rules Procedures

An example of this can be found via the link below.

(Follow the hyperlink to Derivatives Notice 131, dated 27 August 2004: Singapore Telecommunications Limited Reduction of Capital and Cancellation of Shares)
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_025779.pdf

7. Renounceable Rights issue

Item 5 of Appendix 2230 (Adjustment Circumstances) to the ASX Operating Rules Procedures

A renounceable rights issue is one where there is a market in the rights conducted by ASX. In this situation, the tradable rights can sold in the ASX official market by the shareholder who is entitled to the rights.

The adjustment method generally employed for this type of event is the "nominal reinvestment" method. Here the value of the rights is implied from the VWAP (Volume Weighted Average Price) market value of the rights. The reinvestment amount of ex-entitlement securities is based on the number of ex-entitlement VWAP shares on the first day of ex-rights trading that can be notionally invested using the value of the rights.

The formula used to calculate both a new contract size and strike price adjustment is determined by ascertaining the average rights price for the full day's trading on the ex-date and calculating the average traded price of the shares (ex-rights) on that day. The calculation excludes special, late, put throughs and overseas trades.

The new contract size is calculated by multiplying the number of rights attributable to the number of ordinary shares underlying one old contract by the average traded price of the rights divided by the average traded price of the shares (ex-rights) and adding the result to the old contract size.

The adjusted strike price is obtained by multiplying the old strike price by a factor which is calculated by adding the contract size adjustment previously calculated to the ruling contract size i.e. usually 100, and then dividing the result into the old contract size.

Trading in the adjusted option contracts on the first ex-rights day will be on an adjusted basis ("UA" status note on ASX Trade platform) even though the extent of the adjustment will not be known until the close of trading.

(Follow the hyperlink to Derivatives Notice 076, dated 5 June 2009: RIO Tinto Limited Renounceable Rights issue))
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_024475.pdf

Accelerated renounceable entitlement offers (a variety exist, e.g. "AREOs","SAREOs", "RAPIDs", "PAITREOs") have become commonplace, and have to some extent, become more popularly used than the traditional rights offers. These are covered under Item 5 of Appendix 2230 (Adjustment Circumstances) to the ASX Operating Rule Procedures.

(Follow the hyperlink to Derivatives Notice 143, dated 28 October 2009: CSR Simultaneous Accelerated Renounceable Entitlement Offer)
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_025270.pdf

In the case of accelerated entitlement offers, whether renounceable or non-renounceable (see section 8), the calculation of the market value of the rights or entitlement is generally based on the ex-entitlement share price. See the following formula for the reinvestment approach for an entitlement offer, where the market value of the rights (whether positive or negative) is used:

New contract size is calculated as follows:

NC = OC + n*r/S
where
NC = new contract size
OC = old contract size
n = the number of rights attributed to each OC determined by the issue ratio applied to the old contract size
r = the market value (whether positive or negative) of the each rights as determined by ASX
= S - d - C

where

d = ordinary dividend or distribution that new securities are not entitled to compared to existing securities

C= consideration paid to exercise the implied rights (i.e. entitlement or subscription price)

S= VWAP ex-entitlement of existing securities on the first day of trading ex-entitlement

The new strikes are calculated as follows:

New Strike = Old Strike * OC/NC

It is possible that because the OTC generally have a different expiry date to the ETO, that the form of the OTC adjustment may be based on the built-in exercise method should the expiry date of the OTC fall occur during the trading halt of the underlying security associated with the accelerated entitlement offer, while the form of the ETO adjustment would generally be based on the reinvestment method when the ETO expiry occurs after the trading halt.

For an example where the built in exercise method that has been used:

(Follow the hyperlink to Derivatives Notice 131, dated 26 August 2008: Alumina Limited Entitlement Offer- Adjustment Implications for AWC ETOs including Separate Adjustments for August 2008 Expiring Series" and Derivatives Notice 134 dated 28 August 2008: Alumina Limited Entitlement Offer -August 2008 Expiry Series Adjustment Confirmed".

https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_021802.pdf

https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_021836.pdf

8. Non-Renounceable Rights issue

Item 5 of Appendix 2230 (Adjustment Circumstances) to the ASX Operating Rules Procedures

A non-renounceable rights issue is one where a market in the rights is not conducted by ASX.

The adjustment method generally employed for this type of event is the reinvestment method and involves two VWAP calculations. The value of the rights is implied from the difference of the VWAP market value of cum-rights special quotation market shares and the VWAP market value of ex-rights shares on the first day of ex-rights trading.

