Physical units of measure were included in the budget together with unit costs, total costs, and distribution of outlays by objects of expenditure for each of the subfunctions. The budget was overburdened with detail and highly inflexible, and was later abandoned. (1) Several other cities experimented with the functional approach but in nearly all cases it was implemented independently of the main budgetary and accounting procedures. In 1938 Ridley and Simon prepared a survey of criteria which could be used in appraising municipal expenditures, but their work was unrelated to planning and budgetary processes. (2)

In Great Britain too, there was only sporadic interest in functional budgeting. When management aids were introduced, they were usually applied on an _ad hoc_ basis outside the formal budgeting system. If functional classifications were used, they were used in statements supplementary to the main estimates. (3) One of the characteristics of the British unitary system of government in the sphere of finance is the concentration of power in the Treasury, particularly in the sphere of budget formulation. Scrutiny of the estimates by Parliament is not intensive and for that reason the Treasury enjoys greater institutional power than its counterpart in the U.S.A.,

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1. Jesse Burkhead, op. cit. pp. 133-4.

2. Clarence E. Ridley and Herbert A. Simon, _Measuring Municipal Activities_.

3. E.A. Collins, op. cit. p. 307.

the Bureau of the Budget. [1] The British system, based as it still is on the constitutional dominance of the legislature, tended until comparatively recent years, to regard with disfavour any proposals for budgetary reform which served ends other than control. One other factor which influenced budgetary reform in Great Britain was the experiment with objective budgeting in the British Army from 1919 to 1926. The experiment was inspired by criticism of the subjective classification system by professional accountants who were inducted into the War Office during the 1914-18 War. They introduced an intricate system of costing which was integrated with the accounts and estimates. In 1926 the system was abandoned, subjective accounting was resumed, and functional accounting was not revived until the nineteen thirties. [2]

These isolated experiments in functional budgeting prior to World War II are not impressive when viewed against the formidable progress made during the past decade. Most budgetary systems had retained a control-orientation, a feature which had become entrenched during the long history of budgeting described in the preceding chapter. In spite of the many exhortations in favour of a more functional approach, budget formats and accounting classifications were firmly established on patterns which would secure control over public expenditure. During

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1. T.H. Caulcott, 'The Control of Public Expenditure' in Robert T. Golembiewski et al, Public Administration, p. 94.

2. E.A. Collins, op. cit. p. 306.

the nineteen thirties the Great Depression stimulated a broader perspective for government responsibilities. Keynesian economics emphasised the relationship between public expenditure and the general state of the economy. This was the beginning of a management orientation in public budgeting in which cost accounting and work measurement were increasingly applied in the sphere of governmental operations. (1) The application of management techniques was intensified during World War II and continued until the nineteen fifties, as will be observed in the section which follows.

2 The Post War Period to 1960

Reference has already been made to war as a major cause of the rapid growth of public expenditure in the twentieth century. (2) The cessation of hostilities in 1945 found the U.S.A. still committed to large military expenditure on a global basis. In 1949 national defence expenditure covering the armed forces, veterans aid, interest on war debt and foreign aid accounted for 72.2 per cent of total Federal expenditure. (3) It was not surprising therefore, that the first major crusade for budgetary reform took place in this sphere. The necessary impetus was given in the National Security Act 1949 which made provision, among other things, for an improvement in the machinery of budgeting and financial control. (4) A

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1. Allen Schick, op. cit. pp. 532-3.
2. See page 16.
3. John F. Due, op. cit. p. 34.
4. Jesse Burkhead, op. cit. p. 163.

programme budget for the army was introduced in 1949. Although primary programmes had previously been determined for planning purposes, considerable adjustment of these had to be made in order to conform with the new programme budget structure. An important feature in this evolution of programme budgeting was the link forged between appropriation headings and programme headings. Under each appropriation heading there were programmes, projects and subprojects, and there was an improved integration of budgetary decisions with policy decisions. There remained, nevertheless, an absence of effective budgetary relationship with major military objectives, a significant feature in a full programme budgeting system. The military sphere is understandably one where measurement of the accomplishment of goals is most difficult. Burkhead has observed that a performance classification may tell citizens whether their hospitals are better this year than last year and by how much, but it cannot be expected to tell them whether they are better defended this year than last year. (1)

A landmark in the history of programme budgeting was the publication of the Hoover Commission's report in 1949. In the literature of performance and programme budgeting the following recommendation of the Commission has been quoted many times:

> We recommend that the whole budgetary concept of the Federal Government should be refashioned by the adoption of a budget based upon functions, activities and projects; this we designate a performance

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1. ibid. pp. 169-170.

