

Target costing (ACCA question)

06. Edward Limited assembles and sells many types of radio. It is considering extending its product range to include digital radios. These radios produce a better sound quality than traditional radios and have a large number of potential additional features not possible with the previous technologies (station scanning, more choice, one touch tuning, station identification text and song identification text etc).

Assembly workers assembling a variety of components produce a radio. Production overheads are currently absorbed into product costs on an assembly labour hour basis.

Edward Limited is considering a target costing approach for its new digital radio product.

Required:

(a) Briefly describe the target costing process that Edward Limited should undertake.

(b) Explain the benefits to Edward Limited of adopting a target costing approach at such an early stage in the product development process.

(c) Assuming a cost gap was identified in the process outline possible steps Edward Limited could take to reduce this gap.

A selling price of \$44 has been set in order to compete with a similar radio on the market that has comparable features to Edward Limited's intended product. The board have agreed that the acceptable margin (after allowing for all production costs) should be 20%.

Cost information for the new radio is as follows:

- ❑ Component 1 (Circuit board) – these are bought in and cost \$4.10 each. They are bought in batches of 4,000 and additional delivery costs are \$2,400 per batch.
 - ❑ Component 2 (Wiring) – in an ideal situation 25 cm of wiring is needed for each completed radio. However, there is some waste involved in the process as wire is occasionally cut to the wrong length or is damaged in the assembly process. Edward Limited estimates that 2% of the purchased wire is lost in the assembly process. Wire costs \$0.50 per metre to buy.
 - ❑ Other material – other materials cost \$8.10 per radio.
 - ❑ Assembly labour – these are skilled people who are difficult to recruit and retain. Edward Limited has more staff of this type than needed but is prepared to carry this extra cost in return for the security it gives the business. It takes 30 minutes to assemble a radio and the assembly workers are paid \$12.60 per hour. It is estimated that 10% of hours paid to the assembly workers is for idle time.
- ❑ Production Overheads – recent historic cost analysis has revealed the following production overhead data:

	Total production overhead \$	Total assembly labour hours
Month 1	620,000	19,000
Month 2	700,000	23,000

Fixed production overheads are absorbed on an assembly hour basis based on normal annual activity levels. In a typical year Edward Limited will work 240,000 assembly hours.

Required:

(d) Calculate the expected cost per unit for the radio and identify any cost gap that might exist.