

CHAPTER 2

BICC

Origins and development

34. British Insulated Callender's Cables Ltd, re-named BICC Ltd in 1975, was formed in 1945 by the merging of two companies, British Insulated Cables Ltd, and Callender's Cable and Construction Co Ltd, and their wholly and partly-owned subsidiaries. The merging companies were two of the largest and oldest established cablemakers in the United Kingdom. The companies' activities were not confined to cablemaking but included also the manufacture of bare conductors, constructional activities in the field of electrical engineering and, through subsidiary companies, copper refining and fabrication and the manufacture of industrial capacitors. The new company continued these activities and added to them. The BICC Group now makes electric wires, cables and accessories of all types; refines copper and fabricates copper and aluminium and their alloys for the electrical, electronics and engineering industries; produces low voltage switch-gear, lighting columns, communication and control equipment, industrial tapes, industrial plastics and capacitors; and is engaged in civil, mechanical and electrical engineering, including design and construction. BICC is the largest organisation in the world having cablemaking as its primary activity, and has comprehensive facilities for research, manufacture and contracting in transmission and distribution of electrical energy for power and communications purposes.

35. The extent of the growth of the Group and its business since 1945 is indicated by the following figures:

TABLE 2.1

<i>Year</i>	<i>Total Sales</i>	<i>Tangible Assets Employed</i>	<i>Pre-tax Profits</i>
1945/46	£30m	£16.4m	£1.7m ¹
1977	£998m	£310.0m	£47.1m

36. At the time of the 1945 merger the BICC Group was based substantially in the United Kingdom. In the intervening period the Group has become an international organisation whose primary activity is still cablemaking but whose other activities and products have accounted for an increasing proportion of its total sales in recent years. The percentage of total sales in 1974 attributable to other activities was 49 per cent; and this has risen to 60 per cent in 1977. While still extensively dependent on cablemaking, BICC is no longer heavily dependent on the United Kingdom market. Indeed, the larger part of the Group's business now lies outside the United Kingdom. In 1974 52 per cent of total Group sales (excluding sales by associated companies) of £782 million was contributed by overseas companies of the Group and by exports from the United Kingdom. Comparable figures for 1975 were 55 per cent of £758 million, for 1976 58 per cent of £898 million, and for 1977 58 per cent of £998 million.

¹ BICC estimate for 12 months.

37. With effect from 1 January 1975, the BICC Group was re-organised into four 'group companies' as follows:

BICC Cables Ltd (BICC Cables)
 BICC Industrial Products Ltd
 BICC International Ltd
 Balfour, Beatty & Co Ltd (now Balfour Beatty Ltd)

The main object of this re-organisation was to decentralise management responsibility to operational level. As far as cabling was concerned, it brought under single operational control within BICC Cables all the United Kingdom cabling activities of BICC together with the metals units supplying them.

38. The relative importance of the four 'group companies' in the BICC Group as a whole can be readily gauged by the following table showing their respective sales and operating profits (ie before finance charges, taxation and minority interests) over their first three years on an historic cost basis:

TABLE 2.2 Sales and profits of BICC Group companies

	1977		1976		1975	
	£ million		£ million		£ million	
	Sales	Operating profit	Sales	Operating profit	Sales	Operating profit
BICC Cables	375.9	14.0	320.1	12.2	271.1	10.3
BICC International	295.6	26.4	301.2	31.9	265.1	30.6
Balfour Beatty	243.8	9.6	213.4	6.7	168.9	0.7
BICC Industrial Products	82.5	5.5	63.7	2.4	53.0	1.8
TOTAL:	997.8	55.5	898.4	53.2	758.1	43.4

39. Sales of reference goods manufactured in the United Kingdom expressed as a percentage of BICC total sales worldwide in the years 1974-1977 were:

TABLE 2.3 Sales of reference goods

	Sales world-wide	Reference goods made in UK	Per cent
	£ million	£ million	
1974	782.3	187.3	23.9
1975	758.1	170.5	22.5
1976	898.4	175.5	19.5
1977	997.8	209.9	21.0

40. BICC Limited has the following wholly-owned subsidiary companies engaged in the United Kingdom on the production and sale of reference goods as agents for the parent company and managed through BICC Cables:

BICC General Cables Ltd
 BICC Power Cables Ltd
 BICC Telecommunication Cables Ltd
 BICC Connollys Ltd
 BICC Pyrotenax Ltd
 Reliance Cords and Cables Ltd
 Fine Wires Ltd

The structure of BICC Cables as at 1 January 1978 is given in *Appendix 5*. It will be seen that there is a separate operating company for each main category of reference products, mains and supertension cables being taken together. BICC's activities in each of these individual categories are described later in this chapter.

Sales of reference goods

41. The following table shows BICC's home sales and total home and export sales of reference products for the years 1973 to 1976. These are expressed in sterling values and also as percentages respectively of total sales in the United Kingdom and of the total home and export sales of all United Kingdom cablemakers:

TABLE 2.4 Home and export sales

	<i>Sales</i>		<i>Market Share</i>	
	<i>Home</i> <i>£ million</i>	<i>Home and</i> <i>Export</i> <i>£ million</i>	<i>Home</i> <i>Per cent</i>	<i>Home and</i> <i>Export</i> <i>Per cent</i>
1973	112.4	136.9	33.2	35.7
1974	143.7	187.3	34.5	36.6
1975	127.4	170.5	33.0	34.6
1976	129.0	175.5	30.8	32.3

42. As there is small fluctuation in the value of cable stocks relative to the value of sales, the value of BICC's home and export sales relative to total home and export sales constitutes a close guide to the value of BICC's production of reference goods relative to the value of total United Kingdom production of reference goods.

Production of reference goods

43. In the United Kingdom BICC Cables makes all categories of reference goods and within each category makes the widest range of any United Kingdom manufacturer. BICC Cables has factories in Northern Ireland, North-East England, South-East England and the Midlands but the largest concentration of production is in North-West England and North Wales. Some 10,800 employees were engaged in the manufacture of reference goods at the end of 1977.

44. Since 1945, BICC has acquired a number of cablemaking companies, closed some companies and merged others within the Group. These acquisitions and the other changes are set out in tabular form in *Appendix 6*. BICC has made a large investment in reference goods manufacture in the United Kingdom in pursuit of its policy of increasing the efficiency of its manufacturing operations and has carried out a number of major rationalisation schemes. Thus its investment expenditure, before deduction of Government grants, was £68.4 million between 1965 and 1976. BICC's stated objective is to secure that its operations are at least comparable with the best current standards anywhere in the world. This has involved the company, in addition to more routine aspects of plant replacement and modernisation, in a number of major investment projects both in building entirely new factories and the complete re-structuring of existing factories.