> budget. Such an approach would focus attention upon the general character and relative importance of the work to be done or upon the service to be rendered, rather than upon the things to be acquired, such as personal services, supplies, equipment and so on. (1)

The report made a significant contribution to the evolution of programme budgeting. Although the term 'performance budgeting' was used, the basic elements of modern programme budgeting were present. The subsequent Budget and Procedures Act 1950 provided for an executive budget based on functions and activities but the term 'performance budgeting' was not used. When the second Hoover Commission reported in 1955 it used the term 'programme budgeting'.[(2)]

The original emphasis on performance budgeting lead nevertheless to a situation where attention was paid more to evidence of achievement than planning, as will be observed in the developments recorded below. Although much has been written on the differences between performance and programme budgeting, the distinction between the two is not relevant to the present study except in historical context.[(3)] The experiments in performance budgeting conducted in the early fifties were in reality experiments in programme budgeting when seen in the light of programmes, functions and activities. Today, however, a great

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1. U.S.A. Commission on the Organisation of the Executive Branch of Government, op. cit. p. 8.

2. George A. Steiner, 'Problems of implementing Programme Budgeting' in D. Novick, Program Budgeting, p. 313.

3. See for example, United Nations, A Manual for Programme and Performance Budgeting, op. cit. p. 3; Allen Schick, op. cit. pp. 533-539, passim.

deal more is envisaged in programme budgeting than the recasting of budgetary items in terms of activities. The Hoover Commission played an important part in urging a departure from traditional budgetary principles, yet a great deal had still to be done before the all-embracing concept of modern programme budgeting was propounded.

In the post-Hoover era, several budgeting experiments were conducted in the sphere of local government, two of which are noteworthy. The Richmond performance budget (as it was called) was established in 1949 in response to the City Manager's desire to establish overall management controls following the introduction of the Council-manager system of government. The operations of all departments were analysed and two hundred work programmes were compiled which became the basis for a revision of all accounting classifications. (1) Prior to 1949 the Richmond budget document had shown in the case of the fire department, for example, an allocation based on salaries, supplies, maintenance and other objects of expenditure. An analysis of the work of controlling fires within the city showed that five separate work efforts were involved: General administration, fire prevention activities, actual fire fighting, maintenance of the fire stations and the operation of a rescue service. (2) These were established as work programmes and the salaries and other expenses of conducting each activity were charged to the

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1. Jesse Burkhead, op. cit. pp. 170-5.

2. Robert B. Elmore, 'Performance Budgeting in Richmond, Virginia', <u>Municipal Finance</u>, November 1955, p. 79.

relevant programme and the total of each programme served as the basis for appropriation. Units of performance were established e.g. alarms answered (fire fighting), number of inspections (fire prevention), number of calls (rescue squad), square foot cost (maintenance of stations). It was recognised that while these were not completely indicative of all the work involved in each programme they gave a constant picture of the activity of the fire bureau and a starting point for an analysis of the services performed. (1)

The Los Angeles experiment in performance budgeting was the best known during this period. It was well documented, in particular by Terhune in 1954. (2) The system was initiated in 1950 on the basis of recommendations by the Commission for Reorganisation of the Los Angeles City Government which appears to have been influenced by the work of the Hoover Commission. (3) The budget for the year 1952-53 was presented and adopted on a performance basis. The first step in the process was the analysis of the work of the various departments according to their major functions, subfunctions, activities and subactivities. A system of work measurement was introduced to establish an equitable relationship between the volume of work performed and manpower utilized in completing that volume, but a full unit costing system was not used; the

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1. ibid.

2. George A. Terhune, An Administrative Case Study of Performance Budgeting in the City of Los Angeles, California.

3. Jesse Burkhead, op. cit. p. 175.

basis was man-hours per work unit. (1) Tabulations were made of personnel requirements in terms of man-hours per work unit and these became the measures of performance in the budgets of each department. Supporting schedules of other expenses were added for the budget presentation, but not as part of performance measurement. Each departmental budget was then summarised by activity and by object-of-expenditure.

No further detail need be given with regard to the Los Angeles performance budget in this brief historical review. Sufficient information has been given, however, to reveal its importance in the evolution of programme budgeting. It represented the first major attempt of a large and complex city to integrate functional activity with accounting and budgeting. The analysis of activities was used as the basis for budgetary classification and in addition broad measures of performance were included in the budgetary statements.

