City Research Online

City, University of London Institutional Repository

THE DERIVATION OF A COMPUTER SYSTEM
TO AID THE INTERNAL AUDIT PLANNING PROCESS
IN LARGE INTERNAL AUDIT DEPARTMENTS

John A. Mitchell

A thesis submission for the award of the degree of
Doctor of Philosophy at City University

City University Business School

December 1988

THESIS CONTAINS

VIDEO

CD

DVD

TAPE CASSETTE

THE DERIVATION OF A COMPUTER SYSTEM
TO AID THE INTERNAL AUDIT PLANNING PROCESS
IN LARGE INTERNAL AUDIT DEPARTMENTS

CONTENTS

1. System Flowcharts
2. Output from the Experimental System
3. System Operating Instructions
4. Disk Containing the Experimental System and Data

LIST OF TABLES

LIST OF FIGURES

ACKNOWLEDGEMENTS

COPYRIGHT DECLARATION

I grant powers of discretion to the University Librarian
to allow this thesis to be copied in whole, or in
part without further reference to me. This permission
covers only single copies made for study purposes,
subject to normal conditions of acknowledgement.

ABSTRACT

This monograph describes an applied research project to
develop a computer system to aid the planning process
in large internal audit departments. The ultimate
outcome was a sophisticated computerised planning system
based around a formula, but with the important
additions being able to plan at both audit subject and
control objective levels and take into account previous
audit coverage. The system is capable of producing a
plan for up to five years ahead for well over 1.5
million audits involving over 1000 audit staff. The
only real limitations to the system are the amount of
disk storage available for the data files and the
speed of the central processing unit. The system as
derived will run on any industry standard micro computer
and consists of over 80 separate modules comprising some
9,000 lines of code. The modules are linked to each
other by a menu and the user is given information at
each stage of the operation. The system is both fault
tolerant and user friendly.

The main findings from the research are: it is possible
to build a computer system to aid the internal audit
planning process; spread sheets do not provide the level
of sophistication, or the level of user friendliness
required; risk analysis, as applied to internal
audit planning, is a misnomer and it would be more
appropriate to call the output from the process an
"importance score", rather than a risk index; the use
of a formula to indicate the relative importance of a
particular area to the auditor is practical, but it
does not necessarily provide an absolute rating to that
area; if more than one formula is used to deal with
different aspects of the business, then there is a
danger that the auditor will be unable to rank items from
one area against those of another area with any
certainty of relative, or absolute merit; the formula is
not the most important part of a planning system; the
collection of the data to be manipulated by the formula
is one of the most important aspects of the planning
process, as it ensures that the auditor has a good
understanding of the organisation which he is responsible
for; the best time to collect the data required by the
planning system is during an actual audit, which implies
a link between the historic monitoring process and the
future planning process; there is no correlation
between the importance of an area, as rated by its
importance score, and the resource required to audit it;
there is a relationship between the complexity of the
area to be audited and the resource that is required to
do the work, but the relationship is not necessarily
linear; an "override" facility is required to ensure
that items with a low importance score can be forced
into the scheduling mechanism.

SUMMARY

Introduction
This thesis describes an applied research project to
develop a computer system to aid the planning process
in large internal audit departments. For the
purposes of the research a "large" internal audit
department was defined as those departments with in
excess of 150 staff; although it was expected that
smaller departments would benefit from the work. Very
few internal audit departments have this level of
staffing in a single department, although a few exceed
that total when a number of smaller, but discrete units
are aggregated together. External audit firms are
much larger, but their size is spread across a large
number of clients and it is unusual for a firm to
allocate more than 50 auditors to a single client. The
type of work also differs between the two audit
functions; whereas external audit is required by
statute, the existence of an internal audit department is
usually at the discretion of the firm's top
management (U.K. Local Authorities excepted) and
likewise it can be deemed to be an unnecessary overhead
unless it provides an adequate level of performance.

The level of performance will be specified by the firm's
management and it is usual for the head of internal audit
to submit at least an annual plan for approval by
the board, or chief executive, and to account for the
work done against that plan. This accountability may
be fairly easy to discharge if only a few staff are
involved, but it becomes increasingly difficult as the
number of auditors increase and the Chief Internal
Auditor becomes remote from the day-to-day work. This
remoteness is increased if the audit department is
geographically dispersed and dealing with several
divisions within a large company.

Background to the Research

The researcher held a senior job in a large internal audit department which required the submission of an annual plan of coverage to the Board Audit Committee, with reasons being given as to why some areas were being audited at the expense of others and why some units were being reviewed more, or less frequently, than other apparently like units. During the course of this research the author moved to another large company, but the need for an annual plan to be approved still remained. In both companies the cost of internal audit was in excess of 5 million per annum and as staffing levels were constantly under downward review it was essential that the chief internal auditor was in a position to justify both his plan and his department's staffing level.

Over the last fifteen, or so, years a modest number of books and papers have been published dealing with the subject of so called risk analysis for internal audit planning purposes and it was considered that this methodology could form a useful planning aid. Because of the large number of potential auditable units and the large number of staff in the author's department, it was realised that some form of mechanisation would be required to handle the vast number of calculations that were likely to be involved. A decision was therefore taken to attempt to develop a computerised planning mechanism which would take into account the potential audit universe and the available staff resource.

Other Work in this Area

A literature search revealed that the majority of work done in the area related to the derivation of "risk" formulae and the prioritisation of audit

jobs based on the calculation of a "risk number" by
the application of a formula. Little work had been done
on determining the frequency of review, the allocation
of resources, or the projection of a plan. Some of
the proposed formulae were so complex that it was
obvious that the sheer amount of data to be
collected in the first instance would make them
impractical in a large organisation and more
importantly, the number of calculations required made
them of little more than academic interest. Only two
examples of working computerised strategic planning
systems were found and, for reasons discussed later
were rejected as inappropriate for the two
organisations known to the author. It was therefore
decided to develop a tailored system working from first
principles.

Outcome of the Research

The final outcome of the research was a sophisticated
computerised planning system based around "importance
scores", but with the important additions of taking
into consideration the area of control objectives and
previous audit coverage. The system is capable of
producing a plan for up to five years ahead for well over
1.5 million audits involving over 1000 audit staff.
The only real limitations to the system are the amount
of disk storage available for the data files and the
speed of the central processing unit. As both capacity
and speed are continually improving it is unlikely that
these factors are likely to be practical limitation for
even the largest internal audit department. The
system as derived will run on any industry standard
micro computer with either a colour or monochrome screen
and either high density floppy or hard disks. A
printer, although desirable, is not absolutely
necessary, as all reports can be displayed on the screen.

The minimum configuration is a machine with 512K of memory and two high density floppy drives. In 1988 this equates to an outlay of only 500 for the hardware.

Software is in the form of programs written in the dBase III language and the software requirement is therefore a copy of that system, which costs in the region of 400. The system consists of over 80 separate modules comprising some 9,000 lines of code. The modules are linked to each other by a menu driven system and the user is given information at each stage of the operation. The system is both fault tolerant and user friendly.

Main Findings of the Research
The main findings from the research were:

a)   Risk analysis, as applied to internal audit planning, is a misnomer. It would be more appropriate to describe the process as an analytical review across all potential jobs and to call the output from the process an "importance score", rather than a risk index;

b)   The use of a formula to indicate the relative importance of a particular area to the auditor is practical;

c)   If more than one formula is used to deal with different aspects of the business, then there is a danger that the auditor will be unable to rank items from one area against those of another area with any certainty of relative, or absolute merit;

d)   The formula is not the most important part
     of a planning system;

e)   The collection of the data to be manipulated
     by the formula is one of the most important
     aspects of the planning process, as it
     ensures that the auditor has a good
     understanding of the organisation he is
     responsible for;

f)   The best time to collect the data required by
     the planning system is during an actual
     audit. This implies a link between the
     historic monitoring process and the future
     planning process.

g)   There is no correlation between the importance
     of an area, as rated by its importance score,
     and the resource required to audit it;

h)   There is a relationship between the complexity
     of the area to be audited and the resource
     that is required to do the work, but the
     relationship is not necessarily linear;

i)   An "override" facility is required to ensure
     that items with a low importance score can
     be forced into the scheduling mechanism;

j)   It is possible to build a computer system to
     aid the internal audit planning process;

k)   The system applies in a practical manner
     some of the theoretical work relating to so
     called risk analysis;

Conclusion

This research has shown that a computerised planning system to help internal audit management is not only feasible, but provides a valuable tool for justifying the work of the department. A spin off from the research was to show that the actual formula used is of less importance than the overall planning methodology. One of the most important aspects of the planning exercise was the actual data collection exercise as this increased the audit department's knowledge of the organisation and thus drew attention to anomalies in what were considered to be well understood factors and relationships. The relationship between historic data and future plans became better understood and the need for accurate record keeping became apparent when attempting to determine what audit resources would be required for a particular job in the future. The relationship between risk and resource allocation, which has been suggested in a number of papers, was found to be entirely spurious. Certain areas for future research were identified during the course of this work and these are dealt with in an appropriate chapter.

CHAPTER SYNOPSIS

CHAPTER 1

Introduces the topic and discusses the philosophy surrounding internal audit planning. Compares the ideal planning process against the constraints imposed by reality. Describes the research area and its limitations. Concludes that although planning must be based on a sound theoretical basis, it must also be pragmatic.

CHAPTER 2

Examines the available literature and establishes that although the authors are agreed on the need for internal audit to plan its activities, they disagree on the methodology to be adopted. Despite this, the common theme of using a formula based approach receives overwhelming support. Concludes that a number of additional questions need to be answered before a viable system can be designed.

CHAPTER 3

Discusses the additional areas identified during the literature survey. The relationship between risk, resource and audit complexity is examined, together with the need to treat travel time as a separate entity. Examines the relationship between risk and audit frequency. Identifies the need to plan at both the subject and control objective level and discusses the problems associated with using different formulae for different areas.

CHAPTER 4

Discusses the advantages and the problems associated with computer modelling. Evaluates previous work in this area and concludes that a specially tailored system is required. Details the scale of the problem and hypothesises on ways of solving it. Describes the elements of the planning task.

CHAPTER 5

Describes the elimination process to select the experimental hardware and software. Discusses the need to have clear definitions of various aspects of the planning process. Sets some criteria for measuring success and outlines the experimental system.

CHAPTER 6

Describes the data files created in order to cater for the points raised in the previous chapter and the derivation of the formula used to calculate the importance scores. Discusses how the various system parameters were arrived at and details the rationale behind the selection of weights.

CHAPTER 7

Shows how the data was manipulated to produce importance scores, suggest frequencies of review and indicate appropriate audit budgets. Discusses the problems associated with resource availability and the need to interface with a monitoring system.

CHAPTER 8

Describes the output from the system and the generation of the strategic and annual plans. Discusses how many different plans can be produced from the raw data and explains the differences between nominal, system, standard and complex resource allocation.

CHAPTER 9

Raises areas which have not been dealt with previously by other authors. The problems associated with data collection and validation are described. The limitations of spreadsheets for planning purposes are examined. The stratification of importance scores, dealing with non-cyclical and low scoring jobs and a method of estimating a suitable planning horizon are discussed. The need for clear definitions of various items and the requirement to interface with other systems are raised. The requirement for a planning system to be able to operate at both subject and control objective level is discussed and the main findings are summarised.

CHAPTER 10

Outlines areas for future work in the planning sphere; specifically the use of expert systems for generating the formula, the design of monitoring systems. The problems of measuring audit complexity, using different formulae for different areas within the same organisation and resource allocation within the actual audit are also raised.

CHAPTER 1

INTRODUCTION

1.1   **The Problem Area**

1.1.1 In most organisations Internal Audit, where it
       exists, is an independent appraisal function for
       the review of operations as a service to all
       levels of management. It is a managerial control
       which functions by measuring and evaluating
       the effectiveness of internal control. Internal
       control is usually defined as comprising the
       whole system of controls and methods, both
       financial and otherwise, which are established
       by management to safeguard an organisation's
       assets, ensure reliability of records, promote
       operational efficiency and encourage adherence
       to management policies and directions.

1.1.2 Internal Audit is a service function and is
       therefore, an overhead to the organisation. In
       fact, Internal Audit may be regarded as a double
       overhead, as it reviews other service functions
       as part of its overall activities. As such,
       it should have a clear methodology for allocating
       its resources to the most important areas of
       the business. This requirement arises because
       of the virtually infinite variety of work
       available to Internal Audit in contrast to
       its limited resources and the need for it to be
       cost effective in the use of those scarce
       resources.

1.1.3 If an Internal Audit Manager were able to select
       his projects and allocate his resources entirely
       free of other direction, he would, in theory,
       select those areas for examination which he

perceives as being of most importance to the business. He would then allocate his available and potential resources on the basis of this perceived importance. The allocation would be conducted on a totally logical and objective basis, which would be based on set criteria, or formulae, which could be applied consistently to all the different areas of the business.

1.1.4 In reality the Internal Audit Manager is unlikely to have a totally free hand in selecting the areas to be reviewed by his department. He may be required by either political, legal, moral, social or internal reasons to examine areas which he would otherwise consider to be insignificant. Only then will he be free to allocate the remainder of his resources to those areas which he perceives as being of importance. This allocation will itself probably be made on a combination of objective and subjective criteria, which will depend on the Manager's knowledge, or lack of knowledge, of each area and his personal idiosyncrasies. The Manager will probably find it difficult to explain to a non-auditor why he has chosen a particular area for review, why he has allocated a certain amount of resource, or indeed why he considers the need to do some of the directed projects as a waste of valuable resource.

1.1.5 Internal Audit planning therefore requires the balancing of the work to be done against the available resources. Effective and efficient audit is only likely to be achieved if operations are planned on a methodical basis, which

highlights priorities and the allocation of resources. Until recently, the establishment of priorities and the allocation of resources has largely been a matter of intuition, judgement and local knowledge but, as with all exercises involving judgement, important factors may be overlooked. Consequently, some Internal Audit Departments have devised so called risk indices which help to establish priorities on a more formal basis.

1.1.6   These indices involve an analysis of particular factors by formulating a set of values to replace what has previously been determined by intuitive judgements. Although the creation of such indices goes some way towards justifying why an Internal Audit Department examines some areas at the expense of others, they seldom go beyond the step of allocating priorities. A comprehensive and effective planning aid should be capable of far more than the simple allocation of priorities. It should at least be capable of suggesting tactical resource planning for a single audit and ideally it should be capable of helping with the annual and strategic planning process. Just as importantly, it should clearly indicate those areas which will not be covered; either because they are considered to be of low importance, or because the resources are not available.

1.1.7   These additional areas have received little attention, due in part to the vast amount of data collection and manipulation that is likely to be involved and also because of the overall complexity of the processing mechanism. The purpose of this research was to move on

from the simple prioritisation process into the
actual strategic planning and resource
allocation areas. These are the steps involved
after the creation of any formula, which
although an important topic in its own right,
has been dealt with elsewhere by other
researchers.

1.2   Purpose of the Research

1.2.1   The main purpose of this research was to
ascertain whether a computer system could be
derived which would help in the planning
process in large Internal Audit departments. The
bias towards large departments does not mean
that planning is irrelevant to small
departments, but it was anticipated that if a
system could be devised which would cover the
former it would, by default, be capable of
dealing with the latter. The author was also in
a position to test the system in practice, due
to his position in two very large departments
during the course of the research. The two
organisations concerned are described later,
but it was anticipated that the 'portability' of
the system between the organisations would be a
measure of the basic applicability of the
research findings to all Internal Audit
departments.

1.3   Details of the Organisations

1.3.1   The two organisations used for the basis of the
research were very large public utilities in the
energy and communications industries.

1.3.2   The first was a large British energy supplier with
a 1986 turnover of some £7.3 billion, a
pre-tax CCA profit of £800 million, a

workforce of 90,000 and an internal audit department of 230 staff. It was organised into 12 semi-autonomous regions, with each region having its own internal audit department. Control of Internal Audit for the company was the responsibility of the Controller of Audit and Investigations and although he did not exercise direct control over the 12 regional audit departments he had considerable influence in the appointment process.

1.3.3   This organisation was used in the early stages of the research as its planning methodology was well advanced, although conducted manually. Due to its consistent structure however, it did not provide the scope of audit activity that was likely to be encountered in an organisation with diverse subsidiary companies. The bulk of the work was therefore undertaken at another large company.

1.3.4   The second company was an international telephony carrier which had a 1986 turnover of some £8.4 billion, a pre-tax profit historic cost profit of £1.2 billion, a workforce of 230,000 and an internal audit department of 190 staff. The company was organised into 30 geographic districts within the U.K and there were also a considerable number of subsidiary companies, many of which were overseas. Internal audit was however, centrally organised, although 6 geographic zonal offices were in existence for ease of work. The Chief Internal Auditor had direct line control over all the Internal Audit staff. The existence of the subsidiary companies provided scope for testing the system against a varied set of planning conditions. In fact the

existence of such differing aspects within the
same company required a comprehensive planning
system as a matter of priority if the Chief
Internal Auditor was to use his limited resources
to their maximum effect. Details of the scope of
operations is provided in a later chapter.

1.3.5   The size of the Internal Audit departments for
both these organisations was far in excess of
the average for similar organisations in the
U.K. The actual cost of running them was in
excess of £5 million in each case and the need
to provide an effective and efficient service
to management was essential. In the case of the
second organisation the Internal Audit department
was the largest single department within the
Corporate Finance function.

1.3.6   Both departments were under constant evaluation
as regard to their performance, staffing
levels and selection of audits. Some
departments considered that they were being
over-audited, while others made constant demands
on Internal Audit to examine areas which Audit
Management considered to be of little
importance. Neither department had an objective
and consistent methodology for arguing its case
and it was realised that this was a weakness
which needed to be addressed. The use of risk
analysis techniques was perceived to be a
step in the rectification process, but
manual attempts at calculation foundered due
to the vast number of calculations that needed to
be done and redone, if the methodology was to used
on a regular and consistent basis. The use of a

computer was considered to be the only way in which the methodology could be used in a practical manner.

1.4   Research Methodology

1.4.1   The research was to investigate the possibility of devising a computer system to aid the Internal Audit planning process in large audit departments. The research would specifically concentrate on those aspects which determine what audits should be done, when they should be done and what manpower resource should be used.

1.4.2   The research was conducted along the following avenues:

a) a literature search to reveal what work, if any, had already been done in the area of Internal Audit planning using computers;

b) an examination of the link, if any, between risk, strategic planning, the allocation of resources and project monitoring;

c) the evaluation of any systems already in existence;

d) the specification/development of a computer system to provide a planning tool for Internal Audit managers.

1.5   Limitations of the Research

1.5.1   The research did not deal with the lower levels of planning within the audit process. It did not examine, for example, how much of the audit time should be devoted to planning the audit, or

how much to testing and evaluation, report
writing, etc. The research stops at the
higher level of determining when a particular
audit should be done and how many man-days should
be allocated to it. The derived system does not
remove from the manager the responsibility for
planning, it simply attempts to make the
process more consistent and less time consuming
than before.

1.5.2   The research also specifically excluded the
use made of computers during an audit
investigation for (say) word processing,
working papers, or spreadsheet analysis; although
this is an important area for further work in
the future. Neither did the research involve
itself in the so called "expert systems"
field of computing, although the use of such
systems for front-end formulae creation and the
allocation of weights is the next logical
step. These limitations are dealt with in
more detail in the chapter dealing with future
work.

CHAPTER 2
LITERATURE SURVEY

2.1   **Introduction**

2.1.1   The literature survey was conducted along a number
        of avenues. First, a computerised search using
        the key words of "audit/auditing", "risk",
        "analysis", "plan/planning", in any combination of
        two or more, was conducted using the British
        Library Automated Information Service (Blaise) and
        the ABI Inform databases. These searches
        identified 289 items containing the oppropriate
        key words, but subsequent study revealed that only
        9 had any relevance to this research, although
        additional references contained within them
        subsequently bought the total to 17.

2.1.2   Next, the Xerox University Comprehensive
        Dissertation Index (30) was searched for relevant
        Doctorial work in the area, but none was found. A
        similar search of the Aslib Index to Theses (31)
        was also negative, but a manual search of the
        Anbar Abstracting Journals relating to
        accountancy, management and data processing did
        provide some useful contributions.

