APPENDIX E TO TIB NO 9, MARCH 1990 THE TAXATION OF EXCHANGE TRADED OPTIONS CONTRACTS

INTRODUCTION

This item sets out the Department's policy on the tax treatment of exchange traded options, and in particular how Determination G7B: New Zealand Futures and Options Markets, Determination G18: International Futures and Option Markets, and Determination G19: Exchange Traded Option Contracts, apply.

The policy set out in this item relates to -

- (a) New Zealand residents; and
- (b) The fixed establishment in New Zealand of any non-resident.
- 1.0 What is an Option Contract?
- 1.1 An option contract gives the purchaser the right, but not the obligation to buy or to sell something to another party, at a predetermined exercise or strike price on a future date. For this right the purchaser of the option will pay a premium, which is quoted on the exchange in points, to the seller/writer of the option. The purchaser of the option may exercise the option
 - (a) At any date during the term of the option (referred to as an "American" option); or
 - (b) Only at a time specified in the contract (referred to as a "European" option).
- 1.2 Option contracts take two basic forms:
 - (i) Call options give the purchaser of the option the right to assume a "long position" in the underlying futures contract i.e., the right to enter into the buy side of the futures contract at a fixed price (Refer to TPC 90/3/1 for explanation on futures contracts).
 - (ii) *Put options* entitle the purchaser to assume a "short position" in the underlying futures contract i.e., the right to enter into the sell side of the futures contract at a fixed price.
- 1.3 There are two parties to an option contract. The writer of the option is the person who sells the other party rights to exercise an option over a futures contract at a specific exercise price. The other party is the purchaser of the option, who pays the premium for the rights under the option.

- 1.4 Options presently traded on the New Zealand Futures Exchange:
 - Barclays Share Price Index Option Contract
 - Five Year Government Stock Option Contract
 - New Zealand Dollar Option Contract
 - Three Year Government Stock Option Contract
 - 90 Day Bank Bill Option Contract

Approved option contracts traded on overseas exchanges are scheduled in Determination G18: International Futures and Option Markets (refer TIB No.7 January 1990).

3.0 Pre-accruals Taxation Treatment of Option Contracts

- 3.1 Although the Department has not previously considered the issue it is expected that before the introduction of the accruals regime the taxation treatment of option contracts depended on the taxpayer's extent of trading. The assessability of profits was governed by section 65(2)(a) and (e) of the Income Tax Act 1976. The deductibility of losses was considered under section 104, and 106(1)(a) of the Act.
- 3.2 If the taxpayer was a dealer in traded options profits were assessable as business profits in terms of section 65(2)(a) and (e). Purchases were deductible to the dealer under section 104. Options were valued as trading stock pursuant to section 85 at cost price, market selling value, or replacement price. Therefore unrealised gains or losses could be accounted for at balance date.
- 3.3 If the taxpayer was a hedger, profits were assessable along with other business profits under section 65(2)(a). Losses were deductible under section 104. It should be noted, however, that there is authority to suggest that where an option is hedged on a capital item, any gain or loss on that option was also on capital account.
- 3.4 If the taxpayer was a speculator who entered into a series of option contracts which amounted to an 'undertaking or scheme' any profits were assessable under the third limb of section 65(2)(e) of the Act, which includes as assessable income:

"... all profits or gains derived from the carrying on or carrying out of any under-

taking or scheme entered into or devised for the purpose of making a profit:"

If the options were acquired merely for the purpose of resale, profits were assessable under the second limb of section 65(2)(e) which includes as assessable income:

"All profits or gains derived from the sale or other disposition of any personal property or any interest therein ... if the property was acquired for the purpose of selling or otherwise disposing of it ..."

Speculators' losses were deductible to the extent that there was sufficient nexus between income and the loss (or expenditure), and that had a profit been made that it would have been taxable. Such losses were considered deductible under section 104. Losses of a capital nature were not deductible in terms of section 106(1)(a).

4.0 Accruals Treatment of Options Contracts

- 4.1 From 8.30 pm New Zealand Standard Time on the 31st day of July 1986, (the implementation date), options became subject to the accrual tax accounting regime, in particular sections 64B to 64M and the amended sections 106(1)(a) and (h) of the Act. Sections such as 65(2)(e), and 104 have no bearing on the tax treatment of option contracts entered into after the implementation date. Options profits are now assessable under section 65(2)(jb).
- 4.2 A taxpayer who purchases a put option is the holder (as defined in section 64B of the Act) under the financial arrangement, while a taxpayer who purchases a call option is the issuer under that financial arrangement. Conversely a taxpayer who writes a put option is an issuer in respect of that financial arrangement and a taxpayer who writes a call option is the holder in respect of that option. Hedgers, dealers and speculators may either be holders or issuers under an option contract. The following table will assist in determining whether a taxpayer is a holder or an issuer in respect of an option -

PURCHASER WRITER

| PUT | Holder | Issuer |
|------|--------|--------|
| CALL | Issuer | Holder |

4.3 Determination G7B: New Zealand Futures and Options Markets, and Determination G18: International Futures and Option Markets (both signed on 4 December 1989), set out the approved markets, sources of information, and method used for determining prices of option contracts. To ascertain the value of an option at balance date for tax purposes reference must be made to Determination G7B or G18, whichever is relevant.