The succeeding period from 1953 to 1960 was characterised by the advancement of performance budgeting in various spheres of government. Several local authorities adopted performance budgeting systems on the Los Angeles pattern. From the mid nineteen fifties onwards, however, a new emphasis became apparent. Until this time budgeting had been management-oriented with emphasis mainly on the performance of personnel. The revised classifications based on functions and activities had certainly enabled elected representatives to see more

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1. George A. Terhune, op. cit. p. 4.

clearly what activities were encompassed within the appropriation budget but as yet little attention was given to planning as an integral part of budgeting. Towards the end of the nineteen fifties attention was increasingly devoted to this aspect.

3 Developments in U.S.A. after 1960

The main impetus for the rise of programme budgeting came from research work conducted by the Rand Corporation in the sphere of weapon systems and budgeting in the United States Air Force in the nineteen fifties. The main conclusion drawn by analysts working in this field was that the central problem of the Defence Department hinged on the difficulty of choice among several very expensive weapon systems. An examination of the merits of a weapon system as a whole and the reconciliation of cost with the annual budget required an entirely new system of budgeting. In 1954 the Rand Corporation issued a report recommending a new method of estimating resource requirements in military planning. It named this new method 'program budgeting' and proposed four major 'mission areas' for the Air Force - strategic, defence, tactical and transportation. (1) From this date onwards programme budgeting came to mean an integrated planning, programming, budgeting process which would combine all resources aimed at fulfilling a specific mission. The narrower use of 'programme' in the field of administration and personnel management was abandoned in favour of its application to

1. David Novick, op. cit. p. 86.

describe a combination of activities to meet an end objective.

The introduction of new budgetary techniques in the Defence Department was accelerated when Robert McNamara became Secretary of Defence. He had been a statistics officer in the Air Force and had been engaged in programme budgeting techniques. When the Ford Motor Compnay converted to a programme system of budgeting after World War II, the company appointed a number of former Air Force statistics officers of whom McNamara was one. He later became President of the Ford Company. In 1958 President Eisenhower reorganised the Department of Defence to provide for greater unification of the armed services under the Secretary of Defence. This was the climax to several movements towards integrated planning and budgeting which had taken place since the end of World War II. This reorganisation gave considerable power to the Secretary of Defence. In 1961 McNamara was appointed to this position. Not only did he bring his own knowledge of programme budgeting to the task but he also appointed Charles Hitch, Head of Rand Corporation's Economics Department as Comptroller of the Department of Defence. From 1961 onwards programme budgeting made rapid strides in the Department of Defence and for the fiscal year 1963 the budget was formulated in terms of major programmes and weapon systems.

Prior to 1961 there had been a separation between planning decisions and budgeting decisions with regard to major programmes. Each arm of the services had prepared its long-term plans on the basis of its own evaluation of the needs of national security. Budgeting had been a separate issue having as its starting point the dollar totals which represented the burden the economy could stand. Cost data had been inadequate because the budgetary system had identified cost by object classes, that is, inputs in the form of salaries and maintenance costs instead of on the basis of outputs. Furthermore, the estimates covered only one year and there was little distinction between one-time investment outlay and recurring expenses.

The new programme structure focused attention on national objectives and not on sectional objectives. The Navy's Polaris weapon system, for example, was analysed and compared not only with other Navy objectives like aircraft carrier construction, but it was compared with other strategic retaliatory systems in the air force and army. To this concept of overall planning were added the concepts of long-range financial planning and cost-benefit analysis. These came to be important features of the new budgetary system, changing the emphasis from annual budgeting in terms of appropriations to longer-range planning. Space does not permit any fuller description of the system introduced by McNamara and Hitch, but the five basic elements of the system are recorded because they became the basis on which planning, programming, budgeting structures were established at lower governmental levels and in other countries. These five elements were:

1 A programme structure in terms of missions, forces, and weapon and support systems.

2 An analytical comparison of alternatives.

3 A continually updated five-year force structure and financial programme.

4 Related year-round decision-making on new programmes and changes.

5 Progress reporting to test the validity and administration of the plan. [1]

One important feature of the system lay in the fact that financial planning took place in terms of major programmes and programme elements, and cost categories were used which could be related to appropriation categories. However, complete integration of the two classification systems was not achieved. Although the new programme structure had effective links with appropriation totals, the traditional appropriation process remained relatively unchanged. When the Secretary of Defence had made his decision in programme terms, they were reconstructed into conventional budget terms.

