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Corporate Plan

THE ROYAL MINT CORPORATE
PLAN 1989/90 - 1992/93

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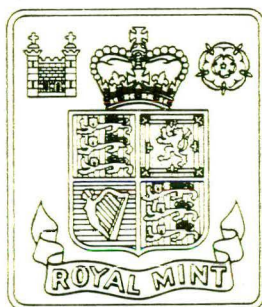
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Begin: 31/3/90
Ends: 31/3/90

DD: 25 years

22/9/95

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Royal Mint

CORPORATE PLAN
1989/90 ~ 1992/93

COMMERCIAL IN CONFIDENCE

ROYAL MINT CORPORATE PLAN 1989/90 TO 1992/93

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COMMERCIAL IN CONFIDENCE

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ROYAL MINT CORPORATE PLAN 1989/90-1992/93

1. INTRODUCTION

- 1.1. This Plan covers the 4 year period 1 April 1989 to 31 March 1993.
- 1.2. Firm forecasts are provided for the first year and provisional forecasts for the second year. Figures for the last 2 years are indicative of trends only. In preparing this Plan a number of key assumptions have been made and these are set out in Section 6.
- 1.3. In broad terms it is forecast that 1989/90 will see a return to healthy profit levels in all areas except the Britannia bullion coin. The issue of a new 5p coin, a new commemorative £2 coin and a new design on the sovereign range of coins are the major contributory factors. Thereafter, and for the remainder of the Plan period, it is forecast that standard coin profits will continue at satisfactory levels and that profits on collector coin will decline in the absence of further changes in design.

2. BUSINESS AIMS AND OBJECTIVES

- 2.1. The current financial objective covering the 3 year period 1987/8 to 1989/90 determined by the Chancellor of the Exchequer is to achieve a 10% current cost return on net assets. The annual rate of return for each of the three years is calculated as current cost operating profit as a percentage of the average net assets at current cost. This target recognises that large fluctuations occur in the minting business and it is proper to assess the Mint's performance over a period of years rather than on an annual basis.
- 2.2. The Board has also established the following additional business aims:
 - . In an increasingly competitive and commercial environment, to continue to seek opportunities for profitable growth.
 - . To achieve an overall return on sales of at least 10%, excluding the metal content of bullion coin.
 - . To maximise the cost efficiency of the overall operation.
 - . To provide and maintain the UK coinage in accordance with statutory requirements.
 - . To be committed to the maintenance of the high quality standards which have become the trademark of the Royal Mint, and to put the customer first.
 - . To become an Executive Agency by 1 April 1990 subject to negotiating an appropriate framework of reference.

3. KEY OBJECTIVES FOR MARKET SECTORS

- 3.1. This section summarises the objectives for each market sector (ie major product group) which are key to forecast performance during the Plan period. Section 7 (Market Sector Analysis) details how, and the extent to which, these objectives will be met particularly during the first year of the Plan period.

UK Circulating Coin

- 3.2. The primary responsibility of the Mint is the provision and maintenance of the United Kingdom coinage in accordance with statutory requirements and to the standards considered necessary by the Government of the day. To this end the objective is to produce the quantity of each denomination necessary to meet public demand, and to maintain stocks at the minimum level consistent with this demand.
- 3.3. It is forecast that in 1989/90 the public demand will require the production of 2050m coins. This will include 900m new 5p coins, of which 700 will be issued to clearing banks by the year end. Compared to 1988/89, production is forecast to increase by 11% (expressed in standard units) and issues by 26%.

Overseas Circulating Coin

- 3.4. To ensure that overall sales of overseas standard coins produced at Llantrisant achieve a minimum 25% contribution as a percentage of sales value (excluding metal), and to achieve a target contribution of £4.0m in 1989/90.
- 3.5. To sell overseas coins at the best possible prices and to obtain sufficient business from overseas countries to fill economically the capacity available.
- 3.6. To secure at least 50% of the available world coin market from countries who do not have their own mints. And, in so far as countries with their own mints are concerned, to secure orders in excess of local capacity. To this end an aggressive approach will be adopted towards our major competitors to ensure that they do not make gains in our traditional markets.
- 3.7. Sales volumes in 1989/90 are forecast to reach 1,000m coins (83% of 1988/89 levels) and 117m blanks (468% of 1988/89 levels).

Circulating Coin - General

- 3.8. The overall forecast for 1989/90 is to achieve a contribution of £14.7m and a profit of £3.4m (a return on sales of 6.3%). This compares with a forecast outturn for 1988/89 of £13.8m contribution and £3.2m profit (representing a return on sales of 6.3%).

UK Collector Coin

- 3.9. To ensure that overall sales of UK collector coin achieve a minimum 50% contribution as a percentage of sales (excluding metal) and to achieve a target contribution of £6.1m in 1989/90.
- 3.10. Given our inability to plan on a structured series of coin design changes, the objective is to continue to find other ways of generating growth in sales volumes.
- 3.11. To address the pricing and costs of UK base metal products so as to bring these products to an acceptable level of profitability.
- 3.12. To improve our position in North America, in particular with regard to wholesale outlets.

- 3.13. To increase the net size of mailing lists by 5% per annum in the UK and in North America with the emphasis on high quality names.

Overseas Collector Coin (Direct)

- 3.14. To obtain profitable overseas collector coin orders for manufacture and to encourage, where appropriate, countries to issue commemorative and collector coins which can be sold in increasing numbers through the Mint's marketing outlets.
- 3.15. To ensure that overall sales of collector coin to overseas issuing authorities achieve a minimum 40% contribution as a percentage of sales (excluding metal) and to achieve a target contribution of £0.4m in 1989/90.

Overseas Collector Coin (Marketed)

- 3.16. To ensure that overall sales of collector coin sold through the Mint's marketing outlets achieve a minimum 40% contribution as a percentage of sales (excluding metal) and to achieve a target contribution of £0.6m in 1989/90.

Collector Coin - General

- 3.17. The forecast for 1989/90 is a contribution of £7.2m and a profit of £3.8m (representing a return on sales of 15.4%). This compares with a forecast outturn for 1988/89 of £4.8m contribution and £2.2m profit (representing a return on sales of 8.9%).

Britannia Bullion Coin

- 3.18. Over the last year the worldwide market for all bullion coins has fallen from 4.00 million ounces per annum to 2.25 million ounces, largely as a consequence of the continued decline in gold prices. This fact coupled with the view that a market for Britannia gold coins in Japan, Taiwan and North America cannot be established cost effectively at this time, has prompted a major shift in marketing strategy. The new strategy is to:
- (a) Protect the continued availability and quotation of Britannia in all of the markets into which it has been introduced.
 - (b) In those markets where consumer penetration is small but distributor inventory high (North America, Japan and Taiwan), provide a minimum level of public relations, promotional and retail support. Some presence in these market areas needs to be maintained because some distributors purchased Britannia coins in response to the Mint's stated commitment to maintain a long term presence in their markets, and this commitment must be honoured if we are to maintain our credibility with our distributors. Additionally, a change for the better in the market climate (especially an improvement in gold prices) could make these markets viable in the longer term. A complete withdrawal at this stage would severely hinder our ability to re-enter the markets at a later date.

- (c) In Germany and Hong Kong, continue active support with the objective of strengthening Britannia's competitive position, securing expanded distribution and generating retail sales some 20% higher than presently.
- (d) Do all this without incurring an overall operating loss of more than £100,000, controlling commitment of resource closely on a month by month basis in relation to sales achievement.

- 3.19. In accordance with the above strategy the target is to achieve sales of at least 124,000 ozs in 1989/90. This compares with forecast sales for 1988/89 of 88,000 ozs.
- 3.20. The specific market targets will be to secure sales of 64,000 ozs in Europe (8% of the Market share) and 60,000 ozs in Hong Kong (20% of the market share).
- 3.21. Beyond 1989/90 Sales are forecast to progressively increase and result in modest profits (see Appendix 2 and 6).

Medals

- 3.22. To retain the core business of award and prize medals, expand the market for cast medals, and develop interest in the series of "Royal Mint Centenary Medals". The overall aim is to achieve a 60% contribution as a percentage of sales value excluding metal.

4. **REVIEW OF 1988/89**

- 4.1. The forecast overall profit for the year is £4.0 million against a planned figure of £7.8 million. The 49% fall in profit as compared with forecast is due to the sales volume shortfall on Britannia bullion coins and the problems experienced with the collector coin market.
- 4.2. Standard coin sales and production have been higher than forecast and production efficiency has shown improvements across all product groups.
- 4.3. The forecast profit/sales percentage for the year is 5.1% compared with the Plan figure of 9.6%. The forecast financial target return for the year is 6.0% compared with the Plan figure of 15.2%.
- 4.4. The forecast average Financial performance for the first 2 years of the current 3-year period is 8.2% compared to a 3-year average target of 10%. A detailed comparison of the Plan and the forecast outturn is at Appendix I. The main reasons for these results were:

STANDARD COIN

PROFIT UP £1.1 MILLION (52%)

UK

- 4.5. The level of activity has been significantly higher than forecast, actual issues are now expected to be 1,467 million (excluding re-issues) as compared with the original forecast of 1,000 million.

- 4.6. The UK Coin Contract arrangements provided a pricing arrangement under which sales in excess of the forecast level are only paid for at variable costs. As a result of this, the unit sales price decreases and the profit on UK standard coin is lower than forecast.

Overseas

- 4.7. The activity level on overseas standard coin is broadly in line with that forecast although the mix has changed. However, the prices obtained have been higher than forecast and, as a result of this, the contribution is significantly ahead of the planned figure forecast contribution being £4.7 million as compared with £3.0 million forecast.

General

- 4.8. Overall standard coin has benefitted from a higher than forecast activity level and significant improvements in productivity. This, together with increased prices on overseas standard coin, has resulted in a forecast profit of £3.2 million as compared with the planned figure of £2.1 million.
- 4.9. The increase of £1.4 million in the fixed costs charged to cost of sales reflects a change in the stock position and not additional expenditure.

COLLECTOR COIN

PROFIT DOWN £1.9 MILLION (46%)

UK

- 4.10. Total sales of UK collector coin are forecast to be some 17% below Plan resulting in a significant drop in contribution. This is due to sales of 1988 UK gold proof coins, both Sovereigns and Britannias, being far lower than forecast. In particular:-

- (i) the United States trade sales and overseas dealer sales have been significantly below Plan.
- (ii) the sales of 1988 Britannia collector coins in the UK retail market have been much lower than forecast.

MEDALS AND MISCELLANEOUS

PROFIT UP £0.2 MILLION (200%)

- 4.11. This product area has had a very successful year. Sales of £1.3 million are forecast as compared with a planned figure of £1.1 million, and improvements in productivity and prices obtained have resulted in a forecast profit of £0.3 million as compared with £0.1 million included in the Plan.

BRITANNIA

PROFIT DOWN £3.2 MILLION (213%)

- 4.12. It is now clear that Britannia will very significantly under perform against 1988/89 objectives. The current forecast is a financial year loss on the bullion coin of £1.7m against a planned profit of £1.5m - a negative turn around of £3.2m.

- 4.13. The background to planning was an estimated 1988/89 total market for bullion coin of 4.0 million ounces, a strong gold price and initial Britannia sales over the first 8 weeks in excess of 150,000 ounces. The market environment has turned out very differently. Total bullion coin sales are

now reliably expected to be 40% down on forecast at 2.25 million ounces, the gold price weakened progressively over the year by almost 20% and the high level of initial sales was not evidence, as was thought, of acceptance by the ultimate purchaser.