45. One of BICC's objectives is that 'our overall productivity per employee should be higher than that of our competitors at home and abroad and be increasing at a higher rate'. For example, the company estimates its productivity savings in respect of reference goods in the two years to December 1973 to have yielded some £3.3 million in cost reductions and some £6.1 million in respect of working capital employed. Over the two years from December 1973 to December 1975 BICC claims to have achieved further savings, estimated at some £2.4 million in cost reductions and some £4.7 million in respect of working capital employed. Between 1970 and 1976 BICC's estimated volume index per employee (1970=100) rose from 100 to 111 while the number of employees in its operating units fell from 14,500 to 11,100. In the same period BICC's volume of home and export sales fell by 15 per cent.

46. With regard to the acquisition of overseas manufacturing companies, BICC's underlying philosophy has been that since eventual local manufacture overseas is inevitable BICC should participate in it in order to offset loss of export business. The establishment of local connections overseas might also help BICC's exports of those more specialised products for the time being beyond the capability of local overseas factories. BICC International Ltd has interests in overseas cabling companies in 15 countries. In addition, BICC Cables is the largest United Kingdom exporter of reference goods and the Group is represented in 122 overseas countries, including those in which it carries out manufacture.

Research and development

47. Research and development in respect of reference goods is carried out by BICC Research and Engineering Ltd (a subsidiary company of BICC Cables) and by the individual cabling companies. As well as undertaking its own research, engineering and development projects BICC Research and Engineering Ltd serves as a centre and focus for research and technical advice throughout the BICC Group and also maintains close liaison with the cabling units. BICC's annual United Kingdom expenditure on R & D for reference goods in each of the six years 1972-77 was:

	£ million
1972	1.646
1973	1.751
1974	2.070
1975	2.605
1976	2.591
1977	2.894

Further substantial expenditure in this field is incurred by overseas subsidiaries in the BICC Group. BICC Research and Engineering Ltd has a large number of departments dealing with such subjects as metallurgy, chemistry, physics, corrosion, polymers, polymer process engineering, high voltage and other electrical engineering and project engineering. About two-thirds of its 1977 expenditure was devoted to reference goods. BICC cites a considerable number of product and process innovations resulting from its R & D work and claims to be in the forefront in the field of cable technology.

Pricing of reference goods

48. BICC's sales of supertension, mains and telecommunications cables are made by tender or quotation; its sales of general wiring cables and winding wires are usually made by reference to price lists. In determining its prices BICC currently pursues an overall target operating profit level of 25 per cent on historical capital employed. For high technology products such as supertension cables a higher return is sought. The figure which acts directly as a guide for specific pricing decisions is the BICC Cables budget figure which lays down a return on historical capital employed for the year. The budget figure represents the best judgment of management in the current cost and commercial situation, as to the rate of return that can in fact be achieved during the year. In practice the target rate of return has not in recent years been achieved either in respect of reference goods as a whole or of any individual category of reference goods.

49. Price decisions in respect of tenders are delegated to the Executive Director of the operating company concerned. Changes in list prices are made on the authority of the appropriate Executive Director after discussion with and approval by the Managing Director of BICC Cables Ltd. Price decisions are taken having regard to the Management Plan and Budget of the relevant operating unit, subject to the provisions of prices legislation.

50. In the case of sales by tender, BICC's first consideration is stated to be total costs. Other considerations, apart from statutory limitations and constraints, of which account must be taken, include the likely price to be quoted by competitors; the last established price to the buyer concerned; the importance of the business in relation to production loading; the possibility of meeting the delivery date set by the customer and the impact of the order on the company's cash flow position.

51. In determining list prices BICC's first consideration again is stated to be total costs. In addition the reaction of competitors and, since the effective price for goods sold with reference to list prices is the net price after discount, considerations of the extent to which the company needs to do business with a particular customer, will influence the effective price charged to him.

Profits and profitability

52. The following table shows BICC's profits¹ on reference goods in each of the years 1971-1976 expressed as a percentage of home sales, of total sales, and of capital employed (historic cost basis) together with the average profit as a percentage of capital employed for all manufacturing industry. BICC has given an estimate of the amount of its repayments to the Post Office (see paragraph 367) that should be set against the profits for the years 1971 to 1974 and the percentages of profit have been adjusted accordingly.

¹ Profits are before interest and taxation, and capital employed includes fixed and current assets less creditors and current liabilities other than bank overdrafts or any other borrowing on which interest is payable. Where allocations of costs or capital employed have been necessary, they have been made on conventional accounting bases and the results shown are therefore approximations.

TABLE 2.5 BICC's profits on reference goods

Year	Per cent Home sales	Per cent Total sales	Per cent Capital employed	Per cent Capital employed— manufacturing industry average
1971	10	9	18	13
1972	11	10	20	14
1973	9	8	17	17
1974	6	6	15	16
1975	7	6	13	15
1976	6	5	12	18
Simple average over period	8	7	16	16
Simple average 1973-76	7	6	14	17

53. In interpreting the changes in profits expressed as a percentage of sales or capital employed, account has to be taken of the effects of the fluctuating price of metals, and in particular of copper on the price of cable sold, and on the amount of capital employed. During the six years for which percentages are given above, the price of copper has fluctuated from under £400 a tonne to £1,400 a tonne. Profits expressed as a percentage of sales are decreased when the price of copper is high, and increased when the price of copper is low.

54. Some indication of the effect of fluctuating copper prices may be gauged by the following table which shows the average price for copper each year both absolutely, and in relation to the retail price index (RPI) and total material cost and profit as a percentage of sales:

TABLE 2.6 Effect of copper price on profits

	RPI ¹	Copper price ² £ per tonne	In relation to RPI 1971=100	Total material cost as per cent of sales	Profit as per cent of sales
1971	80.0	444	100	52	10
1972	85.7	428	90	49	11
1973	93.5	727	140	56	8
1974	108.5	877	146	62	6
1975	134.8	555	74	51	6
1976	157.1	782	90	51	5

Activities in the United Kingdom other than cabling

(a) Copper and aluminium

55. BICC has for long engaged in the refining of copper. Recent investments have included the building of a new electrolytic refinery for copper at a cost of £2.3 million in 1965 (further expenditure of £5.6 million was approved in 1976 to modernise and enlarge this refinery) and the investment of £4.1 million in the

¹ Average for year. 15.1.74=100.