- 4.4 Determination G19: Exchange Traded Option Contracts (also signed on 4 December 1989), sets out the method to be used to calculate income and expenditure on an exchange traded option contract at balance date, this determination or an alternative method may be used under section 64C(3)(a). Alternative methods may be used if they have regard to the principles of accrual accounting, and
 - (i) Conform with commercially acceptable practice; and
 - (ii) Are adopted by the person and are or will be consistently applied in respect of all such financial arrangements for financial reporting purposes; and
 - (iii) Result in the allocation to each income year of amounts that are not materially different from amounts that would be calculated if the method set out in Determination G19 were adopted.
- 4.5 Where the option contract was entered into before Determination G7B; New Zealand Futures and Options Market, Determination G18: International Futures and Option Markets, or Determination G19: Exchange Traded option Contracts, were signed, Determination G12: Accounting for a Financial Arrangement in the Absence of Determination, will be relevant.
- 4.6 Where Determination G12 does not apply, section 64C(3)(b) requires that the taxpayer use a method that satisfies subparagraphs (i) and (ii) set out in paragraph 4.4 above, and results in the allocation to each income year of an amount that, having regard to the tenor of section 64C(2), is fair and reasonable. This means that the method must have regard to the principles of accrual accounting and, to the extent possible, use the yield to maturity method. A method which reflects Determination G19 will be acceptable to the Commissioner in respect of contracts entered into before the date on which Determination G19 was signed.

5.0 The Cash Basis Holder

5.1 In terms of section 64C(5) a taxpayer who is a cash basis holder does not bring to account

any unrealised gains or losses on financial arrangements held at balance date. To be a cash basis holder in terms of section 64D(1) the taxpayer must be a natural person; and

- (a) The difference between calculating the income in terms c-of section 64C or on a realisation basis must not exceed \$15,000; and
- (b) Either
 - (i) The income derived by the holder, in respect of those financial arrangements, must not exceed \$50,000; or
 - (ii) The total value of all financial arrangements held at any time in the income year must not exceed \$400,000:

A cash basis holder cannot claim a deduction for any unrealised loss at balance date.

6.0 The Holder who is not a Cash Basis Holder

- 6.1 If the holder is not a cash basis holder section 64C applies. Unrealised gains are assessable. Unrealised losses are, in terms of section 64C, "expenditure deemed to be incurred" and will be deductible at balance date if section 106(1)(h) is satisfied. For section 106(1)(h) to be satisfied the expenditure has to be:
 - "(i) ... payable in gaining or producing the assessable income for any income year; or
 - (ia) ... necessarily payable in carrying on a business for the purpose of gaining or producing the assessable income for any income year; or
 - (iii) ... payable by one company included in a group of companies in respect of money borrowed to acquire shares in another company included in that group of companies:"

7.0 Holders Generally

7.1 On the exercise, closing out, or lapse of an option contract a base price adjustment (cash base price adjustment for cash basis holders) is calculated under sections 64F(2) and (3). The base price adjustment takes into account any income derived or expenditure incurred in any previous income year. In relation to a holder, a negative amount resulting from a base price adjustment is an allowable deduction under section 64F(4)(a)(ii). If the taxpayer is a cash basis holder then the expendi-

ture is an allowable deduction under section 64F(5)(b). It is not necessary for the holder's expenditure to satisfy section 106(1)(h) for the holder to claim a loss on the realisation of the option contract.

- 7.2 The reason that a holder's expenditure is not subject to section 106(1)(h) is that section 106(1)(h) deals with "expenditure deemed to be incurred" under the accruals legislation, whereas sections 64F(4)(a)(ii) and 64F(5)(b) deem the amount calculated as a result of the base price adjustment to be "... an allowable deduction in calculating the assessable income ...". Therefore the holder's loss per the base price adjustment or cash base price adjustment is deductible in the income year (or equivalent accounting year) in which the option contract is exercised or lapses.
- 7.3 Where the base price adjustment is a positive amount, sections 64F(4)(a)(i) and 64F(5)(a) deem that amount to be ".... income derived by the holder in the income year".