- 4.14. Broadly speaking, these factors were responsible for about half of the shortfall in sales volume and income.
- 4.15. The rest is down to failure to penetrate the major markets in share terms, compounded in sales terms by relatively high inventory of Britannia in the hands of distributors. Britannia's global market share is 7% compared to a forecast of 12%, but this obscures major differences by market. Britannia has simply not got off the ground in North America, Japan, Taiwan and developed a business of significance only in Germany and Hong Kong.
- (a) Only a modest business was expected in North America (7%), but the grip of the Eagle and the Maple Leaf is such that we have not dented the market at all.
 - (b) In Japan, a determined effort has not broken through the dominant position of the Maple Leaf, whose sole distributor also controls 60% of the retail distribution network, which in Japan does not include the banks.
 - (c) In Germany and Hong Kong a share in excess of 10% has been achieved but only at about 75% of expectation. This would have been higher had we concentrated more on expanding distribution and emphasised support for distributors at the retail, point of sale level.
- 4.16. With the bulk of costs (75%) having gone into marketing to create awareness and promote at retail to generate offtake, a reduction in premium income of £4.9m has been accompanied by a reduction in costs of only £1.7m, with the resultant bottom-line effect.
- 4.17. In summary, the Mint's forecasts for Britannia have turned out to be unacceptably optimistic and only partially for reasons outside our control. Better original and ongoing market intelligence would have led to more conservative projections and financial commitment, in the case of Japan probably to avoidance of the market altogether initially and to a swifter reaction to events as time progressed.

GENERAL

- 4.18. The significant features of the year with respect to Production, Capital Expenditure and R & D are detailed at Appendix 9.

5. FINANCIAL SUMMARY

5.1. The table below highlights the main features of this Plan. Profit forecasts together with a forecast balance sheet and funds and resources statement, are given in Appendices 2, 3 and 4. The figures are presented at forecast actual prices and include details appropriate to each product group. The new UK coins are included as sales in their year of issue from the Mint (commencing in 1989/90 with 700m 5p coins - see paragraph 7.1.).

SUMMARY OF PLAN

	1988/89 (Forecast Outturn)	1989/90	1990/91	1991/92	1992/93
Sales Value (£m)	78.0	80.8	77.9	95.0	100.8
Variable Costs (£m)	60.3	58.0	56.6	71.2	72.9
Contribution (£m)	17.7	22.8	21.3	23.8	27.9
Fixed Costs (£m)	13.7	15.5	14.7	17.6	21.9
Operating Profit (£m)	4.0	7.3	6.6	6.2	6.0
Operating Profit as % Sales	5.1	9.0	8.5	6.5	6.0
Current Cost Profit (£m)	3.0	6.2	5.5	5.0	4.7
Current Cost Profit as a % of Average Net Assets at Current Cost	6.0	11.8	9.8	8.4	7.5
Capital Expenditures (£m)	3.1	2.9	3.0	3.0	3.0

6. MAJOR ASSUMPTIONS

6.1. The principal economic assumptions are as follows:

(i) WAGE AND SALARY COSTS

The rates and allowances applicable at 31 March 1989 plus 6% increase for wages and 8% for salaries paid on the appropriate review dates, ie 1 April/1 August for salary costs and 1 July for wages costs.

(ii) INDIRECT MATERIALS AND SERVICES

The actual price where available, eg electricity, gas, or the average price for 1989-90 increased by 6%.

(iii) METAL PRICES

The actual prices paid where available or:-

	<u>US \$</u>	<u>£</u>
Gold (per troy ounce)	414	230
Silver (per troy ounce)	9	5
Nickel (per tonne)	15,300	8,500
Copper (per tonne)	2,970	1,650

(iv) EXCHANGE RATE

The actual rates where available or:-

1.80 US \$ to £1 Sterling.

(v) PRICING

Prices are set at levels sufficient to cover costs and a return on sales sufficient to meet the overall objectives for profitability.

The underlying strategy is to charge what the market will bear consistent with maintaining long term profitability.

Using the 1989/90 forecast price levels as a base, standard coin and collector coin prices are assumed to increase on average by 6% per annum.

(vi) INTEREST RATES

Interest calculations have been based on an average rate of 10% where actual rates are not available.

(vii) BORROWINGS

The Plan assumes that the National Loans Fund borrowing facilities which exist will not be called upon on a long term basis. Short term borrowing facilities will be used for limited periods. Interest calculations have been based on an average rate of 10% where actual rates are not available.

(viii) RESERVES

The Plan assumes that subject to maintaining an adequate level of reserves over the 4 year period, the dividends paid will be based on the net current cost surpluses.

(ix) INVESTMENTS

Liquidity levels will continue to be adjusted by investing in the NLF temporary deposit facility and British Government Stocks.

6.2. PRODUCT CHANGE AND VARIETY ASSUMPTIONS

(i) NEW 5p COIN

A new 1990 dated 5p coin will be introduced in 1990/91 and production will take place in 1989/90 to ensure that sufficient coins are available for the launch date. A silver piedfort version of the coin will be issued during the first year in which the new coin appears in circulation. In the same year, both the new and the old 5p coin will appear in the annual proof and uncirculated sets.

(ii) NEW 10p COIN

A new 1992 dated 10p will be introduced in 1992/93 and production will commence during 1990/91. The same arrangements as for the 5p coins will apply for the issue of collector versions.

(iii) £2 COMMEMORATIVE COIN

Commemorative £2 coins will be issued in 1989 to celebrate the Tercentenary of the Bill of Rights and the Claim of Right. Circulation standard and collector versions in base metal and silver will be issued. Although legal tender, the coin is not intended for general circulation.

(iv) SOVEREIGNS

To commemorate the 500th Anniversary of the sovereign in 1989, a new design will appear on the 1989 dated sovereign range of coins ($\frac{1}{2}$, £1, £2 and £5). Thereafter the sovereign will revert to the familiar Pistrucci design of St George and the Dragon.

(v) £1 COIN DESIGNS

No new designs will be issued for the £1 coin, and from 1989 the existing regional variant designs will be repeated (1989 - Scotland; 1990 - Wales; 1991 - Northern Ireland; 1992 - England). A collector version of the 1989 dated £1 coin only will be issued.

(vi) CROWN COMMEMORATIVE COIN

To commemorate the 90th Birthday of HM The Queen Mother silver and base metal crowns dated 1990 will be issued in 1990/91.

(vii) 1991 COMMEMORATIVE COIN

The Plan assumes a commemorative issue in 1991, the subject of which has yet to be determined.

(viii) PLATING

The ability to produce copper plated steel and zinc blanks already exists. We will have the ability to produce nickel plated steel blanks and yellow (brass) plated steel blanks by 1989/90.

(ix) BI-METAL COINS

Coining capacity for bi-metal coins will be installed in 1989/90.

6.3. OTHER ASSUMPTIONS

- (i) It is assumed there will be no change to existing UK sales tax regulations or rates.
- (ii) The contractual arrangements for the supply of UK coin will provide for the Treasury to pay for the new coins prior to their issue, on the basis of an agreed programme.
- (iii) The basis of the UK Coin Contract is assumed to remain unchanged over the period covered by the Plan.
- (iv) UK Coin Contract prices are assumed to increase at 6% from the base level of 1989/90.
- (v) Metal, production, packaging and distribution costs are assumed to increase at an annual rate of 6% from the base level of 1989/90.

7. MARKET SECTOR ANALYSIS

UK CIRCULATING COIN

7.1. Having consulted the Treasury and the Clearing Banks, it is estimated that the following coins will be required.

DENOMINATION	1989/90 M	1990/91 M	1991/92 M	1992/93 M
£1	50	50	50	50
50p	-	-	-	10
20p	100	75	75	75
10p (new)	-	-	700*	700
5p (new)	700*	700	200	50
2p	350	300	270	250
1p	650	400	350	300
	<hr/>	<hr/>	<hr/>	<hr/>
	1850	1525	1645	1435

The above figures exclude re-issue of 10p and 5p coins.

* Issues to Banks only.

- 7.2. Regular meetings with the clearing banks' representatives will be held during the year to ensure that where necessary these forecasts are modified to meet the public's requirements.
- 7.3. In order to ensure that there are sufficient new 5p and 10p coins a stock of 300m new 5ps were produced during 1988/89, a further 900m will be produced in 1989/90, 300m in 1990/91 and 100m in 1991/92. Thereafter annual issue and production requirements are forecast at 50m annually. Similarly, for the new 10p coin, during 1990/91 a stock of 550m will be produced, with an additional 750m during 1991/92 and 200m during 1992/93.
- 7.4. For each of the last three years there has been a substantial increase in demand for UK coin and in particular for bronze coins. Demand for 2p and 1p coins in 1988 was more than twice the demand in 1986 and over 40% up on 1987. Stocks of coins in the banks at the beginning of 1989 were higher than for any year since 1986 and coupled with the Chancellor's aim to reduce spending, this indicates that demand, leaving aside the requirement to produce new 5p coins, in 1989/90 financial year will be lower than last year. It is, as usual, difficult to forecast demand but the banks confirm our view that there will be an overall reduction, particularly for 2ps and 1ps; forecasts have taken these factors into account. It is assumed that banks will be able to avoid drawing the old style 5p coins during 1989 with the exception of the few million expected to be in stock at the end of March.

OVERSEAS CIRCULATING COIN AND BLANKS

- 7.5. It is forecast that the total worldwide demand during 1989/90 will be in the region of 2000m coins of which approximately 1,000m (50%) will be secured by the Royal Mint. Of this two-thirds will be produced at Llantrisant and the balance at the Birmingham mints. The forecast for 1989/90 is to achieve a 40.5% contribution as a percentage of sales, excluding metal. This compares with the minimum objective of 25% - see paragraph 3.4.
- 7.6. Orders have already been placed for something in excess of 15% of the forecast and negotiations are currently taking place for an additional 5% of the potential demand.
- 7.7. World demand for coinage blanks from other mints is estimated to be in the region of 1000m of which it is hoped to secure 117m pieces. Approximately 60% of this will be produced at Llantrisant and the balance at the Birmingham mints.
- 7.8. Orders on hand to be executed in 1989/90 are lower than for several years and for this reason and because of a lack of any sign of a significant order from one of the large countries, the forecast is that demand for standard coin will be less than in 1989/90 by about 20%. Because of the high cost of copper and nickel there are trends towards using cheaper substitute materials such as nickel plated steel and stainless steel for white coins, and copper plated, copper clad, brass clad, steel and aluminium for the lower denominations. It is impossible to predict accurately when the changes will occur because in most cases changes in the composition of coins require legislation. High value coins continue to replace banknotes; New Zealand will be issuing \$2 and \$1 coins later this year, Thailand will be issuing a 10 Baht coin also later this year, Pakistan may decide to replace the 1 Rupee banknote entirely with coin, Hong Kong have indicated they may

decide to replace the \$10 banknote with a coin within the next two years. Security features such as letters inside a groove, as used on Hong Kong \$5, and bi-metal coins are being considered for some of these high value coins. Price levels for manufacturing are likely to increase roughly in line with inflation rates.

- 7.9. Stiff competition will continue to occur from the Germans, Canadians, Koreans and the French; the Canadians are now particularly active in Africa and the Arab world; a market which has been traditionally the Royal Mint's prerogative. Every effort is being made to avoid the Canadians making inroads into these traditional areas even to the extent of quoting very low prices where necessary. There is keen competition from Germany and Canada for nickel plated steel coins. (The Germans are offering nickel plate on nickel clad and the Royal Mint is carrying out tests on this material in an effort to combat the German success.)
- 7.10. It is virtually impossible to secure payment by Letter of Credit from most of our overseas customers and it is frequently necessary to offer deferred payment terms to match the offers made by our competitors.
- 7.11. To achieve the forecast level of sales it will be necessary to ensure that good relations are maintained with all customers and potential customers. Major customers will be visited at least once each year.
- 7.12. It will also be very important to maintain the good relationship established with the other members of the Consortium and in particular to maintain an effective liaison with De La Rue to ensure that they are fully briefed and motivated.
- 7.13. De La Rue represent the Royal Mint in approximately fifty per cent of the countries likely to order coin during the 4 year period, representing around 75 per cent of total volume. De La Rue is responsible for providing market intelligence in those countries. The Royal Mint makes its own arrangements for those countries dealt with on a direct basis.