² Average London Metal Exchange cash settlement price for electrolytic wire bar.

installation of a continuous copper rod production unit which came into production early in 1975. BICC Metals Ltd, a BICC Cables subsidiary, normally supplies almost all the copper rod and wire requirements for BICC companies making reference products in the United Kingdom. It also seeks business from other cable manufacturers, in competition with other United Kingdom rod rollers, including Pirelli General, Enfield Rolling Mills (a Delta Metal Company subsidiary), Frederick Smith & Sons Ltd (an AEI subsidiary) and Johnson & Nephew.

56. BICC has a joint equal share with Imperial Metal Industries Ltd and the Delta Metal Co Ltd in British Kynoch Metals Ltd, a company which while not itself supplying raw materials, acts on behalf of its shareholders as a focal point to seek out new sources of primary copper (and possibly later other metals) and to investigate projects for the production of primary copper from the point of view of investment.

57. Until 1975 there was a special link between BICC and Anglesey Aluminium Ltd, in which BICC had a 27 per cent shareholding from its inception in 1968 to 31 December 1972 and a 19 per cent shareholding thereafter. The other shareholders were Rio Tinto Zinc and Kaiser Aluminium. The 3 shareholders were required to take aluminium from Anglesey Aluminium in proportion to their shareholdings and Anglesey Aluminium was not permitted to sell its products to anyone else. BICC gave up its shareholding in November 1975 but retained an obligation to take supplies of aluminium from the smelter until the end of 1977.

58. BICC told us that its copper and cabling activities are each required to stand on their own feet. The cable companies do not acquire copper rod and wire at prices which are more favourable, as between themselves and their competitors, than the size of their purchases might be expected in any event to command.

(b) Electrical installation contracting

59. BICC also has interests in installation contracting through Balfour Beatty Ltd (see paragraph 37). BICC Cables has a close working relationship with the Balfour Beatty companies but accords them terms similar to those accorded to other electrical contractors of similar size. It says that to accord Balfour Beatty preferential treatment would imperil its relationship with other large contractors and upset the larger wholesalers. The principal benefit that BICC derives from Balfour Beatty's installation activities is that these complete the comprehensive range of goods and services which BICC can offer; in addition, the installation work which Balfour Beatty secures provides some volume for BICC Cables which that company might not otherwise obtain. BICC estimates that it has less than a 5 per cent share of the United Kingdom installation business in mains and general wiring cables.

(c) Other activities

60. BICC's other activities were brought together under BICC Industrial Products Ltd in the 1975 re-organisation, with the object of facilitating a more positive policy for Group diversification. While its sales are small relative to the rest of the Group this Group company covers a wide variety of products trading with many industrial sectors and is expanding.

Mains and supertension cable

61. In the six year period ending 31 December 1976, mains and supertension cable accounted for 16 per cent and 5 per cent respectively of BICC's total home and export sales of reference goods. BICC's share of the United Kingdom market for these two cable categories in 1965 and in each of the years 1970-1976 is shown in the following table (the figures in brackets are BICC estimates):

TABLE 2.7 BICC's share of United Kingdom market

<i>Year</i>	<i>Mains Cable Per cent</i>	<i>Supertension Cable Per cent</i>
1965	(36)	(36)
1970	(35)	(48)
1971	(34)	(53)
1972	(31)	(44)
1973	32	43.7
1974	32	42.1
1975	27	38.7
1976	26	58.6

62. The following tables show the value of BICC's home sales and total sales of mains cable and supertension cable 1971-1976 together with its total sales expressed as a percentage of the total sales of all United Kingdom manufacturers:

TABLE 2.8 Mains cable sales

	<i>Home sales £ million</i>	<i>Total sales £ million</i>	<i>Total sales Per cent</i>
1971	13.9	17.4	N/A
1972	11.9	16.2	N/A
1973	15.4	20.8	32.3
1974	18.9	31.7	35.5
1975	14.7	27.2	31.8
1976	15.3	30.0	31.0

TABLE 2.9 Supertension cable sales

	<i>Home sales £ million</i>	<i>Total sales £ million</i>	<i>Total sales Per cent</i>
1971	3.1	4.9	N/A
1972	3.2	5.5	N/A
1973	3.7	7.8	53.1
1974	3.8	8.8	52.8
1975	3.3	8.2	44.9
1976	5.9	9.2	48.5

63. For mains cable, BICC's principal customers, by category, and the approximate percentage of its total sales in 1977 made to each category are:

	<i>Per cent</i>
Area Boards	40
Industrial customers and other nationalised industries	23
Electrical contractors	22
Wholesalers	15

64. About 95 per cent of BICC's United Kingdom sales of supertension cable is currently made to CEGB and to the Area Boards, the former taking almost all

the pressure assisted cable of 132kV and above; the other 5 per cent is made to other nationalised industries and to large industrial users.

Production and investment

65. Since 1975 BICC's manufacture of mains and supertension cable has come under the operational control of BICC Power Cables Ltd, a subsidiary company of BICC Cables. At the time of its formation in 1975, mains cable was manufactured at its Wrexham and Renfrew works, of which the latter also manufactured solid supertension cable, and pressure assisted cable was manufactured at Erith. However, all production ceased at the Renfrew works at the end of 1977, so that mains cable production is now concentrated at Wrexham, and the production of all supertension cable, together with some specialised mains cable types, is at Erith.

66. The home demand for mains and supertension cables was at its peak in the mid-1960s, when further expansion of demand was forecast by the electricity supply industry. Construction of the Renfrew factory was authorised in 1964 at a cost of £2.4 million for the production of oil filled pressure assisted supertension cable. As the demand for supertension cable not only failed to increase but fell dramatically, this production ceased in 1969-70, and the buildings and plant were converted to other use. At the same time, as part of the industry-wide rationalisation of supertension cable production, BICC acquired AEI's pressure assisted cable manufacturing interests. Home demand for supertension cable has continued to fall, and in recent years the Erith works which alone remains has depended increasingly on exports for employment.

67. With regard to mains cable, BICC had in 1966 authorised investment of £8.1 million in a new mains cable factory on a green field site at Wrexham I in the light of the forecast increased demand. The building of the new factory was seen by BICC as providing the opportunity of achieving significant savings in operational costs, with production under one roof, modern flow lines and special purpose automated plant. Another factor was the expected increase in demand for supertension cable; moving mains cable production to Wrexham I would leave the Erith factory to develop as a specialised unit for the production of supertension cable. Although it became apparent before the construction of the new factory was begun that neither the increased demand for mains nor that for supertension cable was likely to materialise, BICC continued with its plan but modified it to provide only for the same volume of lower voltage mains cable as had been manufactured at Erith in 1965. The new factory was brought into operation in 1970, and was an important factor in increasing the profitability of BICC's mains cable production which, by 1969, had fallen to a very low level. BICC considers that its planning concept of cost savings has been completely fulfilled and regards the factory as being the most cost-effective plant anywhere for the types of cable it produces.