The success of programme budgeting in the Department of Defence was acclaimed in many quarters. President Johnson made a pronouncement at a news conference on the 25th August, 1965, to the effect that the system would be extended to all Federal agencies. He referred to it as

> a very new and very revolutionary system of planning and programming the budgeting throughout the vast Federal Government, so that through the tools of modern management the full promise of a finer life can be brought to every American at the lowest possible cost. (2)

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1. ibid. pp. 89-90.
2. ibid. p. XV.

At the beginning of this chapter reference was made to the comparatively recent origin of programme budgeting and many writers see in the statement of President Johnson the beginning of the programme budgeting era. In later chapters dealing with the implementation of the system it will be seen that President Johnson's claims were too ambitious notwithstanding the success of the McNamara-system in the Department of Defence. From 1965 to 1968 the extension of programme budgeting into other Federal departments illustrated the fundamental truth that one system of programme budgeting cannot be transplanted to another sphere without a great deal of adaptation. There have been major retreats from the comprehensive systems of programme budgeting originally adopted in Federal departments.[(1)]

Criticism of comprehensive budgeting as an instrument for policy analysis has already been discussed.[(2)] Criticism has also been voiced regarding other aspects of the system following the setback of implementation in the Federal Government. Some have seen this setback as an inherent failure of the system itself while others believe that it was attributable to shortcomings in the methods used when extending the system from Defence to other departments. These shortcomings include lack of top level support, a completely unrealistic timetable, inadequate

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1. Bertram M. Gross, 'The New Systems Budgeting', Public Administration Review, Vol. XXIX, 1969, pp. 114-5; Allen Schick, 'Systems Politics and Systems Budgeting', Public Administration Review, Vol. XXIX, 1969, p. 139.

2. See pp. 37-39.

staff and the adoption of an across-the-board instead of a selective approach. [1] There has also been criticism of the over-concentration of power in the hands of one individual like McNamara. Although he brought rationality to military planning he helped lead the nation into a war of unseen magnitude, and the major objective of a quick end to the Vietnam conflict was not realised. [2]

The introduction of programme budgeting on a comprehensive basis in an enormous organisation like the Federal Government was bound to lead to difficulties. Implementation in smaller governmental units has been more successful. Programme budgeting has been introduced in various States, Counties and Cities in varying degrees, including Vermont State Government, City of New York, Fairfax County, City of Dayton, City of Boulder, City of San Diego, Ventura County and the State of Oregon. [3] The best-known experiment in this field, however, was that conducted by the George Washington University in cooperation with five cities, five counties and five states. [4] A series of twelve press releases was issued, mostly in the form of PPB Notes. One of the main purposes of the exercise was to evaluate the practical

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1. I.C. Hancock, 'The American Experience' in I.M.T.A. - U.K., Programme Budgeting - Some Practical Problems of Implementation, pp. 16-19.

2. Time, July 5, 1971, p. 19.

3. The experiences of these particular authorities have been recorded in articles in Municipal Finance (now Government Finance) from time to time.

4. George Washington University, State Local Finances Project.

applicability of programme budgeting to state and local authorities. It became known as the '5-5-5 Project'. In spite of the widespread discussion which has taken place on programme budgeting, the actual number of local authorities in the U.S.A. which have installed a complete system is relatively small, but a more sophisticated use of computers is accelerating the implementation of integrated systems. (1)

In 1971 three organisations in the U.S.A. cooperated in a survey to establish the progress of programme budgeting in local government, the International City Management Association, the National Association of Counties, and the Urban Institute. Of two hundred and twenty five cities responding, 22 per cent indicated that they were presently using a programme budget and 24 per cent indicated that they were actively working towards that type of budgeting. For one hundred and twenty nine counties responding, the percentages were 16 per cent and 15 per cent respectively. A major problem reported by the cities and counties in the sphere of budgetary reform was the recruitment and training of adequate analytical staffs. (2)

4 Developments in the United Kingdom after 1960

As was the case in the U.S.A., the main pioneering work

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1. J. Ward-Wright, 'EDP and the Budgeting Process, Municipal Finance, May 1967, p. 1[illegible].