UK COLLECTOR COIN

- 7.14. The table below shows the contribution from collector coin sales achieved in recent years and that forecast to be achieved during the Plan period. The forecast contribution in the first year of the Plan represents a 58.7% return on sales excluding metal. This compares with the minimum objective of 50% - see paragraph 3.9.

YEAR	CONTRIBUTION (£m)
1984/5	4.6
1985/6	4.7
1986/7	5.1
1987/8	6.9
1988/9 (forecast outturn)	3.6
1989/90 (forecast)	6.1
1990/1 (forecast)	4.4
1991/2 (forecast)	4.0
1992/3 (forecast)	4.3

NOTE: The contributions for 1984/85 to 1987/88 have been adjusted to include commission paid on UK precious metal coins.

- 7.15. The market for collector coins is currently depressed, a fact acknowledged by our major competitors. However, the forecast contribution for the first year of the Plan compares very favourably with recent years performance reflecting the introduction of design change over the whole of the product range.
- 7.16. Indicative forecasts in subsequent years are poor reflecting, in part, general market conditions but also the minimal level of design change planned, and the lack of a structured series of change which is an essential ingredient to stimulate sales. While the introduction of new sizes for the UK 5p and 10p circulation coins are beneficial to the financial forecasts their effect is dampened by the retention of the current design. The only other new coin positively planned is that to commemorate the Queen Mother's 90th birthday which will be popular with buyers in the UK but less so overseas. It is assumed that in 1991 there will be a new issue commemorating as yet an undecided occasion, but one which will be consistent with the dignity and integrity of the coinage. The issue of commemorative UK coins is strategically very important for the long term profitability of the Mint.
- 7.17. Underlying the Plan forecasts are two main areas of concern. The first is the North American market where unacceptable profit levels are forecast. During 1989/90 it is intended to develop a vigorous network of trade outlets and to increase mailing lists of retail customers. The second area of major concern is that profits are over-reliant on the success of gold products, which in volume terms represent a small percentage of sales. Thus small variations in gold sales have a significant impact on overall profit levels. There is no easy solution to this problem, but efforts will be made to reduce the dependency on gold products by increasing sales for other products.

Base Metal Products

- 7.18. In recent years this product group has been sold at prices very close to - and, occasionally below - full costs. The overall strategy will be to increase profit margins to more acceptable levels. However, it is recognised that it is generally the lower cost base metal products which, in the first instance, attract new customers. The aim is to then convert ("upgrade") these customers into purchasers of higher value, more profitable gold and silver products.
- 7.19. Base metal products are also the most popular for promotional incentive schemes and as company gifts. Our past practice has been to establish no issue limits for uncirculated sets but to fix issue limits for proof sets at levels approximately 25% above forecast sales. In this manner we have retained a flexibility to react to market opportunities. This is especially important for the uncirculated products, where large orders can rise from the incentive gift market. No change is planned in this strategy for the uncirculated products. However, the 1989/90 issue limits for the base proof sets has been reduced to 100,000 sets which while allowing for an element of sales above forecast does provide a better opportunity for a 'sell-out'. This change in strategy is necessary in view of the lack of design change in future years which will hinder sales and if a sell-out can be achieved in 1989/90 it will be a significant factor in assisting sales beyond 1991.
- 7.20. The key forecasts for 1989/90 are to sell 79,100 UK Base Proof Sets (1% below 1988/89 forecast levels) and 313,650 UK Base Uncirculated products (34% above 1988/89 levels).

Silver Products

- 7.21. The overall strategy is to fully exploit the issue of commemorative coins and to present these to the customer as part of a regular (but not annual) series of structured design changes.
- 7.22. 1989/90 sees the benefits of the introduction of both the Bill and Claim of Rights coins coupled with the decision to produce a proof and piedfort version of the £1 coin reflecting the change on the obverse design since the coin was last issued in 1984.
- 7.23. No proof or piedfort versions of the £1 coin are planned beyond 1990. This is because the designs will be the same as in earlier years. Although it is certain that modest quantities of such products could be marketed, most collectors would resist such repeat issues and maintaining faith with the generality of collectors is seen as paramount.
- 7.24. Piedfort versions of the new 5p and 10p coins will be sold in the years these coins are first introduced.
- 7.25. For 1989/90, 76,200 silver products (sales items) are forecast to be sold, representing an 11% increase of 1988/89 forecast levels.

Gold Products

- 7.26. The short term outlook for UK gold products is not encouraging. In 1989/90 only 3,795 Britannia proof coins (ounces) are forecast to be sold and this represents a 55% shortfall on the forecast outturn for 1988/89. For the sovereign range of coins 21,586 ounces are forecast to be sold (8% higher than 1988/89).
- 7.27. The sales forecasts for Britannia proof coins reflect the fact that a significant quantity of 4-coin sets previously sold to dealers in the USA remain on their inventories. This is despite further recent promotional support from the Royal Mint. Unlike the well established range of sovereign proof coins, the Britannia has not been in existence long enough to have attracted a hard core of regular collectors. Therefore, it is planned to significantly reduce issue limits and thereby activate investor and collector interest.
- 7.28. The increase in forecast sales of sovereign proof coins would have been larger but for the fact that significant quantities of 1989 dated products (in particular 2,500 4-coin sets) were sold in North America during the closing weeks of 1988/89.
- 7.29. The design change on the 1989 sovereign will be most beneficial to the 1989/90 financial results. Beyond 1989/90 it is not foreseen that there will be further changes to the sovereign design, which will revert to the Pistrucci design from 1990/91 onwards. As a consequence, experience would suggest that sales, particularly to overseas customers, are likely to suffer as they did with the 1988 sovereign.

Summary

- 7.30. For six years (1983 to 1988) the Mint has benefitted from a regular series of £1 coin design changes. In addition there have been occasional commemorative coins such as the 1986 Commonwealth Games £2 coin. As a result adequate levels of profit have been sustained in most market areas, although trade outlets (especially in North America) have suffered a recent decline. The design changes on the 1989 dated range of sovereign coins and the new 1989 dated £2 will enhance sales in the closing weeks of 1988/89 and the early part of 1989/90. However, the climate for collector coin sales is generally poor: increasing inflation, high mortgage rates and the aftermath of the 1987 stock-market crash has left many potential customers (both in this country and abroad) with lower disposable incomes. Major countries issue regular commemorative coins at attractive prices and these products compete with ours for the limited disposable income of collectors. Unless there is a significant change in the market climate it is difficult to forecast other than a declining volume trend beyond 1990/91.
- 7.31. A structured programme of dignified commemorative coins is strategically very important. In the absence of such a programme, full advantage will be taken of occasional commemorative coins (such as that assumed for 1991) and new coin specifications (such as the 1992 new 10p coin). In addition, renewed efforts will be made to rekindle interest among trade outlets, to expand mailing lists and to enhance the profitability of base metal products.

OVERSEAS COLLECTOR COIN (DIRECT)

- 7.32. The forecast for 1989/90 is to achieve a 41% contribution as a percentage of sales, excluding metal. This compares with the minimum objective of 40% - see paragraph 3.15.
- 7.33. Competition arises mainly from Germany, Canada and France, but also Hungary and Pobjoy are active. Prices quoted by the French and Hungarians are far below the prices for proofs quoted by other suppliers, but most worrying is that the proof prices quoted by all of the other competitors are extremely low in comparison with Royal Mint costs. We appear to be more competitive on the uncirculated collector coins. Our suspicion is that the Hungarians and French are not charging an economic price.

OVERSEAS COLLECTOR COIN (MARKETED)

- 7.34. The forecast for 1989/90 is to achieve a 50% contribution as a percentage of sales, excluding metal. This compares with the minimum objective of 40% - see paragraph 3.16.
- 7.35. Overseas coins will continue to be promoted through all outlets, although most products do not have the sales potential which justifies individual mailing promotions. There are, however, exceptions and these will be exploited to the full. We will also increase our contact with dealers and agents who sometimes secure orders direct from monetary authorities.

- 7.36. This product category includes those medallions which are produced in the Proof Coin Unit because they have a lower relief than normal medals. From time to time proposals are made or received for a one-off or series of such medallions. Currently, discussions are well advanced for the sale of a series of gold medallions portraying various events in the Muslim calendar. These have been included in our forecasts.

BRITANNIA BULLION COIN

- 7.37. In view of the significant downturn in the world bullion coin market, from 4.0m to 2.25m ounces (largely as a consequence of the continued decline in gold prices), it is clear that Britannia's initial success cannot be sustained in all markets. Effort will, therefore, be concentrated on those markets where there is seen to be medium term potential, while enough resources will be allocated to maintain a presence for the time being in other markets which we have already entered.

UK Market

- 7.38. With Britannia being the national coin we are obliged to maintain a presence in the UK. However, it is reasonable to expect sales of around 4000 ounces per year from the jewellery and gift sectors of the market.

Europe

- 7.39. The objective is to achieve sales of at least 60,000 ounces. This represents an 8% market share which compares with 7% for 1988/89. Much stronger emphasis will be placed on merchandising visits in order to spread the distribution and encourage the display of Britannia point of sale material in banks throughout Germany, Austria, Luxembourg and Switzerland. Ten such visits are planned.
- 7.40. An advertising campaign (newspapers and magazines) will be undertaken during the autumn of 1989, using existing artwork and copy. A joint promotion will be carried out with the World Gold Council to incorporate Britannia in a gold accumulation plan operated by GTZ, Zurich and OVB Cologne. Early indications from the scheme which has just commenced are encouraging. Since November 1988 Commerz Bank has been added to the Britannia distributorship in Germany. In November 1989 efforts will be made to expand distributorship to other major banks in Europe.

Hong Kong

- 7.41. The objective is to achieve a sales target of at least 60,000 ounces. This represents a 20% market share which compares with 14% for 1988/89. The promotional budget is almost half the 1988/89 figure, but as considerable awareness has been achieved since the launch the advertising budget will in future be allocated more directly to distributors such as the Hang Seng Bank in return for guaranteed off-take, and to combat similar action by competitors. A similar approach will be necessary should the current discussions with Hong Kong and Shanghai Bank prove successful in expanding distributorship in Hong Kong.

USA

- 7.42. As no sales are anticipated during the year a small budget has been allocated for the production and distribution of point of sale material, and to maintain a limited presence in the market. It is planned to concentrate the limited resource to expanding the retail base through merchandising support.

Japan

- 7.43. In view of the unfavourable market circumstances and exceedingly high cost of promotional activities Japan is no longer seen as an attractive market. An impending change in the tax laws (in favour of bullion coins) may improve the situation, and a small budget has, therefore, been allocated to maintain a presence in the market for the time being for the reasons given in paragraph 3.18. In the longer term there is the possibility that major Japanese banks and institutions may take a more aggressive approach to stimulating sales of bullion coins and in this event the marketing strategy will be reviewed.

Taiwan

- 7.44. In view of the difficulties in this market as regards bureaucracy, the strong consumer resistance to 22 carat products, and talk of the Taiwan Government introducing their own bullion coin in the near future, this is not now seen as an attractive long term market. Therefore, our activity will be restricted to maintaining a limited presence and a small Public Relations budget has been allocated for this purpose. In addition, consideration will be given to undertaking a joint campaign with the World Gold Council to develop a gold accumulation plan through the Central Trust of China, subject to the success of a similar plan operated in Germany (see Para 7.40).

Pacific Rim

- 7.45. Apart from Hong Kong and Taiwan (see above), the current taxation regimes in the countries of the Pacific Rim discriminate against an active bullion market. Therefore, it is not planned to commit any resource into this region at the present time.

Middle East

- 7.46. Discussions with organisations in the Middle East suggest that there may be future opportunities in this region. In particular a positive indication of interest has been established in Dubai which will be actively pursued.