68. In view of the continued low demand for, and poor profitability of, mains cable BICC in 1969 began taking steps to rationalise its production by concentrating production at Wrexham I and at one other site. It terminated production at Iver by Britannic General Cables Ltd, which it had acquired only in

¹ This works was known as Wrexham I after the second works (Wrexham II) was built for general wiring cable.

the previous year before the downturn had become fully apparent to it. In late 1970 it closed down W T Glover's factory in Manchester on which it had recently spent £1 million for modernisation and expansion and terminated mains cable production at Connolly's (Blackley) Ltd, leaving that company's Blackley factory to concentrate on the production of telecommunications cables. BICC's mains cable manufacture was thus by the end of 1970 concentrated at Renfrew and Wrexham I when the capacity of the two factories was utilised to the extent of an estimated 82 per cent and 84 per cent respectively. In 1973-74 £14 million was invested in the Renfrew mains cable plant, equipping it to make the full range of the newer designs of lower cost cable developed by the company initially in addition to and eventually in place of the older types of mains cable. The investment did not add significantly to BICC's overall capacity for mains cable manufacture but provided a second source of production for major products in this sector. At Wrexham an investment of £3.1 million was approved in order to expand production of the newer cable types in the light of projections of a high volume of exports in the period up to 1978. Although increased export volume was achieved the domestic market continued to be depressed and at the end of 1977 it became necessary to close the Renfrew factory (see paragraph 65).

Prices and pricing policy

69. Until the end of 1972 BICC published price lists for mains cable up to 22kV. It states that it began to do so in 1960 in an attempt to restore more stable conditions in a market in which the termination of minimum pricing agreements in a situation of excess manufacturing capacity had resulted in price reductions of 20 per cent for mains cable, with all manufacturers trading at a loss (see paragraph 22). However, increasingly rapid cost-inflation since 1972 had caused it to base its tender prices upon the current level of costs rather than to try to achieve its pricing objectives by adjustments to a list price. Between 1960 and 1972 some other manufacturers used BICC's mains cable price lists as a reference point to which they related their own competitive quotations but this was no longer possible after BICC ceased to publish lists.

70. When BICC published a mains cable price list its sales of mains cable were made at list prices less discount where appropriate. Since the discontinuation of published price lists, sales have been made by tender or by quotation in response to specific enquiries.

71. In arriving at prices to be tendered or quoted for mains cable, BICC says that it first has regard to its costs and the contribution required to achieve budgeted profitability. The latest up-dated costs and the required contribution are used to calculate a basic selling price. To arrive at the net selling price BICC makes deductions, in the case of certain categories of large customers, in accordance with the category of customer; and, based on the company's assessment of the customer's purchasing potential, allowance is made (by deduction or surcharge) for anticipated volume of purchases and distance of delivery, according to BICC's commercial judgment and the competitive environment. An addition to the net selling price is made to Area Boards requiring cut lengths delivered to sites.

72. To some Area Boards and to the National Coal Board BICC may offer discounts for one or more of the following reasons:

- (a) a promise of a given proportion of the Board's requirements or of a given quantity of cable;
- (b) better payment terms;
- (c) acceptance of prices variable by a cost price adjustment formula;
- (d) standard drum lengths;
- (e) forward ordering/programmed deliveries;
- (f) deliveries in bulk as opposed to cut lengths to site;
- (g) discontinuation of consignment stocks.

73. Prices tendered or quoted are subject to adjustments, in accordance with BICC's Conditions of Sale, for variations in the price of copper, aluminium and where applicable lead. BICC's standing contractual arrangements with copper producers provide for the daily pricing of a limited amount of copper at LME prices and BICC's Conditions of Sale provide that prices will be adjusted by reference to the LME price of copper ruling when the order is received. The copper required to fulfil the order can then be matched by BICC's Metals Purchasing Department on a 'back-to-back' basis with a pricing under a contract with a copper producer at the day's price. Similar arrangements obtain in the case of lead. Aluminium producers, however, will only sell by reference to the price obtaining at the date of delivery. Accordingly BICC's Conditions of Sale for cables incorporating aluminium normally provide that the aluminium content will be priced at the producers' rate ruling at a given number of weeks prior to the delivery of the cable.

74. In accordance with BICC's terms of trading published to electrical contractors and wholesalers, prices quoted to those customers are subject to a rebate or, in the case of wholesalers, to a face of invoice discount. Wholesalers receive a discount, and large and medium-sized electrical contractors a rebate, of $7\frac{1}{2}$ per cent in the case of copper conductor cables and 10 per cent in the case of those with aluminium conductors. Small contractors receive 5 per cent and $7\frac{1}{2}$ per cent. BICC's experience is that many contractors prefer to receive a rebate rather than a discount off invoice but in recent years at least, the larger contractors have preferred to receive, and have received, a face of invoice discount rather than a rebate paid in arrears.

75. BICC's sales of supertension cables also are made by tender or by quotation in response to specific enquiries. There are no discounts or rebates off list or other fixed prices. In determining its prices BICC says that it takes into account such factors as: the likely prices of its competitors; the extent to which the current volume of orders received is above or below budgeted volume; the price level needed to produce budgeted levels of return having regard to costs, delivery required and the capacity of the production unit to meet that delivery; and the design of the cable and the type approval tests which may be required. Because of the high technology involved, a higher than average return of profit on capital employed is aimed at for supertension cables (see paragraph 48).

76. Adjustments are made to tendered or quoted prices for variations in the price of copper, aluminium or lead. Such adjustments are similar to those made to mains cable prices described in paragraph 73 above. In addition, contract

price adjustment has been accepted by the CEGB and the Area Boards for variations in the costs of other materials and of factory labour.

77. Virtually all supertension cable of 132kV and above supplied to the CEGB is installed by the manufacturers as is much of the supertension cable of 33kV and upwards supplied to Area Boards (though some Area Boards do install such cable). BICC's installation of supertension cable is carried out by the company's supertension cable works in conjunction with Balfour Beatty Ltd.

Stockholding policy and cutting charges

(a) Area Boards

78. It is BICC's policy to be able to meet Area Boards' mains cable requirements from stock. In general some six weeks' estimated requirements are held in stock. Where Boards require cut lengths delivered to site to meet their daily schedules a charge is made to take account of the extra costs involved.

(b) Other customers

79. BICC maintains stocks at Wrexham, Renfrew, Erith and at its sales branches of the most commonly ordered types of cable. BICC's policy is to have 10 weeks' requirements of these cables either in finished stock or under manufacture, which in effect means that some 5-6 weeks' estimated requirements are normally held in finished stock.