8.0 The Issuer

- 8.1 Under the accruals rules the issuer has to include in assessable income any unrealised gains at balance date. Any unrealised losses at balance date are deductible if section 106(1)(h) is satisfied.
- 8.2 On the closing out, exercising, or lapsing of an option a base price adjustment is calculated under section 64F to ascertain the income or expenditure. Section 64F(4)(b)(i)states that in relation to an issuer, where the base price adjustment is a positive amount it is deemed to be expenditure incurred by the issuer. Therefore, unlike the holder, on realisation of the option contract it is necessary for the issuer's expenditure, calculated according to section 64F(2), to satisfy section 106(1)(h) for it to be deductible. It is not possible for the issuer in the contract to be a cash basis holder in respect of that contract.
- 8.3 Where the base price adjustment is a negative amount, section 64F(4)(b)(ii) deems that amount to be "... income derived by the issuer in the income year".

9.0 The Dealer

9.1 Also known as an arbitrageur, the dealer may be a holder and an issuer in respect of different contracts. Under the accruals rules the dealer must account for any unrealised gains or losses at balance date where the dealer is the issuer. Profits are assessable under section 65(2)(jb), (the profits may also fall within the words of section 65(2)(a), but it is clear from section 64L(1) that only the amounts calculated according to section 64B to 64Mare to be brought to account for tax purposes, and section 65(2)(jb) explicitly includes such amounts as assessable income). However whether the dealer accounts for the unrealised gains or losses on financial arrangements in relation to which the dealer is the holder at balance date, will depend upon whether the dealer is a cash basis holder or not.

9.2 If the dealer is not a cash basis holder all unrealised gains or losses on options contracts must be taken into account for taxation purposes at balance date. On the closing out, exercise, or lapse, of these contracts a base price adjustment is calculated to determine the amount that is assessable/deductible in the year in which the option is exercised, lapses, or closed out.

10.0 The Hedger

10.1 The hedger may be a holder or an issuer in respect of different option contracts. As with the dealer, whether the hedger accounts for the unrealised option contracts in which the hedger is the holder at balance date depends on whether the hedger is a cash basis holder. Unrealised contracts in which the hedger is the issuer must be taken into account at balance date.

A base price adjustment is calculated on closing out, exercise, or lapse, of the option. Profits are assessable under section 65(2)(jb)and, because the hedger's expenditure will satisfy section 106(1)(ia), unrealised losses are deductible at balance date for holders (not being cash basis holders) and issuers. Any loss on the closing out, exercise, or lapse, of the option incurred by a hedger who is a holder, and calculated pursuant to section 64F, will be deductible under section 64F(4)(a)(ii), (64F(5)(b) for a cash basis holder).

11.0 The Speculator

11.1 The speculator's unrealised gains on an option contract in respect of which the speculator is the issuer, are assessable at balance date in terms of section 64C. However unrealised losses on an option in which the speculator is the issuer, are only deductible if section 106(1)(h) is satisfied. On the exercising, lapsing, or closing out of the option contract a base price adjustment is calculated in terms of section 64F(4)(b). A positive amount is deemed to be expenditure incurred and must satisfy section 106(1)(h) to be deductible. A negative amount is deemed to be income derived and therefore assessable.

- 11.2 If the speculator is a holder (but not a cash basis holder) at balance date all unrealised gains would be assessable, and unrealised losses, subject to the satisfaction of section 106(1)(h), deductible. On the exercise, lapse, or closing out of the option a base price adjustment is calculated and a positive amount is deemed income and a negative amount an allowable deduction.
- 1.3 If the speculator is a cash basis holder only realised profits are assessable income under section 65(2)(jb). On the exercise, lapse, or closing out of the option a cash base price adjustment is calculated and the positive amount is deemed income under section 64F(5)(a). Realised losses are deemed an allowable deductible under section 64F(5)(b).

11.4 Section 106(1)(a), which prohibits any deduction for capital losses, has a proviso which ensures that it does not deny a deduction for expenditure deemed to be incurred under sections 64B to 64M. Therefore option losses are not subject to section 106(1)(a)

12.0 Base Price Adjustment

- 12.1 As mentioned previously, in the year in which the taxpayer exercises, lapses, or closes out the option, a base price adjustment is calculated in accordance with section 64F.
- 12.2 The base price adjustment is calculated using the following formula:

a - (b + c)

Where a is:

- "(i) In the case of a holder, the sum of:
 - (A) The amount of all consideration that has been paid, and all further consideration that has or will become payable, to the person; and
 - (B) Any amounts that have been remitted by the person and that are not included in subparagraph (A) of this paragraph:

(ii) In the case of an issuer, the amount of all consideration that has been paid, and all further consideration that has or will become payable, by the person -

in relation to the financial arrangement;"

Therefore 'a' will be all amounts paid and to be paid to the holder in case of the holder, and it will be all amounts paid and to be paid by the issuer in the case of the issuer.