MEDALS/MEDALLIONS

- 7.47. The forecast for 1989/90 is to achieve the minimum objective (see paragraph 3.22.) of a 60% contribution as a percentage of sales, excluding metal.
- 7.48. To ensure that we maintain our current predominant position in the high quality "struck" and "cast" medal market, we must continue our excellent

liaison with the prominent organisations and institutions, together with the influential artists who operate within this field of activity. It is our intention to continue to devote more effort towards sales of high quality medallions both in the UK and overseas.

8. PRODUCTION CAPACITY ANALYSIS

- 8.1. In broad terms production capacity is adequate to meet demand forecasts for the entire Plan period. Significant productivity improvements have been achieved in all areas during recent years, and it is forecast that further improvements will be achieved in most areas. In part, productivity improvements are dependent upon output levels (economies of scale) and, therefore, in the Proof Coin Unit and Precious Metal Unit where demand is forecast to decline it will be impossible to sustain current productivity levels.

STANDARD COIN/BLANKS

Melting, Rolling and Blanking (MRB)

- 8.2. The current casting capacity of the MRB is 12,500 tonnes of bronze equivalent blanks or 10,400 actual tonnes per annum. This equates to the forecast demand. In addition, there is capacity to blank a further 1,350 tonnes of mild steel blanks for plating. (The capacity assumptions are based on the normal 50/50 split between cupro-nickel and bronze; four shift continental working at melting, three shift working at rolling and two shift working at blanking.)

Hot End

	1987/88	1988/89	1989/90
8.3. PRODUCTIVITY GAINS (KILOS/MAN HR)	78	85 (+9.0%)	88 (+3.5%)

This planned improvement will be achieved by implementing the new solid state electronic controls to the furnace line pulling equipment on the remaining two casting lines.

Cold End

	1987/88	1988/89	1989/90
8.4. PRODUCTIVITY GAINS (KILOS/MAN HR)	52	55 (+5.8%)	58 (+5.5%)

The above forecast productivity gain is despite the planned programme containing an average pieceweight which is significantly lighter than the average produced during 1988/89, (the major contributory denomination represented by the new very light UK 5p coin).

- 8.5. In the MRB cold end the emphasis will be on improving accuracy of blank parameters which will aid CPR productivity and ensure export blank quality. The accuracy improvements will be realised by

- (i) Computer analysis of strip profile from the finishing mill. (This will be a two year project)
- (ii) Riddling of blanks from the Blanking Press
- (iii) Purchase of new Rimming machines.

Annealing & Pickling (A&P)

- 8.6. The capacity of the A&P is 12,000 tonnes per annum of ordinary coinage blanks assuming the normal 50/50 main alloy split and three shift working. In addition, there is sufficient capacity to support the normal proof coin requirements.
- 8.7. No major productivity improvements are envisaged in these areas, although minor development and learning will be required to ensure maximum productivity from the recently installed Nickel Plating plant, however, there will be a cost reduction due to improved acid recovery and blank quality will be improved due to riddling at the annealing furnaces.

Coining Press Room (CPR)

- 8.8. The CPR has a capacity of 2,050 million standard units per annum assuming two shift working. The increased capacity is due to the introduction of 12 new fast coining presses, five of which are installed with the additional seven due to be in production in two stages, four by September 1989 and the final three by December 1989. With all the new presses in production the overtime required to match capacity requirements will be minimal.

- | | | | | |
|------|-----------------------------------|---------|---------------|---------------|
| | | 1987/88 | 1988/89 | 1989/90 |
| 8.9. | PRODUCTIVITY GAINS (COINS/MAN HR) | 5172 | 5854 (+13.2%) | 6500 (+11.0%) |

This planned improvement is feasible due to the procurement of seven additional coining presses during the year, the introduction of the new automated boxing line and improvement in telling techniques plus the anticipated continuation of the currently experienced mixture of good running denominations (see also Sections 9 and 11).

COLLECTOR AND BULLION COIN

Precious Metal Unit (PMU)

- 8.10. The PMU has a capacity to produce 25,000 ounces of gold blanks or alternatively 15,000 ounces of silver blanks per week on single shift working. However, for the coming financial year (1989/90) manning in the area will be reduced to give a capacity of only half that stated above, this will then match the unit output with forecast demands.
- 8.11. The introduction of the new rolling mill will improve strip accuracy, therefore, reducing blank rejects due to failure to meet the weight tolerance.

- | | | | | |
|-------|---------------------------------|---------|---------|-----------|
| | | 1987/88 | 1988/89 | 1989/90 |
| 8.12. | PRODUCTIVITY GAINS (OZS/MAN HR) | N/A | 46 | 40 (-13%) |

The current plan estimates a demand which equates to approximately 50% of the 1988/89 achievement. Therefore, no productivity gains are anticipated in the PMU during 1989/90, and indeed output per man hour is likely to fall as shown to 40 equivalent gold ounces. Due to the forecast reduction in activity in this area a fundamental review of the cost structure and economics of operating the PMU will be carried out during 1989/90.

Proof Coin Unit (PCU)

8.13. The PCU has the capacity to produce 20 million standard units per annum, but there are constraints which limit weekly output to the following levels:

a.	Proof blank buffing	10,000
b.	38mm to 60mm proof coins	4,000
c.	60mm to 75mm proof coins	750
d.	Base metal lacquering	75,000
e.	Precious metal lacquering	42,000

These outputs assume single shift working for a. b. and c. and three shift working for d. and e; with d. and e. capacities being mutually exclusive.

8.14. For the financial year 1989/90 the unit is budgeted to be manned to produce approximately two-thirds of the above capacity which is in line with forecast demands.

8.15.	PRODUCTIVITY GAINS (STD UNITS/MAN HR)	1987/88 146	1988/89 192 (+31.5%)	1989/90 160 (-16.66%)
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The significant productivity gain during 1988/89 was fundamentally the result of a much higher than planned level of activity. The estimated activity level for 1989/90 is about 70% of 1988/89 actuals. Therefore, it is anticipated that productivity levels will reduce from the very high levels of last year as shown above, or 9% above 1987/88 levels.

8.16. Within the PCU the emphasis will be on improving output through a reduction in rejects, both internal and customer, this will be accomplished by revised quality and operating techniques (see paragraph 9.18.).

MEDALS

8.17. The capacity of the Medal Room is 2,000 pieces per week on single shift working assuming a normal mix of mounted medals, unmounted medals and clasps.

8.18.	PRODUCTIVITY GAINS (STD MEDALS/MAN HR)	1987/88 2.34	1988/89 2.39 (+2.1%)	1989/90 2.44 (+2.1%)
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A target has been set for 1989/90 to further improve productivity by 2.1% and, therefore, achieve a performance level of 2.44 standard medals per man hour.

PLATING

8.19. (i) Copper Plated Steel

Current capacity is 350 million blanks per annum assuming:

- 3 shift x 6 day working
- 30 micrometre plating and
- Coin of current 5p size.

(ii) Copper Plated Zinc

Current capacity is 260 million per annum based on the same assumptions. Both this product and copper plated steel would be produced on the same plant and therefore the outputs are mutually exclusive.

(iii) Nickel Plated Steel

Current capacity is 250 million blanks per annum based on the same assumption.

DIES AND TOOLS

8.20. The Die Shop has the capacity on single shift working to produce 600 dies per week and 60 collars per week which is adequate to support the anticipated standard and collector coin production.

8.21. The Toolroom has the capacity on partial double shift working to support the requirement for tools throughout all the production areas. However, regular overtime is necessary particularly during periods of high demand.

BI-METAL COIN

8.22. Four of the seven new coining presses will have the additional facility to assemble and strike bi-metal coins, giving a capacity of 4 to 5 million coins per week on the standard 2-shift working pattern.

ENERGY

8.23. The energy bill for 1988/89 is estimated to total £1.134m.

8.24. The efficiency of the process in energy terms is very dependent on the level of output, and the increased activity of the factory, especially in the foundry, has resulted in an 18% improvement since 1986/87.

8.25. Energy saving schemes are estimated to have saved an additional 8% since 1986/87 and will save a further 1.8% in 1989/90.

8.26. Information from the "Energy Monitor" has been used to set the energy used for each cost centre budget and will be used to provide actual cost information during the year.

9. RESEARCH AND DEVELOPMENT/QUALITY

RESEARCH AND DEVELOPMENT

9.1. The R&D budget for 1989/90 is £195,000 for a detailed project programme, summarised in Appendix 8, which represents an increase of 26% on the estimated outturn of expenditure in 1988/89. A new project developing machinery for sale to a coinage customer is included with an increased provision for work on blank finishing (see below paragraph 9.6.).

9.2. The programme is orientated to meet the market needs in terms of product type and quality. A reduction in production costs is also foreseen by

attention to process and waste disposal. A quality management programme will be conducted in parallel (see paragraphs 9.17. to 9.19.).

- 9.3. Projects of particular importance are detailed below. They are grouped in reference to standard coins; collectors and bullion coins; and new product concepts serving the market in general. No project specific to medals is included this year.

STANDARD COINS (AND BLANKS FOR EXPORT)

- 9.4. Understanding of the science in making nickel, copper and brass-electroplated blanks is to be increased, with the aim of improving the competitive position in terms of quality and cost.
- 9.5. Alternative white plates based on nickel are to be investigated with the aim of providing coins of hard wearing properties for more aggressive (tropical) climatic conditions.
- 9.6. A particular problem of surface marking when coining nickel and nickel-plated blanks is to be tackled in conjunction with a university research centre. The objective is to gain a distinct market advantage in the quality of blanks for export and this will also benefit the Mint's own coin orders.
- 9.7. Yellow bronze plating will be researched to provide a product alternative with a higher tarnish resistance to the brass plate now developed.
- 9.8. An increasing difficulty of disposing solid chemical waste is to be addressed, by developing modified processes in blank finishing, with the additional benefits of lowering chemical and treatment costs.
- 9.9. At low priority, work will continue into securing a cost effective capability in-house for castable copper-based yellow alloys (ie non-plated).
- 9.10. In harmony with the Quality Programme, a number of projects on strip processing and blanking will be pursued in order to reduce the level of defective products for coining.
- 9.11. The successful development of improved die shapes and associated methods of manufacture, will give place gradually to a new look at alternative tool materials and surface finishes. The chemical machining of edge-lettering tools will form an important element in this work.

COLLECTORS AND BULLION COINS

- 9.12. To improve the yields of good quality precious metal products at each process stage, one project is to develop and apply appropriate quality engineering techniques.
- 9.13. A flexible plastic material for the uncirculated coin pack is to be found, which is stronger, has better heat-sealing properties, is more readily available and is no dearer than the current plastic laminate. This is a response to customer complaints.
- 9.14. Nickel-plated cupro-nickel will be researched as a material of improved colour and tarnish resistance to normal cupro-nickel, yet within the existing material specifications.

NEW PRODUCTS

- 9.15. The need to demonstrate the Mint's ability to provide the market with a range of products showing features giving increased security, requires a development programme along a number of lines, ie
- (i) To develop physical properties of cupro-nickel to the point of designing a coinage material with a distinctive machine-readable feature.
 - (ii) To provide engineering processes for rimming and edge lettering/beading on an increasing variety of shaped coin specifications.
 - (iii) To research innovative techniques for selective, chemical colouring of blanks/coins, whether as background or a principal feature. Such products complement the bi-metal series of coins now developed. Application to two-coloured precious metal coins will be investigated alongside work with base metals.

QUALITY

QUALITY POLICY

- 9.16. A statement of policy has been set, which is:

"We, The Royal Mint, are determined that the products and services we supply will be judged by our customers to be the best in the world.

In our view it is fundamental to our business that we fully understand the requirements of our job, our customers, and those with whom we work. Our personal standards are to conform to the requirements at all times.