80. In the case of the faster moving types and sizes of mains cable (mainly low voltage PVC insulated and armoured) and where the customer requires less than a drum length, the cable is cut to exact length for which a cutting charge is made to cover the additional costs of handling, cutting and drumming and the risk of unsaleable lengths. In other cases (mainly paper insulated cable) where the length ordered is less than a drum length, a short length extra is charged to cover the cost of short length manufacture or (if the cable is a stock item at works) to cover the cost of handling, cutting and drumming and the risk of unsaleable lengths. No stocks of finished supertension cable are held since there is little, if any, repetition business, conductor sizes and cable lengths being specially designed to meet the needs of each new contract.

Profits and profitability

81. The following tables give BICC's profits¹/[losses] expressed as a percentage on its home sales and total sales of mains and supertension cable for each of the years 1971-1976 on an historic cost basis:

TABLE 2.10 Profits on mains and supertension cable

Year	Mains cable		Supertension cable	
	home Per cent	total Per cent	home Per cent	total Per cent
1971	12	10	8	[5]
1972	14	13	17	6
1973	8	7	18	8
1974	9	8	16	6
1975	10	6	15	5
1976	2	2	22	13
Simple average over period	9	8	16	6
Simple average 1973-1976	7	6	18	8

¹ See note to paragraph 52.

Profits/[losses] as a percentage of capital employed for mains and supertension cable are given in the following table with the average of all manufacturing industry for comparison:

TABLE 2.11 Return on capital—historic cost basis

	<i>Mains cable</i>	<i>Supertension cable</i>	<i>All manufacturing industry</i>
	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
1971	16	[4]	13
1972	20	7	14
1973	12	11	17
1974	18	9	16
1975	12	8	15
1976	4	24	18
Simple average over period	14	9	16
Simple average 1973-76	11	13	17

BICC also provided figures of profits/[losses] as a percentage of capital employed on mains and supertension cable adjusted for inflation in accordance with the principles of current cost accounting, as shown by the following table with the comparative figures for all manufacturing industry:

TABLE 2.12 Return on capital—current cost basis

	<i>Mains cable</i>	<i>Supertension cable</i>	<i>All manufacturing industry</i>
	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
1973	5	5	7
1974	6	1	2
1975	Nil	[1]	3
1976	6	6	2
Simple average 1973-1976	4	3	4

General wiring cable

82. In the six year period ending 31 December 1976, general wiring cable accounted for 45 per cent of BICC's total home and export sales of reference goods. BICC's share of the United Kingdom market for general wiring cable in 1965 and in each of the years 1970-1976 is shown in the following table (the figures in brackets are BICC estimates):

TABLE 2.13 Share of United Kingdom general wiring cable market

<i>Year</i>	<i>Per cent</i>
1965	(27)
1970	(35)
1971	(34)
1972	(31)
1973	32.5
1974	33.2
1975	33.2
1976	30.2

83. General wiring cable covers a great variety of different types of cable and BICC's share of different sectors of the market varies. Thus, BICC is the only manufacturer of mineral insulated cable, and it does not supply vehicle wiring harnesses at all (though it supplies small quantities of cable for making up the harnesses). BICC's share of the market in booklet cables¹ is rather less than one-quarter (see paragraph 279) and its larger share of the general wiring cable market as a whole reflects in part its relative strength in specialised products.

84. The following table shows the value of BICC's home sales and total sales of general wiring cable 1971-76 together with its total sales expressed as a percentage of the total sales of all United Kingdom manufacturers:

TABLE 2.14 General wiring cable sales

	<i>Home sales</i> <i>£ million</i>	<i>Total sales</i> <i>£ million</i>	<i>Home and export sales</i> <i>Per cent</i>
1971	43.8	51.5	N/A
1972	40.4	47.1	N/A
1973	51.2	58.7	36
1974	67.6	80.9	36
1975	66.5	80.1	36
1976	67.7	81.8	33

85. BICC estimates the percentages of its 1977 sales by customer category as follows:

	<i>Per cent</i>
Wholesalers	41
Electrical contractors	4
Industrial customers	34
Nationalised industries and Government departments	21

BICC's booklet cables are mainly sold to electrical wholesalers, though they are also sold direct to large contractors and industrial companies.

Production and Investment

86. BICC's manufacture of general wiring cable came in 1975 under the operational control of BICC General Cables Ltd, a subsidiary company of BICC Cables. Its principal works are at Leigh, Helsby, and Wrexham, but special types of general wiring cable are also manufactured at Melling, Leyton and Belfast.² Mineral insulated cable is manufactured at Hebburn-on-Tyne and at Prescott.

87. The two largest works, at Leigh and Helsby, were already part of BICC when it was formed in 1945, but the Wrexham factory (Wrexham II), built on a green field site at a cost of £4.6 million, first came into production in 1970-71. The Leyton and Belfast factories originally belonged to Reliance-Clifton Cables Ltd which was acquired by BICC in 1969.

88. Leigh is basically a jobbing factory, with 18,000 live manufacturing specifications, serving the electronics, aerospace, mining, railway signalling, oil rig and ship wiring fields. Its products are largely confined to cable made with

¹ This term is explained in paragraph 276.

² The Belfast works is part of BICC Telecommunications Cables Ltd.

rubber, synthetic rubber and special high performance insulants. Helsby, also a jobbing factory, manufactures some 6,000 live specifications, and the markets served include the industrial building, domestic appliances, automobile, petrochemical, telephone cords, television and radio, electronics and computer fields. Its products are mainly plastic insulated. Up to 1971, Helsby had also manufactured the popular types of general wiring cable for which there is a high demand, and which are sold from stock; but when BICC brought into operation Wrexham II, which like the Wrexham mains cable factory (Wrexham I), uses high-speed automated production methods, production of the types of cable involved was transferred to the new factory leaving Leigh and Helsby to concentrate on more specialised types of general wiring cable. This transfer was followed by an extensive programme of modernisation and investment at the two older factories.

