

Quillmoor Fibre: one network, many decisions

Student workbook | Pearson Edexcel A level Economics A (9EC0), Theme 3 | Year 12 or 13 (A level exams in 2027 for the current Year 13) | Original TBS three-lesson series

Quillmoor Fibre is the only full-fibre broadband network in the upper Quillmoor valley, a rural area in the north of England. It was owned by the district council until eight years ago, when the council sold it. Now it has asked to buy Nethergarth Net, the only other network in the lower valley's border towns, and the district council has asked you, its economics adviser, what the government should do. Over three lessons you will work as an economist: the tools of government intervention (Lesson 1), what the tools do and where they fail (Lesson 2), then one mixed Theme 3 judgement (Lesson 3).

Lesson	Question	You will
1	Which tool for which problem?	match eleven tools of government intervention to situations, test a merger with figures, compare tender bids and judge a privatisation
2	What does the tool do, and where does it fail?	find the profit-maximising output of the monopoly, test price caps on a diagram and in a table, and meet quality cuts, inflated cost reports and regulatory capture
3	Which package should the council back?	test whether one network is cheaper, compare three packages with figures and write a recommendation of about 180 words

Quillmoor at a glance

Feature	Details
Upper valley	Quillmoor Fibre is the only network. Today 30 thousand are connected and each pays £40 a month.
Border towns	Quillmoor Fibre and Nethergarth Net both serve 20 thousand homes in the border towns, at £32 a month each. Quillmoor Fibre has 11 thousand of the homes and Nethergarth Net has 9 thousand.
Units	Homes are in thousands. Prices and unit costs are in £ per home per month. Money totals are in £000 (thousands of pounds) a month unless stated. Total (£000) = homes (thousands) x £ per home.
Costs	The upper-valley network costs £500 thousand a month in fixed costs, and each connected home adds £10 a month in marginal cost. All costs include normal profit, so "profit" in this pack means supernormal profit and 0 means the owners earn normal profit.
Not real	Quillmoor Fibre, Nethergarth Net, the district council, the regulator, the competition authority and every figure are fictional and invented for teaching.

You need a calculator, a pencil and a ruler. The data pack is on pages 2 to 4 and each task repeats the figures it needs. This is original classroom practice, not an exam paper. Not endorsed by Pearson. This pack contains no exam board questions, marks or mark schemes.

Free sample

Quillmoor Fibre: government intervention and a Theme 3 judgement

Contents of the full pack

Lesson 1: Which tool for which problem?

Lesson 2: What does the tool do, and where does it fail?

Lesson 3: Which package should the council back?

Student workbook and teacher guide, as PDF and as editable Word files.

The teacher guide has lesson plans, full worked answers and indicative guidance.

This sample is the cover and the first two pages of Lesson 1 of the student workbook. It contains no answers. The pages that follow are exactly as in the full pack.

Lesson 1: Which tool for which problem?

By the end of this lesson you can name the tools of government intervention in Theme 3, use figures to test a merger and a tender, and judge a privatisation.

Starter: write the term for each description

Description	Term
1. A limit on the price a firm may charge	
2. A limit on the profit or return a firm may keep	
3. A minimum level of service a firm must provide	
4. Targets such as repair times, with a penalty if missed	
5. Removing rules that restrict who may enter a market	
6. Firms bid to win a government contract	
7. Moving an organisation from public to private ownership	

Task 1: match the tool to the situation

Choose from: control of mergers; price regulation; profit regulation; quality standards; performance targets; promotion of small business; deregulation; competitive tendering; privatisation; restriction of monopsony power; nationalisation. Each tool is used once.

Situation	Tool
1. The regulator says Quillmoor Fibre may not charge more than £30 a home each month.	
2. The regulator limits the yearly profit Quillmoor Fibre may keep to a fixed return on the money invested in the network.	
3. Every connection must reach a minimum speed and a minimum share of time without a fault.	
4. Quillmoor must repair 90% of faults within 24 hours or pay a fine to the regulator.	
5. The district council asks firms to bid to connect its schools and libraries.	
6. Eight years ago the council sold the network it owned to private owners.	
7. The council gives grants to small community networks that want to start up in the valley.	
8. The government scraps a rule that stopped a second operator using the poles and ducts.	
9. The competition authority investigates whether Quillmoor Fibre may buy Nethergarth Net.	
10. A rule says the main buyer of installation work, who dominates that market, must pay small contractors within 30 days.	
11. Some councillors want the council to buy the network back and run it again.	