2. Letter from the Executive Director of the Municipal Finance Officers Association of the United States and Canada, 12th September, 1972.

in the field of programme budgeting in the United Kingdom was carried out in the Ministry of Defence, the main features of the system being adapted from the U.S.A.'s Department of Defence. The system was introduced in 1964 and was known as 'a functional costing system'. (1) Its usefulness in reviewing defence policy aroused interest in other fields and the Treasury began to investigate the possibility of introducing the same procedure in other departments. A series of feasibility studies was therefore mounted, the first two of which were undertaken in the Home Office and in the Department of Education and Science. A consequence of these studies was a decision to bring programme budgeting to the operational stage in the Police and Education Departments respectively.

The feasibility report on education published in 1970 represents an important landmark in the history of programme budgeting in the United Kingdom. (2) It was a general approach rather than a particular technique and one of its main objects was to link expenditure with the planning process. Although the term 'output budgeting' was chosen, it was stated in the report that the nature of the system was comprehensive and would be better described by the phrase 'planning-programming-budgeting'. (3)

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1. J.M. Bridgeman, 'Planning Programming Budgeting Systems', <u>O and M Bulletin</u>, November 1969, p. 175.

2. United Kingdom, <u>Output Budgeting for the Department of Education and Science</u>.

3. ibid. p. 4.

With regard to the Police service, the first steps were taken in 1969 to draw up a programme structure based on a clear and acceptable statement of the objectives of police activities. The programme structure chosen for use by police forces showed a division of expenditure into approximately eighty programme elements grouped into nine major programmes as follows:

1 Operational:

Ground cover. Crime investigation and control. Traffic control. Additional services.

2 Support:

Management. Training. Support services.

3 Overhead:

Pensions. Accommodation. (1)

The programme elements which made up each of the above major programmes were all units of identifiable police activity which could readily be arranged in different ways and broken down into territorial or other organisational groupings. Costs could be identified in terms of centres of responsibility. Information on past expenditure was produced in programme terms by assigning to payments a code corresponding to the programme, and this was accomplished by use of the computer as a by-product of the conventional accounting system.

In the sphere of local government, real interest in programme budgeting began only in 1969. Organisations such as the Institute of Municipal Treasurers and Accountants, the Institute of Local Governments Studies at

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1. G.J. Wasserman, O and M Bulletin, May 1970, p. 199.

Birmingham University and the Royal Institute of Public Administration all published material on the subject and arranged courses and seminars. A working-party of the I.M.T.A. issued a series of fourteen reports on various aspects of programme budgeting. This working-party has now been replaced by a programme budgeting executive to act as a focal point for the development of programme budgeting and to provide progress reports on implementation.[1] Individual local authorities began to investigate how the system could best be implemented, some going no further than reforming their budgetary procedures, others appointing consultants to report on a fully integrated system. Programme budgeting in the sphere of local government is very much in the formative stage in the United Kingdom. In a survey conducted by the Institute of Municipal Treasurers and Accountants in 1970, of six hundred and fifteen replies received from local authorities only thirty six indicated that they were either engaged in or examining programme budgeting.[2] A report on the survey stated that the overall impression gained was one of alert awareness of programme budgeting, but most authorities wanted further proof of practicability before devoting resources to implementation studies.[3] No further surveys have been conducted since 1970 and

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1. I.M.T.A. - U.K., Local Government Finance, January 1972, p. 24.

2. I.M.T.A. - U.K., 'Programme Budgeting Survey 1970', Local Government Finance, August 1970, pp. 292-297.

3. ibid. p. 294

there seems to be much less enthusiasm on the subject in 1972 than previously but more real work is going on. Programme budgeting is being approached in different ways by different authorities. (1) At present Bradford, Coventry, Gloucestershire, Great London Council, Greenwich, Islington, Liverpool and Teeside are in the implementation stage. (2)

The progress of programme budgeting generally has been slower in Great Britain than in the U.S.A. In their 1959 publication on budgeting, for instance, the Royal Institute of Public Administration made no reference to functional or output budgeting nor to the work of the Hoover Commission. (3) The Crick Committee in 1947 endorsed the continuance of the prevailing system of budgeting. (4) The Plowden Committee in 1961 by implication accepted the system, notwithstanding its other contributions to the forward planning of public expenditure. (5) The experience of the army with output budgeting in 1918 may have had a restraining effect on the acceptance of programme budgeting. There has been no shortage of public expenditure surveys, but these have made little impact on traditional budgeting except

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1. Letter from Secretary of the I.M.T.A. - U.K., 8th September, 1972.

2. I.M.T.A. - U.K., Local Government Finance, August 1973, p. 294.

3. R.I.P.A., Budgeting in Public Authorities, op. cit.

4. Chapter IV, Section 4.

5. U.K., The Control of Public Expenditure.