2.1.3   The most fruitful source by far however, was the
        American Instiute of Certified Public Accountants
        Index. This is a printed index which is published
        annually and contains references to articles,
        books and conference papers, published anywhere in
        the world, which are related to accountancy, or
        finance. It is arranged in alphabetic sequence
        and the sections headed "audit" and "internal
        audit" provided the majority of the base
        information used for this research. The index was

manually searched back to 1972 (No useful
references were found for the period prior to 1971
and the majority were during the period 1981 -
1986).

2.1.4 The interesting thing from this author's point of
view was that the manual retrieval of references
was far more fruitful than its electronic
counterpart. The reason for this is believed to
be that with electronic retrieval the researcher
is totally in the hands of the original indexer
and if the indexer has used different key words to
those anticipated by the researcher, then the
search will totally miss the item. With the manual
search however, the researcher can use his
intelligence to establish whether a particular
item is likely to be relevant based on more
information than just the key words used during an
electronic search.

2.1.5 The remainder of this chapter provides an analysis
of the reference material identified by the above
searches and its relevance to this research. Some
limitations noted in the existing literature are
dealt with in more depth in chapter 3.

2.2   Background
2.2.1 Whereas all publicly quoted companies and U.K.
local authorities must, by statute, have their
books of account audited by professional
accountants, the existence of an Internal
Audit group is solely at the discretion of
top management. Although the role of Internal
Audit will vary from company to company, it is
usually defined as an "independent appraisal
function for the review of operations to all
levels of management." This definition is

used by a number of professional bodies, such
as the Chartered Institute of Public Financial
Accountants (CIPFA), the Institute of
Internal Auditors (IIA) and the the Chartered
Association of Certified Accountants (CACA).

2.2.2   As a service function Internal Audit must
respond to the requirements of management, but
certain rights of independence are often
granted in the form of a charter, which allows
Internal Audit unusual rights of access to the
internal records of the company and a fairly free
hand in the areas it chooses to examine. Even
so, it is not unusual for top management to
query why some things are being done and
others are not, and in many cases the department
is expected to produce an overall plan of
activity for ratification by top management.

2.3   **The Need to Plan**

2.3.1   In many large firms a Board Audit Committee
oversees the work of Internal Audit and
often expects justification for the deployment
of resources. In some instances the
justification will be easy, in that the area to
be audited is accepted as being crucial to the
business. In other cases however, there may
well be a conflict of views and the
Internal Audit department will then need to
justify its case. Such justification may
well require an explanation that will stand up
to critical examination when compared to other
like cases. Indeed, the whole planning process
may well be questioned with the Audit Manager
being required to not only explain why he is, or
is not, going to examine a particular area, but
also why he is allocating more resources to

one area, rather than to another. Unless the manager is able to show that his plan is logically devised, he will be unable to defend it on a sensible basis and the whole requirement for Internal Audit may well be called into question.

2.3.2 This argument for a soundly based planning process deals only with a single planning period. If however, Internal Audit is to be of true service to management, it should also take a long-term view so that it can warn management if there are likely to be areas in the future which should be examined, but which may have to be neglected due to lack of resources. The longer term strategic planning also has an impact on the plan for the current period, in that if it is not attempted then the annual plan will always be a poor compromise, based on inadequate information, fire fighting and the idiosyncratic behaviour of the various people involved.

2.3.3 Thus the Internal Audit department should be attempting to predict long-term as well as short-term requirements for its services and also where it should best use its limited resources to gain maximum benefit to the organisation. How it goes about this process should be both logical and consistent and capable of explanation to a third-party. This view is supported by a number of professional bodies.

2.3.4   CIPFA's Audit Management Statement, Section 3, Planning and Control (6) states that "audit planning involves the balancing the work to be done against the resources available; effective and efficient audit is more likely to be achieved if operations are planned in advance with the intentions being recorded. This planning involves consideration of all possible areas of audit operation and evaluation of changes which have either taken place or are expected to take place - changes in both priorities and objectives. The need to determine audit priorities arises because of the infinite variety of work available for audit in contrast to the limited audit staff. The problem is, in fact, one of classical economics - that of matching limited resources with unlimited demands. Audit is operating within a dynamic environment in which systems, procedures, ideas and personnel are constantly changing and the audit function must therefore be capable of responding to these changes. An audit plan provides the framework within which this flexibility can be achieved; the fact that actual performance varies because of predictable circumstances does not invalidate planning but emphasises the need to allow for contingencies within the plan."

2.3.5   That planning of the nature described above is not done on a widespread basis is described in a number of articles. Bell (1) commenting on the Chief Inspector of Audit's investigation into the state of internal audit in the public sector draws attention to inadequacies in long term planning and control. The same article

finds that a survey by the Comptroller and
Auditor General had similar misgivings in the area
of long term planning and concluded that "whilst
internal audit is good at short term planning
there are deficiencies in longer term planning
..... which could well mean that abortive work
is being undertaken and there are likely to be
gaps in coverage." Bell suggests a course
of future action to remedy the deficiencies
highlighted by the two investigations; "the agreed
plan of action ..... should ask ..... whether
internal control priorities have been assessed
and alternatives presented to management, and
whether all main systems of control are
reviewed at least annually by internal audit or by
the external auditor. It is up to management to
provide the resources and if it does not, then
the auditor cannot be criticised for not
providing the cover".

2.3.6   He goes further to ask "whether audit plans have
been prepared covering the short, medium and
long term plans and whether management is
aware of the plans and any limitations on the
work that can be done. This is the time when
management can be educated to its
responsibilities and the need to provide the
resources necessary to achieve the results it
requires. This is probably the chief internal
auditor's most important task".

2.3.7   He summaries his article with "..... the main
priority of a chief internal auditor is to
understand the requirements of his organisation,
determine what resources he can obtain, organise
those resources in the best possible way, and

agree a plan with management based on a
compromise between what management wants and
what resources management is prepared to provide".

2.4   **Planning Horizons**

2.4.1 In 1985 the IIA (U.K.) conducted a survey (28)
       into internal auditing in the U.K. and Eire.
       The survey indicated that 63% of the companies
       who responded had an internal audit function and
       that 72% of those who did so had had one for over
       10 years, thus indicating a fair degree of
       maturity of internal audit in those
       organisations. Some 90% of the departments
       planned beyond the current year, the planning
       horizons being:-

                1-2 years 35%
                3-5 years 48%
                > 5 years   7%

2.4.2 The majority therefore fell into the 3+ years
       bracket and some 93% broke the long-term plan
       down into an annual plan for the year ahead.
       The annual plan itself was split into various
       periods as shown below:-

                Quarterly 33%
                Monthly   32%
                Weekly   18%

2.4.3 Audit timings were expressed in man-days by
       84% of the companies and the same percentage
       stated that they monitored time spent against
       the anticipated budget for each job.

2.4.4   From the above it can be deduced that the majority of internal audit departments in the U.K. conduct long-term planning exercises, which are then used to produce an annual plan of coverage which is used as a control mechanism for resource allocation and measurement.

2.5   **Department Size**

2.5.1   The survey indicated wide variations in the size of the departments with the mean number of internal auditors in an audit department being 15.82, although this included a mean of 55.91 for nationalised industries which distorted the total. The median was 4.51 staff. The mean number of support staff was 12.39, although again the high number in private sector companies distorted the total. The median was 1.15.

2.5.3   The survey deduced that the wide variance between the mean and median indicated that many organisations only had a small number of staff involved in internal auditing and therefore classified the departments into small (1-3 auditors), medium (4-9) and large (>10). From the point of view of this research the classification was disappointing as this author does not consider a department of 10 auditors to be large. Indeed, the problem faced by the two organisations of which this author has first-hand knowledge was how to plan for between 190 and 230 staff. What the survey did indicate though, was the rareness of this problem. Indirectly however, the survey explained one of the findings of this research in that almost all the previous authors glossed over the problems of data collection and manipulation which would

be faced by a large department. The omission of this was not deliberate, it was just beyond the comprehension of the majority of the authors who were used to planning the work for a department of less than 15 staff.

2.6   **The Planning Process**

2.6.1   The ideal planning process would attempt to identify all potential audit projects for the foreseeable future, prioritise them into order of importance, schedule when they should be done, calculate the resource required to do them, and if the resource was not available, suggest those projects which should be excluded. It should be capable of easy amendment to cater for changes in either the number of potential projects, or the available resource and should be logical and consistent in its application.

2.6.2   The process breaks down therefore into a number of steps:-

        1)   identify all potential projects;
        2)   rank them into priority order;
        3)   Schedule when they should be done;
        4)   allocate resource if available
                    otherwise
              reject those projects which are not to be
done.

2.6.3   Thompson (23) draws attention to the IIA directives on planning in its "Standards for the Practice of Internal Auditing" (29). He then describes an overall planning process which incorporates "long range, intermediate-term, short-term and individual audit project" plans, with appropriate

definitions. Although he perceives each level
of plan as having a distinct purpose he
stresses the need for integration and the
requirement for feedback for future planning
purposes. He argues that long-term plans
should be developed by "assessing audit risk
in various areas of the organisation" with the
conclusion that "areas of higher risk would be
audited more often than areas of lower risk".
He proposes a four stage approach: identify
auditable areas; establish the criteria to be
used to quantify risk; quantify the risk for each
area; and determine the frequency of audit based
on the level of risk.

2.6.4   The criteria to be used for evaluating risk
include financial impact, competitiveness,
public and regulatory relations impact,
level of internal control, management concern,
prior audit findings, frequency of changes in
personnel or procedures and the complexity of
the activity. He suggest that each factor
should be weighted, with the more objective
factors being given a higher weighting, but he
provides no guidance as to how these weights
should be calculated relative to each other.
Furthermore, despite his urging that "the goal of
the risk-based planning methodology is to assign
to each auditable area time(s) when the audit
will be done during an established planning
time frame", he provides little help in
determining how the frequency should be
calculated.

2.6.5   Although a number of articles have been published
dealing with individual aspects of the planning
process, the definitive book on the subject is

Boritz's "Planning for the Internal Audit
Function" (24). Boritz's book was the
forerunner of a computerised planning system
developed under the sponsorship of the IIA
Research Foundation. The system itself is
evaluated later, but the basic design of the
system uses an adapted Wilson and Ranson
(25) loss control mechanism as an audit
scheduling tool. The theory is expanded in
Boritz's and Broca's (26) later article on the
subject where a system developed by Silver and
Meal (27) for production planning is applied to
audit scheduling. The prime aim of the
methodology is to determine the correct timing
of an audit so as to minimise loss to the
organisation. The assumption made by Boritz, based
upon Wilson, is that there is a correlation
between audit activity, or the threat of audit
activity, and reduction in loss. This author
is not convinced by Wilson's argument, but even
if it were to hold true in a linear fashion,
there is still a great deal of Internal Audit
work which has little to do with the regulatory
side of the business and which therefore,
falls outside the parameters of the Wilson model.

2.7   **Risk Analysis**
2.7.1   Risk analysis, as applied to internal auditing,
        can be defined as "a mathematical model used
        to allocate resources in a consistent manner
        based upon predetermined attributes." The
        majority of the published material supported this
        definition and most authors proposed a model based
        on a formula, or formulae, to produce the
        required consistency.

2.7.2 The IIA (UK) survey (28) found that some 36% of departments used risk analysis techniques as an audit tool, but the survey did not establish whether these techniques were used for planning purposes, or during the actual audit.

2.7.3 Silverman (12), while agreeing with the definition is sceptical as to the need for advanced mathematical formulae. He comments that "many of the systems written about appear to be far more intricate than necessary to accomplish the goal of stratifying the audit population into different groups based on a perceived risk." His approach to the problem is fairly traditional, however, with a five element formula using sales, employees, audit history, management changes and audit visits, as the components. Like the majority of other authors, he simply attempts to prioritise the audits and then stratifies the results into high, average and low risk bands. He adds a word of caution however; "if it (the formula) generates an audit schedule that substantially deviates from your current plan, something is wrong." Whilst this warning is sensible, it also indicates that Silverman is looking for a formula which emulates, or mimics, the existing subjective planning process. This raises an interesting question. If we are looking for a formula which substantially supports the existing mechanism, why bother to produce one? Surely the whole basis of risk analysis is to identify in a logical manner where the resource should be deployed? If our current planning perceptions are wrong, then it would be useful if the results from the application of the formula drew our attention to the fact.

The formula may be wrong, but then so might be
our current planning constructs. Silverman also
suggests that different formulae may be
required for different locations/functions within
the organisation. This immediately raises
the problem of equivalence between the
different formulae; a subject which is examined
later.

2.8   **Risk Indices**

2.8.1   One of the earliest U.K. articles on the
subject of setting priorities by the use of
risk indices was written by the County
Treasurer's Staff of the Royal County of Berkshire
in 1973 (2). Their paper was the first
systematic attempt to reduce judgement, or
intuition to a set of rules. The formula they
devised has, with various modifications, become
the starting point of much subsequent work on
the subject. They analysed the elements of
risk for each audit project into various
categories to which values could be assigned,
then devised a relationship between those
risk categories which they considered to
be representative of the establishment to be
audited. Some of the items in the formula were
quantifiable, while others were subjective.
Berkshire realised that this mix could present
problems in acceptance of the results. In their
own analysis of the benefits and limitations of
the use of an index they state ".....
construction of the index necessitates
considerable thought being given to the reasons
for selecting any establishment for audit, to
the composition of risk and to the internal
check and controls at all establishments. This
exercise in itself will be beneficial to the

auditor. Another great benefit is that he
can show clearly .... a logical measure of
the risks involved at establishments which cannot
be audited because of lack of audit time .....
There will be criticisms of the index for the
subjective nature of many of its components.
But we do not think this will invalidate the
index. If the index is not used a totally
subjective decision may be made: at least with
the index, factors influencing the decision are
down on paper and logically thought out".

2.8.2   This analysis by Berkshire raised three
important issues. First, the planning to plan
process is important in itself, regardless of
the plan finally devised, in that it makes the
planner think about his job and the important
factors relating to it. Second, the planner can
give reasons as to why certain establishments
will not be visited. Third, any criticism as to
the objective value of the index cannot be
substantiated, as it is undoubtedly superior to a
totally subjective plan.

2.8.3   Datmond (12) uses the Berkshire formula as
his starting point for the calculation of
index numbers. His changes are in two areas:
first he categorises annual expenditure for which
the departmental head is responsible into three
areas of equipment and tools etc., laundry
expenses and subscriptions and "other". He
omits the "need for help" component and
introduces a denominator to convert the
final result into manageable figures.
Second, he adds the degree of internal check and
the special factors, whereas Berkshire divided
the degree of check by the special factors. He

also introduces a "rationalisation process" to "establish uniformity" where calculations have been done by different groups and to "iron out any anomalies that may have been created by the use of the index". Having calculated the index he suggests that it is used "purely for the regularity side of audit work" and not for such areas as "cost effectiveness and cost reduction exercises; complete review of major systems and procedures and computer audit".

2.8.4   Datmond's exclusion of important areas of internal audit activity is puzzling, especially the exclusion of computer audit. If the index is to be used as a planning aid as he suggests, then surely all aspects of a department's work should be included?

2.8.5   Chambers (9) suggested a modification to the Berkshire index which involved changing the relationship of the "need for help" component from an addition to a multiple; his argument being that in the original formula this component was only appropriate as an addition if all the other components were for quantities which had a reasonable relationship to the maximum value of that component. By changing that component to a multiple and reducing its range from 0 - 5,000 to 1 - 3 Chamber's considered that the revised formula was useful as an aid to assessing priorities where prevention of fraud and other loss of liquid assets is the main audit objective. He then points out that "a different formula is needed to rank possible management audit areas ....." and proposes a formula which "focuses attention on capital as this is the only measure which allows

comparative evaluation of most, if not all, management audit areas". In his article, Chambers states that "an historical approach to risk is inherently inadequate" and provides an ICQ as an aid to undertaking a risk management audit. Although Chamber's article is predominantly about the problems of auditing the risk management function it does touch upon audit risk indices and proposes both a change to the Berkshire formula and an additional index for discussion. The important point here is that Chambers, like Silverman, has raised the question of different indices for different purposes, an area which is examined in more detail later.

2.8.6 Later work by Chambers (27) on formulae construction proposes splitting the formula into three sections dealing with size, control and detection. This enables the auditor to "flex" the associated weights so that the prioritisation process reflects the real planning process, where the areas to be audited are selected by comparing size, control and detection and then selecting those projects where the auditor considers there to be an imbalance. He mentions the use of a computerised system to do the calculation, but only gives the briefest details on how it would actually operate and he does not mention the problems of data collection and data entry.

2.9   Setting Priorities

2.9.1 Much of the literature obtained by this researcher dealt solely with the problem of setting audit priorities, usually by the means of a formula which produced a risk index number.

2.9.2   CIPFA's Audit Panel Standards Working Party in
         a guidance document (6) states "In carrying
         out the audit planning exercise the chief
         internal auditor will need to determine a
         priority ranking of audits since audit resources
         rarely match the scope of the task .....
         Assessing priorities is a matter of personal
         judgement, but the auditor must be prepared to
         defend any decision made, bearing in mind that
         internal audit coverage could be open to
         criticism ..... if it was considered that
         certain areas had not been covered in the audit
         cycle ..... Priorities will have to be assessed
         bearing in mind the nature of the organisation
         and any inherent risk areas".

2.10   **Risk/Resource Relationship**

2.10.1 Cunnington (11) uses a formula to calculate
       risk, but then uses the calculated risk to
       derive a frequency of audit review and the
       number of man days to be allocated to a
       particular area each year. This is a logical
       extension of the planning process based on risk
       and Cunnington uses the system to devise a
       strategic audit programme. He claims that "the
       risk index has been useful in communicating the
       extent of internal audit cover and that when
       changes in either policy, or staff, occur the
       effects on the planned periodical audits may be
       easily calculated".

2.10.2 Cunnington's article is the first to go beyond
       the simple prioritisation process and to extend
       the scope into the frequency of review and
       manpower allocation, and hence into the
       strategic planning sphere.

2.10.3 Should audit managers devote more of their
resource to the most risky areas as Cunnington
suggests? At first sight the answer appears to
be yes, but a moments reflection indicates that
this is a dangerous assumption. Simply because
an area is of higher risk does not necessarily
mean that it requires more resource to audit it.
Any audit has both fixed and variable components.
The fixed components usually relate to the
mechanics of planning the audit, file
preparation, report production and management
review, whilst the variable elements include
travel time and the actual audit work. The
amount of audit work will depend on a great
number of factors such as the depth of the
audit being undertaken, the state of the
system, the availability of auditees, etc. The
fact that a high risk area is to be reviewed
does not mean that more resource is required to
do the job, it simply means that the area
should be examined. The amount of time required
to do the job has to be calculated outside the
risk formula.

2.11   **Risk v Cost**

2.11.1 Cirtin (10) examines the type of risks that
concern auditors. He sees two main types of
risk; the risk that "material errors will occur
in the accounting process" and the risk that
these errors "will not be detected in the
audit". From this he develops a graph to
show that the optimal cost of internal control
is where the cost of control curve crosses the
losses from errors and irregularities line.
Although not directly related to this area of
research it does have a bearing on calculating

risk values and how much should be spent on combating them. It also forms the basis of Boritz's system. This area is tackled by Bolzendahl (3) where his article referring to the number of auditors required in a department raises the question of risk versus costs in a US banking environment. Although the main thrust of his argument is for a balance between internal and external audit costs the principal factor of balancing cost against risk is an important planning concept for any manager.

2.12 Conclusions

2.12.1 The majority of the published material dealt solely with the problem of prioritising audits by the application of a formula, or formulae with little attention being given to the practicalities of converting the formula into an operational and usable planning mechanism. Very little work had been done in the area of computerisation and only two systems appeared to offer any help in that area. The limitations of the published material are dealt with in more detail in the following chapter, while some computer systems, which were identified as potentially providing a planning service, are evaluated in chapter 4.

CHAPTER 3
ISSUES RAISED BY THE PUBLISHED MATERIAL

3.1   **Introduction**

3.1.1   The majority of the published material dealt
        solely with the problem of prioritising
        audits by the application of a formula, or
        formulae, in order to establish the "risk"
        associated with a particular area, or
        project. The risk numbers were then used to
        rank projects on the assumption that internal
        auditors would wish to examine the higher risk
        items, at the expense of the lower risk items
        when only limited resources were available.
        Some authors (notably Cunnington) attempted to
        go further by determining audit frequency and
        man-day allocation, but they overlooked
        the problems associated with equating risk to
        resource allocation. Many of the proposed
        formulae were complex (sometimes with more than
        20 components) and the authors were applying them
        to complete business areas, or operational
        units, without appreciating the problem of then
        converting their findings into a schedule of
        manageable audits. Where multiple formulae were
        proposed the problem of equivalence between the
        formula was either ignored, or fudged. Some
        authors did mention the problems associated
        with extensive calculation, but only a few
        mentioned the possible use of computers and
        with one exception, those that did gave no
        practical guidance in the area. The exception
        here is of course Boritz, who during the course
        of this research was sponsored by The IIA
        Research Foundation to produce a computerised
        planning system. The resulting system, Audit

Master Plan, was evaluated by this author for his own organisation and the results of the analysis are dealt with later.

