

### WEEK 7\_WS\_3: Activity Based Budgeting

Prepare answers to the following questions and to discuss them with your classmates.

#### Qn1.

The Raven's Wing Manufacturing Company produces a range of electric guitars that are sold under a variety of names such as Kender, Tibson, and Moon. The company only produces four models but, by using a variety of labels and finishes, a wide range of apparently different products is sold. The company has operated an activity based costing system for a few years. The company now wishes to introduce an activity based approach to its 2000/1 budget, using the experience it has gained through activity based costing. This approach will replace the incremental approach to budgeting which the company has used for more than a decade.

The company's accountant has collected together the following data for the 1999/2000 budget year.

| Activity                   | 1999/2000 cost driver rate              |
|----------------------------|---|
| Assembly                   | £4.50 per direct labour hour (DLH)      |
| Material handling          | £25.00 per batch of material received   |
| Despatch                   | £50.00 per batch of products despatched |
| Production planning        | £150.00 per production order            |
| Marketing and Sales        | £4.75 per instrument sold               |
| Administration and General | 15% of total of other overhead costs    |

#### Expense type analysis

| Cost Pool                  | Wages & Salaries | Occupancy | Other |
|----------------------------|------------------|-----------|-------|
| Assembly                   | 65%              | 20%       | 15%   |
| Material handling          | 50%              | 25%       | 25%   |
| Despatch                   | 40%              | 20%       | 40%   |
| Production planning        | 75%              | 10%       | 15%   |
| Marketing and Sales        | 55%              | 10%       | 35%   |
| Administration and General | 50%              | 10%       | 40%   |

| Product data                   | Model A | Model B | Model C | Model D |
|--------------------------------|---------|---------|---------|---------|
| No of bought-in parts per unit | 6       | 8       | 12      | 15      |
| No of DLH per unit             | 2.5     | 3.0     | 4.2     | 5.5     |

The 2000/1 budget is to be based on the following assumptions:-

(i)

| <b>Product data</b>                   | <b>Model A</b> | <b>Model B</b> | <b>Model C</b> | <b>Model D</b> |
|---------------------------------------|----------------|----------------|----------------|----------------|
| Production/sales volume               | 120,000        | 50,000         | 20,000         | 10,000         |
| Average production order              | 2,000          | 2,000          | 500            | 200            |
| No of despatches per production order | 10             | 25             | 50             | 50             |

- (ii) Each production order is produced as a batch, with appropriate batches of the required parts being brought in.
- (iii) The 1999/2000 cost driver rates are to be used as the basis for calculating the 2000/1 overhead budget.

**Note:** Due to an anticipated swing in the music market away from girl or boy singing groups to guitar based bands, the 2000/1 volumes for models A and B are 20% greater than those for 1999/2000, whilst the 2000/1 volumes for models C and D are 25% greater than in 1999/2000.

**Required:**

- (a) Using the above assumption, calculate the company's 2000/1 total overhead budget analysed by expense type.
- (b) Comment on the budget calculated in part (a), discussing in particular the validity of the assumptions used.