For instance, the formula used to calculate both a new contract size and strike price adjustment is determined by ascertaining the average price per right (or entitlement) by calculating the implied entitlement price per share and dividing by the issue ratio of the number of entitlements per share. The implied entitlement price per share is determined by calculating the average traded price for the full day's trading in the special cum-entitlement market on the ex-date and calculating the average traded price of the shares ex-entitlement on that day. The calculation excludes special, late and overseas trades. Generally, if trading through the special facility is, in the opinion of ASX, illiquid ASX may determine to include only those trades in the cum- and ex- markets that take place within a reasonable time proximity. In the unlikely event that no transactions take place through the special facility, ASX will set an entitlement value, if any or determine an adjustment using an alternative method.

The new contract size is calculated by multiplying the number of entitlements attributable to the number of ordinary shares underlying one old contract by the calculated entitlements price divided by the average traded price of the shares (ex-entitlement) and adding the result to the old contract size.

The adjusted strike price is obtained by multiplying the old strike price by a factor which is calculated by adding the contract size adjustment previously calculated to the ruling contract size i.e. usually 100, and then dividing the result into the old contract size.

(Follow the hyperlink to Derivatives Notice 164 dated 20 October 2003 for AMP Non-Renounceable Rights Offer)
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_025890.pdf

For an example where an alternative method has been used, see the following. These are covered under Item 5 of Appendix 2230 (Adjustment Circumstances) to the ASX Operating Rules Procedures.

(Follow the hyperlink to Derivatives Notice 138 dated 6 October 2009 for MAP Non-Renounceable Rights Offer using Alternative Method)
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_024844.pdf

Accelerated pro-rated non-renounceable entitlement offers (for example, “Jumbos” that also involve a placement) have been used by companies seeking to raise capital under certain market conditions. These are covered under Item 5 of Appendix 2230 (Adjustment Circumstances) to the ASX Operating Rules Procedures. The adjustment calculation for non-renounceable entitlement offers is similar to that used for renounceable entitlement offers (see section 7 above).

It is possible that because the OTCs may have a different expiry date to the ETO, that the form of the OTC adjustment may be based on the built-in exercise method should the expiry date of the OTC falls on the trading halt of the underlying security, while the form of the ETO adjustment would generally be based on the reinvestment method if the ETO expiry occurs after the trading halt. This situation applies for both renounceable and non-renounceable accelerated entitlement offers.

For an example where “Jumbos” have been used:

(Follow the hyperlink to Derivatives Notice 120, dated 31 August 2009: Gunns Limited “Jumbo”):
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_024447.pdf

9. Bonus issue (whole number entitlement)

Item 6 of Appendix 2230 (Adjustment Circumstances) to the ASX Operating Rules Procedures

An example of a bonus issue of securities in the same class where the issue ratio is n:1 where n is a whole number. E.g. 3:1 bonus issue.

In this situation, the change to the option quantity is effected by increasing the number of contracts (lots) held and leaving the contract size per contract the same (at 100 normally). The exercise price falls proportionately to maintain the total exercise value as before.

For an example of the adjustment, the more common share split shows the typical method used in general. These are covered under Item 5 of Appendix 2230 (Adjustment Circumstances) to the ASX Operating Rules Procedures.

(Follow the hyperlink to the Notice 115 dated 26 October 2000 ERG Limited share split)
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_026053.pdf

10. Bonus issue (fractional entitlement)

Item 6 of Appendix 2230 (Adjustment Circumstances) to the ASX Operating Rules Procedures

An example of a bonus issue of securities in the same class where the issue ratio is m:1, where m is a not a whole number e.g. bonus issue ratio of 1:3

In this situation, the change to the option quantity is effected by leaving the number of contracts unchanged, but the shares per contract (i.e.; the contract size) are increased. The exercise price falls proportionately to maintain the total exercise value as before.

This is not common.

11. Bonus issue (near whole number entitlement)

Item 10 of Appendix 2230 (Adjustment Circumstances) to the ASX Operating Rules Procedures

An example of a near standard 1.0651: 1 bonus issue involving more securities is the BHP-Billiton Dual Listed Corporation restructure.

In this situation, the change to the option quantity is effected by increasing the number of contracts, leaving the number of shares per contract (i.e.; the contract size) slightly increased, but as close as practicable to the normal size of 1000 shares per contract (as applied at that time). The exercise price falls proportionately to maintain the total exercise value as before.