Our definition of quality is achieving customer expectations.

The system of quality management concentrates on prevention, eliminating the opportunities for error.

Everyone is responsible for quality improvements, understanding their job and doing it right first time.

The standard of quality is that which eliminates all customer complaints and, where possible, is zero defects.

The measurement of quality is the cost of doing things wrong ie non-conformance".

QUALITY IMPROVEMENT

- 9.17. Building on the preparatory work of last year, a three-year programme of quality improvement will be undertaken. Attention will be given first to the Production Division, with the specific aims of reduced costs, greater competitive edge, increased customer loyalty and employee pride.

9.18. This year's programme includes these detailed objectives:

- (i) To determine the quality costs of all products.
- (ii) To develop procedures on the way to establishing, during the third year, a quality system which is at least adequate for the requirements of internationally recognised certification standards, and is in advance of any future call by our customers for independent accreditation of the Mint for quality assurance purposes.
- (iii) To implement a programme (emphasizing production responsibilities for quality and the need at every stage to do error-free work) in:
 - a. the Collectors Coin Production Department, with the target of reducing quality costs by a minimum of 5% in the year (PCU).
 - b. The Tools Department, with the target of reducing quality costs by a minimum of 3% in the year.
 - c. The Coining Department (CPR), with the target of reducing quality costs by 2% in the second half of the year.

For further improvements on the Quality aspect see Section 8.

- (iv) To visit the principal suppliers and sub-contractors in order to encourage them to institute quality systems to meet our expectations.
- (v) To draw upon the services of the Wales Quality Centre, the Polytechnic of Wales and consultants, as necessary, in order to raise awareness of quality issues among personnel at all levels, equipping them to use specialist techniques, as appropriate.

9.19. The programme will involve working groups for each product area, reporting to a steering group. The improvements expected will complement those arising from introducing new machinery either purchased externally or developed by RM resources.

10. INFORMATION TECHNOLOGY

10.1. The forecast expenditure over the next four years amounts to £0.88 million (£0.39 million in 1989/90) in respect of hardware and £0.52 million in respect of in-house support costs. Royal Mint policy is to take the benefits available from information technology wherever they can be identified to be cost effective.

10.2. A formal Information Technology Strategy is now in place which provides for:

- . the continued development of the departmental systems network
- . the continued operation of central support for new and existing systems from the Computer Bureau. This involves the recruitment and training of specialist staff and the use of external contractors
- . the provision of specific and general training

- . the use of personal computers where cost effective and consistent with the IT policy
 - . the establishment of a corporate information system and a central information centre
 - . progressive development to ensure software portability.
- 10.3. Departmental Liaison Officers have been appointed to provide a primary point of contact, maintaining familiarity with and awareness of security procedures, current projects and co-ordinating suggestions for future systems.
- 10.4. The main current task is the establishment of a Financial Management and Corporate Information System (FMCIS). Price Waterhouse have been employed to assist a Royal Mint team select and to implement a Financial Management System by 31 March 1990 and a Corporate Information System by 30 September 1990.
- 10.5. The FMCIS data base will obtain most of its information from the existing departmental computer systems. The needs of managers relating to corporate information will certainly initiate amendments to the departmental systems.
- 10.6. The main application areas and associated costs are detailed below:

	£'000
1. Financial Management and Corporate Information System	550
2. Personnel Systems (includes Time and Attendance)	110
3. Collector Coin Marketing Systems	200
4. Production Support Systems	150
5. Maintenance and Stock Control Systems	80
6. General Office Automation Systems	60
7. System Replacement	250
	£1.4m

11. CAPITAL INVESTMENT

- 11.1. The forecast capital to be spent in the first year of the Plan is £2.9m which includes £0.39m on Information Technology detailed in Section 10. Provision has been made for a spend of £3m in subsequent years which brings the total over the four years to £11.9m.
- 11.2. Major projects already planned or in hand include coining press replacement, improvements in rolling mills, extension of the facilities to produce plated blanks and to refurbish the roof covering on three buildings.

11.3. The projects involving expenditure in excess of £100,000 in the 4 year Plan are tabled below with a more detailed summary in Appendix 7(ii).

11.4. Projects will only go ahead if they satisfy the Mint's established capital investment criteria which is that unless specially approved for legal or similar reasons such as safety, welfare, and improved working conditions each project is normally expected to meet the following criteria:

- (i) a positive "net present value" using a discount rate of 10%,
- (ii) a "discounted cash flow yield rate" in excess of the marginal cost of capital,
- (iii) a maximum pay-back period of 5 years on a non-discounted basis.

AREA	PROJECT	TOTAL COST (£'000)
BLANK MANUFACTURE	Updating of Rolling Mills	1,000
	Rolling Mill Precious Metal Unit	122
PLATING PROJECTS	2nd Nickel Line	2,100
	Extension to Copper Line	615
	Brass Plating Line	1,500
COIN CONVERSION	Coining Presses	932
	Rotary Furnace for Brass Blanks	130
WORKS ENGINEERING	Roof Repairs (total of 3 schemes)	270
	Air Compressor	106
TECHNICAL SERVICES	Computer Aided Design	106

The Financial year spread of capital expenditure is detailed in Appendix 7(i).

12. PERSONNEL & TRAINING

MANPOWER

12.1. The Mint's objective is to man economically in relation to the demands of the business. With the agreement of Treasury Ministers, the Royal Mint has delegated authority to operate within 10% of a manpower complement of 979.

12.2. The outturn average for 1988/89 was 964. In the main the reduction in numbers has been a result of improved productivity. However, the Mint has lost specialist Toolmakers attracted by substantially higher remuneration in the private sector. The situation has had to be dealt with by reorganisation and increased levels of overtime working.

Manning for 1989/90 is expected to remain at the 88/89 level.

- 12.3. There are growing signs that the buoyant economy of South Wales is leading to an acute shortage of specialist skills. The constraints imposed on the Mint prevent it from matching the commercial pay rates for specialised skills in the private sector and this could jeopardise further productivity improvements. If this becomes a serious problem it will be necessary to negotiate special pay additions in order to retain our skilled workforce.
- 12.4. A less acute problem is an increase in turnover of young administrative personnel which will be countered by introducing alternative working practices, including flexible attendance, part-time working and job sharing.

INDUSTRIAL RELATIONS

- 12.5. The high level of the Mint's production activity has been seen by personnel as evidence of success in the commercially competitive environment in which the Mint operates. There has been no disruption whatsoever over local issues and even one isolated involvement of the CPSA and NUCPS in support of the Union line on GCHQ was organised in such a way as to minimise any possibility of causing customer dissatisfaction. Morale is high and the low levels of sick and associated absences have been maintained.
- 12.6. Although Team Briefing which is well established throughout all non industrial areas has not been formally extended to the shop floor, there are good internal communications and relations with meaningful participation by both union representatives and industrial personnel generally.

PERFORMANCE-RELATED PAY

- 12.7. The objective, within the constraints of the system, is to apply a sound and equitable system of reward and incentive for performance at all levels of the business.
- 12.8. All industrial personnel benefited from the industrial incentive scheme now in its 17th year with payments ranging from £1100 to £2400. For non industrial staff a profit-related merit payment scheme resulted in payments of £668 to £1865 to approximately 17% of staff. Although non industrial personnel continue to press for the application of profit sharing to all on a similar basis to that provided for in the industrial incentive scheme, they have accepted that given the constraints of the current merit payment scheme, application has been both equitable and effective.
- 12.9. The industrial scheme which is clearly very effective is to be continued. The future effectiveness of the non industrial merit payment scheme is less clear particularly in the light of the long term flexible pay arrangements recently agreed between the Centre and unions. Consultations with the staff and unions as provided for in the agreement will be held before concluding on whether or not the Mint's alternative performance pay arrangements should be continued.

TRAINING

- 12.10. The Mint is committed to ongoing training involvement to ensure provision of the necessary resource and skill to meet the requisite day to day and longer term corporate plans and objectives. During 1989/90 it has been decided to increase our intake of Apprentices by 50% on the previous year.

- 12.11. The successful outturn in technical areas has been evidenced yet again by success in the Engineering Employers annual Apprentice competition which in 1988/89 saw 7 of the Mint's Apprentices winning 9 out of 14 craft prizes.
- 12.12. There is also evidence of increased commitment in non technical areas with individuals at intermediary and final stages of involvement in Open University BA Degree courses for Computer and Business Studies, Personnel and Purchasing and Supply diplomas, Accountancy qualifications and Marketing skills.
- 12.13. The training budget for 1989/90 is £108,000 (compared to £72,000 for 1988/89) and will provide for continuation of both the Mint and individual effort to provide the requisite reservoir of resource in craft, administrative and professional areas.

SAFETY POLICY

- 12.14. The Royal Mint recognises that many of the activities and processes carried out on the premises could be hazardous to the health and safety of employees and other persons. The Royal Mint accepts its responsibility to take whatever measures are reasonably practicable to reduce the risk from these hazards.
- 12.15. Arrangements, procedures and defined responsibilities are detailed in the Royal Mint Health & Safety Manual. From 1 October 1989 the Control of Substances Hazardous to Health (COSHH) regulations become effective and action is in hand to ensure that the Mint works within these regulations.

13. GENERAL

PUBLIC AND COMMUNITY RELATIONS

- 13.1. Public Relations expenditure (£250,000 budgeted for 1989/90, the same as the current year) will continue to be used to good effect with emphasis on high profile product launches and support (representing over 50% of budgeted expenditure). The overall aim is to maintain awareness of the Royal Mint, to enhance its stature, and to develop its corporate identity. To this end a corporate brochure will be produced during the year together with a special book to commemorate the 500th anniversary of the sovereign.

The Mint will continue to demonstrate its interest in local affairs with membership of senior managers on the Boards of local businesses and other bodies and by giving practical support, both financial and voluntary, to such organisations.

EXECUTIVE AGENCY STATUS

- 13.2. The Royal Mint has offered itself as a candidate for Executive Agency status. As a Trading Fund of some 14 years standing, the Mint already operates under a rigorous commercial regime and has many of the delegations, controls and self-imposed operating objectives envisaged by the 'Next Steps' project team. These have been all the easier to integrate into the ethos of the organisation because the Mint manufactures and sells a discrete range of products and its success or failure in this endeavour can be readily judged from its bottom line profit performance.

- 13.3. Nevertheless, Executive Agency status is seen as an opportunity to strengthen the commercial position of the Mint. In general terms, the Mint's aim is to establish greater freedoms on the pay, remuneration and recruitment fronts. In turn, the Treasury will expect a more visible accountability and the more rigorous imposition of control objectives, which, in turn, should lead to a better return on our assets employed.
- 13.4. Discussions are well advanced with the Treasury with a view to the Mint becoming an Executive Agency on 1 April 1990.
- 13.5. The move to Executive Agency status affords an opportunity to update the corporate identity of the Mint. The Royal Mint's logo and the palace script used on all corporate literature (see, for example, the front cover to this Plan) is now seen as out of step with the modern times in which we operate. Like many larger organisations before us, a new logo will be adopted which, whilst retaining the essential elements of our past, will be more future looking and consistent with the Mint's modern day commercial operations. This new logo will be introduced to coincide with Executive Agency status.

1992 (SINGLE EUROPEAN MARKET)

- 13.6. The Mint welcomes the challenge presented by the creation of a Single European Market in 1992. It is too early to quantify all the specific opportunities and threats. Certainly the harmonisation of standards, the removal of technical barriers and the simplification of customs' procedures are all likely to be of benefit. The further liberalisation of public procurement may be a minor nuisance in that advance publication of our purchasing requirements will lengthen leadtimes still further. As the sole supplier of UK coinage, many of the threats from competition will not be felt as heavily as by other commercial organisations.
- 13.7. Nevertheless, it is important not to underestimate the ramifications of 1992. As a corporate member of the CBI, full advantage is being taken of their advisory service to help businesses prepare for this event. A senior Mint officer has been appointed to co-ordinate, assess and report on the full implications of 1992.