3.2   Risk Resource Relationship

3.2.1   Other authors also suggested that there was a relationship between the calculated risk of an area and the resources that should be allocated for audit purposes. The reasoning being that large resources are required to audit large risk. This author considers this tu be a non-sequitor as areas of great risk do not necessarily require great resources in order to reach an audit opinion. The converse of course is that areas of low risk may need a great deal of resource in order to reach an opinion. This is because some projects are extremely complex and others require extensive travelling time. Neither of these attributes has anything to do with the risk of the area under review and yet they need to be accounted for in any audit planning process.

3.3   Audit Complexity

3.3.1   There appears to be a requirement therefore to indicate the relative complexity of the proposed audit work required to reach an opinion and also to identify travel time as a separate item. The relative complexity of the audit is a subjective measure, but an effort should be made to bring it into any calculation of resource allocation for a project. A simple weighting could be used based on a "high, medium, low" scale with (say) 9 representing a highly complex project and 1 representing an extremely simple job. This weighting would be used by the system to calculate a refined man day allocation after

using the calculated risk in the initial calculation. For example, if there were two projects with the same risk, but with different complexity weights the final man day allocation should be different for each as shown in Table 3.3.1.

Affect of Complexity on Resource Allocation

Proj	Score	Complexity	SxC	Man Days	Total
A	500	High (9)	4500	45	45
B	500	Low (1)	500	5	5
					50
					--

Table 3.3.1

3.3.2   This is more realistic a representation of how a Manager plans his work load against available resources than simply using the initial risk calculation.

3.4   **Travel Time**

3.4.1   The point regarding travel time is equally important. In the previous example the final man day figures are based on available manpower for audit work. If we now extend the calculation to include travel to and from the audit location we obtain the result shown in Table 3.4.1.

Affect of Travel Time on Resource

Proj	Score/Complexity (Man Days)	Travel Time (Man Days)	TotalT ime (Man Days)
A	45	0	45
B	5	5	10
			55
			--

Table 3.4.1

3.4.2 The five days travelling time for Project B has to be found from somewhere. As the travel time is a fixed element, which is unaffected by risk it needs to be netted off from the total available manpower prior to any risk/days calculation being made, otherwise there will be a deficit in available resource when the travel time is added to the project. Thus for each audit project the potential travel time needs to be recorded separately from any other budgeted time.

3.5 Other Fixed Elements

3.5.1 Now the flood gates open. If we need to net off a fixed element such as travel time, then surely we should also net off the other fixed elements of an audit, such as file preparation, report writing, etc., prior to doing any allocation based on risk. What element of the audit then can truly be attributed to risk? These questions were considered further during the research and are also raised under further work.

3.6   **The Role of Historic Data**

3.6.1 It is difficult to conceive of any business
       planning which does not to some degree utilise
       past data, even though there may be dangers in
       using the past when attempting to anticipate the
       future. The use of past data is of special
       significance to Audit Managers however, as they
       are often required to cover all major business
       areas, or units, in a particular time scale.
       In order to ensure that this coverage is achieved
       they need to keep records of what was done
       previously and to take due regard of previous
       findings.

3.6.2 From the above it can be seen that there is a
       relationship between audit planning and the
       findings from previous work, but few of the
       authors mentioned the problem of collecting the
       data and none of them proposed an automatic
       link between the planning & monitoring process
       as is illustrated in Figure 3.6.2.

              Planning & Monitoring Relationship

```
              ------> Strategic ---->
             |          Plan            |
             |                          |
             |                          V
       Monitoring                  Annual
        of Findings                 Plan
             ^                        |
             |                        |
             |                        |
        <------- Tactical<-----
                  Plan
```

                   Figure 3.6.2

49
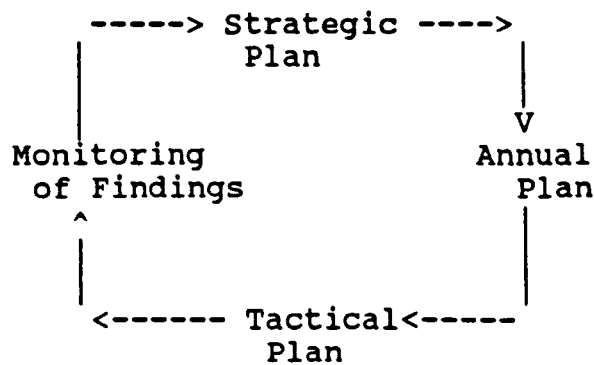
3.6.3   Any planning system must have the ability
        therefore, to record what work has been done
        previously and the results from that work. From
        this we can see that a planning system without its
        monitoring partner is unlikely to be fully
        useful to a manager.

3.7   **How Important is the Formula?**

3.7.1   Much has been written regarding the
        applicability, or otherwise, of various formulae.
        Many authors seem to see the formula as an end
        in itself, rather than as the beginning of the
        planning process. If the formula is correct,
        then everything else will be okay appears to be
        the attitude of the formula proponents. Most
        authors admit however, that their formula might
        not be ideal for all purposes and some go even
        further and suggest that in the final analysis
        the judgement of the auditor is the most
        important factor of all. Just how important
        then is the formula in the planning process?

3.7.2   A survey of audit managers at two major
        conferences [IIA (UK) COMPACS 86 & BCS ABC Group
        87], who used risk analysis techniques for
        planning, stated that they used their own
        judgement in preparing the final plan.
        Although the majority had found the process
        useful in formulating their plan, they had all
        found that no formula could totally satisfy
        their requirements to produce a complete plan,
        as some of their activities had to be scheduled
        at the direction of top management. Thus the
        formula was an aid to planning and not a
        substitute for it. All the managers stated that
        the benefit came from the planning process itself
        and especially the data collection exercise.

3.7.3   The above views are shared by this author,
        but with a slight modification.   Computer
        modelling enables formula to be flexed fairly
        easily if the data items are not changed.   What
        this means is that the elements of the formula
        and their mathematical relationships can be
        shuffled at will, which provides the
        opportunity to produce a formula giving the best
        "fit" for a particular organisation. What cannot
        be done very easily is to add a new element to
        the formula, as this will require the
        collection of all the data for that element for
        each job on file. It is important therefore to
        identify at the outset those data items which
        are to be used in the planning process and
        then try out a small number of
        calculations to see if the resulting plan looks
        right. If it does not, then the formula can be
        flexed to see whether the correct fit can be
        achieved. If it cannot, then the elements of
        the formula should be examined to determine
        whether they are suitable for the planning
        process.   This interactive process also serves
        as a learning process for the auditor, in that
        he becomes more aware of his own intuitive
        planning constructs and simply by planning to
        plan arrives at a better final plan than would
        otherwise be the case.

3.7.4   The formula is really a catalyst which forces the
        auditor to collect data about the organisation
        he works for. Even if the data is not
        manipulated in a formal manner it provides a base
        line for the auditor to work on mentally. the
        advantage of manipulation is that it enables
        the auditor to question his own planning

constructs and may even change the way he conducts the process in the future. Thus even if the formula is totally wrong it has helped the auditor to plan his work better.

3.8   **Low Risk & Audit Frequency**

3.8.1 If frequency of review is not one of the components of the planning methodology it is possible that an area of the business will never be reviewed by internal audit. This may be an acceptable way of producing a plan, but the danger is that up-to-date information is never available for a proper analysis. A previous paragraph indicated that the best time to collect planning information for the future is at the time of doing an actual audit. If the criteria for selecting an area for review is always based on high risk then the low risk areas may never receive even cursory attention. How then can the audit manager meet his objective of reviewing all areas of the business in a balanced and controlled manner? this does not mean that audit have to review everything in detail, but a mechanism should exist for ensuring that nothing is missed by default.

3.9   **Budgets and the Type of Audit**

3.9.1 When setting a budget for a particular audit the auditor not only has to consider the fixed elements such as travel, preparation, report writing, etc., but also needs to consider the complexity of the job to be undertaken. This complexity not only depends on the difficulty of obtaining information and conducting testing, but also on the type of audit to be undertaken. There are a number of different types of audit such as a system audit, a compliance audit, a

value for money audit, etc. The same area will
require a different amount of resource
depending on the type of audit type and this
is another reason why the relationship between
risk and resource must be treated with extreme
caution.

3.10 Relative v Absolute Risk

3.10.1 The majority of audit risk formulae produce a
relative ranking for each project, in that each
project is ranked relative to other projects.
This holds true so long as the same formula is
used for the calculation in each case. Some
organisations however, use different formulae
for different business activities which
results in groups of projects which although
ranked correctly within a group cannot be
ranked between groups. This is because the
ranking is relative rather than absolute. The
difference between the two types of ranking is
extremely important from a planning point of view,
but before discussing that area let us examine
the differences between relative and absolute
rankings in more detail.

3.10.2 If it were possible to rank two projects in
absolute terms and they produced the same risk
value we could state that the "riskiness" of
each was exactly the same. This derives from
the fact that they would be measured from the
same base and the variance from that base was
exactly the same.

3.10.3 The use of different formulae for different
business activities is justified on the basis
that no general formula can be found which can
be applied to all types of business activity.

This effectively means that projects are being measured from different bases and although projects can be ranked relatively within their respective areas they cannot be ranked absolutely within the organisation. This derives from the fact that whereas with absolute placing we can state that an equal variance from the base point denotes an equal value, with different formulae being used the same value does not necessarily mean the same variance from the base point. The simple comparison of two results may therefore lead to incorrect assumptions of their relative risk. Taking this a stage further we can imagine a holding company controlling several diverse subsidiaries. How can the Chief Internal Auditor decide on the absolute riskiness of every potential audit project if different formulae are used by each company. Indeed, the problem is magnified if each company itself uses different formulae for different business activities. If he is unable to compare projects in absolute terms how can he effectively allocate his resources?

3.11   Different Formulae for Different Areas

3.11.1 The problem of deriving a formula which can be consistently applied to all areas of the business has defeated many of the authors. In order to overcome this problem they argue the case for using different formulae for different areas of the business. At first sight this is an attractive proposition as it enables the best possible formula to be utilised in a particular area. Thus it is possible to rank all the (say) personnel projects one against another and all the finance projects against each other. The use of such a system

produces a number of lists, one for each discrete area of the business, with projects ranked within each area. So far, so good, but what happens when an attempt is made to decide which of all the projects should be done first, or how much resource should be allocated for projects ranked the same, but within different lists. The situation facing the auditor is illustrated below.

Personnel	Finance	Stores
Project 1	Project 1	Project 1
Project 2	Project 2	Project 2
Project 3	Project 3	Project 3

3.11.2 Let us assume that the auditor has only sufficient resource to do two of the three ranking premiere projects. Which does he do? They are all equally ranked, but are they truly equal? Does their equivalence really hold true? As different formulae were used to calculate them it is extremely unlikely that an individual element of (say) personnel risk equates exactly to a single element of stores risk. Does the auditor now need a mega-formula to determine which project should be eliminated? The answer is undoubtedly that he does. If such a mega-formula exists, then why not use it in the first place and do away with the individual formulae? But the reason that the individual formulae were required in the first place was because it was considered impossible to devise a single mega-formula!

3.11.3 The use of many different formulae also poses the problem of determining which formula should be applied to which project. If the project involves elements of each formula, such as stores and finance, as may well be the case, which one should be used?

3.13   The Problem of Linearity

3.13.1 Unless some form of scaling can be introduced the use of many formulae will result in an assumption of linearity. That is the assumption that the relationship between the various components in the formula remains constant for all values. Whether this actually the case is open to conjecture, but the allocation of weightings goes someway to help in this matter and many formulae used weightings to insert a degree of scaling into the final score. There was little evidence however as to how the weights had been derived.

3.14   Determining Frequency

3.14.1 It has been suggested that projects with a greater risk number should be audited more frequently than those with a lower risk number. Superficially this looks appealing as it extends the usefulness of the index system. A closer examination reveals a possible flaw in the argument in that it ignores feedback from previous reviews. Let us look at an example. The Manager has decided that projects with a score of above 500 will be audited on an annual basis. If, however, one of the factors used in calculating the risk is that of "when was it last audited", it is apparent that by the second year the risk number will probably fall below 500 because of that factor. If a further

factor was "level of internal control", it is
conceivable that with the area being reviewed
annually there is a marked improvement in
internal control, which again is likely to reduce
the risk. The effect of these changes is that
when the risk is re-calculated after one
year, the project falls below the criteria for
annual review.

3.14.2 This indicates that basing audit frequency on
risk may be no more than an academic exercise,
as once feedback is available to the system the
annual re-calculation, if it can be done, is a
far more potent factor in deciding which projects
should be undertaken in a particular year, than
by a blanket scheduling. The advantage is that
the frequency calculated by the system can be
compared with that allocated by the manager and
the reason for any difference investigated.

3.15 **Subject v Control Objective Approach**

3.15.1 Every paper examined during the course of this
research discussed audit planning without
defining what an audit actually was. The
assumption seemed to be that one (say) payroll
audit was exactly the same as another audit on
the same subject. In fact all the scoring
systems were based on calculating a score for
the subject area to be examined. This is indeed
important in that it tells the internal auditor
that he should look at a particular area because
it is important to the business. What it does not
do is to tell the auditor what control
objectives should be checked. Now some large
internal audit departments ensure consistent
coverage of the same subject in two
different locations by determining which

control objectives are to be reviewed in order to ensure "full" coverage of the subject concerned. In some cases, where the same subject is required to be covered in a large number of locations, it is not unusual for "full" coverage at a single location to be split over a number of years. The reason for doing this is that by spreading the coverage the internal auditor is able to use his scarce resources in a manner which will detect trends in the business as a whole. Providing that he sticks to a regular cycle of coverage he will, in the course of time, obtain full coverage as defined by the control objectives, over the entire business. This requires that the planning system not only draws his attention to particular subject areas, but also informs him as to what control objectives have been dealt with in the past. The importance score calculation can only draw attention to the subject and the auditor must rely on his audit methodology and monitoring system to supply data on the control objectives. This split between the two aspects of planning is very important for internal audit departments responsible for large businesses, as without an awareness of the problem they may find themselves with an apparently sophisticated planning mechanism, but which can only deal in broad terms with the problem of allocating a great number of audit staff over the business.

3.16 Conclusions

3.16.1 The omissions in the published material and the questions raised above, indicate that a computerised system faces a number of problems. How can the data be collected in the first instance? What flexibility needs to built into the system to cater for future changes? How should audit complexity be dealt with and what weightings should be applied to the various elements in the formula? Should the system be subject, or control objective biased, or a combination of both? These problems were dealt with during the system development process and although a number of false starts were made the final system is considered to be suitable for use in most internal audit departments regardless of their planning methodology.

CHAPTER 4

MODELLING THE PLANNING PROCESS

4.1   **The Role of Computer Modelling**

4.1.1   Computer modelling has been used for a number of years to aid management in planning for the future. Until fairly recently these models were limited in the business sphere to financial simulations on mainframe computers. The advent of powerful microcomputers and their associated software has enabled the modelling process to be conducted at a far lower level than was previously possible and even quite small parts of a business now use these tools for their planning process. The main area of planning still relates to financial affairs and the growth of comprehensive spreadsheet packages has reflected the requirement of management for more sophisticated planning tools.

4.1.2   Internal auditors were quick to appreciate the use of microcomputers to aid their audit work and it was the spreadsheet that introduced auditors to the usefulness of microcomputers as an audit tool. Although originally used as a tool during, or after the audit, some audit departments used spreadsheet packages to do so called risk analysis exercises based on the many formulae that were being described by the various authors mentioned in a previous chapter. This author also conducted exercises of that nature, but soon realised that spreadsheets were not ideal for the planning process as they were generally cumbersome to manipulate, prone to user

error and were often limited by the memory capacity of the machine, as they invariably required all the data to be held in memory.

4.2   **Problems of Computer Modelling**

4.2.1   These limitations only become apparent when large amounts of data are being dealt with, a factor which was usually overlooked by many authors and which only becomes relevant to large internal audit departments when they extend the planning process down to individual audit jobs rather than at the higher level of auditable units, such as departments or divisions, which were often described in the various articles.

4.2.2   Computer modelling becomes essential when the number of calculations required to be done in order to manually calculate a risk number for each potential audit job and the amount of effort to sort them into sequence, takes so long that the auditor is seriously diverted from the job of actually auditing. Although this may seem to be an obvious statement it must also be realised that the use of computer modelling requires an initial investment which may be totally wasted if the process is not subsequently used on a regular basis. This is because modelling by computer not only requires the software to be constructed, but also requires the data to be collected and loaded prior to manipulation. The data collection exercise may well be the most arduous part of the process, but also the most useful and revealing. It is often at this stage that the auditor finds out just how little he knows about the organisation for which he works for and just

how much he has taken for granted. Indeed, it is this planning to plan process, which probably most benefits the auditor and not the actual modelling process for which the data is collected.

4.2.3   The type and amount of data to be collected for the model will obviously depend on the formula, or formulae, chosen by the auditor for calculating the importance score. If the formula has a large number of elements, or indeed just a small number of particularly exotic ones, it may prove impossible to collect all the necessary data items and assumptions may have to be made. Very few models can actually handle these unknown factors and it is only recently that expert systems have become available which can deal with uncertainty. Many of the proposed formulae examined by this author required more than 10 different items to be collected and one needed 28 items to produce a result.

4.2.4   A formula with 10 items of data will often require 10, or more, separate calculations to arrive at a result, because of the various additions, multiplications and divisions required. Table 4.2.4 shows the number of calculations and manipulations required to calculate a score for various published formulae. In a large organisation there may be several thousand potential audit jobs which require to be analysed. This in itself does not seem important if a computer is available, as it will be used to do the tedious work of calculation and recalculation. That is indeed the case, but for every item of data required

for manipulation there is the problem and
effort of collecting it in the first place and
keeping it up-to-date in the second place. If we
assume a ten item formula and 5000 potential
audit jobs then we need to collect 50,000
items for the computer to manipulate, with
about half a million calculations to be
performed. Although this may be a useful job in
its own right it, is not a task to be taken
lightly and the question of expending the effort
of keeping it up-to-date also needs to be asked.

Number of Calculations Required for Various Formulae

Formula Name	Elements	Calculations
1. Finance Houses – (operational audit)	8	7
2. (1) above modified	10	9
3. Finance House Branches	9	8
4. Banking Portfolio	11	10
5. Expected Loss in Finance House	12	11
6. Bank Head Office	12	16
7. Multiple Stores	3	2
8. Banks	16	25
9. Chambers	14	11
10. British Gas	5	10
11. Spare Parts (Motor Trade)	6	9
12. Berkshire	8	7
13. Modified Berkshire	8	8
14. British Telecom	4	8
15. Trustee Bank	6	8

Source: **Chamber's 1986 IIA (UK) Risk Analysis Course paper with additional work by the author.**

Table 4.2.4

4.2.5 In fact the problems of keeping the data current needs to be examined further. Many authors suggest that an annual exercise is all that is required. For a small department auditing a small number of jobs this may indeed be a suitable way of doing it. For a large department however, the effort to collect and check (say) 50,000 items as an annual exercise is

probably impossible, due to time and resource constraints. How then can we ensure that we have the most up-to-date data for the planning process? The short answer is that unless we check the data just before calculation we cannot be certain of its currency. A large department is therefor faced with the problem of how much inaccuracy is it willing to bear in its planning process.

4.2.6   This problem is faced by most audit departments in one form or another, under a manual planning process anyway. The majority of audit plans are prepared using out-of-date data collected in a haphazard manner. If a computer model is too large to enable annual collection of data, then the next best thing will be to update the data relating to a specific audit at the end of the audit itself. Indeed, depending on the data items required this may be the only time it can be done with any accuracy anyway. At worst the data for a job will only be as old as the last time it was done and if a rolling audit plan is adopted then only a percentage of the items will be at their oldest and they will probably be scheduled for review in the next period.