(Follow the hyperlink to the Notice 58 dated 21 May 2001 Broken Hill Proprietary Limited Bonus Issue under BHP- Billiton Merger)
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_025994.pdf

12. Special Dividends

Item 9 of Appendix 2230 (Adjustment Circumstances) to the ASX Operating Rules Procedures

ASX's policy is to adjust options where the Issuer of Underlying Financial Products makes a distribution that it has announced to be a "special" or "abnormal" dividend, using its powers under *Items 9 and 10 of Appendix 2230 (Adjustment Circumstances) to the ASX Operating Rules Procedures*. Distributions by trusts and stapled security structures are treated on a case-by-case basis however, as noted on page 6 where such a distribution is regular an ETO adjustment will not be made. The same principle as applied to the cash return of capital *Item 3 of Appendix 2230 (Adjustment Circumstances) to the ASX Operating Rules Procedures*, also known as the reinvestment method is also employed for adjustments for special dividends.

As a general rule there will be no adjustment for ordinary dividends unless ASX considers it should take action under *Item 10 of Appendix 2230 (Adjustment Circumstances) to the ASX Operating Rules Procedures*. If so, ASX will issue a notice advising that it is considering such action.

(Follow the hyperlink to Derivatives Notice 124 dated 16 November 2000 Special Dividends policy).
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_026054.pdf

Example

The contract size will be adjusted to the quantity determined in using the formula applied under *Item 3 of Appendix 2230 (Adjustment Circumstances) to the ASX Operating Rules Procedures* which will generally be based on the volume weighted average price (VWAP), as determined by ASX), on the last cum dividend date. The exercise price will be adjusted to maintain the total exercise value for options. Under this Rule, the special dividend is notionally reinvested. The formulae used in this application are:

Contract Size:
New Size = Old size +
value of return for each old contract size/ (VWAP – return per share)

Strike Price:
New Strike = Old strike times (Old Contract Size/New Contract Size)

The following example is based on a special distribution. This has the same treatment as a special dividend.

(Follow the hyperlink to Derivatives Notice 236, 13 December 2007, Macquarie Airports Special Distribution)
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_024712.pdf

Where the Special Dividend has the same ex-date as the Ordinary Dividend, the following calculations apply effective from 1 July 2008**:**

New Contract Size = Old Contract Size + (total special dividend paid per Old Contract Size)/(S - OD - SD)

Where
S = VWAP of the last cum-dividend share price
OD = amount of ordinary regular dividend per share, if any
SD = amount of special dividend per share

New Exercise Price = Old Exercise Price x Old Contract Size/ New Contract Size

(Follow the hyperlink to Derivatives Notice 027, 15 February 2008, ETO Adjustment Calculation Method For Special Dividends Where Paid With Ordinary Dividends With Same Ex-date)
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_020463.pdf

Generally, this method can also be used for standalone special dividends where there is no ordinary dividend involved. An example of this as follows:
(Follow the hyperlink to Derivatives Notice 216, 28 November 2008, Australian Worldwide Exploration Limited Special Dividend)
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_024549.pdf

13. Takeovers and Mergers under Schemes of Arrangement
Item 10 of Appendix 2230 (Adjustment Circumstances) to the ASX Operating Rules Procedures

Note that takeover and mergers are events whereby the rules do not specifically prescribe a standard form of adjustment to be used.

As a general matter under an adjustment, ASX will seek to maintain the total value of exercise, before and after the event as far as is practicable, to be fair to takers and writers of open positions held.

A cash offer if successful, would generally result in a termination of the options.

Currently, termination is by cash-settlement at intrinsic value. This is equivalent to the expiry of the options effectively brought forward to the last day of trading of the underlying security. No market is available in the underlying security and hence no market available in the options. Generally, the cash offer amount is used in lieu of the market value of the shares on the last day of trading. All terminations are determined on a case by case basis.

ASX Clear (ASXCL) will terminate the Options contracts as directed by ASX pursuant to ASX Clear Operating Rule 13.4.2.

(Follow the hyperlink to Derivatives Notice 163 dated 8 September 2006, for Burns Philp & Company Limited)
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_016104.pdf

In relation to takeover events involving a cash and scrip offer, ASX may determine an adjustment that involves making the total value of exercise before the event *less the cash component***,** to be the same after the event. This is similar to the basket option method with the cash component being taken out of the strike so that the option remains over a single underlying security.

(Follow the hyperlink to Derivatives Notice 096, dated 24 April 2006 for the Patrick Corporation Limited – Toll Holdings Takeover Offer)
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_024972.pdf

14. Code Changes

An adjustment can also include the change in the ASX Code for the security.

An example of this event is the change in the name for MFS Limited to Octaviar Limited. This was followed by a change in the ASX Code from MFS to OCV.

(Follow the hyperlink to Derivatives Notice 053 dated 28 March 2008)
https://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_020734.pdf