Plastic and elastomeric insulated cables

89. The following table lists BICC's factories making plastic and elastomeric insulated general wiring cable, and shows in respect of each in 1977, the products made and the numbers employed at the end of the year:

TABLE 2.15 General wiring cable factories

<i>Factory</i>	<i>Products</i>	<i>Employees on 31 December</i>
Helsby	mainly plastic-insulated other than those made at Wrexham I	1,971
Leigh	mainly rubber, synthetic rubber—and special high performance (eg PTFE) insulated	2,323
Wrexham II	building wires and small conductor PVC-insulated, steel wire—armoured cables only	389
Melling ¹	equipment wires, glass-insulated cookers wires, heat-resisting cables, ribbon and flat form cables, glass/silicone high temperature appliance wires, miniature cables	441 general wiring cable plus winding wires
Leyton ¹	miscellaneous products notably plastic and rubber insulated leads with integrally moulded terminations	591 general wiring cable plus telecommunication cable
Belfast ¹	rubber and plastic insulated leads with integrally moulded terminations	235 telecommunication cable plus general wiring cable
Renfrew ²	building wires and PVC-insulated wire armoured cables only	133 mains cable plus general wiring cable

Prices

90. BICC publishes price lists for some 8,500 different items (excluding items which are separate only because of colour or other non-technical differences)

¹ Factory also manufactures other reference goods.

² Renfrew factory was in course of closure at the end of 1977.

with a wide range of differing cost structures. The most important list is its trade price list for 'booklet' cables (see paragraph 276), but it also produces price lists for most specialised cables comprising items such as aircraft cables, radio and television cables, heating cables, railway signalling cables, mining cables and X-ray cables, on which it gives a variety of discounts to customers, including wholesalers, according to the company's judgment of the customer's potential annual purchases. Sales to some large users, such as British Rail and the National Coal Board, are made by competitive tender at net prices. Prices are arrived at by reference to cost and to the competitive situation in such cases, and these arrangements generally cover the supply of cable over a period with provision for automatic adjustment in respect of the price of copper.

91. BICC's price lists had to be entirely re-cast with the adoption of metrication on 1 January 1970. Between that date and December 1977, BICC issued 33 new price lists for booklet cables. Changes in the list prices were mainly occasioned by changes in the price of copper (though changes in other costs were also taken into account), but three successive reductions in some list prices in 1971-72 were made in response to price cutting (see paragraph 298).

92. When changes in list prices are occasioned by increases or decreases in costs, BICC's policy is to apply those increases or decreases to the individual products that those cost changes affect, rather than apply an overall percentage increase or decrease to products with very different cost structures. But the exercise is described as not being a simple one of cost recovery, but one requiring the consideration and balancing of a number of factors, the relative impact of which will not be constant, of which the following are cited as examples: profitability either overall or in respect of particular products or product groups; the state of demand and the competitive situation; pre-existing price relationships; the need to have a structure which is rational and acceptable; and the provisions of prices legislation.

93. In the case of the standard types of general wiring cable manufactured at Wrexham II, the effect of cost changes on individual products is continuously monitored, with extensive use being made of computer programmes. Account is taken of factory costs (which are affected by volume loading, product mix and productivity) as well as of alterations in raw material costs, and in addition the profit contribution of individual products is kept under review.

94. In the case of general wiring cable manufactured at the 'jobbing' factories, such continuous monitoring of costs does not take place, but every three months a review is made of the profit contribution rates of individual product groups. This review is made on a fairly broad basis, with not all costs being assessed product by product; for instance, overall scrap rates for the factory as a whole are used. However, the review enables BICC to see whether its list prices are broadly in line with costs. In addition, special cost reviews are undertaken on an *ad hoc* basis where the three-monthly reviews lead BICC to suppose that the level of price of a particular product group is seriously out of line with costs; and when new products are introduced a detailed review of their costs is undertaken.

95. In taking account of changes in the price of copper incorporated in general wiring cable, BICC adopts a FIFO (first in first out) policy. In this connection BICC expressed the view that its copper pipeline was probably longer than that of some of its competitors. The effect of changes in the price of copper on BICC's list prices is discussed further in paragraphs 285 and 300-302.

96. When issuing new price lists BICC used to send copies of them to some other cablemakers at the same time as it sent them to its customers, but it has not done this since 1974.

Discounts and rebates

97. BICC's effective price for goods sold by reference to price lists is the price after deducting discount and any additional rebate. The list price is seldom, if ever, charged, but is a datum point from which net prices are calculated. While discounts off list prices are invariably given, the rates are not, save in the case of mineral insulated cable, published.

98. BICC generally gives the highest rates of discount to wholesalers, though very large industrial buyers may be able to obtain comparable rates. Wholesalers are given higher rates for booklet than for non-booklet items reflecting the services they normally provide in respect of booklet, but not of non-booklet, items by way of stockholding, distribution and the provision of credit to customers. BICC also has a preference for dealing with the ultimate customer when supplying non-booklet items. The rates of discount to wholesalers range from 30 per cent to 34 per cent for booklet items, and from 25 per cent to 29 per cent for non-booklet items, the highest rates of discount in each case being generally accorded to the largest wholesaler customers.

99. Before 1974, the same ranges of discounts had been given to wholesalers for booklet and standard non-booklet¹ items. The present two-tier system was introduced in January of that year by BICC after having made known to the wholesale trade through the Electrical Wholesalers Federation, its intentions of introducing it, its policy in this respect being in the event accepted by both wholesalers and other cablemakers. BICC told us that its initiative was taken in accordance with its aim of preventing excessive 'drift' in the rates of discount given, and of bringing actual prices nearer to those dictated by costs. In this case the latter objective was uppermost in that the differential was achieved by increasing the rates of discount given in respect of booklet items, not by reducing those in respect of non-booklet items. The net prices to the larger wholesalers qualifying for the highest rate of discount were little affected by the change, because rebates were reduced to offset the increase in discounts, but wholesalers qualifying for the lowest rate of discount obtained an advantage, because they were mainly not in receipt of rebates.

100. Most of the relatively small amount of general wiring cable which BICC sells to contractors is sold to large contractors who are offered terms comparable with the best that BICC thinks they would be likely to be offered by a wholesaler. BICC offers low discounts to small contractors reflecting the additional costs and risk of bad debts which it would incur if it were to deal direct with a larger number of small contractors. The following discounts are offered by BICC to customers other than wholesalers:

<i>Customers</i>	<i>Discount (per cent)</i>
Contractors	5 to 27½ (inclusive of standard rebate of 5 per cent)
Industrial buyers	up to 24
Very large industrial buyers	up to 32½

¹ See paragraph 276 for explanation of this term.

101. A cash discount of 2½ per cent is given for all general wiring cable, for payment by the 20th of the month following invoice. Longer periods for settlement are sometimes agreed.

102. BICC told us that the ranges of discount it offers to wholesalers and the larger contractors reflect its need to attract appropriate volume and a reasonable share of the market so as to enable its general wiring business to be conducted profitably. The level of discount allowed is based on BICC's estimate of the customer's purchasing potential and the need for BICC to offer terms that are at least comparable with those of its competitors. There is no direct link between the level of the discount allowed and the cost of supply.