4.2.7   So although large departments are unlikely to be planning on completely accurate data the mechanism for update is provided by the current audit, when the data is readily available and fresh in the mind of the auditor. This linking of the past, present and the future is an important feature of a good planning mechanism as it obviates the need for a special data collection exercise and thus reduces the

cost of the planning process. If a
time-recording, or some other project control
mechanism is already in existence it may be
possible to transfer some, if not all of the
data required for the planning process directly
from the monitoring process, thus reducing the
data collection exercise even further.

4.3   **The Advantages of Computer Modelling**

4.3.1   One of the problems faced by the early
        proponents of risk indices was the amount of
        calculation required for even a fairly simple
        model. A model with only five parameters, each of
        which has associated weights, requires at
        least nine calculations for each project
        analysed. If a department has identified only
        1,000 potential projects, then some 9,000
        separate calculations will be required in order
        to prioritise the projects. This is obviously a
        very time consuming and prone to error exercise
        if conducted manually, and the exercise will
        need to be repeated whenever there is a change in
        either the formula, or one of the base
        measures used to determine the weights. The
        use of a computer system has the following
        advantages:

        a) The individual projects can be held in a
           database which can be added to, amended and
           deleted from, as required;

        b) The formula can be modified and applied to
           the database quickly and consistently;

        c) Weights can be modified and tested in a
           similar way;

d) Results can be printed on hard-copy, or held in magnetic format, for subsequent comparison and analysis;

e) Data can be transferred between systems, thus facilitating the integration between the historic monitoring system and the planning system.

4.4 Previous Work in this Area

4.4.1 Four potential computerised systems were identified and evaluated as part of the research: Audit Master Plan, Audit Department Manager, Risk Pac and Risk Buster. Both Risk Pac and Risk Buster were quickly eliminated because they dealt with the problems of deciding which area to test during the actual audit process. They therefore fell outside the scope of the research which was aimed at deciding which audits to do in the first place. They both have their place however, in the overall mechanisation of the audit process as it would seem desirable for any strategic planning process to have the facility to continue through into the planning of an individual audit. This issue is pursued further in the chapter dealing with future work.

4.4.2 The other two systems did however, present the characteristics of a strategic planning system and a more detailed evaluation was conducted.

4.5 Outcome of the Evaluation

4.5.1 Audit Master Plan (32 & 33), supplied by the Institute of Internal Auditors (USA) failed on a number of counts. First, the use of the Wilson

loss control mechanism as a scheduling tool
restricted the system from dealing with
non-regularity audit work (this limitation was
confirmed by the University of Illinois who use
the system, but only allocate some 35% of their
time by its use. They found that they could only
effectively use the system for financially related
audits of a regular nature). Second, there was no
direct link to a monitoring mechanism, which
therefore required either the creation of one,
or the requirement to maintain two separate
systems. Third, there was no facility to
consolidate planning data from a number of audit
offices into a single plan for a large
geographically dispersed audit department. This
consolidation was essential for the author's
department which had 7 separate audit offices, but
which was required to provide a consolidated plan
to the Board Audit Committee.

4.5.2   Audit Department Manager supplied by Perrier
Associates did provide a link to a monitoring
mechanism, but both the planning and monitoring
components were quite crude and did not
provide the sophistication demanded by the
author's company. Indeed, on the planning side
there was no facility for the calculation of
Importance Scores, so it was impossible to even
rank potential audit jobs against each other on
any sort of rational basis. This was considered
to be a major deficiency and its omission lead to
the rejection of the system as a possible
contender.

4.5.3   Neither of the systems dealt with the problems
of planning by control objectives (see 3.15), as
they were both subject based. This lack of

sophistication lead to the decision to design
a tailored system, based on both the
theoretical work and the practical
requirements of a large sophisticated audit
department, operating from a number of offices and
with a world wide responsibility for audit
coverage.

4.6   **The Size of the Problem**

4.6.1 The company used for this research consisted of
a number of Divisions and subsidiary companies
which were required to be reviewed by Internal
Audit in a 3 year cycle. The areas to be reviewed
and the methodology to be used was left, in the
main, to Internal Audit, but the plan had to be
approved by a Board Audit Committee. The company
was dominated by one very large Division, which
was the cash cow as far as income was concerned,
but which was operating in a slow growth area. The
other Divisions and subsidiary companies were seen
as the rising stars, as they tended to be
operating in high risk, high growth and
potentially high profit areas and were extremely
diverse in their business activities. Because of
their newness there was some doubt over their
internal procedures and their management
expertise. The audit department was therefore
faced with the problems of where best to allocate
its resources with regard to these new, relatively
unknown areas and how to prove to the Board Audit
Committee that it had done so on a logical and
consistent basis and certainly not at the expense
of other areas which were considered, rightly or
wrongly to be well understood. In some of the new
areas there was little, or no, past track record

to help in making the decision and even the
identification of all potential auditable units
was a problem.

4.7   Hypotheses

4.7.1   It was hypothesised that it should be possible
to devise a system which would not only provide a
database of potential jobs, but could also be used
to identify areas of importance from very diverse
operations and possibly help in the scheduling and
resource allocation exercise. Some doubts had
also been raised over the applicability of the
three year cycle of coverage and it was further
hypothesised that the system could be of use in
either confirming, or denying, its applicability.

4.8   The Planning Task

4.8.1   The Internal Audit Charter required that all major
systems and units were to be audited in a three
cycle, but what did this actually mean? What, or
where, were the major systems and units? How was a
system, or unit, defined and just as importantly
what exactly was an audit? How did the department
know whether it had met its Charter objective?
Indeed, was it in a position to be able to plan to
meet its objective, unless it could find answers
to the other questions? An overall methodology
was obviously required to provide a framework
within which the planning exercise would operate
and this is dealt with in the next chapter.

4.9   Conclusions

4.9.1   The assumption by other authors that audits were
subject area based, coupled with the need to
actually review areas on a control objective basis
lead to the conclusion that a planning system
required two main components. The first would be

subject area based and would indicate the relative importance of each part of the business. The second would be control objective based in order to ensure consistent and comprehensive audit coverage of the various subject areas. In simplistic terms the system would be saying, "these are the areas that should be looked at (based on importance scores), this is when you should look at them (based on frequency of review) and this is what you need to examine in order to ensure complete coverage (based on the control objectives within a subject area). An experiment was therefore devised to attempt those three tasks.

CHAPTER 5

THE EXPERIMENT

5.1   The Experimental Hardware

5.1.1   The computer available to an Audit Manager is
        likely to range from powerful mainframe
        computers down to small   micro computers.
        An audit planning and monitoring system   is
        unlikely to require large computer facilities,
        except in the exceptional circumstances of
        using "expert system" software.   Although a
        true expert system must be the ultimate goal,   in
        the   medium term the system is likely to
        be   of   the database/modelling type.

5.1.2   As   the Manager may require to use   the   system
        in a number of geographic locations   it would
        be better if the system was   portable.
        Portability can be software based, in   which   case
        the system must be capable of running on a number
        of different machines, or it can be hardware
        based in which case a portable computer is
        required.   Both solutions present problems,   but
        the   nearest that is attainable for either would
        be to design the system around a standard
        personal computer.

5.1.3   The   IBM PC has become the industry standard in
        both hardware design and software operating
        system. Portable versions of the machine are
        available and developments indicate that
        extremely powerful, but lightweight enhancements
        are imminent.   The minimum configuration for
        which a   system should be designed should be
        at the lower end of the IBM PC market if it   is

to be available in the most flexible way. It is suggested that this would be for an IBM PC with 512K memory, two floppy disk drives and an 80 column, 25 line monochrome screen.

5.1.4   A printer would also be useful and as the width of paper supported by printers varies from 8" to 24", it would be prudent to design the system to cater for the smaller printers. The system should therefore produce all its reports on 8" wide paper with a length of 11". This is standard A4 size which is supported by most micro computer printers.

5.1.5   The above hardware selection should ensure that the system can run on a very small micro configuration which at 1987 prices should not exceed 1,000.

5.2   **The Experimental Software**
5.2.1   Although the initial reaction was to program the system in a conventional language, such as BASIC, the portability of the system needed to be kept in mind. Every micro computer seems to use a different version of BASIC and although the proposal to standardise on the IBM PC would seem to solve this problem it does reduce the portability of the system. Simply wanting to standardise on one range of equipment should not preclude the possibility of running the system on a different range. For this reason the use of BASIC was rejected as were other languages, such as FORTH and PROLOG. The use of a spreadsheet package was initially tried, but as the experiment developed it was found that spreadsheets were too restrictive in a number of areas:

a)   the amount of data they could hold was restricted by the computers memory and not by the available disk storage;

b)   it was difficult to build-in the complex data validation that was required in order to prevent invalid data from being accepted;

c)   producing complex reports based around several different data files was impossible;

d)   it was difficult to create a user friendly interface.

For these reasons the use of a spreadsheet was eventually discarded and consideration was given to a number of database packages. After some early experimentation it was found that there was a need to maintain a minimum of four data files (see Chapter 6) and therefore a number of packages were eliminated as they were only capable of dealing with a single file at any one time.

5.2.2   There was one database system however which fulfilled the file manipulation requirements and also ran on a vast range of micro equipment. It also had a powerful programming language which allowed the production of tailored user friendly programs. The package referred to is dBase III, which is one the leading database language for micro computers.

5.2.3   Before preceding with the design of the system however, it was necessary to answer some of the questions which had been raised during the literature survey.

5.3   **What is an Audit?**

5.3.1   This was considered to be of fundamental importance to the exercise. The majority of articles tended to describe an audit in the sense of a particular subject e.g. Payroll, Stores, Income, etc., but this was considered to be too vague to be useful. It was essential that there should be some assurance that if the same audit were conducted by two different teams in two different locations, that exactly the same areas of internal control would be examined. This was especially important when comparing what was meant to be a similar activity between two different districts of the largest division, or two separate subsidiary companies.

5.3.2   It was eventually decided that an audit could be defined by the control objectives tested as part of the review. This required that all conceivable control objectives needed to be defined at the outset and for any monitoring, or planning, to be conducted at this level. Thus the generic description 'Payroll' would only be used in its widest sense in order to identify the subject and not to imply what was actually covered by the audit. In order to know what was covered it was necessary to break it down into the actual control objectives tested. This would make it possible to plan and monitor on an objective basis.

5.4 What is a Location?

5.4.1 Although locations tend to be thought of as physical places it is conceivable, indeed likely, that certain operations from different divisions within a company will share the same physical place. If only physical locations were identified and recorded there is a possibility that apparently complete coverage could be achieved, in that all control objectives had been covered at a particular physical location, but in reality an important area could be overlooked, due to the location sharing situation. It was therefore decided to allow for logical, as well as, physical locations. This also allowed for aggregation of locations in order to provide a high level overview where necessary.

5.5 What is a System?

5.5.1 Modern internal audit tends to use a system based approach to its work. In an organisation of the size being used for this research, it was often impossible to define system boundaries and very unlikely that a complete system would be covered by a single audit. In order to cater for the diversity of operations encountered and to allow for the problem identified above, it was decided to divide the company into Business Areas. Although each area could be considered as subjective in nature, the use of control objectives was expected to provide a sufficiently objective measure to the activity. The advantage of dividing the business into well understood areas was that it would be easier to ascertain how much resource was being given to (say) Stores in one subsidiary as against Stores in a different

subsidiary. A Business Area could therefore be considered as an aggregation of like units of audit interest.

5.6   **What is Full Coverage?**

5.6.1 Although there was a requirement to complete the audit work in a three year cycle, there was no definition as to what was meant by this. Empirically it was realised that some areas needed to be covered more frequently than others, but which areas fell into each potential cycle within the maximum of three years? It was considered that perhaps there was a relationship between importance, however measured, and frequency, but could this be substantiated and how could it be used? Was there a relationship between importance and the resource to be allocated? After all, the amount of resource available was finite and the need to cover everything in three years would conceivably have an impact on the resource allocation for a particular job. Indeed, should everything be reviewed at all? In view of the department's limited resources it would seem more sensible to review those areas considered to be of greater importance at the expense of those considered less important. What mechanism could be used to help in the decision making process which would be capable of application across the diverse areas of the business and be capable of rational defence to enquiry? With these things in mind it was decided to attempt the experiment to see whether it was possible to produce a viable system.

5.8   **Measuring Success**

5.8.1 It was considered that the most suitable
       measure of success would be to attempt to apply
       the system to the diverse operations of the
       various subsidiary companies with the resulting
       plan being critically examined by the team
       responsible for that area and the teams
       responsible for the other companies. Thus even if
       the "owning team" were satisfied, there would
       still be a need for the plan to be defensible to
       critical appraisal from third parties before
       acceptance.

5.8.2 Five subsidiary companies were selected for the
       experiment, each of which had a diverse range of
       activities. One was an international telephony
       carrier, another was responsible for the marketing
       of the company's products, the third was involved
       in value added services, the fourth dealt with
       consultancy to developing countries while the
       fifth produced and marketed high technology
       systems.

5.9   **Outline System Description**

5.9.1 A complete hierarchical system flowchart and the
       associated operating instructions are provided in
       the Appendices, but in order to aid understanding
       of the following chapters the main building blocks
       of the system are shown in Figure 5.9.1.

OUTLINE SYSTEM CONSTRUCTION
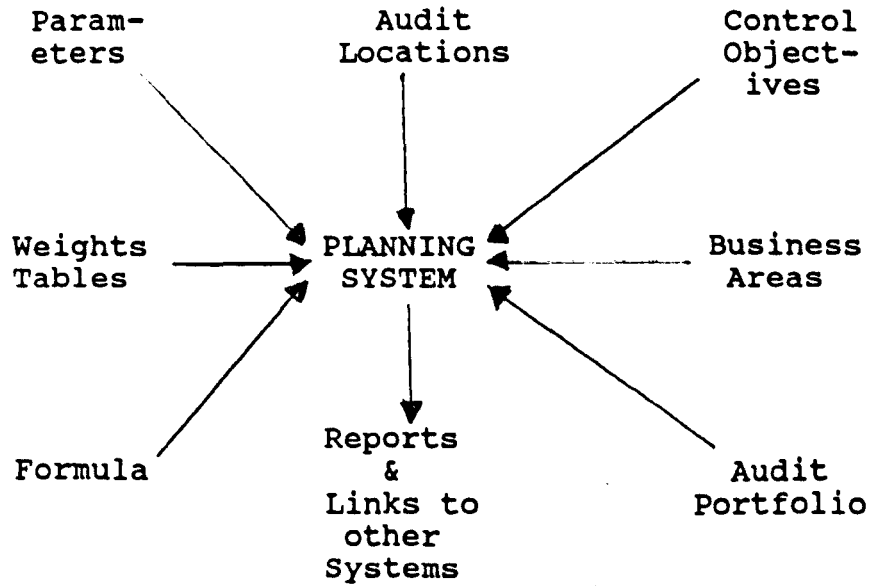
Figure 5.9.1

5.10   **System Modules**

5.10.1 The various modules which make up the main
        building blocks are listed in Table 5.10.1.

SYSTEM MODULES

MODULE	DESCRIPTION
LHSCOM1	OPENING TESTS
LHSCOM2	MAIN SYSTEM MENU
LHSCOM3	AMEND SYSTEM DEFAULTS
LHSCOM4	CHANGE DATA FILE DRIVE USAGE
LHSCOM5	CLOSE SYSTEM AT USER REQUEST
LHSCOM6	CLOSE SYSTEM BECAUSE OF MISSING FILE
LHSCOM7	NEW BUSINESS AREA
LHSCOM8	AMEND BUSINESS AREA
LHSCOM9	DELETE BUSINESS AREA
LHSCOM10	BUSINESS AREAS MENU
LHSCOM11	---- SPARE ---
LHSCOM12	REGISTRATION FOR FIRST TIME USERS
LHRSKC1	PLANNING SYSTEM MAIN MENU
LHRSKC2	AMEND PROJECT DETAILS
LHRSKC3	NEW PROJECT
LHRSKC4	AMEND FREQUENCY PARAMETERS
LHRSKC6	AMEND ANNUAL PARAMETERS
LHRSKC7	AMEND BUDGETS IN STRATEGIC PLAN
LHRSKC8	AMEND RISK FACTOR RATIOS
LHRSKC9	AMEND RISK FACTOR WEIGHTS
LHRSKC10	REPORTS MENU
LHRSKC11	CALCULATE STRATEGIC PLAN
LHRSKC12	CALCULATE AUDIT FREQUENCY
LHRSKC13	CALCULATE IMPORTANCE SCORES
LHRSKC14	DELETE PROJECT
LHRSKC16	TRANSFER TO MONITORING SYSTEM MENU
LHRSKC17	AUDIT PORTFOLIO MAINTENANCE MENU
LHRSKC18	PARAMETER MENU
LHRSKC20	CALCULATE BUSINESS AREA BUDGETS
LHRSKC24	AMEND AUDIT COMPLEXITY WEIGHTS
LHRSKC25	CALCULATE PRELIMINARY RISK BUDGETS
LHRSKC26	TRANSFER PROJECTS AUTOMATICALLY
LHRSKC27	TRANSFER PROJECTS BY DISPLAY
LHRSKC28	TRANSFER PROJECTS BY CODE ENTRY
LHRSKC30	FILE CHECK
LHRSKC60	ADD AUDIT LOCATION
LHRSKC61	AMEND AUDIT LOCATION
LHRSKC62	DELETE AUDIT LOCATION
LHRSKC63	AUDIT LOCATIONS MENU
LHRSKC70	ADD CONTROL OBJECTIVE
LHRSKC71	AMEND CONTROL OBJECTIVE
LHRSKC72	DELETE CONTROL OBJECTIVE
LHRSKC73	CONTROL OBJECTIVES MENU

Table 5.10.1

MODULE	DESCRIPTION
LHRSKC80	SELECT TRAINING FILES
LHRSKC81	TIDY DATA FILES
LHRSKC82	EXTRACT FILES FOR CONSOLIDATION
LHRSKC83	SET OFFICE CODE
LHRSKC84	CALCULATIONS MENU
LHRSKC85	INTERFACE WITH OTHER SYSTEMS MENU
LHRSKC86	HOUSEKEEPING MENU
LHRSKC87	RESTART FROM SECURITY COPY
LHRSKC88	SECURE DATA FILES
LHRSKC89	IMPORT FROM MONITORING SYSTEM
LHRSKC91	CLEAR 'MUST DO' INDICATORS
LHRSKP1	SYSTEM PARAMETERS
LHRSKP2	PROJECTS RANKED BY RISK
LHRSKP3	ANNUAL PLAN BASED ON FREQUENCY ONLY
LHRSKP4	ANNUAL PLAN BASED ON FREQUENCY, AVAILABLE DAYS & SCORE
LHRSKP5	ANNUAL PLAN BASED ON FREQ/DAYS & SELECTED SCORES
LHRSKP6	BUSINESS AREA DESCRIPTIONS
LHRSKP7	BUSINESS AREA BUDGETS
LHRSKP8	SUGGESTED FREQUENCY BASED ON SCORE
LHRSKP9	AUDIT PORTFOLIO DETAILS
LHRSKP10	STRATEGIC PLAN
LHRSKP11	NOMINAL/SYSTEM BUDGET COMPARISONS
LHRSKP12	'MUST DO' PROJECTS
LHRSKP13	CONTROL OBJECTIVES
LHRSKP14	LOCATIONS
LHRSKP15	INCOMPLETE COVERAGE
LHRSKP16	PLANNING HORIZONS

Table 5.10.1 (Continued)

CHAPTER 6

THE MAJOR DATA REQUIREMENTS

6.1   **The Data Files**

6.1.1 Four separate data files were constructed in order
       to provide the basic requirements discussed in
       Chapter 5.
                a) Audit Locations
                b) Control Objectives
                c) Business Areas
                d) Audit Portfolio

6.2   **Audit Locations File**

6.2.1 This file was constructed to hold details
       relating to each physical,or logical audit
       location. The major types of location were
       identified as Division, District/Unit and Customer
       Service Area (CSA). It was hypothesised that
       these locations also provided the necessary
       ability to be aggregated at appropriate levels.
       Thus it was conceivable that CSA's could be
       aggregated to provide a District picture and
       Districts could be aggregated to give a Divisional
       view, while a total of all Divisions would provide
       a company summary. The file structure is shown in
       Table 6.2.1

AUDIT LOCATIONS FILE

Fld	Name	Contents	Type	Size	Dec
001	LOCCODE	Location Code	C	003	
002	LOCTITLE	Location Description	C	030	
003	LOCTYPE	Location Type	C	001	
004	PROJZONE	Audit Office	C	001	

NB - The Location Type was coded as:

D = Division
U = District/Unit
C = Customer Service Unit

Figure 6.2.1

6.3 Control Objectives File

6.3.1 This file held details of all identified Control Objectives so that it would be possible to test for full coverage in a cycle at a particular location. It was also hypothesised that a standard time for testing a particular control activity could be held so that for any audit, which may use a mix of control objectives, a total standard budget could be derived. It was considered that the ability for the system to construct such a budget was a useful addition, as it allowed for comparison with budgets created either by an audit manager, or by the system itself based on any importance criteria. It was also decided that a standard frequency of review, in years, should be held which again could be used for comparison purposes. The file structure is provided in Table 6.3.1.

