

Annexe H

PRICE ADJUSTMENT FACTOR: EXAMPLE CALCULATIONS

$$PAF = \left[W_1 \left(\frac{L_1 - B_1}{B_1} \right) + W_2 \left(\frac{L_2 - B_2}{B_2} \right) + W_3 \left(\frac{L_3 - B_3}{B_3} \right) + W_4 \left(\frac{L_4 - B_4}{B_4} \right) + \dots + W_{11} \left(\frac{L_{11} - B_{11}}{B_{11}} \right) \right]$$

$$P = BP \times [1 + PAF]$$

where:

<i>PAF</i>	:	is the Price Adjustment Factor
<i>W</i>	:	is the percentage weighting of the respective component
<i>L</i>	:	is the Latest Index Value
<i>B</i>	:	is the Base Date Index Value
<i>P</i>	:	is the Price
<i>BP</i>	:	is the Base Price
1	:	Labour From relevant SEIFSA source table
2 - 5	:	Mining Supplies From relevant Stats SA source tables
6	:	Diesel DME 0.05% Sulphur, Reef
7	:	Electricity From Stats SA PPI source table
8 - 9	:	Overheads From relevant Stats SA CPI & PPI source tables
10 - 11	:	Profit & Capital From relevant Stats SA CPI & PPI source tables

For example, if the Base Dates and indices were as stipulated below, the formula would result in the following:

Example 1: Monthly Price Adjustment

Cost Component	Weight	B	Base Date	L	Latest Index Date	(L-B)/B	Weighted Change
Labour	26%	117.2	Apr-15	117.2	Apr-15	0.0000	0.00000
Mining Supplies	3%	105.5	Apr-15	105.5	Apr-15	0.0000	0.00000
	6%	113.9	Apr-15	113.9	Apr-15	0.0000	0.00000
	3%	73.2	Apr-15	73.2	Apr-15	0.0000	0.00000
	3%	114.9	Apr-15	114.9	Apr-15	0.0000	0.00000
Diesel	8%	1122.79	Apr-15	958.17	Mar-16	-0.1466	-0.01173
Electricity	4%	118.6	Apr-15	118.6	Apr-15	0.0000	0.00000
Overheads	7.5%	114.1	Apr-15	114.1	Apr-15	0.0000	0.00000
	7.5%	117.3	Apr-15	117.3	Apr-15	0.0000	0.00000
Profit & Capital	11%	114.1	Apr-15	114.1	Apr-15	0.0000	0.00000
	11%	104.6	Apr-15	104.6	Apr-15	0.0000	0.00000
Fixed	10%						
Total Weighted Change							-0.01173
Price Adjustment Factor: 1 + (sum of lines 1 to 5)							0.98827
Base Price							R10.00
Adjusted Price							R9.88

Example 2: Annual Price Adjustment

Cost Component	Weight	B	Base Date	L	Latest Index Date	(L-B)/B	Weighted Change
Labour	26%	117.2	Apr-15	127.4	Apr-16	0.0870	0.02263
Mining Supplies	3%	105.5	Apr-15	109.2	Apr-16	0.0351	0.00105
	6%	113.9	Apr-15	127.3	Apr-16	0.1176	0.00706
	3%	73.2	Apr-15	90.2	Apr-16	0.2322	0.00697
	3%	114.9	Apr-15	117.4	Apr-16	0.0218	0.00065
	8%	1122.79	Apr-15	1053.87	Apr-16	-0.0614	-0.00491
Diesel	4%	118.6	Apr-15	133.1	Apr-16	0.1223	0.00489
Overheads	7.5%	114.1	Apr-15	121.2	Apr-16	0.0622	0.00467
	7.5%	117.3	Apr-15	125.4	Apr-16	0.0691	0.00518
Profit & Capital	11%	114.1	Apr-15	121.2	Apr-16	0.0622	0.00684
	11%	104.6	Apr-15	107	Apr-16	0.0229	0.00252
Fixed	10%						
Total Weighted Change							0.05755
Price Adjustment							
Factor: 1 + (sum of lines 1 to 5)							1.05755
Base Price							R10.00
Adjusted Price							R10.58

Example 3: Monthly Price Adjustment (after an annual adjustment)

Cost Component	Weight	B	Base Date	L	Latest Index Date	(L-B)/B	Weighted Change
Labour	26%	117.2	Apr-15	127.4	Apr-16	0.0870	0.02263
Mining Supplies	3%	105.5	Apr-15	109.2	Apr-16	0.0351	0.00105
	6%	113.9	Apr-15	127.3	Apr-16	0.1176	0.00706
	3%	73.2	Apr-15	90.2	Apr-16	0.2322	0.00697
	3%	114.9	Apr-15	117.4	Apr-16	0.0218	0.00065
	8%	1122.79	Apr-15	1052.87	May-16	-0.0623	-0.00498
Diesel	4%	118.6	Apr-15	133.1	Apr-16	0.1223	0.00489
Overheads	7.5%	114.1	Apr-15	121.2	Apr-16	0.0622	0.00467
	7.5%	117.3	Apr-15	125.4	Apr-16	0.0691	0.00518
Profit & Capital	11%	114.1	Apr-15	121.2	Apr-16	0.0622	0.00684
	11%	104.6	Apr-15	107	Apr-16	0.0229	0.00252
Fixed	10%						
Total Weighted Change							0.05748
Price Adjustment							
Factor: 1 + (sum of lines 1 to 5)							1.05748
Base Price							R10.00
Adjusted Price							R10.57