103. BICC offers rebates additional to discounts, to a small number of wholesalers and a few of its other large customers. These rebates differ from discounts in that they are invariably the subject of personal negotiation at senior level, and they are paid periodically, in arrears, to head offices. Unlike discounts, which are expressed on the face of the invoice, the rates agreed are not readily ascertainable, though BICC said that it does not attach any pledge of secrecy to the rates which it offers. The rebates are calculated by applying the agreed rate to the net invoice price. They are volume-related only in the sense that the amount payable varies with the actual amount of the customers' purchases. In the ordinary way only the wholesaler's purchases of booklet and standard non-booklet items qualify for rebate, not his purchases of specialised general wiring cable or mains cable. However, a few very large wholesalers receive from BICC rebates in respect of a wider range of products including some non-reference goods. Cables constitute 95 per cent of all such wholesalers' purchases from BICC and most of the cable is general wiring cable. According to BICC higher rates would have to be given if they were calculated by reference to a narrower range of products.

104. Electrical contractors receive a basic rebate (or 'deferred discount') of 5 per cent though this is often given in the form of a face of invoice discount. The range of discounts for contractors quoted in paragraph 100 is inclusive of this rebate. Some industrial customers expect rebates. For example, tender documents issued by the British Railways Board and the National Coal Board make provision for rebate to be offered.

Mineral insulated cable

105. BICC's production of mineral insulated cable began in 1953 and its first sales were made in 1955. Its principal United Kingdom competitor, Pyrotenax Ltd, already well established in this field, was acquired by BICC in 1966¹. Another company, Glynwed Ltd, began to make mineral insulated cable in 1962 but ceased manufacturing at the end of 1969. After the merger, until July 1976, BICC and Pyrotenax carried on separate businesses though their published list prices and discounts were identical, but from July 1976 following a consultant's report the two companies have been operated as a single autonomous

¹ The merger with Pyrotenax Ltd was referred to this Commission which recommended that it should be allowed to proceed subject to certain assurances given to them by BICC. These assurances, which are listed in Appendix 5 to the Commission's report (British Insulated Cables Ltd and Pyrotenax Ltd. A report on the proposed merger), are reproduced in appendix 7 hereto.

unit, BICC Pyrotenax Ltd. The new arrangement was expected to effect savings in administration, and in the sales and distribution of the product. After about a year's experience BICC told us in June 1977 that estimated annual savings of some £500,000 from the new arrangements were being achieved.

106. The following table shows the value of BICC's total sales of mineral insulated cable 1972-77:

TABLE 2.16 Mineral insulated cable

<i>Year</i>	<i>Total sales £ million</i>
1972	10.6
1973	13.5
1974	16.3
1975	15.9
1976	18.0
1977	20.5

107. Mineral insulated cable is made at Hebburn (the former Pyrotenax Ltd factory) and Prescot. The total number of employees on 31 December 1977 was 1,067.

108. BICC states that the majority of its mineral insulated cable sales are made to wholesalers.

109. BICC publishes price lists for mineral insulated cable, from which it gives the following discounts:

<i>Customers</i>	<i>Discount (per cent)</i>
Wholesalers	15 plus up to a further 12½
Contractors	Up to 23
Trade users	Up to 20, based on annual turnover
Other cable manufacturers	25 to 28
Public bodies and nationalised industries	12½ to 20

110. In accordance with the assurances¹ given by BICC when the BICC/Pyrotenax merger was being considered by this Commission, BICC makes available to each category of customer its terms (including terms and conditions as to discounts, rebates and credit) for mineral insulated cable appropriate to that category.

111. BICC does not in general give rebates on purchases of mineral insulated cable but it does give to a small number of wholesalers rebates based on their purchases of a range of BICC products including mineral insulated cable.

Profits and profitability

112. The following table gives BICC's operating profits² on general wiring cable, for each of the years 1971-76 on an historic cost basis expressed as a percentage on home sales, on total sales, and on capital employed, together with the average profit as a percentage of capital employed for all manufacturing industry:

¹ See Appendix 7.

² See note to paragraph 52.

TABLE 2.17 Profits on general wiring cable

Year	Home sales Per cent	Total sales Per cent	Capital employed Per cent	Capital employed— manufacturing industry average Per cent
1971	12	11	23	13
1972	10	10	21	14
1973	9	9	19	17
1974	7	7	17	16
1975	8	8	18	15
1976	7	7	15	18
Simple average over period	9	9	19	16
Simple average 1973–1976	8	8	17	17

113. General wiring cable includes a great number of cables which may have different margins and give different returns on capital. We have not investigated costings for individual cable types except that we obtained separate figures for the return on capital of mineral insulated cable of which BICC is the only producer and which is produced in separate works. In certain years the return on mineral insulated cable was very different from that on other types of general wiring cable but the simple averages were as follows:

	Return on capital 1971–76 Historic cost basis
All general wiring cable (as above)	19%
Mineral insulated cable	26%
Other general wiring cable	17%

The return on mineral insulated cable is increased because exports are more profitable than home sales which is not the case with some other categories of general wiring cable.

114. BICC provided figures of profits as a percentage of capital employed in general wiring cable, adjusted for inflation in accordance with the principles of current cost accounting, as shown by the following tables with comparative figures for all manufacturing industry:

TABLE 2.18 Return on capital—current cost basis

Year	All general wiring cable Per cent	Average of all manufacturing industry Per cent
1973	2	7
1974	7	2
1975	8	3
1976	1	2
Simple average 1973–1976	4	4

Winding wires

115. In the period 1971–76 BICC's total home and export sales of winding wires amounted to 17 per cent of its total home and export sales of all reference goods. The following table shows the value of BICC's home sales and total sales

in 1971-76 together with its total sales expressed as a percentage of the total sales of all United Kingdom manufacturers¹:

TABLE 2.19 Winding wires sales

<i>Year</i>	<i>Home sales £ million</i>	<i>Total sales £ million</i>	<i>Home and export sales Per cent</i>
1971	17.1	19.9	N/A
1972	17.1	19.8	N/A
1973	23.0	27.0	45.1
1974	30.3	36.3	46.3
1975	21.6	25.1	44.3
1976	23.6	26.9	41.2

116. BICC estimates its market share in volume terms of enamelled and textile covered wires as follows:

TABLE 2.20 Share of United Kingdom winding wires market

<i>Year</i>	<i>Enamelled</i>	<i>Textile</i>
1965	46	32
1970	42	33
1971	42	33
1972	43	36
1973	44	35
1974	44	32
1975	41	38
1976	33	36

Sales of both types of wire declined over this period, but textile covered wires declined much more steeply and by 1976 accounted for only about one-ninth of the total market.

