## ANNEX to CCCTB/WP057: CCCTB: possible elements of a technical outline

## Example 1: Sale of goods without stocks

Company A and company B belong to the same CCCTB group. Company A produces intermediate products that are sold to B for 4000 . To produce these goods A needs third party inputs as electricity (60), raw materials (1000) and wages (2000).

Company B purchases intermediate products from A (4000) and from third parties (500). In addition, B uses third party electricity (30) and wages (1000) to produce goods that are sold to third parties for 6000 .

| A |  | B |  |  |
| :--- | ---: | ---: | :--- | ---: |
| Electricity | -60 |  | Electricity | -30 |
| Raw material | -1000 |  | Cost of purchase | $-(4000+500)=-4500$ |
| Wages | -2000 |  | Wages | -1000 |
| Sales to B | +4000 |  | Sales to third | +6000 |
|  |  |  |  |  |

Option (i) - ignoring completely:

Only third party income and third party expenses are taken into account for the calculation of the group's tax base:

| A | B | Group |  |  |  |
| :--- | ---: | :--- | :--- | ---: | ---: |
| Electricity | -60 |  | Electricity | -30 | -90 |
| Raw material | -1000 |  | Cost of purchase | $(4000+500)=-4500$ | -1500 |
| Wages | -2000 |  | Wages | -1000 | -3000 |
| Sales to B | $\mp 4000$ |  | Sales to third | +6000 | +6000 |
| Tax base |  |  |  | $=\mathbf{1 4 1 0}$ |  |

To calculate the group's tax base all third party expenses (electricity 90, raw materials 1500 , wages 3000 ) are deducted from the sales to third parties (6000). This leads to a tax base of the group of 1410 .

Option (i) - but recording cost:

Sales to B are valued at 3060. The group's tax base can be calculated by adding the figures for company A and company B.

| A |  | B | Group |  |  |
| :--- | ---: | :--- | :--- | ---: | ---: |
| Electricity | -60 |  | Electricity | -30 |  |
| Raw material | -1000 |  | Cost of purchase | $-(3060+500)=-3560$ |  |
| Wages | -2000 |  | Wages | -1000 |  |
| Sales to B | +3060 |  | Sales to third party | +6000 |  |
| Tax base | $\mathbf{0}$ |  |  | $\mathbf{1 4 1 0}$ | $=\mathbf{1 4 1 0}$ |

Option (ii) - included in each group company and netted off when consolidated:

The individual tax bases of company A and company B are added. If no automatic off-set of all intra-group transactions occurs, a separate elimination of such intra-group transactions has to be carried out. In this case (without stocks) it is possible to add the two tax bases ( $940+$ $470=1410$ ), because the sales to $B$ in the amount of 4000 are automatically set off with the purchase of intermediate products by B in the amount of 4000 .

| A |  | B |  | Group |  |
| :--- | ---: | :--- | :--- | ---: | ---: |
| Electricity | -60 |  | Electricity | -30 | -90 |
| Raw material | -1000 |  | Cost of purchase | $-(4000+500)=-4500$ | -5500 |
| Wages | -2000 |  | Wages | -1000 | -3000 |
| Sales to B | +4000 |  | Sales to third party | +6000 | +10000 |
| Tax base | $\mathbf{9 4 0}$ |  |  | $\mathbf{4 7 0}$ | $=\mathbf{1 4 1 0}$ |

In this simple example the options lead to the same result without additional elimination actions. However, it is necessary to consider how the methods would work in a more realistic situation where there are closing stocks.

## Example 2: Sale of goods with stocks

The figures are basically the same as in example 1, except that B does not sell any goods and the entire production of A and B is reflected in B's closing stock. All the electricity, intermediate goods and wages are taken into account for the valuation of stocks.

| A |  | B |  |  |
| :--- | ---: | ---: | :--- | ---: |
| Electricity | -60 |  | Electricity | -30 |
| Raw material | -1000 |  | Cost of purchase <br> (intra-group and <br> third party) | $-(4000+500)=-4500$ |
| Wages | -2000 |  | Wages | -1000 |
|  | 0 |  | Valuation of stocks | +5530 |
| Closing stock | +4000 |  | Sales to third party | 0 |
| Sales to B |  |  |  |  |

## Option (i) - ignoring completely:

Stocks are valued at the third party cost to the group as only third party costs are taken into account. $90+1500+3000=4590$. In this example, where no goods have been sold, the closing stocks equal the total third party expenses of A and B . Thus, the group tax base is 0 .