"b is the acquisition price of the financial arrangement in relation to the person;"

From paragraph (d) of the definition of core acquisition price in section 64BA(1):

- "(i) In relation to a holder of the financial arrangement, the value of all consideration provided by the holder in relation to the financial arrangement; or
- (ii) In relation to an issuer of the financial arrangement, the value of all consideration provided to the issuer in relation to the financial arrangement."

Therefore 'b' will be all amounts of consideration paid by the holder in the case of the holder, and 'b' will be all amounts of consideration paid to the issuer in the case of the issuer.

"c is:

- (i) In the case of a holder, all amounts that are income derived, less the aggregate of amounts of expenditure deemed to be incurred under section 64C or section 64I of this Act or deemed to be an allowable deduction under section 64D of this Act by the person in respect of the financial arrangement in all previous income years since the acquisition of the financial arrangement; and
- (ii) In the case of an issuer, all amounts of expenditure incurred in respect of the financial arrangement in all previous income years since the issue of the financial arrangement, less the aggregate of:
 - (A) All amounts that are income deemed to be derived under section 64C or section 64D or section 64I of this Act by the person in respect of the financial arrangement in all previous income years since the issue of the

financial arrangement; and

(B) All amounts that are dividends(within the meaning of section 4(1)(ba) of this Act) derived by the person in respect of the financial arrangement."

Therefore 'c' will be the amount of income derived less expenditure incurred in all previous income years in the case the holder. In the case of the issuer 'c' will be the amount of expenditure incurred less income derived in all previous income years.

13.0 An Example

Situation: On 10 March 19X9 a taxpayer believes that there will be a fall in interest rates. The taxpayer purchases ten call options on 90 Day Bank Bill Option Contracts at a strike price of 8650, so as to limit the risk. The futures price for a June 19X9 90 Day Bank Bill Contract on that day is 8650. The option premiums for the ten contracts total \$4,950. The taxpayer is required to pay an initial margin of \$4,000 [\$400 per contract x 10 contracts]. The taxpayer also pays brokerage and Clearing House fees on purchase totalling \$390.

Balance Date: The taxpayer has a 31 March balance date. The price of a 90 Day Bank Accepted Bill Futures Contract has fallen reflecting a rise in interest rates to 8600. The value of the premiums, as ascertained in accordance with Determination G7B: New Zealand Futures and Options Market, has fallen to \$2,080. Further margin calls have been met by the taxpayer of \$870. The cost of closing out the contracts is \$390.

Income/expenditure for 19X9 income year:

Using the formula from Determination G19 -

a = \$5,340.00 (4,950 + 390)b = \$1,690.00 (2,080 - 390)

Therefore:

a - b

\$5,340.00 - \$1,690.00

= \$3,650 deemed to be expenditure incurred in the 19X9 income year.

Result: In May 19X9 interest rates fall resulting in the corresponding rise in value of the call options. On 15 May the taxpayer closes out all ten call options for \$9,025, reflecting the underlying 90 Day Bank Bill Futures Contracts trading at 8725. Variation margins received since balance date totalled \$4,800, while margins paid since balance date were nil. The remaining \$3,755, still owing to the taxpayer (after taking into account the initial deposit and margin requirements and commission etc on sale), is credited into the taxpayer's account held with the broker.

Application of base price adjustment:

Using: a - (b + c)

As the taxpayer is an issuer:

a = initial deposit of \$4,000 plus brokerage, etc., relating to the purchase of the options \$390 plus margin calls paid out of \$870.

b = margins received of \$4,800 plus the \$3,755 credited to the taxpayer.

c - \$3,650

Therefore:

\$5,260 - (\$8,555 + \$3,650)

- (6,945) deemed to be income derived by the issuer under section (64F(4)(b)(ii)) in the 19X0 income year.

14.0 The Department's Policy

14.1 Timing

For income tax purposes all options must be accounted for at balance date except those contracts in respect of which the taxpayer is a cash basis holder. Options in respect of which the taxpayer is a cash holder are required to be accounted for in the income year in which they lapse or are closed out or exercised.

14.2 Assessability and Deductibility

The Department considers that a taxpayer's expenditure on options in relation to which the taxpayer is an issuer, will almost inevitably satisfy section 106(1)(h) and is therefore deductible at balance date. Therefore all gains on an option contract will be treated as assessable income for income tax purposes, and all losses (whether realised or not) will be treated as deductible. The only exception is expected to be where the option contract is entered into for private or domestic purposes.