14. STRATEGIC REVIEW

- 14.1. The financial forecasts at Annex 2 reflect the most likely scenarios. The 1989/90 figures are consistent with the approved operating budgets and targets. The difficulty in forecasting future demand is well established and the figures for years 2-4 of the Plan period reflect this uncertainty. In view of this, the financial figures included in the following paragraphs on sensitivity and strategic options have, in general, been based on year 1.

SENSITIVITY

Standard Coin

- 14.2. The demand for circulating coin is very volatile and past experience suggests that in-year demand for UK coins can vary by in excess of 50%. Forecasting demand for overseas coins is subject to similar problems, in addition to which from time to time tenders are invited for very large unforeseen orders.

- 14.3. The following table shows the affect on profit of significant changes in the mix/demand for either overseas or UK demand.

	VARIATION (STANDARD COIN ISSUES)	SALES VOLUME MILLIONS/PCS	EFFECT ON STANDARD COIN PROFIT £m
(i)	50% increase in UK coins (excluding new 5p/10p)	575 Increase	(1.45) Decrease
(ii)	50% increase in Overseas coins	500 Increase	1.20 Increase
(iii)	50% reduction in UK coins (excluding new 5p/10p)	(575) Decrease	0.67 Increase
(iv)	50% reduction in Overseas coins	(500) Decrease	(1.85) Decrease
(v)	50% of overseas cupro- nickel coins replaced by white plated coins		(0.27) Decrease

- 14.4. In the short term an increase in demand of 50% would be difficult to meet within existing production facilities. Higher overtime levels and additional sub-contracting of work would meet the situation in part. There would also be the option of declining to take on those orders which were least profitable. In the longer term it would be necessary to increase our capacity by purchasing additional plant and equipment.

- 14.5. Should demand decrease by 50% this would result in a serious surplus of capacity. It would necessitate a fundamental review of the fixed element of our costs, particularly labour costs. It is likely that any such decrease in demand would be gradual rather than sudden. Thus we would have some warning to effect capacity adjustments.

- 14.6. A continuing increase from the current high prices for base metals may lead to their replacement by other alloys or plated coins. The introduction of plated 1p and/or 2p coins would significantly reduce the cost of these coins and have the following affect on Royal Mint profits.

	OPTION	EFFECT ON STANDARD COIN PROFIT £M
(i)	Plated 1p coin	1.20 Increase
(ii)	Plated 1p and 2p coins	2.40 Increase

Should this situation arise it would be necessary to install additional plating capacity.

The above figures assume such an increase, as well as a continuation of the existing UK contract arrangements, and overall demand for homogeneous blanks exceeding Llantrisant capacity.

Collector Coin

- 14.7. The profitability of collector coin sales is significantly affected by changes in volume, US\$/sterling exchange rates and gold prices.
- 14.8. There is a net inflow of US Dollars from the North American marketing operations. An increase/decrease in the value of the US\$ against sterling as compared with the economic assumption of 1.8 US\$ to £1 will increase/decrease profit. An exchange rate of 1.6 US\$ to £1 sterling would increase profit by £0.280m and an exchange rate of 2.0 US\$ to £1 sterling would reduce profit by £0.220m.
- 14.9. The gold content represents a large element of the cost of UK collector coins and an increase/decrease in the price of gold will have the opposite effect on profit, ie an increase in gold costs will reduce profit. The forecast requirement for UK collector coin is approximately 25,000 ozs of which 40% has already been purchased. Any change from the assumed price of £230 per oz when the balance is purchased will directly affect profit, eg an increase of £20 per oz will reduce profit by £0.300m.
- 14.10. Wherever possible benefits available from changes in exchange rates and gold prices will be maximised and losses minimised by the use of forward transactions, options and gold leasing facilities.
- 14.11. Recent experience indicates that sales volumes are affected by external factors, and the following table shows the sensitivity of profit forecasts to variation in sales volume.

VARIATION	EFFECT ON COLLECTOR COIN PROFIT £M
Increase of 15% in Sales Volume and Value	£1.0m Increase (30%)
Decrease of 15% in Sales Volume and Value	£1.0m Decrease (30%)
Decrease of 30% in Sales Volume and Value	£2.0m Decrease (60%)

- 14.12. The above figures indicate that a sales volume/value shortfall of 50% or higher will result in an overall loss on collector coin. If faced with a downturn in sales, in the short term we would be prepared to accept reduced margins. In the longer term, however, it would be necessary to reduce our fixed costs. A review of fixed costs associated with proof coin production will take place during 1989/90 (see paragraph 8.12).

Britannia

- 14.13. Changes in both the gold price and overall demand for bullion coins have a direct effect on profitability. The sales price changes with gold value and any change has a direct effect on profit, eg a 15% increase in the gold price to £265/oz would add £0.160m and change the forecast loss of £0.100m to a profit of £0.060m.

- 14.14. Sales demand for bullion coins is very volatile and significant variations in demand may arise. The following figures are indicative of the effect on profitability of changes in sales volume:-

VARIATION IN DEMAND (‘000 ozs)	REVISED ANNUAL SALES (‘000 ozs)	EFFECT ON PROFIT £M
Increase of 20%	149	0.077 Increase
Increase of 50%	186	0.192 Increase
Reduction of 20%	99	(0.077) Decrease
Reduction of 50%	62	(0.192) Decrease

- 14.15. It is likely that a fall in the gold price would be accompanied by lower demand and, assuming a 15% reduction in the price of gold to £196/oz and a 15% reduction in sales volume, the forecast loss for the year would increase from £0.100m to £0.318m. As some protection against this situation arising and to limit our risk exposure, expenditures will be closely controlled against sales revenue.

STRATEGIC OPTIONS

Standard Coin

- 14.16. The Royal Mint produces standard coins for over 60 countries worldwide and in 1989/90 the forecast profit from this product group is £3.4m. Although UK coin is the primary product the contribution from overseas standard coin sales is extremely important amounting to £4.0m in 1989/90 well in excess of the average target contribution of £3.5m. The target contribution corresponds to the share of total fixed costs assessed simply on the basis of output. However, a decision to withdraw from the market for overseas standard coins would not result in a pro-rata reduction in fixed costs and there is clearly significant financial benefit from continuing to compete in the world market for the supply of standard coins.
- 14.17. Under a long-standing arrangement one-third of the total overseas standard coin business is sub-contracted to the two Birmingham mints (BMP and IMI). Assuming these arrangements could be varied the affect on overall standard coin profits would be:-

OPTION	EFFECT ON STANDARD COIN PROFIT (£m)
(i) No sub-contracting of overseas standard coin	0.66 Increase
(ii) All overseas standard coin sub-contracted	(2.27) Decrease

- 14.18. Although scenario (i), no sub-contracting, looks attractive the possibility of the Birmingham mints continuing to compete cannot be excluded. In the event, a change in the sub-contracting arrangements would at least in the short-term disrupt the market because of increased competition and the overall benefit would be much less than forecast. In the period of the Plan

no changes are proposed to the existing sub-contracting arrangement although the position will be kept under close scrutiny in the light of any significant changes in either the mix or volume of future demand.

Collector Coin

- 14.19. There are two major elements to be considered, the product range and the market areas.
- 14.20. The product range is dominated by United Kingdom coins and in particular gold coins and, although from time to time large orders from overseas will have a significant impact, these are largely of a 'windfall' nature. United Kingdom gold coins account for 79% of the total collector coin profit in 1989/90 and this makes the overall outturn particularly vulnerable as the demand for gold coins is subject to external influences, eg gold price, credit control. The long term aim is to reduce the reliance on gold products by developing the market for silver and base metal products.
- 14.21. The UK Retail (29%) and USA Retail (16%) account for 45% of total collector coin sales and 51% of marketed collector coin sales. These activities are within our control and will continue to be developed with the long term aim of increasing their share of total sales.
- 14.22. Trade sales which cover UK, USA and other overseas markets are dominated by a relatively small number of major customers. The withdrawal of one or more major customers would have a significant impact on profit. A 50% reduction in trade sales with no consequent increase in retail sales would reduce overall collector coin profit by £1.4m (37%). In order to reduce this risk, the long term strategy is to increase the number of trade outlets both numerically and geographically.

Britannia

- 14.23. The strategic options to that adopted were:-
- a. To continue to support Britannia on a worldwide basis. This would have required a very substantial additional investment in marketing costs. The attendant risk, given the general outlook for gold investment, was such that we did not view this option as either responsible or sensible.
 - b. To withdraw completely from the bullion coin market. However, there is always the possibility of an upturn in market conditions and it is therefore sensible to maintain a presence in the market in order to react quickly to such a change. Furthermore a complete withdrawal from the market could damage the wider corporate image of the Mint.

APPENDIX 1

**FORECAST FINANCIAL OUTTURN
COMPARED TO PLAN FOR 1988/89**

STANDARD COIN	1988/89 PLAN (£m)		1988/89 FORECAST OUTTURN (£m)		VARIANCE (£m)	
	UK	O/SEAS	UK	O/SEAS	UK	O/SEAS
Sales Value	20.4	29.4	26.3	24.9	5.9	(4.5)
Variable Cost	12.1	26.4	17.2	20.2	(5.1)	6.2
	<u>8.3</u>	<u>3.0</u>	<u>9.1</u>	<u>4.7</u>	<u>0.8</u>	<u>1.7</u>
Contribution	11.3		13.8		2.5	
Fixed Cost	9.2		10.6		(1.4)	
Profit	<u>2.1</u>		<u>3.2</u>		<u>1.1</u>	
<hr/>						
COLLECTORS COIN						
Sales Value	20.2	4.5	16.8	7.9	(3.4)	3.4
Variable Cost	14.7	3.3	13.2	6.7	1.5	(3.4)
	<u>5.5</u>	<u>1.2</u>	<u>3.6</u>	<u>1.2</u>	<u>(1.9)</u>	<u>-</u>
Contribution	6.7		4.8		(1.9)	
Fixed Cost	2.6		2.6		-	
Profit	<u>4.1</u>		<u>2.2</u>		<u>(1.9)</u>	
<hr/>						
BRITANNIA BULLION						
Sales Value	5.7		0.8		(4.9)	
Variable Cost	4.0		2.3		1.7	
Contribution	1.7		(1.5)		(3.2)	
Fixed Cost	0.2		0.2		-	
Profit	<u>1.5</u>		<u>(1.7)</u>		<u>(3.2)</u>	
<hr/>						
MEDALS AND MISC						
Sales Value	1.1		1.3		0.2	
Variable Cost	0.7		0.7		-	
Contribution	0.4		0.6		0.2	
Fixed Cost	0.3		0.3		-	
Profit	<u>0.1</u>		<u>0.3</u>		<u>0.2</u>	
<hr/>						
TOTAL Profit	7.8		4.0		(3.8)	
<hr/>						

APPENDIX 2(i)