CONTROL OBJECTIVES FILE

Fld	Name	Contents	Type	Size	Dec
001	PROJKA	Business Area	C	002	
002	COCODE	Control Objective Code	C	002	
003	COTITLE	Objective Description	C	030	
004	COSTDTIME	Standard Time	N	003	001
005	COFREQ	Standard Frequency	N	001	
006	PROJZONE	Audit Office	C	001	

NB - The Standard Time was an estimate of how long it would take to test the Control Objective under ideal conditions.

The Standard Frequency was the maximum time, in years, between reviews of the Control Objective at a particular Audit Location.

Figure 6.3.1

6.4 Business Areas File

6.4.1 This file contained the details of each identified Business Area and also a field which was capable of holding the aggregated budgets of all audit jobs allocated to a particular Business Area for each year of a five year planning horizon. The file structure is provided in Table 6.4.1.

BUSINESS AREAS FILE

Fld	Name	Description	Type	Size	Dec
001	PROJKA	Business Area Code	C	002	
002	PROJDESC	Description	C	030	
003	PROJBUDGET	Nominal Budget (Days)	N	006	
004	PROJRINBUG	System Budget (Days)	N	006	
005	PROJPLAN1	Year 1 Budget (Days)	N	006	
006	PROJPLAN2	Year 2 Budget (Days)	N	006	
007	PROJPLAN3	Year 3 Budget (Days)	N	006	
008	PROJPLAN4	Year 4 Budget (Days)	N	006	
009	PROJPLAN5	Year 5 Budget (Days)	N	006	

Figure 6.4.1

6.5   **Audit Portfolio File**

6.5.1   This file was designed to hold the details of
        every potential audit job that could be
        identified. Its purpose was to provide the raw
        material on which the system would operate when
        attempting to rank and schedule audits for the
        plan. The various data items collected for each
        potential audit job were developed as the
        experiment proceeded. The file structure is given
        in Table 6.5.1.

6.5.2   The data collection document used to obtain the
        information to load the Audit Portfolio file is
        shown as Figure 6.5.2.

AUDIT PORTFOLIO FILE

Fld	Name	Description	Type	Size	Dec
001	PROJKA	Business Area Code	C	002	
002	PROJCODE	Project Code	C	004	
003	PROJDESC	Project Description	C	030	
004	PROJLAST	Year Last Reviewed	N	002	
005	PROJREPNUM	Last Report Number	C	008	
006	PROJIMPRV	Internal Control	C	002	
007	PROJFREQ	Nominal Review	N	001	
008	PROJNEXT	Next Review Year	N	002	
009	PROJBUDGET	Nominal Budget (Days)	N	006	
010	PROJTRAVEL	Travel Time (Days)	N	002	
011	PROJIMPACT	Business Impact	C	001	
012	PROJLIQUID	Temptation Factor	C	001	
013	PROJVALUE	Size (Millions)	N	007	002
014	PROJWGT1	Bus. Impact Weight	N	001	
015	PROJWGT2	Temptation Weight	N	001	
016	PROJWGT3	Internal Cont. Weight	N	001	
017	PROJWGT4	Size Weight	N	001	
018	PROJWGT5	Not Used (Spare)	N	001	
019	PROJRIN	Importance Score	N	006	
020	PROJRINBUG	System Budget	N	006	
021	PROJMUSTDO	Must Review (Y/N)	C	001	
022	PROJRINFRQ	System Frequency	N	001	
023	PROJPLAN1	Year 1 Budget	N	006	
024	PROJPLAN2	Year 2 Budget	N	006	
025	PROJPLAN3	Year 3 Budget	N	006	
026	PROJPLAN4	Year 4 Budget	N	006	
027	PROJPLAN5	Year 5 Budget	N	006	
028	PROJCMPLX	Audit Complexity	C	001	
029	PROJDIV	Division	C	003	
030	PROJDIST	District	C	003	
031	PROJCSA	Customer Service Area	C	003	
032	PROJVALTYP	Type of Value	C	001	
033	PROJOBJECTS	Control Objectives	C	001	
034	PROJSTDTME	Standard Time Allowed	N	003	
035	PROJCXTIME	Std Time modified	N	003	

NOTES

Field	Comments
PROJCODE	A unique code to identify the project
PROJDESC	A freeform description of the project
PROJKA	The business area to which this project is related
PROJOBJECTS	Audit objectives covered during the review
PROJDIV	Divisional Location

Figure 6.5.1

Field	Comments
PROJDIST	District Location
PROJCSA	Customer Service Location
PROJLAST	Year Last Audited (0=Never)
PROJREPNUM	Last Report Number
PROJIMPRV	The level of internal control.
PROJFREQ	The frequency in years (1 - 5) based on judgement.
PROJNEXT	The year of next review. This is calculated by adding PROJFREQ to PROJLAST, or alternatively PROJRINFRQ to PROJLAST (see below)
PROJBUDGET	The number of man days considered necessary to review the area based on judgement. This is referred to as the Nominal Budget.
PROJIMPACT	The Business Impact of this particular area (H=High, M=Medium, L=Low, N=None)
PROJLIQUID	The temptation factor of this area (H=High, M=Medium, L=Low, N=None)
PROJVALUE	The value in millions of the area.
PROJWGT1-5	These 5 weights are calculated by the system based on information entered in the PROJIMPACT, PROJIMPRV, PROJLIQUID, PROJLAST and PROJVALUE fields and details held in the parameter files (see the section 'Weight Calculation')
PROJRIN	The Importance Score calculated by the system based on the formula described in 'Formula'
PROJRINBUG	A budget calculated by the system based on the Importance Score, Audit Complexity and available man days (see 'Budget Calculation'). This is referred to as the SYSTEM Budget.
PROJMUSTDO	An indicator (Y/N) which shows that a project must be selected for review, even though its Importance Score may be low. This indicator is referred to when calculating one of the annual plans described in Chapter 7.
PROJRINFRQ	Frequency of review, as suggested by the system, based on the Importance Score and Frequency Criteria specified in the system parameters.

Figure 6.5.1 (Continued)

Field	Comments
PROJPLAN1-5	A calculated budget for each year of the 5 Year Strategic Plan based on Last Audit and Frequency of Review. The actual budget may be one of four types as described later in this Chapter.
PROJVALTYP	The type of value allocated to an area (A=Gross Asset Movements, B=Income, C=Expenditure, D=Stores, E=Payroll)
PROJSTDTME	The Standard Budget for the review based on the Control Objectives to be tested. This is calculated by the system by summing the Standard Time for each Control Objective to be tested by the audit. The standard time for each objective is held on the Control objectives file. This is referred to as the Standard Budget.
PROJCXTIME	The Standard Budget, as calculated above, modified by the Audit Complexity weight from the system parameters. This is referred to as the Complex Budget.
PROJZONE	Audit Office responsible for job (C=Central,E=Capital Expend,F=Financial,I=I.T., N=North,S=South)

Figure 6.5.1 (Continued)

6.6   **Formula Elements**

6.6.1 A group of Audit Controllers, Audit Managers and Senior Auditors were used to establish which items were considered to be suitable as elements in a formula for the calculation of Important Scores. Two of the group had attended a seminar conducted by Professor Chambers of City University and had already attempted to derive various elements. Several brainstorming meetings took place and a number of elements were considered and discarded as not being appropriate.

6.6.2 Eventually it was decided that the elements listed below were significant and capable of being obtained.

      a) Size (Value)
      b) Business Impact
      c) Temptation
      d) Internal Control

The ease of obtaining the data for each element was considered to be of paramount importance. What was the point of having an element if it was not possible to insert the appropriate data because it could not be found?

The rationale for selection is explained in the following paragraphs.

6.7 Size (Value)

6.7.1 The size of a particular area was considered to have a material impact on whether it should be audited. The rationale being that management would have an interest in such areas and would expect Internal Audit to ascertain the level of control operating there, unless there was a very good reason not to. Size was therefore considered to require a separate element within the formula.

PLANNING SYSTEM INPUT

CODE: DESCRIPTION:

JOB TYPE (P/R):   FREQ/YEAR (1-5):   MUST REVIEW (Y/N):

DIVISION: DISTRICT/UNIT: CSA/LOCATION:

BUSINESS AREA: CONTROL OBJECTIVES: / / / / /

SIZE OF AREA (Millions):   SIZE TYPE (A-E):

INTERNAL CONTROL (H/M/L/N):   BUSINESS IMPACT (H/M/L/N):

TEMPTATION (H/M/L/N):   AUDIT COMPLEXITY (H/M/L/):

LAST AUDITED (Year):   REPORT NUMBER:

NOMINAL BUDGET (Days):   TRAVELLING TIME (Days):

COMPLETION NOTES

```
CODE          : 4 digit numeric
DESCRIPTION   : 30 character description of the job
JOB TYPE      : Type of Job (P=Project, R=Regulatory)
FREQ/YEAR     : Year to be done for (P)roject jobs.
                Frequency of review for (R)egulatory
                jobs.
MUST REVIEW   : Must be reviewed regardless of score
DIVISION      : 3 Character Division code
DISTRICT/UNIT : 3 character District/Unit code
CSA/LOCATION  : 3 character Customer Service Area
BUSINESS AREA : 2 digit Business Area
OBJECTIVES    : Control Objectives
SIZE OF AREA  :  The Total Value based on the type code
SIZE TYPE     :  The "makeup" of the value
                A = Gross Asset Movements
                B = Income
                C = Expenditure
                D = Stores
                E = Wages)
INT. CONTROL  : H = Good/Satisfactory,
                M = Satisfactory except for ....,
                L = Unsatisfactory,
                N = Critical
BUS. IMPACT   :  H=High M=Medium L=Low N=None
TEMPTATION    :  H=High, M=Medium, L=Low, N=None
AUDIT COMPX   :  H=High, M=Medium, L=Low
LAST AUDITED  : 2 digit year of last review
REPORT NUMBER : 8 character report number
NOM. BUDGET   : Time required for the review
                  (excluding travel) in days
TRAVEL TIME   : Time required for travel to/from
                  job in days
```

Figure 6.5.2

6.8   Business Impact

6.8.1   It was realised that the value of an area was not necessarily synonymous with its importance to the business. It was conceivable that relatively low value areas could have a significant business impact if there was a breakdown in internal control. For example, the maintenance of an organisation's headquarters building may only cost a few thousand pounds per annum and this would be the value of that area in financial terms, if however the maintenance department failed to do its job properly and the building was flooded, then the impact on the business could be disastrous. This concept of business impact was considered to be of such significance that it rated a separate element within the importance score formula.

6.9   Temptation

6.9.1   There can be little doubt that certain items within any organisation are more desirable than others and that these items are susceptible to misappropriation. The temptation to take the item and the ease of removing it were considered to be significant factors which were outside the Value and Business Impact elements of the formula, in that low value items were just as likely to be misappropriated as those of a high value. Indeed, many relatively low value items were extremely desirable, portable and easily concealed and it was considered that the temptation to remove them could be very high. Although individually they were not of great value, in total they could be significant. It was therefore decided to identify Temptation as a separate element in the formula.

6.10   Internal Control

6.10.1 The level of internal control was considered to be a significant factor in determining how frequently an area should be reviewed and how much resource should be allocated to it. If there were perfect internal control, then only infrequent audit attention would be necessary, assuming there were no changes in the interim. It was hypothesised that for areas previously reviewed the findings from the earlier audit could be used to ascertain the level of internal control. For those areas not previously covered the worse possible level would be assumed until otherwise proven. It was also expected that areas not previously reviewed would be scheduled very early into the planning cycle, unless all the other elements were of such low significance that other more important areas would take priority. Internal Control therefore became an element in the formula.

6.11   Creating the Formula

6.11.1 Chamber's matrix method was used to assess the relative importance of each item in the formula against every other item. This revealed that Size and Business Impact were valued at 7, Temptation at 2 and Internal Control at 4. Having established the relative importance it was then necessary to decide how the elements should be related mathematically to produce a score.

6.11.2 Seven trial runs were conducted using various mathematical relationships to produce scatter diagrams which were used to evaluate the spread of scores on the experimental data (see Figure 6.11.1 for an example). It was eventually decided that a

SCORE DISTRIBUTION - FINAL FORMULA

Figure 6.11.1
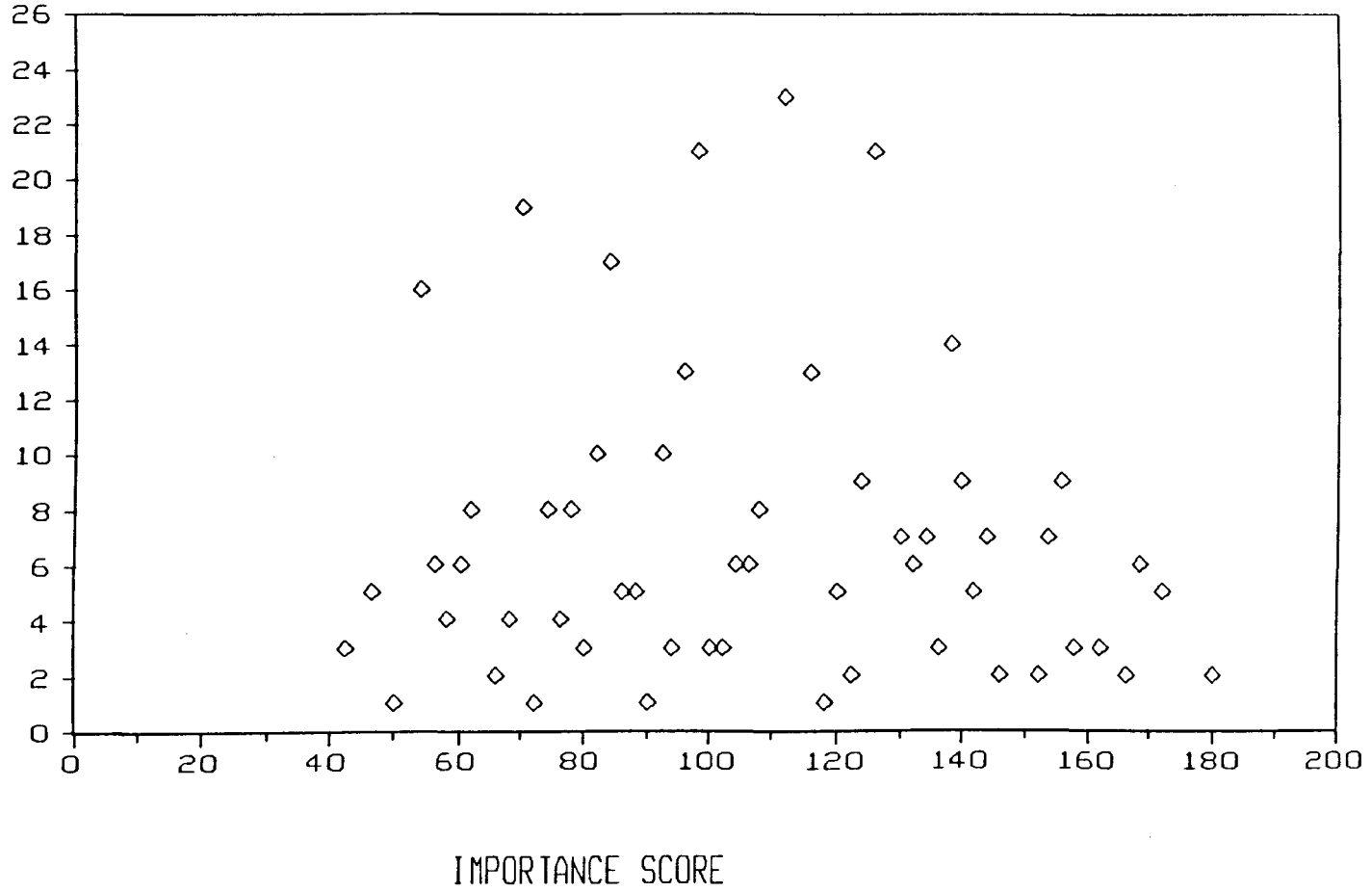
IMPORTANCE SCORE

◊　IMPORTANCE SCORE

straight addition of all elements, combined with a divisor to restrict the range of score to a maximum of 1000, would be suitable.

6.11.3 The resulting formula is shown in Figure 6.11.2. It was held that if this was found to be unsuitable it would be a simple matter to adjust the relationships to produce an acceptable scoring mechanism. Indeed, this had been the case during the trial runs where the formula had been modified several times before an acceptable spread of scores was found.

Importance Score Formula

$$Score = \frac{(7S + 7B + 2T + 4C)}{D}$$

Where: S = Size/Value Element
B = Business Impact Element
T = Temptation Factor Element
C = Internal Control Element
D = Divisor

Figure 6.11.2

6.11.4 Establishing the ratios and mathematical relationships between the formula elements in order to calculate a score still left the problem as to how each separate audit project could be measured against each element in the formula. The raw formula would give exactly the same score for each project unless a method could be found to apply a suitable weight to each element, which would reflect the different magnitudes that were expected to be found. The difference to the two

approaches can be illustrated by comparing two potential audit projects which have the following characteristics.

Project	Size	Business Impact	Temptation	Internal Control
A	100	High	Low	High
B	100	Low	High	Low

6.11.5 If we now apply the original unweighted formula we find that we do not have a way of indicating the difference between High and Low levels of Business Impact, Temptation and Internal Control. What is required is a method of converting these items into a numeric weight which will not only suitably reflect their different magnitudes, but which will also provide an additional method of flexing the output from the formula for sensitivity analyses purposes.

6.12 Determining Weights

6.12.1 It was conceived that tables could be created which would enable the conversion of the raw data for each element into a suitable weight which could then be applied on a consistent basis, so that projects containing exactly the same raw data would produce exactly the same score and that, where there was a variation in the data, the difference in final score could be determined on a constant basis by the consistent application of appropriate weights.

6.12.2 The significance of a particular element in any potential project was determined by measuring it against an appropriate base point and then converting that measure into a weight which could be used to flex the appropriate element component. The determination of these weight tables is described below.

6.13   **Size Weight**

6.13.1 The Size weight was obtained by determining a percentage based on the value held in the raw data against an appropriate base (see below for a description of appropriate base sizes). For example, if Turnover was used as the base and Turnover was 8 billion and the size of the audit item was 100 million, then the percentage is:

$$\frac{100}{8000} \times 100 = 1.25\%$$

6.13.2 This percentage can be converted into a weight, if a table is used to relate a particular percentage, or range of percentages, to each weight, as illustrated in Table 6.13.2.

Determining Size Weight Table

Percentile Range	Weight
0.00 - 0.30%	1
0.31 - 0.40%	2
0.41 - 0.50%	3
> 0.51	4

Table 6.13.2

6.13.3 Although this provided a simple way of converting the size of an audit area into a weight it was found that certain items swamped the scale simply because of their nature. Certain fixed assets for example, were of such high value that they distorted this part of the formula. This lead to the concept of having different base points for different types of items, as described in the following paragraphs.

6.14 **Size Base Points**

6.14.1 In order that the size element of each individual project could be converted into an appropriate and consistent weight there was need for it to be compared against a standard base point. The selection of these Base Point with regard to the Size element in the formula presented initial problems in that it was found difficult to collect the data. The lesson from the initial data collection trials was that only value data which was collected for the financial accounts was easily available on a regular and consistent basis. It was therefore decided that the Base points for calculating the Size Weight had to based on information which was collected for the the published accounts. It was also held that this provide an agreed audited figure in each case, which would enable these parameters to be updated annualy and without argument.