| A | B |  | Group |  |  |
| :--- | ---: | :--- | :--- | ---: | ---: |
| Electricity | -60 |  | Electricity | -30 | -90 |
| Raw material | -1000 |  | Cost of purchase | $-(4000+500)=-4500$ | -1500 |
| Wages | -2000 |  | Wages | -1000 | -3000 |
| Valuation of stocks | +0 |  | Valuation of stocks | +4590 | +4590 |
|  |  |  |  | 0 |  |
| Sales to B | $\pm 4000$ | Sales to third <br> parties | 0 | 0 |  |
| Tax base |  |  |  | $=\mathbf{0}$ |  |

It should be noted that the group would need to have third party cost data for B's closing stocks.

Option (i) - but recording cost:

Sales to B are valued with costs of 3060 . Then, the tax bases of company A and company B are added.

| A |  | B | Group |  |  |
| :--- | ---: | :--- | :--- | ---: | ---: |
| Electricity | -60 |  | Electricity | -30 |  |
| Raw material | -1000 |  | Cost of purchase | $-(3060+500)=-3560$ |  |
| Wages | -2000 |  | Wages | -1000 |  |
| Valuation of stocks | 0 |  | Valuation of stocks | +4590 |  |
|  |  |  |  | 0 |  |
| Sales to B at cost | +3060 |  | Sales to third <br> parties | $\mathbf{0}$ | $=\mathbf{0}$ |
| Tax base | $\mathbf{0}$ |  |  |  |  |

Under this alternative the stocks are automatically at third party cost and no adjustment is necessary.

Option (ii) - included in each group company and netted off when consolidated:

Tax bases of company A and company B are added. There is no automatic off-set of the stocks. Therefore, a separate elimination of the intra-group profit that is included in the sale of goods to company B has to be carried out.

Cost for stocks for the group (without intra-group transactions): 4590
Elimination amount: stocks of B on stand-alone basis - stocks without intra-group items:
$5530-4590=940$

| A |  | B |  | Group |
| :---: | :---: | :---: | :---: | :---: |
| Electricity | -60 | Electricity | -30 |  |
| Raw material | -1000 | Cost of purchase | $-(4000+500)=-4500$ |  |
| Wages | -2000 | Wages | - 1000 |  |
| Valuation of stocks | + 0 | Valuation of stocks <br> (including A's <br> profit on sale to B) | + 5530 |  |
| Sales to B | + 4000 | Sales to third | 0 |  |
| Tax base | 940 |  | 0 | $=+940$ |
| Elimination of intra group profit on stock |  |  |  | -940 |
| Consol. tax base |  |  |  | = 0 |

It should be noted that the group would need third party cost data for the elimination adjustment. In the above example where no stocks are sold the adjustment corresponds to the entire intra-group profit made by A. However, in a more realistic scenario where B has sales to third parties and some stock (possibly with different product lines), unless the stock adjustment were calculated on an average apportioned basis, detailed third party cost information about the closing stocks would be required.

## Example 3: Sale of assets from company A to company B

Company A sells an asset (tax written down value of 4000, market value of 5000 ,) to company B for a sales price of 5000 . Assumption: pools are calculated entity by entity (necessary for the calculation of the asset factor for the sharing mechanism) and depreciation is at the rate of $20 \%$ on a reducing balance basis.

Option (i) - ignoring completely: nb not possible to ignore assets

Under this alternative intra-group purchase and sales proceeds are ignored but as noted above the assets cannot be completely ignored.

The sale and acquisition of the asset is recorded at the tax written down value of the asset in company A. The consolidated depreciation is that of company A and company B with no adjustment.

| A |  | B |  | Group |  |
| :--- | ---: | :--- | :--- | ---: | ---: |
| Asset leaving | -4000 |  |  |  |  |
| Sale of asset to B | +4000 |  | Acquisition of asset | 4000 |  |
|  |  |  | Depreciation | -800 |  |
|  |  |  |  |  |  |
| Tax base | $\mathbf{0}$ |  | Tax base | $\mathbf{- 8 0 0}$ | $\mathbf{- 8 0 0}$ |

Option (ii) - included in each group company and netted off when consolidated:

Tax bases of company A and company B are added. Two elimination actions are necessary:
(1) The intra-group profit (1000) must be eliminated.
(2) The depreciation must be adjusted: required depreciation $=4000 \times 20 \%=800$; adjustment $=800-1000=-200($ too high depreciation in an amount of 200).

| A |  | B |  | Group |  |
| :--- | ---: | :--- | :--- | ---: | ---: |
| Asset leaving | -4000 |  |  |  |  |
| Sale of asset to B | +5000 |  | Acquisition of asset | 5000 |  |
|  |  |  | Depreciation | -1000 |  |
|  |  |  |  |  |  |
| Individual tax base | $\mathbf{1 0 0 0}$ |  | Individual tax base | $\mathbf{- 1 0 0 0}$ | $\mathbf{- 0}$ |
|  |  |  |  |  |  |
|  |  |  | Elimination action 1 |  | -1000 |
|  |  |  | Elimination action 2 |  | +200 |
| Consol. tax base |  |  |  |  | $\mathbf{- 8 0 0}$ |

NB: the adjustment to the depreciation would have to be repeated every year as the base cost is overstated by the intra-group profit on sale.

## Example 4: Internally produced goods at company A sold to company B where it is considered as an asset (useful life 4 years)

Assumption: pools are calculated entity by entity.

| A |  | B |  |  |
| :--- | ---: | :--- | :--- | ---: |
| Electricity | -60 |  |  |  |
| Raw material | -1000 |  | Acquisition of asset | 4000 |
| Wages | -2000 |  | Depreciation | -1000 |
| Cost of stock sold <br> to B | +3060 |  |  |  |
| Closing stock | 0 |  |  |  |
| Sale to B | +4000 |  |  |  |
|  |  |  |  |  |

Option (i) - ignoring completely, nb not possible to ignore assets:

As noted above the assets cannot be completely ignored.
The sale and acquisition of the asset (ie the appropriation of A's stock as an asset by B) is recorded at cost.

| A |  | B |  | Group |  |
| :--- | ---: | ---: | :--- | ---: | ---: |
| Electricity | -60 |  |  |  |  |
| Raw material | -1000 |  | Acquisition of asset | +3060 |  |
| Wages | -2000 |  |  |  |  |
| Valuation of stocks | 0 |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  | -612 |  |
| Sales to B (at cost) | +3060 |  | Depreciation | - | $\mathbf{- 6 1 2}$ |
| Consol tax base |  |  |  |  |  |

Option (ii) - included in each group company and netted off when consolidated:

The individual tax bases of company A and company B are added. Two elimination actions are needed. First, the intra-group profit from the sale of the asset (940) has to be eliminated. Second, the depreciation has to be adjusted: The depreciation was calculated on a base cost of 4000. The correct depreciation base is 3060 , only third party costs without intra-group profit. Therefore, the annual depreciation has to be reduced.

Elimination action 1: Elimination of intra-group profit: - 940
Elimination action 2: Adjustment of depreciation: $3060 \times 20 \%=612$

$$
800-612=188
$$

| A |  |  | B |  | Group |
| :--- | ---: | ---: | :--- | ---: | ---: |
| Electricity | -60 |  |  |  |  |
| Raw material | -1000 |  | Acquisition of asset | 4000 |  |
| Wages | -2000 |  |  |  |  |
| Valuation of stocks | 0 |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  | $\mathbf{- 8 0 0}$ | $+\mathbf{1 4 0}$ |
| Sales to B | 4000 |  | Depreciation | -940 |  |
| Tax base | $\mathbf{9 4 0}$ |  |  |  | +188 |
|  |  |  | Elimination action 1 |  | $\mathbf{- 6 1 2}$ |
|  |  |  | Elimination action 2 |  |  |
| Consol. tax base |  |  |  |  |  |

NB The depreciation adjustment would have to be repeated every year as the base cost is overstated by the intra-group profit on sale.

## Example 5: Dividends

Intra-group dividends do not appear to pose any particular problem as they can either be left out or eliminated.

## Example 6: Interest, royalties, rents, leasing ${ }^{1}$

With these items no separate elimination actions are necessary. These would generally be periodic transactions and there should be no complications concerning stocks. In option (i) they are not taken into account due to their intra-group character. In option (ii) the income and expenses would be automatically off-set when the two tax bases are added.

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[^0]:    ${ }^{1}$ Leasing may require additional rules depending on how the rules for finance and operating leases are finalised.