**FORECAST PRODUCT GROUP CONTRIBUTION
AND PROFIT STATEMENT 1989/90 TO 1992/93**

ACTUAL PRICES

	STANDARD COIN		COLLECTORS COIN		BRITANNIA	MEDALS & MISC.	TOTAL
	UK	OVERSEAS	UK	OVERSEAS	£m	£m	£m
	£m	£m	£m	£m			
1989/90 (Forecast)							
Sales Value	33.9	19.8	16.6	8.1	1.1	1.3	80.8
Var Costs	23.2	15.8	10.5	7.0	0.7	0.8	58.0
	<u>10.7</u>	<u>4.0</u>	<u>6.1</u>	<u>1.1</u>			
Contribution	14.7		7.2		0.4	0.5	22.8
Fixed Costs	11.3		3.4		0.5	0.3	15.5
	<u> </u>		<u> </u>		<u> </u>	<u> </u>	<u> </u>
Profit	3.4		3.8		(0.1)	0.2	7.3
	<u> </u>		<u> </u>		<u> </u>	<u> </u>	<u> </u>
1990/91 (Provisional Forecast)							
Sales Value	31.6	21.0	13.2	9.2	1.5	1.4	77.9
Var Costs	20.6	17.5	8.8	8.0	0.8	0.9	56.6
	<u>11.0</u>	<u>3.5</u>	<u>4.4</u>	<u>1.2</u>			
Contribution	14.5		5.6		0.7	0.5	21.3
Fixed Costs	10.2		3.6		0.6	0.3	14.7
	<u> </u>		<u> </u>		<u> </u>	<u> </u>	<u> </u>
Profit	4.3		2.0		0.1	0.2	6.6
	<u> </u>		<u> </u>		<u> </u>	<u> </u>	<u> </u>
1991/92 (Indicative Forecast)							
Sales Value	46.6	22.2	13.0	9.8	1.9	1.5	95.0
Var Costs	32.8	18.9	9.0	8.6	0.9	1.0	71.2
	<u>13.8</u>	<u>3.3</u>	<u>4.0</u>	<u>1.2</u>			
Contribution	17.1		5.2		1.0	0.5	23.8
Fixed Costs	13.2		3.4		0.7	0.3	17.6
	<u> </u>		<u> </u>		<u> </u>	<u> </u>	<u> </u>
Profit	3.9		1.8		0.3	0.2	6.2
	<u> </u>		<u> </u>		<u> </u>	<u> </u>	<u> </u>
1992/93 (Indicative Forecast)							
Sales Value	45.3	33.2	13.4	5.1	2.2	1.6	100.8
Var Costs	31.3	26.1	9.1	4.3	1.1	1.0	72.9
	<u>14.0</u>	<u>7.1</u>	<u>4.3</u>	<u>0.8</u>			
Contribution	21.1		5.1		1.1	0.6	27.9
Fixed Costs	17.4		3.4		0.7	0.4	21.9
	<u> </u>		<u> </u>		<u> </u>	<u> </u>	<u> </u>
Profit	3.7		1.7		0.4	0.2	6.0
	<u> </u>		<u> </u>		<u> </u>	<u> </u>	<u> </u>

Note: The variation in fixed costs from year to year is mainly attributed to changes in the level of finished coin stocks.

FINANCIAL PERFORMANCE 1989/90-1992/93

	1989/90	1990/91	1991/92	1992/93
SALES (£m)	80.8	77.9	95.0	100.8
OP PROFIT (£m) (after current cost depreciation)	7.3	6.6	6.2	6.0
CURRENT COST ADJUSTMENTS (£m) (for cost of sales and monetary working capital)	1.1	1.1	1.2	1.3
CURRENT COST PROFIT (£m)	6.2	5.5	5.0	4.7
NET INTEREST (£m)	0.4	-	(0.5)	0.5
DIVIDEND (£m)	6.5	5.5	4.5	5.0
TRANSFER TO RESERVE (£m)	0.1	0.0	0.0	0.2
OPERATING PROFIT AS % ON SALES	9.0	8.5	6.5	6.0
CURRENT COST OPERATING PROFIT AS A % OF AVERAGE NET ASSETS AT CURRENT COST	11.8	9.8	8.4	7.5
CURRENT COST PROFIT AS % ON PUBLIC DIVIDEND CAPITAL (PDC)	88.6	78.6	71.4	67.1
SALES AS A MULTIPLE OF AVERAGE CURRENT COST CAPITAL EMPLOYED	1.5	1.4	1.6	1.6
CURRENT COST OPERATING PROFIT AFTER INTEREST AS % OF AVERAGE PDC PLUS CURRENT COST RESERVES	12.5	9.8	7.6	8.3

FORECAST FUNDS AND RESOURCES STATEMENT
1989/90-1992/93

ACTUAL PRICES

	1988/89 Forecast Outturn £M	1989/90 £M	1990/91 £M	1991/92 £M	1992/93 £M
CASH AND INVESTMENTS AT 1 APRIL	10.5	2.6	1.0	1.0	1.0
OPERATING PROFIT	4.0	7.3	6.6	6.2	6.0
NET INTEREST RECEIVED	0.7	0.4	-	-	0.5
DEPRECIATION	1.7	1.9	2.1	2.5	2.7
REDUCTION IN WORKING CAPITAL	-	-	0.8	0.5	-
	16.9	12.2	10.5	10.2	10.2
LESS:					
DIVIDEND PAYMENTS	5.5	3.5	6.5	5.5	4.5
NET INTEREST PAID	-	-	-	0.5	-
CAPITAL EXPENDITURE	3.1	2.9	3.0	3.0	3.0
REPAYMENT OF LOANS	0.2	0.1	-	-	-
INCREASE IN WORKING CAPITAL (excludes proposed dividend)	5.5	4.7	-	0.2	0.7
CASH AND INVESTMENTS AT 31 MARCH	2.6	1.0	1.0	1.0	2.0

FORECAST BALANCE SHEETS

ACTUAL PRICES

	1.4.89	31.3.90	31.3.91	31.3.92	31.3.93
	£M	£M	£M	£M	£M
<u>NET FIXED ASSETS</u>					
Land & Bldgs.	7.3	7.9	8.2	8.5	8.8
Plant & Machy.	13.0	15.2	17.4	19.4	21.3
	<u>20.3</u>	<u>23.1</u>	<u>25.6</u>	<u>27.9</u>	<u>30.1</u>
<u>CURRENT ASSETS</u>					
Stocks	85.5	93.9	111.2	117.5	106.3
Debtors & Pre-payments	3.8	4.0	4.2	4.5	4.8
Cash & Investments	2.6	1.0	1.0	1.0	2.0
	<u>91.9</u>	<u>98.9</u>	<u>116.4</u>	<u>123.0</u>	<u>113.1</u>
Less:					
<u>CURRENT LIABILITIES</u>					
Proposed Dividend	3.5	6.5	5.5	4.5	5.0
Creditors Advances And Provisions	57.5	61.2	78.9	85.3	73.4
	<u>30.9</u>	<u>31.2</u>	<u>32.0</u>	<u>33.2</u>	<u>34.7</u>
NET CURRENT ASSETS					
TOTAL ASSETS	<u>51.2</u>	<u>54.3</u>	<u>57.6</u>	<u>61.1</u>	<u>64.8</u>
Financed By:					
Public Dividend Capital	7.0	7.0	7.0	7.0	7.0
Reserves:					
Profit & Loss Account	43.1	46.3	49.6	53.1	56.8
Insurance	1.0	1.0	1.0	1.0	1.0
NLF Advances	0.1	-	-	-	-
11% 1975-1990					
12 1/8% 1975-1990					
	<u>51.2</u>	<u>54.3</u>	<u>57.6</u>	<u>61.1</u>	<u>64.8</u>

APPENDIX 5(i)

FINANCIAL RESULTS 1985/86-1988/89

ACTUAL PRICES

	STANDARD COIN		COLLECTORS COIN		BRITANNIA £m	MEDALS & MISC £m	TOTAL £m
	UK £m	OVERSEAS £m	UK £m	OVERSEAS £m			
1985/86							
Sales Value	17.5	28.0	16.4	8.2	-	1.3	71.4
Var Costs	10.0	23.4	13.2	7.5	-	0.8	54.9
	<u>7.5</u>	<u>4.6</u>	<u>3.2</u>	<u>0.7</u>	-	-	-
Contribution		12.1		3.9	-	0.5	16.5
Fixed Costs		11.1		2.2	-	0.3	13.6
		<u> </u>		<u> </u>		<u> </u>	<u> </u>
Profit		1.0		1.7	-	0.2	2.9
		<u> </u>		<u> </u>		<u> </u>	<u> </u>
1986/87							
Sales Value	14.9	25.9	14.7	11.3	-	1.3	68.1
Var Costs	7.4	18.8	11.2	9.8	-	0.7	47.9
	<u>7.5</u>	<u>7.1</u>	<u>3.5</u>	<u>1.5</u>	-	-	-
Contribution		14.6		5.0	-	0.6	20.2
Fixed Costs		10.6		2.3	-	0.4	13.3
		<u> </u>		<u> </u>		<u> </u>	<u> </u>
Profit		4.0		2.7	-	0.2	6.9
		<u> </u>		<u> </u>		<u> </u>	<u> </u>
1987/88							
Sales Value	16.6	18.9	21.8	6.5	2.2	1.1	67.1
Var Costs	8.4	14.4	18.2	5.6	0.4	0.6	47.6
	<u>8.2</u>	<u>4.5</u>	<u>3.6</u>	<u>0.9</u>			
Contribution		12.7		4.5	1.8	0.5	19.5
Fixed Costs		8.3		2.8	2.2	0.4	13.7
		<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>
Profit		4.4		1.7	(0.4)	0.1	5.8
		<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>
1988/89 (Forecast) Outturn							
Sales Value	26.3	24.9	16.8	7.9	0.8	1.3	78.0
Var Costs	17.2	20.2	13.2	6.7	2.3	0.7	60.3
	<u>9.1</u>	<u>4.7</u>	<u>3.6</u>	<u>1.2</u>			
Contribution		13.8		4.8	(1.5)	0.6	17.7
Fixed Costs		10.6		2.6	0.2	0.3	13.7
		<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>
Profit/(Loss)		3.2		2.2	(1.7)	0.3	4.0
		<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>

- Notes: (i) The variation in fixed costs from year to year is mainly attributed to changes in the level of finished coin stocks.
- (ii) To be consistent the profit for 1985/86 is now shown after current cost depreciation and will not, therefore, correspond to earlier Plans.
- (iii) Collector coin figures are after payment of commission on UK precious metal coins, except for 1988/89.
- (iv) 1987/88 and 1988/89 Britannia Sales and Variable Costs exclude bullion values.

FINANCIAL PERFORMANCE 1985/86-1988/89

	1985/86	1986/87	1987/88	1988/89 (Forecast) Outturn
SALES (£m)	74.4	69.3	67.9	78.0
OP PROFIT (£m) (after current cost depreciation)	2.9	6.9	5.8	4.0
CURRENT COST ADJUSTMENTS (£m) (for cost of sales and monetary working capital)	(0.6)	(0.7)	(1.0)	(1.0)
CURRENT COST PROFIT (£m)	2.3	6.2	4.8	3.0
NET INTEREST (£m)	0.5	0.8	0.8	0.7
DIVIDEND (£m)	3.5	6.5	5.5	3.5
TRANSFER TO RESERVE (£m)	(0.7)	0.5	0.1	0.2
OPERATING PROFIT AS % ON SALES	3.9	9.9	8.5	5.1
CURRENT COST OPERATING PROFIT AS A % OF AVERAGE NET ASSETS AT CURRENT COST	5.5	14.5	10.3	6.0
CURRENT COST PROFIT AS % ON PUBLIC DIVIDEND CAPITAL (PDC)	32.9	88.6	72.9	42.9
SALES AS A MULTIPLE OF AVERAGE CURRENT COST CAPITAL EMPLOYED	1.8	1.6	1.5	1.6
CURRENT COST OPERATING PROFIT AFTER INTEREST AS % OF AVERAGE PDC PLUS CURRENT COST RESERVES	6.7	17.0	12.4	7.4

- Notes: (i) Monetary Working Capital Adjustment now excludes the metal adjustment.
- (ii) To be consistent the operating profit for 1985/86 is now shown after current cost depreciation and will not, therefore, correspond to earlier Plans.
- (iii) Sales values for 1987/88 and 1988/89 exclude the bullion sales element of Britannia bullion coin.