117. BICC has over 1,000 customers for winding wires, all of them industrial manufacturers.

Production

118. Since 1975 BICC's manufacture of winding wires has been under the operational control of BICC Connollys Ltd, a subsidiary of BICC Cables. The most important factory is Kirkby, at which a full range of winding wires is made, and which accounts for over half of BICC's production. Huyton Quarry and Melling, part of BICC General Cables, produce a complementary range of types, and together account for about a further third of BICC's winding wire output. The small factory of Fine Wires Ltd at Nottingham produces specialities. A factory at Bessbrook in Northern Ireland was closed at the end of 1976 because of falling demand, and production at Kirkby was reduced at the same time.

Prices

119. BICC's sales are made at list prices, less discount and rebates, and not by tender.

120. The level of discount off list prices given to a customer is based on BICC's estimate of his annual potential purchases ('status') (see paragraph 339).

¹ BICC's home sales as a percentage of all sales in the United Kingdom are given in paragraph 332.

121. BICC gives rebates in addition to discounts to a small number of its customers, but they are mainly its largest customers and they account for well over half BICC's sales. However, no precise pattern is followed, and rebates are given to some customers who qualify for only a low 'status' discount.

Profits and profitability¹

122. The following table gives BICC's operating profits [losses] on winding wires for each of the years 1971-76 on an historic cost basis expressed as a percentage on home sales, on total sales, and on capital employed, together with the average profit as a percentage of capital employed for all manufacturing industry:

TABLE 2.21 Profits on winding wires

<i>Year</i>	<i>Home sales Per cent</i>	<i>Total sales Per cent</i>	<i>Capital employed Per cent</i>	<i>Capital employed— manufacturing industry average Per cent</i>
1971	6	4	9	13
1972	8	5	12	14
1973	6	5	12	17
1974	4	3	8	16
1975	Nil	[2]	[4]	15
1976	Nil	[2]	[5]	18
Simple average over period	4	2	5	16
Simple average 1973-1976	2	1	3	17

BICC also provided figures of profits/[losses] as a percentage of capital employed on winding wires adjusted for inflation in accordance with the principles of current cost accounting as shown in the following table with the comparative figures for all manufacturing industry:

TABLE 2.22 Return on capital—current cost basis

<i>Year</i>	<i>Winding wires Per cent</i>	<i>All manufacturing industry Per cent</i>
1973	6	7
1974	[0.5]	2
1975	[8]	3
1976	[10]	2
Simple average 1973-1976	[3]	4

Stockholding

123. BICC holds stocks, mainly at local sales branches, for those of its customers who have a regular demand for particular sizes and types of winding wire. A base stock of items sold by two or more stockholding branches will usually be held at the factories. Subject to cash flow considerations, about 9 weeks' total sales are held in stock at any one time.

¹ See note to paragraph 52.

Telecommunication Cable

124. In the period 1971-76 BICC's total home and export sales of telecommunication cable amounted to 17 per cent of its total home and export sales of all reference goods. The following table shows the value of BICC's home sales and total sales of telecommunication cable in 1971-76, together with its total sales expressed as a percentage of the total sales of all United Kingdom manufacturers¹:

TABLE 2.23 Telecommunication cable sales²

Year	Home sales £ million	Total sales £ million	Home and export sales Per cent
1971	17.7	21.4	N/A
1972	17.1	20.8	N/A
1973	19.2	22.7	28.2
1974	23.2	29.5	27.8
1975	21.3	29.9	27.4
1976	16.4	27.6	23.8

125. Most of BICC's United Kingdom sales of telecommunication cable are to the Post Office but a significant amount of business is done also with public utilities and major industrial organisations which operate their own telecommunication systems. The appropriate percentages are as follows:

Post Office	92½ per cent
Industrial customers and public utilities	7½ per cent

Production

126. Since 1975, BICC's manufacture of telecommunication cable has been under the operational control of BICC Telecommunication Cables Ltd which manufactures all types of telecommunication cable except submarine cable. In 1975 its external telephone cable³ was manufactured at Prescot, Belfast, Blackley, Leyton and Renfrew, but manufacture of external telephone cable at the last named works ceased during 1976 as a consequence of reduced demand. Blackley, Leyton and Belfast also make switchboard cable.

127. Prior to 1975 BICC had committed substantial sums to expanding and modernising its production. In 1961 it re-located and modernised the Prescot facilities at a cost of £1.5 million, and since 1961 a further £4.8 million was spent in extending and modernising the Prescot plant for the purpose of coping with increasing demand and the increasing sophistication of the product. In 1968, BICC purchased Reliance-Clifton Cables Ltd, with cablemaking factories at Leyton and Belfast at a cost of some £13.3 million, and during the period 1972-74 some £1 million was spent in improving the Blackley plant.

128. All sales are made by reference to tenders or quotations at net prices and no rebates are offered or granted. Until December 1974, BICC was party to an

¹ BICC's home sales as a percentage of all sales in the United Kingdom are given in paragraph 355.

² Sales of internal telephone switchboard cables manufactured at Helsby, in 1974 worth £6.1 million, have been counted as sales of general wiring cable.

³ See paragraphs 356-358 for a description of this cable.

agreement with other cablemakers on prices to be tendered or quoted to the Post Office for external telephone cable (see paragraph 364).

Profits and profitability

129. The following table shows BICC's profits¹ on telecommunication cable for each of the years 1971-76 on an historic cost basis expressed as a percentage on home sales, on total sales, and on capital employed together with the average profit as a percentage of capital employed for all manufacturing industry:

TABLE 2.24 Profits on telecommunication cable

<i>Year</i>	<i>Home sales Per cent</i>	<i>Total sales Per cent</i>	<i>Capital employed Per cent</i>	<i>Capital employed— manufacturing industry average Per cent</i>
1971	11	11	36	13
1972	12	13	41	14
1973	10	10	34	17
1974	5	4	14	16
1975	7	4	16	15
1976	11	8	29	18
Simple average over period	9	8	28	16
Simple average 1973-76	8	6	23	17

The profits have been adjusted to take account of payments to the Post Office (see paragraph 52).

130. BICC also provided figures of profits as a percentage of capital employed on telecommunication cable adjusted for inflation in accordance with the principles of current cost accounting as shown by the following table with the comparative figures for all manufacturing industry:

TABLE 2.25 Return on capital—current cost basis

<i>Year</i>	<i>Telecommunication cable Per cent</i>	<i>All manufacturing industry Per cent</i>
1973	16	7
1974	1	2
1975	Nil	3
1976	5	2
Simple average 1973-76	6	4

Stockholding

131. BICC does not stock finished products but arranges production programmes to meet Post Office and other customers' requirements.

¹ See note to paragraph 52.