6.14.2 It was also realised that because businesses were dynamic in nature there was a likelihood that the base point could change from year to year as the business either expanded, or contracted, in various areas. It was eventually decided that in order to be objective, certain values taken from the audited accounts would be used and that these

would be updated annually to reflect the latest base point. It was considered that this would enable the system to more accurately reflect the importance, in value terms, of a particular audit project as the base point would be adjusted on a regular basis. Therefore any change in the base point would be reflected in the weighting allocated to that element and hence the score. For example, if the base point was the turnover of the business and this suddenly decreased then any projects which used this as their base measurement would be affected. This seemed a suitable method of reflecting the dynamic nature of a planning system without the need to re-enter the raw data associated with every project.

6.15   **Total Turnover**

6.15.1 This was required to provide a common base point against which each potential job could have its value compared. The reason for having a common base point was to enable an absolute, rather than a relative comparison to be made in each case. Initially this was the only size parameter used by the system, but it was found to be too crude a measure to provide the level of sensitivity required and the following were added as experience was gained. This particular parameter was finally used to determine the size weight for those projects identified as being of an income nature.

6.16   **Stores Value**

6.16.1 This was the total value of stock as given in the audited accounts. It was to be used in calculating the size weight for those projects identified as being of a stores nature.

6.17 Gross Fixed Asset Movements

6.17.1 This was the sum of fixed asset movements, both in and out, as revealed by the annual accounts. Its purpose was for the calculation of the size weight for those projects identified as being of fixed asset nature.

6.18 Payroll

6.18.1 This was the gross payroll costs shown in the annual accounts and it was to be used in the calculation of the size weight for those projects as being identified as of a payroll nature.

6.19 Operating Costs

6.19.1 This was also taken from the accounts and was to be used in the calculation of the size weight for those projects identified as being of an expenditure nature.

6.20 Annual Parameters

6.20.1 Because all of the above base points could change each year they were identified as annual parameters and the system was designed to enable them to be easily modified and to force a re-calculation of scores whenever any of them were changed. This automatic re-calculation feature was considered to be an important requirement of the system, otherwise important factors could be changed which could affect the importance scores of all the potential audit jobs and without automatic re-calculation the user could inadvertently make decisions on out-of-date data.

6.20.2 The annual parameters can be categorised as part of the standing data of the system (i.e. that data which affects every transaction in the audit portfolio). Two additional annual parameters were

also identified: the start year of the planning
cycle under consideration and the number of
man-days available for audit purposes. The final
list of annual parameters was therefore:

Annual Parameters

(a) Annual Turnover of the Company;

(b) Gross Asset Movements during the Year;

(c) Total Stores Value;

(d) Gross Pay Costs;

(e) Operating Costs (excluding Pay).

(f) Start Year of the Planning Cycle;

(g) Man-days available for audit work in the first
year;

The rationale behind items (a) - (e) above has
already been described. That for the remaining
two is provided below.

6.21   **Start Year of the Planning Cycle**

6.21.1 This was required for two reasons. First and most
       importantly, it was needed to decide when an audit
       should next be done. If, for example, an audit
       had last been done in 1986 and its frequency was
       set at two years, then it should next be done in
       1988 and subsequently in 1990. If the first year
       of the planning cycle was 1987, then the audit
       could be considered as occurring in years two and
       four of the strategic plan as the horizon runs
       from 1987 to 1991. If we change the start year to
       1988 (i.e. we advance it by one year) then the
       audit may be considered as being due in years one,
       three and five of the cycle. Thus the start year
       of the cycle automatically schedules an audit
       based on when it was last done and its frequency

of review. Second, it enables sensible headings
to be produced containing actual calendar years
rather the simply stating "Year 1" etc.

6.22   Man-days available for Audits

6.22.1 This was required in order that the system could
inform the auditor of any potential over, or
under, resource utilisation. A further reason was
to enable the system to maximise the total
available resource by allocating it to the more
important audits, or to spread all the resource
over all potential audit jobs at a possibly
greatly reduced individual budget in each case.
The reason for only requesting the first year
figure was that the first year of the plan was
what authority was sought for at the Board Audit
Committee. The subsequent years were for internal
planning purposes only and experience had shown
that departmental establishment did not tend to
fluctuate greatly from year to year. By using a
stable man-power figure for the entire cycle it
was also possible to anticipate any over, or
under, resource utilisation and use the output as
evidence of (say) the need for more staff in order
to meet the anticipated demands.

6.23   Business Impact Weights

6.23.1 The initial weightings for Business Impact were
decided as shown in Table 6.23.1, but the system
was designed so that they could be amended in
order to provide a sensitivity analysis
capability.

Determining Business Impact Weights

Business Impact	Weight
High	4
Medium	3
Low	2
None	1

Table 6.23.1

6.23.2 The definition of each impact type was decided as being:

Impact	Definition
High	The business would be severely affected
Medium	The affect would have a significant impact
Low	The business would not suffer unduly
None	There would be no affect on business operations

6.24   **Temptation**

6.24.1 The initial Temptation weights were set as shown in Table 6.24.1, but again they were capable of easy amendment for sensitivity purposes.

Determining Temptation Weights

Temptation Likelihood	Weight
High	4
Medium	3
Low	2
None	1

Table 6.24.1

6.24.2 The definitions applied were:

Impact	Definition
High	Extremely desirable and portable (i.e. Cash)
Medium	Desirable, but not easily converted
Low	Not particularly desirable and not easily converted
None	Unlikely to be of temptation (i.e. Buildings)

6.25 Internal Control

6.25.1 The audit department used standard key words in its audit reports in order to convey to management an opinion on the level of internal control found during a review. These key words were used to derive the initial weights shown in table 6.25.1, but the system permitted amendment for sensitivity analysis purposes.

Determining Internal Control Weights

Internal Control	Weight
Good or Satisfactory	1
Satisfactory Except for ...	2
Unsatisfactory	3
Critical	4

Table 6.25.1

6.26 System Parameters

6.26.1 It was realised that in order to process the raw data in a sensible way the system would need to be supplied with certain other parameters. The type and number of parameters increased during the experiment as the system was expanded from a "Nominal" to a "Formula" based system. The

Nominal system simply, accepted the raw data and processed it into a strategic plan based on the individual audit budgets and frequencies as entered by the auditor. Although this was useful it did not add greatly to the manual planning process. It did not for example help the auditor to defend either his resource allocations, or frequency determinations, neither did it provide the ability to logical reject projects for which resource was not available. In order to create the Formula based system the following parameters were found to be required.

6.27   **Sensitivity Parameters**

6.27.1 In order to maximise the usefulness of the system there was a need for other parameters by which the varying of could be used to conduct sensitivity analyses and provide additional management information. The following were used during the experiment:

a) audit complexity;
b) frequency advisory criteria.

These are described below.

6.28   **Audit Complexity**

6.28.1 It was hypothesised that there could be a relationship between the complexity of the audit task and the time taken to conduct the review and that if standard times were to be used there had to be a method of increasing them to take account of this. The following initial weights were provided to allow for this.

Determining Audit Complexity Weights

Audit Complexity	Weight
High	3
Medium	2
Low	1

Table 6.28.1

6.28.2 Subsequently, this was found not to be a particular useful parameter, as it was easier for the auditor with his local knowledge to better determine an appropriate budget, which allowed for complexity.

6.29   **Frequency Criteria**

6.29.1 It was hypothesised that if the system was to be capable of advising on the frequency of review based on the score, then a table would be required in order to convert ranges of scores into a suggested frequency. The following initial table was used, but again it was capable of easy amendment.

Determining Frequency Criteria

Score Range	Advised Frequency
0 - 25	Every 5 Years
26 - 50	Every 4 Years
51 - 75	Every 3 Years
76 - 100	Every 2 Years
> 101	Every 1 Year

Table 6.29.1

6.30   Final Formula

6.30.1 The addition of the various weights into the
formula resulted in it having the construction
shown below:

$$\text{Score} = \frac{(7S + 7B + 2T + 4C)}{D}$$

Where: S = Size Weight
B = Business Impact Element
T = Temptation Weight
C = Internal Control Weight
D = Divisor

6.30.2 How does this differ from the original? The only,
but significant change, is that we now have
associated a weight to each element. The
appropriate weight to be used is determined for
each element by the system, based on the
methodology described for each item above. Thus,
if for a two different projects the following
weights were determined:

	Project A	Project B
Size	9	1
Business Impact	9	1
Temptation	9	1
Internal Control	9	1

Then the resulting Importance Scores would be:

$$\text{Project A} = \frac{(7*9)+(7*9)+(2*9)+(4*9)}{1} = \frac{180}{1} = 180$$

$$\text{Project A} = \frac{(7*1)+(7*1)+(2*1)+(4*1)}{1} = \frac{20}{1} = 20$$

The divisor is used to keep the score to a maximum of 1000, regardless of the size of the ratios and weights actually used, although in this instance the score could not exceed 1000. The calculation of the divisor for any change in the construction of the formula was to calculate the theoretical maximum score (by multiplying each element by its maximum potential weight) and then dividing this by 1000 if that score was exceeded, thus:

$$\text{Divisor} = \frac{(7S + 7B + 2T + 4C)}{1000}$$

Example Based on Large Ratios/Weights

$$D = \frac{(99*9) + (99*9) + (99*9) + (99*9)}{1000} = \frac{3312}{1000} = 3.312$$

6.31   Conclusions

6.31.1 The major data requirements were identified as
being: those items which changed annually and
affected all the data in the system; information
relating to potential audit jobs; sensitivity
weightings; a mathematical relationship. A
methodology was now required in order to
manipulate these items in a consistent way.

CHAPTER 7

MANIPULATING THE DATA

7.1   Introduction

7.1.1   Having created a framework within which it was
expected a system could function it was now
necessary to attempt to manipulate the raw data to
ascertain whether the hypotheses were valid.
Although a spreadsheet was initially used for this
purpose it quickly became apparent that there were
severe limitations in using software of this
nature when manipulating large amounts of data.
Ultimately, some 70 modules, written in the dbase
language, were developed and Table 5.10.1 lists
the modules concerned.

7.2   Importance Score Calculation

7.2.1   The derivation of the formula has already been
described and it is now necessary to discuss
exactly how this is converted into an Importance
Score for each project. To recap, the formula
was:

$$Score = \frac{(7Ss + 7Bb + 2Tt + 4Cc)}{D}$$

Where: S = Size/Value Element
       B = Business Impact Element
       T = Temptation Factor Element
       C = Internal Control Element
       s = Size/Value Weight
       b = Business Impact Weight
       t = Temptation Factor Weight
       c = Internal Control Weight
       D = Divisor

7.2.2   It will be recalled that the ratios between each
         element were derived by the Chamber's matrix
         method and that the mathematical relationship was
         arbitrarily determined, with a divisor being used
         to keep the score to a maximum of 1000, regardless
         of the ratios and weightings used. The
         calculation of the divisor for any change in the
         construction of the index was to calculate the
         theoretical maximum score (by multiplying each
         element by its maximum potential weight) and then
         dividing this by 1000.

7.2.3   Chapter 6 discussed the need to weight each
         element of the formula based on information
         supplied by the raw data for each project. This
         was to allow different importance scores to be
         calculated which, while based on the same formula,
         would fairly reflect the differences in the
         project data. The calculation of the weights has
         also been described and it will be remembered
         that, in order to conduct sensitivity analyses,
         the weightings were capable of amendment. Thus
         any changes to the allocated weightings would have
         an effect on the Importance Scores and will
         require a complete re-calculation of the entire
         file.

7.3   **Frequency Calculation**

7.3.1   This was achieved by taking the importance score
         of each project, comparing it against the
         frequency determination criteria parameters (Table
         6.30.1) and recommending an appropriate frequency.
         This was used to provide a comparison against the
         frequency allocated by the user. The hypothesis
         being that there was a relationship between the
         importance score and the frequency of review. A
         comparison therefore, between the system derived

and the user allocated frequency could reveal whether the user was doing a project more, or less frequently than its importance suggested.

7.3.2   Report LHRSKP8 in Appendix 2 shows the differences between the manually prepared and the system derived frequencies based on the frequency determination criteria shown in Table 6.30.1.

7.4   **Audit Budget Calculation**

7.4.1   The system was designed to use up to four different types of budget:

a)   Nominal   - entered by the user;

b)   System   - calculated from the Score;

c)   Standard - the sum of the standard time of each Control Objective covered by the audit;

d)   Complex   - the Standard modified by a factor indicating the local complexity of doing the job.

Report LHRSKP11 in Appendix 2 shows the differences between these budget types based on the control data.

7.4.2   The Nominal budget is supplied by the user as part of the raw data for each project.

7.4.3   Likewise the Standard budget is also supplied by the user, in that a Standard time is entered against each Control Objective in the Control Objectives file and the objectives which are to be tested are supplied as part of the raw data for each potential audit. The Standard time for a job is therefore the sum of the time for each Control Objective associated with the job.

7.4.4   The Complex budget takes the Standard budget and modifies it by applying an appropriate weighting from the Complexity Parameters. The weighting to be used is determined by the user identifying the complexity of the audit as part of its raw data. The audit can be identified as being of High, Medium, or Low complexity and the Complexity Parameter table converts this into a weighting. The parameters used for the experiment are shown in Table 6.29.1.

7.5.1   The System Budget is calculated by spreading the available resource across the projects based upon their importance scores. It does this by calculating the ratio of available days against the sum of all the importance scores and then allocates time based on that ratio as described in the example below.

```
Available Man-day Resource    = 100
Sum of Importance Scores      = 1000
Ratio of Resource:Importance Score = 100:1000
                              =   1:10
```

Therefore 1 man-day of resource will be allocated for each 10 points of a project's importance score. If we have a project with an importance score of 300 it will be allocated 300/10 = 30 days. Because the sum of all importance scores was used the available days will be completely and consistently allocated. The problem with this method of allocation is that it is conceivable that there will be many low importance projects which will absorb a large amount of resource, but in very small amounts in each case. Indeed, these amounts may be so small that a workable audit is impossible. For example if a project only had an importance score of 10, it would attract only one day of resource, which is unlikely to provide sufficient time for an audit. If there were 50 projects with that score, then 50 days would have been absorbed from the 100 available, but none of it would have allocated into workable amounts. This problem is dealt with in the next chapter.

7.5   Changing the Formula

7.5.1   Although the four formula elements and the
mathematical relationships between them were fixed
for the purposes of this experiment, the ratios
between the elements were capable of amendment in
order to conduct sensitivity analyses.

7.6   Resource Availability Problems

7.6.1   Very few audit departments can guarantee
stability of available resource. Any variation on
the available resource due to staff leaving, or
being allocated to non-audit tasks will have an
impact on the plan. Holding the available
resource as an annual parameter enables the affect
of any change to be quickly analysed.

7.7   Re-Calculation

7.7.1   Mention has already been made of the ability to
modify the formula element ratios and the affect
this has on importance score calculation. Other
standing data parameters have a similar effect in
that every project on the file will be affected in
some way. The Parameters which force a
re-calculation of the entire file are:

    a) Formula Element Ratios (already discussed);
    b) Change in the mathematical relationship;
    c) Any of the Annual Parameters:
      i) Available Resource,
     ii) Turnover,
    iii) Stores Value,
     iv) Gross Asset Movements,
      v) Payroll Costs,
     vi) Operating Costs.
    d) Any of the Weights.

7.7.2   The reason why a change to any of the value base
        points forces a re-calculation is that they may
        affect the ratio between the size identified in
        the raw data for each job and the value base point
        and that in turn will affect the associated
        weighting for that size ratio. As the size
        weighting forms part of the Importance Score
        calculation it is necessary to re-calculate for
        the entire file, as the system derived budget may
        well be affected (see 7.7.3). Likewise a change
        in any of the weights applied would affect a score
        calculation, as the weights form part of the
        formula. The system was designed to detect any
        changes which would affect a score calculation,
        either for all projects (i.e. due to change in any
        of the standing data parameters), or for an
        individual project (i.e. the amendment of any data
        used in score calculation). The reason to force a
        re-calculation of the entire file if only a single
        project's data was amended is discussed below.

7.7.3   It will be recalled that the calculation of the
        system derived budget required the calculation of
        a ratio between the available resource and the
        total of all the importance scores, so that the
        available resource would be allocated according to
        importance. If only a single project's score
        changes for any reason then this ratio will also
        need amending which may affect the allocation of
        resource to every project on the file. Thus a
        complete re-calculation will be required.

7.8   **Interfacing With Other Systems**

7.8.1   The system allows for data to be imported from and
        exported to an associated Monitoring System. This
        permits the easy and accurate updating of the
        Planning System data on a regular basis and also
        enables the annual plan to be set-up on the
        Monitoring System to enable management control to
        be exercised over the audit work. In addition,
        the dBASE III data files from the Planning System
        can be exported to other software packages in
        order to conduct graphical and other analyses of
        the plans and data. Examples of such analyses are
        provided in Appendix 2.

7.9   **Conclusion**

7.9.1   The manipulation of the data in order to produce
        the output and plans described in the next chapter
        required a number of changes to the various
        parameters, but these were quickly and easily
        accomplished due to the design of the system. It
        was also recognised that the system's ability to
        import data from the computerised monitoring
        system enabled planning to be conducted on either
        a continuous, or ad-hoc basis. It was no longer
        necessary to allocate a large manpower resource at
        a specific time to conduct the annual planning
        exercise, as the data for it was now being
        collected as part of the normal audit process.
        Any new areas, or potential jobs which were
        identified during the year could be input as they
        were recognised and the impact on future coverage
        determined by re-calculating the plan. It was
        estimated that for the five subsidiary companies
        used as the basis for this experiment, some 200
        mandays per year would be saved for a once off
        investment of 200 days; this being the cost of

collecting the data in the first instance and which it was considered would have been spent to do the annual manual planning exercise correctly. Thus some 200 man days per year were likely to be released for direct audit work once the initial data collection exercise was completed.

CHAPTER 8

MANAGEMENT INFORMATION

8.1 Introduction

8.1.1 The input to the system was determined by the required outputs and it is useful to examine the final range of reports which the system was capable of generating. To a certain extent these standard reports may be viewed as the minimum considered useful by the department, but because the system used the dBASE III software it was not only possible to speedily develop ad-hoc reports by using the dBASE ASSISTANT utility, but also to transfer the data files to other software analysis packages such as Supercalc and Reflex. Indeed, the use of the graphical capabilities of these other packages was found to be a considerable enhancement in aiding management interpretation of the output. The standard reports generated by the system are shown in Table 8.1.1. A fuller description of these reports is provided below.

8.2 Planning Parameters (LHRSKP1)

8.2.1 This report lists all the parameters (standing data) used by the system to manipulate the raw data contained in the Audit Project Portfolio file.

8.3 Audit Portfolio Ranked By Importance (LHRSKP2)

8.3.1 After score calculation, this report provides a sorted list of all projects within the audit portfolio in importance score sequence. The highest scoring project appears first and the lowest is printed last.

STANDARD REPORTS FROM THE SYSTEM

Report	Description
LHRSKP1	Planning Parameters
LHRSKP2	Audit Portfolio Ranked by Importance Score
LHRSKP3	Annual Plan Based on Frequency Only
LHRSKP4	Annual Plan Based on Frequency & Available Resource
LHRSKP5	Annual Plan Based on Frequency, Importance and Resource
LHRSKP6	Business Area Descriptions
LHRSKP7	Business Area Budgets
LHRSKP8	Suggested Frequency Based on Importance
LHRSKP9	Strategic Audit Plan
LHRSKP10	Audit Project Portfolio
LHRSKP11	Nominal and System Budget Comparison
LHRSKP12	'Must Do' Projects
LHRSKP13	Control Objectives
LHRSKP14	Audit Locations
LHRSKP15	Incomplete Control Objective Coverage
LHRSKP16	Planning Horizons

Table 8.1.1

8.4   **Annual Plan Based On Frequency Only (LHRSKP3)**

8.4.1 This report provides details of those projects which are scheduled to be done in the first year of the current cycle, regardless of their importance score, or resource availability. Inclusion is determined simply by summing when they were last done and their frequency of review and ascertaining whether the resulting year matches the first year of the plan.

8.4.2 Where a project has no previous review date then the Frequency Determination table is used to ascertain how soon it should be scheduled by examining its importance score and converting this into a review frequency. If the frequency so determined is "1", then the project is scheduled into the annual plan. The reason for checking the

importance score is to avoid putting all projects
that have not previously been reviewed into the
first year of the planning cycle.

8.4.3   The effect of using the Frequency Determination
criteria is to spread these projects over the full
planning horizon based on their importance. That
is the higher scoring projects are scheduled
earlier than those with a lower score. This plan
makes no reference to available resource and it is
possible to have a total man-day requirement in
excess of that which is available.