SALES VOLUMES BY PRODUCT GROUP 1987/88-1992/93

	1987/88 (Actual)	1988/89 (Forecast Outturn)	1989/90	1990/91	1991/92	1992/93
1. STANDARD COIN AND BLANKS: all figures are in MILLIONS of pieces						
Llantrisant Produced UK Issues	1030	1467	1850	1525	1645	1435
Llantrisant Produced Overseas	743	768	717	717	717	1100
Sub-Contracted Overseas	398	461	400	400	400	480
	<u>2171</u>	<u>2696</u>	<u>2967</u>	<u>2642</u>	<u>2762</u>	<u>3015</u>
2. COLLECTOR COIN:						
UK Gold (Equivalent Ounces - THOUSANDS)	46	28	25	19	19	19
UK Silver (THOUSANDS of items)	138	69	76	66	48	20
UK Base (THOUSANDS of items)	343	314	393	260	221	182
Overseas Gold (THOUSANDS of items)	33	59	11	17	17	17
Overseas Silver (THOUSANDS of items)	193	167	131	158	158	158
Overseas Base (THOUSANDS of items)	664	187	72	30	30	30
3. BULLION COIN (BRITANNIA)						
Equivalent Ounces (THOUSANDS)	201	88	124	170	205	225
4. MEDALS: all figures are in THOUSANDS of pieces						
	84	90	105	105	105	106
5. MEDALLIONS (included in Collector Coin Product Group)						
Gold < 63 mm	1	6	48	48	48	-
Silver < 63 mm	1	82	300	50	50	-
Base < 63 mm	1	82	300	50	50	50

CAPITAL EXPENDITURE PROGRAMME 1989/90-1992/93

1989/90 PROGRAMME

DEPARTMENT		BUILDING £'000	PLANT £'000	TOTAL £'000
Administration and Finance	Firm	15.0	93.5	108.5
	Possible	-	10.0	10.0
				118.5
Assay and Scientific Services	Firm	-	21.3	21.3
	Possible	-	-	-
				21.3
Coin Press Room	Firm	-	958.0	958.0
	Possible	-	36.0	36.0
				994.0
Tools	Firm	-	172.5	172.5
	Possible	-	139.5	139.5
				312.0
Medal Unit	Firm	-	0.5	0.5
	Possible	-	15.0	15.0
				15.5
Melting Rolling and Blanking	Firm	-	353.4	353.4
	Possible	-	-	-
				353.4
Annealing and Pickling	Firm	30.6	135.0	165.6
	Possible	15.0	15.0	30.0
				195.6
Procurement	Firm	-	10.0	10.0
	Possible	-	-	-
				10.0
Proof Coin Unit	Firm	6.0	24.3	30.3
	Possible	-	15.0	15.0
				45.3
Quality Assurance	Firm	-	26.2	26.2
	Possible	-	-	-
				26.2
Precious Metal Unit	Firm	-	160.9	160.9
	Possible	-	45.0	45.0
				205.9
Technical Services	Firm	-	120.9	120.9
	Possible	-	1.8	1.8
				122.7

Works Engineering	Firm	286.5	60.0	346.5
	Possible	-	6.0	6.0
				352.5
Receipt and Despatch	Firm	5.5	26.4	31.9
	Possible	-	-	-
				31.9
Computer Bureau	Firm	-	389.0	389.0
	Possible	-	-	-
				389.0

TOTAL - FIRM				2895.5
TOTAL - FIRM AND POSSIBLE				3193.8

1990/91	-	-	3,000
1991/92	-	-	3,000
1992/93	-	-	3,000

**SUMMARY OF CAPITAL EXPENDITURE PROJECTS
IN EXCESS OF £100,000**

1. Rolling Mill Equipment £500k 1990/91 £500k 1991/92

It is planned to refurbish the Breakdown and Finishing Mills' electrical equipment that are at the end of their operational life.

2. Rolling Mill - Precious Metal Unit £122k 1989/90

A new mill has been ordered for delivery during the first year of the Plan that will improve the quality and productivity of producing precious metal blanks.

3. 2nd Nickel Plating Line £2.1M 1990/91

The requirement is based on anticipated increased demand for this product.

4. Copper Plating Extension £614.8k 1991/92

It is expected that during the period of the Plan that demand for this product will justify this expansion.

**5. Brass Plating Line £1.5M 1992/93
Rotary Annealing Furnace £130k 1992/93**

Development work continues with encouraging results so it is expected to instal a new line during the next 4 years.

6. Coining Presses £931.5k 1989/90

This is the completion of the coining press replacement with the final 7 presses being delivered during 1989/90.

7. Roof Repairs £270k 1989/90

New roof covering is required on three buildings.

8. Air Compressor £106k 1992/93

Two of our compressors are over 20 years old and it is expected that one will need to be replaced during the period of the Plan.

9. Computer Aided Design £106k 1989/90

The scheme has been prepared and it is planned now to go to tender for system for the Design Office.

RESEARCH AND DEVELOPMENT PROGRAMME 1989/90-1992/93

A.	1989/90 PROGRAMME	£
1.	Circulation coins - production	60,500
2.	Collectors' products, including vision systems	23,000
3.	Materials and new coinage concepts	86,500
4.	Development of equipment for sale	20,000
5.	Information gathering	5,000
		<hr/>
		195,000
		<hr/>

B. EXPENDITURE COMPARISON 1987/88-1992/93

	INTERNAL £	EXTERNAL £	TOTAL £
1987/88	129,000	42,838	171,838
1988/89 (estimated)	132,500	21,500	154,000
1989/90	160,000	35,000	195,000
1990/91	190,000	37,000	227,000
1991/92	230,000	38,000	268,000
1992/93	270,000	44,000	314,000

NOTES: (i) Internal expenditure relates mainly to wages and salaries but also includes production of special mechanisms and process disruption costs.

(ii) External expenditure refers to consultancies, contracts, services etc carried out by University, Research Association or company, industry.

**REVIEW OF PRODUCTION, CAPITAL EXPENDITURE
AND R&D FOR 1988/89**

1. PRODUCTION

The following significant events and productivity gains occurred in the year.

1.1. MRB

(i) Casting

The increased availability of the fourth casting line due to refractory improvement and a consequent change in working practices has made the major contribution to a 9% productivity improvement achieved in the area during the year.

A minor contribution to the productivity gain was the introduction of solid state control on two of the casting lines.

(ii) Blanking

A negotiated change in working practices in this area resulted in a 5.8% improvement in productivity.

1.2. PMU

- (i) A number of technical problems have been solved during the year which have improved the quality of silver blanks and given the capability to produce 9999 gold blanks from suitable feed stock.

1.3. AP&P

- (i) The Cetema blank finishing machine came on line during the year, and proved able to produce a blank quality compatible with that of our competitors in the blank export market, albeit at a slower throughput rate than the existing EFCO plant.
- (ii) The major project of installing and commissioning the Nickel Plating Line was realised and our first nickel plated coin orders using 'in house' produced blanks were successfully completed.

1.4. CPR

- (i) The coining centres showed a productivity improvement of 13.2%, much of the improvement being due to high throughput volumes.
- (ii) A part of the productivity improvement can be attributed to the 5 new high speed (700 spm) coining presses which were installed towards the end of the year.

1.5. PCU

- (i) Productivity in the Proof Coin area improved by 31.5%, this was again mainly due to very much higher than anticipated work volumes.

- (ii) The installation of a semi-automatic buffing machine contributed to the overall efficiency gains, the new machine doubling the output of previous machines.
- (iii) At the end of the year a new proof packing line was completed, the new line design concepts should not only improve productivity but also quality control.

1.6. TOOLS

- (i) Two additional CNC milling machines were purchased during the year, these together with those previously purchased allowed the Tools area to cope with an increased workload while reducing manning by 5%.

1.7. MEDALS

- (i) The investment casting capability was extended to cover higher melting temperature alloys such as cupro-nickel, this allowed the production costs on selected medals to be reduced by as much as 50%.

2. CAPITAL EXPENDITURE

The major projects involving planned expenditure in excess of £100,000 in the year 1988/89 were:-

- 2.1. Plant modifications to enable 19mm cast bar to be processed in the Foundry and Rolling Mill (£0.2m)

Increased output was achieved in the foundry casting at 14.8mm that filled the Tandem Rolling Mill's capacity with a two pass schedule so it was not viable to convert to rolling three passes from 19mm.

- 2.2. Rolling Mill Precious Metal Unit (£0.13m)

A contract has been placed but delivery of the mill will be in April 1989.

- 2.3. Nickel Plating Line (£1.25m)

The project was completed within the year.

- 2.4. EFCO Replacement (£0.18m)

Due to reliability problems and the relatively high operating costs of the first new unit, there are no plans for more new machines. The first machine will be used for export blanks and some special work where the high finish demanded justifies the costs.

- 2.5. Coining Presses (£0.23m)

In the year contracts were placed for twelve new high speed presses, five of which were delivered. The project spend in 1988/89 will be about £490k.

- 2.6. Boxing Line (£0.15m)

The line is now complete.

2.7. Buffing Machine (£0.1m)

The machine has been delivered and set to work.

2.8. CNC Machining Centre (£0.12m)

Complete.

2.9. CAD/CAM Master Tools (£0.13m)

Investigation could not make a case for purchase. The work is quicker by conventional methods.

2.10. Coin Store (£0.492m)

Complete.

2.11. Building II Roof Repairs (£0.35m)

The project is complete at a cost of £0.28m.

3. R&D

The following were the major R&D projects of the year:

MATERIALS

- (i) The laboratory phase of developing a process for yellow plating steel blanks has been successfully concluded. Transfer to production scale is now dependent upon a customer's order.
- (ii) The nickel-plating plant was successfully commissioned and the production process refined in fulfilling orders for 11 million coins.
- (iii) Late in the year a short series of trials indicated that use of the nickel-plating plant was feasible for the total enveloping of previously clad (sandwich) materials with nickel. This success offers an important new source of plating business in areas of the market loath to change from traditional suppliers of clad blanks.
- (iv) After limited trials a production route for high-tin brasses has been determined with sufficient confidence to justify taking on a trial order.

BLANK MANUFACTURE

- (i) The problems of preparing blanks with a nickel surface have been investigated. The aim of producing coins from such blanks to a quality superior to that currently offered by any Mint has not yet been satisfactorily realised. The attempt must continue.
- (ii) Manufacturing methods for precious metal blanks have been improved and the product range widened.

CIRCULATION COINS

- (i) The development phase in designing machinery to sort defective blanks is near completion. Riddling units are ordered but yet to be fitted to the annealing furnaces. A workshop prototype sorter for the coining press has been manufactured and is under test.
- (ii) A capability for rimming the edges of equilateral curved heptagonal blanks has been established.
- (iii) The introduction of high-alloy die steel is deferred, awaiting the purchase of a friction screw press.

MEDALS

- (i) Investment casting of medal bars in cupro-nickel proved only moderately successful, in that the product was marginally hard enough though of good surface quality.

QUALITY

A Quality Review was initiated with the aim of maintaining or improving the Mint's high standards of product quality at lower cost. Quality improvement teams for circulation and collectors' products began work in the second half of the year working to a Steering Group.

Awareness of the contribution of Quality Engineering to production was raised throughout the year by frequent discussions with managers, supervisors and trade unions and a training programme for supervisors in statistical techniques.

In this first and preparatory year, the definition of coin standards throughout the product range has been revised and a strategy determined for a shift in emphasis from inspection to a production responsibility for quality. Control techniques for rimming and plating have been introduced and a programme of factory-wide plant capability studies begun.

An improvement in the quality of circulation coins has been achieved with a reduction in batches for sorting of 50% at the year end, when compared with the previous year. A firmer approach in respect of suppliers performance is now paying dividends. Customer returns of collectors products have been reduced together with the introduction of a more customer-orientated procedure to handle such returns.

The quality costs of collectors products have been determined as a basis for measuring improvements in the next Plan year.

Membership of the Wales Quality Centre has been taken but as yet the initiative to operate an improvement programme rests upon existing resources and not specialist consultants.