8.5   **Annual Plan Based On Frequency And Resource
(LHRSKP4)**

8.5.1   Although this plan selects projects in a similar
manner to the previous one it also uses the
available resource by spreading it across the
selected projects based on their importance
scores. It does this by calculating the ratio of
available days against the sum of all the
importance scores and then allocates budgets based
on that ratio, as shown in the example below.

Available Man-day Resource = 100
Sum of Importance Scores   = 1000
Ratio Resource:Score = 100:1000 = 1:10

8.5.2   Therefore 1 man-day of resource will be
allocated for each 10 points of a project's
importance score. If we have a project with an
importance score of 300 it will be allocated
300/10 = 30 days. Because the sum of all
importance scores was used the available days will
be completely and consistently allocated. The
problem with this method of allocation is that it
is conceivable that there will be many low

importance projects selected for the annual plan (because selection is based on frequency) which will absorb a large amount of resource in very small amounts in each case. Indeed, these amounts may be so small that a workable audit is impossible. For example if a project only had an importance score of 10, it would attract only one day of resource, which is unlikely to provide sufficient time for an audit. If there were 50 projects with that score, then 50 days would have been absorbed from the 100 available, but none of it would have allocated into workable amounts. This problem is overcome in the following report.

8.6 **Annual Plan Based On Frequency, Importance &
Available Days (LHRSKP5)**

8.6.1 This report attempts to overcome the problem described above by providing the option of ignoring those projects whose importance score falls below a certain value (this value may be varied at reporting time). This enables the resource which would have been allocated in unworkable small amounts to be used elsewhere. It is conceivable however, that certain low importance projects must be included in the plan and this is achieved by flagging them as 'Must Do' regardless of importance and frequency. The flagging is done within the project itself (see Audit Portfolio Input) and this report allows the user the option of either including, or excluding, such projects. If the user chooses to include them, then the system ignores the instruction to reject a project if its score falls below the minimum required for inclusion and includes it anyway.

For example if the minimum score for selection was set at 50 and 'Must Do' projects were excluded the the following project would be rejected:

Score = 49   Must Do Flag = Yes

If however, it had been decided to include 'Must Do' projects then it would be included.

8.7   **Business Area Descriptions (LHRSKP6)**

8.7.1   This report simply lists all allocated Business Areas so that their descriptions are available.

8.8   **Business Area Budget Totals (LHRSKP7)**

8.8.1   This report aggregates the individual project budgets for each year of the plan into their relevant Business Areas. This provides a useful summary of how the resource is to be used. This may reveal that (say) an undue amount of resource is to be used for stores as against payroll.

8.9   **Suggested Frequency Based on Score (LHRSKP8)**

8.9.1   This report takes the importance score of each project, compares it against the frequency determination criteria parameters and suggests an appropriate frequency. This can be compared against the frequency allocated by the user to ascertain any difference. This may well reveal that the user is either doing some projects more, or less frequently, than their importance suggests.

8.10   Strategic Audit Plan (LHRSKP9)

8.10.1 This report shows for each project in the portfolio where it is scheduled in the strategic plan based on its year of last review and it frequency, or if it has not been previously reviewed when it will be first scheduled, based on its importance score and suggested frequency. The frequency to be used may be either the Nominal frequency entered against each project in its raw data, or that determined by the system based on the importance score and the frequency determination criteria, the 'System' frequency.

8.10.2 The strategic plan provides an overview of the likely resource requirements over the planning horizon, which will enable the user to identify peaks and troughs in the proposed coverage and potential periods of over, or under resource utilisation. Fine tuning for any particular year can be achieved by producing the three reports relating to annual planning (LHRSKP3 - LHRSKP5), which have been described above.

8.10.3 The budgets to be used for the strategic plan can be either the 'Nominal' budgets entered by the user against each project, or the 'System' budgets calculated by the system based on each projects importance score and the available annual resource. Thus there is the possibility of producing a number of strategic plans which use the same raw data, but which are flexed by the system parameters. The eight types of plan capable of production in this way are:

a) Nominal Frequencies & Nominal Budgets
b) Nominal Frequencies & System Calculated Budgets
c) Nominal Frequencies & Standard Budgets
d) Nominal Frequencies & Audit Complexity Budgets
e) System Frequencies & Nominal Budgets
f) System Frequencies & System Calculated Budgets
g) System Frequencies & Standard Budgets
h) System Frequencies & Audit Complexity Budgets

8.10.4 Where the Nominal Budgets are those entered against each project by the user; System Calculated Budgets are those produced by the system by determining the ratio of available man-days against the sum of the importance scores and allocating a budget based on that ratio; Standard Budgets use the time entered against each Control Objective to be covered during the audit; and Audit Complexity Budgets take those Standard Times and multiply them by a weighting which indicates the local complexity of doing the job.

8.10.5 The strategic plan provides a powerful argument for requiring either more resource, or for dropping, or re-scheduling jobs in order to match the demand against available supply, which is one of the prime reasons for audit planning.

8.11   **Audit Project Portfolio (LHR8KP10)**
8.11.1 This report lists the raw data held against each project in the portfolio for checking purposes.

8.12   **Nominal & System Budget Comparison (LHRSKP11)**

8.12.1 This report compares the four types of budget
       (Nominal, System Calculated, Standard Time & Audit
       Complexity Time) to show variations which may help
       in determining a suitable budget for a particular
       job.

8.13   **'Must Do' Projects (LHRSKP12)**

8.13.1 This report lists all projects where the 'must do'
       indicator has been set.

8.14   **Control Objectives (LHRSKP13)**

8.14.1 This report lists the various Control Objectives
       for checking purposes. The Standard Times and
       Frequencies are important as they can be used by
       the system for calculation purposes. In addition,
       the Control Objectives are used when the system
       attempt to ascertain whether complete coverage is
       scheduled for any location during the planning
       cycle. The assumption being that every Control
       Objective should be covered in every Location.

8.15   **Audit Locations (LHRSKP14)**

8.15.1 This report shows the Locations known to the
       system and indicates whether they are Divisions,
       Districts, or Customer Service Areas. The system
       uses this location information when determining
       whether complete audit coverage is scheduled for a
       particular location in the planning cycle.

8.16   **Incomplete Core Coverage (LHRSKP15)**

8.16.1 This report analyses the proposed coverage at each
       location and identifies any omissions. The
       assumption being that all Control Objectives
       should be covered at all locations during the
       planning horizon.

8.17   Planning Horizons (LHRSKP16)

8.17.1 This report shows the minimum cycle necessary in order to achieve complete coverage of ever audit in the portfolio based on the Nominal Budgets. It achieves this by summing the individual Nominal Budgets and dividing that figure by the available resource as held in the Annual Parameters. This immediately reveals, in an unsophisticated manner, the minimum planning cycle that is necessary in order to provide full coverage using the available annual resource.

8.16   Conclusions

8.16.1 The above reports are really the minimum useful output from the system, but the ability to transfer data to other software packages, enables very powerful analysis tools to be used if so required. This author experimented with various graphical and data manipulation tools and produced the charts and graphs provided shown in Figures 8.16.1 to 8.16.3.

MAN DAY REQUIREMENTS BY DIVISION
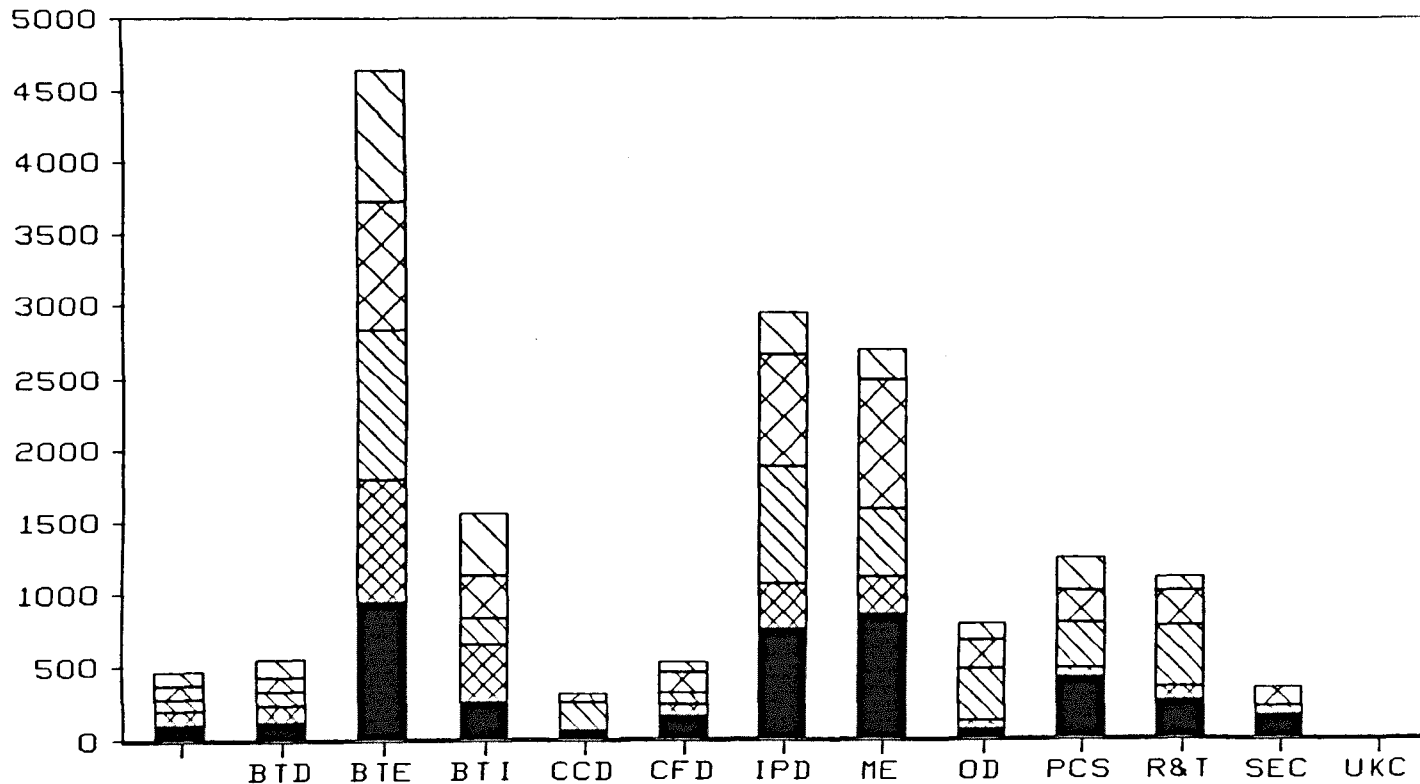
DIVISION

YEAR 1 YEAR 2 YEAR 3 YEAR 4
YEAR 5

Figure 8.16.2

125b

MAN DAY REQUIREMENTS BY BUSINESS AREA

BUSINESS AREA
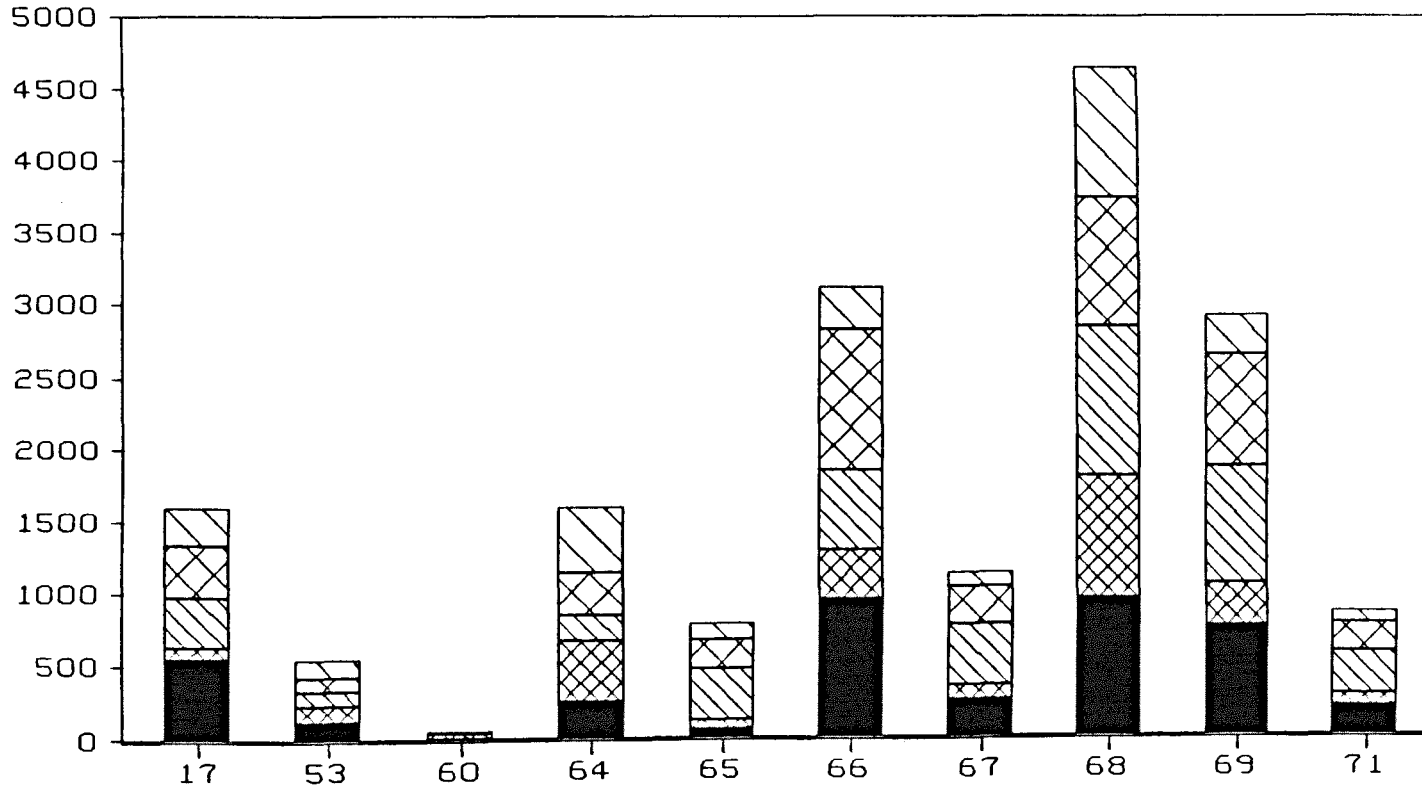
■ YEAR 1 ▨ YEAR 2 ◪ YEAR 3 ▧ YEAR 4
▨ YEAR 5

Figure 8.16.3

125c

CHAPTER 9

PREVIOUSLY UNPUBLISHED AREAS

9.1   **Introduction**

9.1.1 Although this research indicates that the use of a
       formula to determine relative importance in the
       audit planning process is capable of application
       on a large scale, certain areas need to be treated
       with care. Describing the process as "risk
       analysis" is misleading and it would be better to
       describe it as conducting a standard analytical
       review across the entire potential audit
       portfolio.

9.1.2 The use of a computerised planning system to help
       internal audit management is therefore, not only
       feasible, but can also provide a valuable tool
       for justifying the resource of the department. A
       spin off from the work was to show that the
       actual formula used is of less importance than
       the overall planning methodology. One of the most
       important aspects of the planning methodology was
       the actual data collection exercise, as this
       increased the audit department's knowledge of the
       organisation and thus drew attention to
       anomalies in what were thought to be well
       understood factors and relationships.

9.1.3 The relationship between historic data and future
       plans became better understood and the need for
       accurate record keeping became apparent when
       attempting to determine what audit resources
       would be required for a particular job. The
       relationship between risk and resource
       allocation, which has been propounded in a number

of papers, was found to be spurious and the use
of different formulae for different aspects of
the business was found to present problems with
regard to equivalence between formulae.

9.1.4 A number of major problems, together with some
unexpected advantages, were encountered which had
not been mentioned by other authors and these are
dealt with below.

9.2   **New Areas**

9.2.1 The new areas encountered during the experiment
and which had not previously been raised by other
authors related to:

(a) data collection problems;

(b) data validation requirements;

(c) the need for user friendliness;

(c) spreadsheet limitations;

(d) stratification of importance scores;

(e) bunching of jobs which had not previously
    been done;

(f) dealing with non-cyclical activity;

(g) the need to override low scoring jobs to force
    them into a particular year of the plan;

(h) the capability to estimate a minimum cycle to
    ensure full coverage of the audit portfolio;

(i) the need for good definitions for 'audit',
    'location', 'system' and 'full coverage';

(j) monitoring system interface;

(k) subject v control objective approach.

9.3   **Data Collection**

9.3.1 Because it had been decided to create an audit
portfolio at the job level, rather than by
division, or unit, it was necessary to collect
data for every potential job. It should be

remembered that it was held that to create a
portfolio at the lowest possible level would
always enable aggregation at the higher levels,
whereas collection at the higher levels only,
would not enable a breakdown to audit job level to
be undertaken. Although only four items of data
were required for score calculation, it was found
that nineteen items needed to be entered into the
system for each job in order to provide a
comprehensive planning system.

9.3.2   Although some of these items were easily obtained,
the data collection, data entry and data checking
tasks were far greater than had been indicated by
the literature, which reinforced the hypothesis
that previous authors had not practically applied
their theories to a large organisation at the
audit job level. In this case, with some 2,000
potential jobs, it was necessary to collect, enter
and check over 38,000 data items for the full
system. For this experiment, which ran as sub-set
of the full system, it was still necessary to deal
with nearly 4,000 data items.

9.4   **Data Collection Problems**
9.4.1   None of the authors had dealt in any depth with
the problems associated with collecting the data.
This was found to be a major commitment with
regard to scale, interpretation and accuracy.

9.4.2   The scale of the exercise was far in excess of the
preliminary calculation, which indicated that for
3,000 potential jobs it would be necessary to
collect some 12,000 items of data, based on a 4
element formula (3,000 x 4 = 12,000). In practice
it was necessary to load some 19 items of data for
each job and although many of these items required

no research (i.e. project code, description, etc.), many others did (year of last review, budget, etc.). It was necessary therefore to collect and input 57,000 items of data, in order to provide a complete audit portfolio for the 5 year horizon.

9.4.3   One advantage of using a database is that not all the data need be collected, or indeed input, at one time. The portfolio can be built up gradually over a reasonable time period, but the initial data collection exercise is still likely to be a time consuming process. It is at this time that the Audit Department is likely to realise, just how little it really knows about the organisation it is serving. One further aspect relating to the data input side which needs to be considered is the need for good validation of the data at the time of input.

9.4.4   It was found that by working at the lowest possible level, that it was possible to aggregate upwards to Business Area, Customer Service Area, District, Division, or Company. This gave the system immense flexibility in generating management information which would not have been possible if data had only ben entered at the higher level(s) as many other authors had intimated. Indeed, this author found examples of score calculation beeing conducted at subsidiary company level, even though the audit of that company actually involved the examination of many different systems and locations.

9.5   **Data Validation**

9.5.1   With many thousands of items of data being input
        it is absolutely essential for the system to have
        sophisticated validation routines to prevent
        invalid data being accepted into the system.
        Although it is possible to do a one for one check,
        by printing the raw data, it is far more efficient
        and effective to warn of and reject invalid data
        during the input process. Failure to do so will
        lead to erroneous results being generated
        following the old GIGO maxim (garbage in, garbage
        out). This need for validation is consistent with
        the requirement for user friendliness.

9.6   **User Friendliness**

9.6.1   Because it was always intended that this system be
        run on a distributed basis, with central
        consolidation of the results, it was found to be
        absolutely essential for it to be user friendly.
        Even if it had not been a distributed system, it
        was noticed that data was input by several
        different members of staff at each location and
        that there was a wide variation in their
        understanding of the requirements of the system.
        This made it necessary to include clear
        explanations of what the system would do, or what
        it required at each stage.

9.6.2   These explanations and instructions were finally
        provided on-line, as it was found that there was
        little effort made by the staff to refer to a
        manual for information. It was also found
        necessary to make the system totally self checking
        with regard to the sequence of processing.

9.6.3   If, for example, a change was made to any item
        (data or parameters) which could effect the
        output, then the system would not only warn the
        user when a report was requested, but it also
        would automatically recalculate the results prior
        to printing the report. In addition, if the user
        exited the system without conducting a logical
        close down (e.g. power failure), then the system
        would recognise the failure at the next start-up
        and offer the user the opportunity to restore from
        the security files. Many other areas were covered
        in order to make the system fault tolerate and
        user friendly.

9.7   **Spreadsheet Limitations**

9.7.1   A number of authors had suggested the use of
        spreadsheets for the purposes of score calculation
        and plan preparation. Although at first sight
        this seems a sensible suggestion, the use of a
        spreadsheet during the early part of this
        experiment found severe limitations in its
        application in practice.

9.7.2   The data collection problem already described was
        compounded by the fact that spreadsheets did not
        provide the ability to fully validate the data
        input, or to fully automate the process. It was
        necessary for the auditor to have a thorough
        understanding of the spreadsheet package and even
        then the derived system would be neither fault
        tolerant, or use friendly.

9.7.3   A further factor which mitigates against the use
        of a spreadsheet is that they hold all the data in
        memory. Although this presents no problem where
        small data volumes are being processed, it is a
        severe limitation on the size of the data files

which can be used. In the case of this author's
organisation, it was found that the data volumes
far exceeded the ability of the spreadsheet to
hold all the data for processing purposes, whereas
the use of dbase removed any limitations in this
area. Indeed, with dbase the only limitation is
set by the size of the disk holding the data. As
hard disks for micro computers already have
capacities in excess of 300 megabytes, it is
unlikely that this limitation will present a
problem to even the largest audit department.

9.7.5 The derived system ultimately maintained four
separate data files: Audit Portfolio; Audit
Locations; Control Objectives; Business Areas.
The interaction between these files was essential
for the usefulness of the system, but once again
spreadsheets do not allow for several data files
to be accessed simultaneously for processing
purposes.

9.7.6 The reports generated by the system often needed
to access the contents of more than one data file
simultaneously. Spreadsheets on the other hand
only enable reports to be generated from a single
file.

9.7.7 The final system required 69 separate modules,
containing some 10,0000 lines of code, in order to
produce a useful, user friendly and fault tolerant
system. The individual modules were linked
together by the use of menus and each input screen
contained comprehensive validation routines to
guarantee integrity of input. No spreadsheet
could have dealt with complexity of this nature.

9.7.8   The points raised above indicate that the use of
        spreadsheets for audit planning purposes are
        extremely limited and a more sophisticated
        processing mechanism is required if the resulting
        system is to be truly useful.

9.8   **Stratification of Importance Scores**

9.8.1   Despite the fact that the formula as applied
        permitted a theoretical score range between 20 and
        180, it was found in practice that the portfolio
        fell into fairly discrete strata within that
        range. At first this was puzzling but a
        mathematical analysis revealed the culprit to be
        the limited number of weights which were available
        to each element of the formula.

9.8.2   It will be remembered that the formula had four
        elements and that each element could have one of
        four weights associated with it. The maximum
        theoretical number of combinations was therefore 4
        to the power of 4 which equals 272. However, due
        to the fact that two of the elements had the same
        ratio, the maximum practical number of
        combinations for the selected formula was only 4
        to the power of 3, which is 64.

9.8.3   Although this did not present any undue problems,
        in that the use of scatter diagrams had been used
        in the formula development to arrive at a formula
        providing a good spread of scores, the detection
        of discrete stratification was unexpected. The
        reason why it had not been noticed during formula
        development was simply that the test data had not
        been sufficient, in either volume, or content, to
        reflect the real world. It was only when real
        data was used that the effect was noticed. As
        stated this did not present any great problems,

but it may be useful for future formula developers to consider not only score spread, but also score stratification.

9.9   **Bunching of Jobs**

9.9.1   The tendency of the system to bunch together those jobs which had not been done previously, arose initially because the system had been programmed to identify such jobs (year of last audit not given) and to enter them into the first year of the strategic plan regardless of their score. This lead to the first year being swamped, as one of the purposes of the system was to hold details of all potential jobs which could be identified by the audit department. By necessity, this required the entry of any and many speculative jobs which had not been previously undertaken and were therefore automatically scheduled by the system into the first year.

9.9.2   In order to overcome this problem it was decided to use the importance score as a scheduling mechanism for jobs of this nature and the system was re-programmed to use the Frequency Advisory Table to determine when the job should be done. The system therefore examined the score and from the table established the frequency of review. This was then used to determine when the job should be done for the first time by adding the frequency to the first year of the plan minus one. Thus, if the score suggested an annual review was required, then the job would be scheduled into the first year of the plan by the application of the formula:

Scheduled Year = (1st Plan Year - 1) + Frequency

For example, if the first year of the plan was
1989 and the suggested review frequency, based on
the job's score and the table, was 3, then:

Scheduled Year = (1989 - 1) + 3 = 1991

9.9.3   While this provided a method of moving some jobs
out of the first year of the plan, it was found
that many of the jobs had relatively low scores
and therefore ended up in the last year of the
planning horizon. All that had been achieved was
to move the bunching from the first to the last
year! It was also noticed that potential "once
only" jobs were being treated by the system as
being cyclical in nature and were therefore being
scheduled based on their frequency. This meant
that they could appear more than once in the
strategic plan. Indeed, if a job of this nature
had a high importance score it could appear in
each year of the plan even though it was a
supposedly once only project. A better method had
to found therefore, to not only satisfactory
schedule jobs which had not been done previously,
but to also segregate cyclical and once only
activity.

9.10   **Cyclical & Once only Jobs**

9.10.1 An indicator was added to the raw data associated
with every job on the Audit Portfolio file to
identify it as either a Project (once only), or a
Regulatory (cyclical) job. The system was then
re-programmed to do two additional tasks.
Firstly, if the job was of a once only nature it
would only be scheduled once in the plan.
Secondly, if the job had not been done before
(year of last audit not given), then the auditor
was requested to provide the year within the plan

For example, if the first year of the plan was
1989 and the suggested review frequency, based on
the job's score and the table, was 3, then:

Scheduled Year = (1989 - 1) + 3 = 1991

9.9.3   While this provided a method of moving some jobs
out of the first year of the plan, it was found
that many of the jobs had relatively low scores
and therefore ended up in the last year of the
planning horizon. All that had been achieved was
to move the bunching from the first to the last
year! It was also noticed that potential "once
only" jobs were being treated by the system as
being cyclical in nature and were therefore being
scheduled based on their frequency. This meant
that they could appear more than once in the
strategic plan. Indeed, if a job of this nature
had a high importance score it could appear in
each year of the plan even though it was a
supposedly once only project. A better method had
to found therefore, to not only satisfactory
schedule jobs which had not been done previously,
but to also segregate cyclical and once only
activity.

9.10   **Cyclical & Once only Jobs**
9.10.1 An indicator was added to the raw data associated
with every job on the Audit Portfolio file to
identify it as either a Project (once only), or a
Regulatory (cyclical) job. The system was then
re-programmed to do two additional tasks.
Firstly, if the job was of a once only nature it
would only be scheduled once in the plan.
Secondly, if the job had not been done before
(year of last audit not given), then the auditor
was requested to provide the year within the plan

that he would like to do the job. This enabled
the auditor to spread first-time jobs, of
whichever type, throughout the planning horizon.
Where the job was cyclical the system would use
the frequency to determine when it should
subsequently be done after the first year provided
by the auditor. If the job was a once only, it
would be scheduled only for the requested year.

9.10.2 These modifications solved the bunching problem
and also enabled the auditor to segregate cyclical
and once off jobs. If a once off job subsequently
became cyclical, either because of its score or
the audit findings, then it was a simple job to
amend the indicator in the raw data.

9.11   **Low Scoring Jobs**

9.11.1 In order to be of a service to management Internal
Audit is sometimes requested to do jobs which it
would otherwise not undertake due to the low
importance associated with the job. Although the
derivation of a low importance score provides a
powerful argument for not doing jobs of this
nature, it is conceivable that Internal Audit will
be directed to do so. Any planning system must
therefore provide a facility to enter selected low
scoring jobs into a particular year.

9.12.2 This system provided an indicator within each job
which enabled the auditor to identify jobs of this
nature and thus force them into the plan even
though under normal circumstances they would have
been excluded.

9.13   Estimating the Planning Cycle

9.13.1 It was found possible to calculate the minimum
cycle needed to achieve full coverage of the
portfolio by the simple method of summing the
individual budgets of every job and dividing by
the available mandays held in the annual
parameters. While accepting that this is not
totally accurate, it does provide a reasonable
guide as to whether full coverage can be achieved
in a reasonable period.

9.13.2 A further sequence of calculations can be
conducted to indicate how many mandays are
required to achieve full coverage for a particular
chosen cycle. This requires the sum of the
budgets to be divided by the required cycle (e.g.
if the sum of the budgets is 8,000 days and a four
year cycle is required, then 8000 / 4 = 2,000
mandays must be available annually).

9.13.3 The system automatically calculated the minimum
possible cycle based on the available resource and
generated the required mandays for cycles of one
to five years. This was an interesting report
(Report 16) in that the first run of the system
indicated that full coverage could be achieved in
only two years, whereas the official cycle was
three years. This caused some consternation among
the auditors until they realised that a complete
area had been omitted from the database.
Insertion of the appropriate data changed the
cycle to three years and sighs of relief were in
order! The important lessons from this were that:

a) the system was capable of identifying that items were missing from the portfolio;

b) a resource surplus could be quickly identified;

c) a cycle of coverage to match the available resource could be suggested.

9.10   **The Importance of Definitions**

9.14.1 The need to adequately the define the audit process prior to determining the planning methodology has not been dealt with to any great extent previously, but this research has indicated that it is extremely important to separate the audit subject area (i.e. Payroll) from the audit objectives (i.e. only bona fide staff are paid).

9.14.2 Whilst it is relatively easy to develop a system which operates only at the subject level, it must be stressed that assumptions will then be made as what an audit of the subject actually requires. Where consistency of review across a large organisation is required, it is important to operate at the audit objective level and this has repercussions on the design of the system.

9.14.3 Clear definitions are undoubtably required with regard as to what is an 'audit, where is a 'location' (which may be physical or logical), and what is 'full coverage' at a particular location.

9.15   **Monitoring System Interface**

9.15.1 Although an automated planning system is useful in its own right, it becomes far more useful when linked to a suitable monitoring mechanism. The

linkage between planning and monitoring was shown
is shown below and the appropriate link was built
into the system.

Planning & Monitoring Relationship

```
        -----> Strategic ---->
       |         Plan              |
       |                           |
       |                           V
  Monitoring                    Annual
   of Findings                   Plan
      ^                           |
       |                          |
       |                          |
       <------- Tactical<-----
                 Plan
```
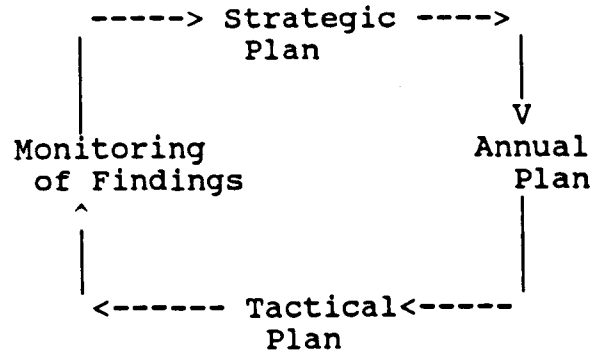
9.15.2 This saved time at the beginning of the year in
       that the appropriate jobs could be transferred
       directly from the planning system into the
       monitoring one without the need to re-key the
       data. Likewise, at the end of the year, it was
       possible to automatically update the planning
       system with details of those jobs completed during
       the year.

9.16   **Subject v Control Objective Approach**

9.16.1 Chapter 5 described the difference between the two
       approaches and concluded that whereas the subject
       approach was suitable for ranking potential jobs,
       it needed to be supplemented by control objectives
       in order to determine complete and consistent
       coverage at a particular location. The derived
       system ultimately provided both capabilities.

9.18   **Main Findings of the Research**

9.18.1 The main findings from the research can be summarised therefore as:

a) Risk analysis, as applied to internal audit planning, is a misnomer. It would be more appropriate to describe the process as an analytical review across all potential jobs and to call the output from the process an "importance score", rather than a risk index;

b) The use of a formula to indicate the relative importance of a particular area to the auditor is practical;

c) If more than one formula is used to deal with different aspects of the business, then there is a danger that the auditor will be unable to rank items from one area against those of another area with any certainty of relative, or absolute merit;

d) The formula is not the most important part of a planning system;

e) The collection of the data to be manipulated by the formula is one of the most important aspects of the planning process, as it ensures that the auditor has a good understanding of the organisation he is responsible for;

f) The best time to collect the data required by the planning system is during an actual audit. This implies a link between the historic monitoring process and the future planning process.

g) There is no correlation between the importance of an area, as rated by its importance score, and the resource required to audit it;

h) There is a relationship between the complexity of the area to be audited and the resource that is required to do the work, but the relationship is not necessarily linear;

i) An "override" facility is required to ensure that items with a low importance score can be forced into the scheduling mechanism;

j) It is possible to build a computer system to aid the internal audit planning process;

k) The system applies in a practical manner some of the theoretical work relating to so called risk analysis;

l) The data needs to collected at the job level if the system is to be capable of upward aggregation.

CHAPTER 10

FUTURE WORK

10.1   Introduction

10.1.1 This research used standard data manipulation
techniques to create a system which models the
strategic audit planning process. During the
process however, it became apparent that there
were some areas that could provide fruitful work
for the future. This chapter highlights a number
of areas of this nature.

10.2   Expert Systems

10.2.1 The derivation of the formula was arrived at by
a mixture of brainstorming and the Chamber's
matrix method, but it is believed that the use of
Expert Systems could be of benefit in the future.
A conceivable scenario would be to have a system
which would hold details of all the formula
elements which have been identified in the
literature to date and to associate these with
various types of businesses. The user would be
prompted to enter details relating to his business
and their respective magnitudes and the system
would suggest relevant formulae and weightings for
the user to select from. Indeed, the use of
pattern recognition and matching techniques should
also enable the system to add previously unknown
elements to its database for future use. A system
of this nature could be held at a central location
and be made available via a dial-up link to any
interested party. This should result in a very
large database being built up over the years and
the system should become more expert in the advice
that it can give.

10.3 Audit Monitoring Systems

10.3.1 This research found that in order to plan sensibly it was necessary to provide the system with historical information. Although many audit departments use time recording systems to identify work done by a particular auditor little work has been done on the use of this data for planning purposes. The system derived from this research relied heavily on data collected during the normal audit activity and it is believed that there may be a minimum data collection level that is relevant to both planning and monitoring. If this is the case then anyone designing a monitoring system for their own internal use should also consider the planning process in order to determine whether data for the future can be collected at the same time.

10.4 Audit Complexity

10.4.1 The research suggested that it is possible to determine a "standard" time for an audit based on the control objectives that are to be tested during the review. It further suggested that this standard time is likely to differ from the actual time due to local variations in the complexity of conducting those tests. This variation was referred to as "audit complexity" and it was hypothesised that the difference between the standard time and the nominal time budgeted by the Audit Manager was an allowance for this complexity factor. Useful work could be undertaken to determine whether this is the case and if so, the feasibility of building a complexity table to accurately convert a standard budget into a local nominal budget. Not only would this be useful for

large internal audit departments, but it would
also be of benefit to external auditors when
calculating the audit fee.

10.5   **Different Formulae for Different Areas**

10.5.1 Although this research rejected the use of
        multiple formulae for the reason of not being able
        to prove equivalence between formulae, it is
        possible that a method of either proving
        equivalence, or determining a standard deviation
        could be devised. If this could be done it would
        be possible to not only use multiple formulae
        within an organisation, but it may even be
        possible to use them between companies. This
        would prove extremely useful to external auditors
        when deciding whether to accept, or reject, an
        engagement.

10.6   **Resource Allocation Within the Audit**

10.6.1 Although this work concerned itself with overall
        strategic and tactical allocation of resources
        there is little doubt that the way the resource
        budget is actually used within an audit is of
        concern to an Audit Manager. Correctly allocating
        the resource budget for the job is pointless if
        the time is then frittered away on useless tasks.
        This use of time within an audit needs further
        research. How much time should be spent on
        planning the conduct of the assignment;
        documenting the area to be reviewed; testing the
        controls; keeping records; report writing; etc.?

REFERENCES

(1) The State of Public Sector Internal Audit
Bell, G.
Public Finance & Accountancy, pp 23 - 25
December 1981

(2) The Audit Risk Index
County Treasurer's Staff - Royal County of Berkshire
Public Finance & Accountancy, pp 69 - 71
February 1973

(3) How Many Auditors Do You Need?
Bolzendahl, R.
Magazine of Bank Administration (USA), pp 53 - 56
September 1980

(4) Risk and Audit Planning
Bonham, A.J.
Unpublished Course Hand-out

(5) Planning for the Internal Audit Function
Boritz, J.E.
IIA Research Foundation
1984

(6) Audit Management
CIPFA
1982

(7) Priorities for Internal Audit
CIPFA
Public Finance & Accountancy, pp 31 - 33
April 1982

(8) Managing Risk - A Computer Aided Strategy
Carroll, J.M.
Butterworth
1984

(9) Internal Audit and Risk Management
Chambers, A.D.
Telescope, pp 355 - 366
1976

(10) Risk Analysis of Internal Control Procedures
Cirtin, A.
The Internal Auditor, pp 33 - 35
June 1982

(11) Audit Planning By Risk Index
     Cunnington, T.
     Public Finance and Accountancy
     September 1984

(12) How to Implement a Risk Analysis System
     Silverman, A. R.
     Journal of Systems Management
     August 1986

(13) Risk Measurement: Analysis and Assessment
     Fanning, D.
     Management Accounting, pp 32 - 34
     January 1984

(14) Managing the Internal Audit Function
     Ford, B.
     Retail Control, pp 2 - 19
     February 1980

(15) Audit Project Evaluation Methodology
     Gray, O.R.
     The Internal Auditor, pp 31 - 34
     June 1983

(16) The PDQ Prioritizer
     Storslee, M.D. & Breckel, D.W.
     The Internal Auditor, pp 27 - 29
     April 1984

(17) Planning Audit Coverage
     Gresham, N.K.
     Journal of Systems Management, pp 29 - 32
     May 1984

(18) Security/Risk Analysis & Audit Resource Assignment
     Howard, C.J.
     The Internal Auditor, pp 63 - 68
     June 1981

(19) Developing an Audit Plan that Works!
     Kasparek, W.
     The Internal Auditor, pp 63 - 67
     December 1981

(20) A Framework for Evaluating Internal Audit Risk
     Patton, J.M., Evans, J.H. & Lewis, B.L.
     Institute of Internal Auditors (USA)
     1983

(21) The Risk Index and the Auditor
CIPFA
Public Finance and Accountancy, pp 17 - 18
September 1982

(22) A Framework for Audit Planning
CIPFA
Public Finance and Accountancy, pp 18 - 20
September 1982

(23) Comprehensive Audit Planning
Thompson, G.T.
The Internal Auditor, pp 36 - 38
April 1985

(24) Planning for the Internal Audit Function
Boritz, J.E
IIA Research Foundation
1984

(25) Internal Audit Scheduling - A Mathematical Model
Wilson, D.E. & Ranson, R.D.
The Internal Auditor, pp 42 - 50
July - August 1971

(26) Scheduling Internal Audit Activities
Boritz, J.E. & Broca, D.S.
Auditing: A Journal of Theory & Practice
Vol. 6. No 1, pp 1 - 19
Fall 1986

(27) Risk Analysis for Internal Auditing
Lewington D.G. et al.
Research Report No 19
IIA (U.K.)
1987

(28) Survey of Internal Auditing in the U.K. & Eire
Selim, G.
Research Report No 15
IIA (U.K.)
1985

(29) Standards for Internal Auditing
IIA (U.K.)
1986

(30) Comprehensive Dissertation Index 1861-1972
Volume 26
Xerox University
1973

(31) Index to Theses
Volume 35
Patterson G M (Ed)
Aslib
1987

(32) Using Audit Master Plan: A Case Study
Dunmore, D.B.
Auerbach
1987

(33) Audit Master Plan
Beerman, W.J.
Datapro Research Corporation
1986

(34) Evaluating the Effectiveness of Internal Audit Depts
Albrecht, W.S. et al
IIA Research Foundation
1988

(35) Modern Internal Auditing (4th Ed)
Brink, V.Z. & Witl, H.
Wiley & Sons
1982

(36) Internal Auditing
Chambers, A.D. et al
Pitman
1987

(37) Inadequacies of Internal Audit in Public Sector
Organisations
Gray, G.
Public Finance & Accountancy
Vol 10, pp 35 - 37
March 1983

(38) Evaluating the Internal Audit Function
Deloitte Haskins & Sells
New York
1982

(39) Developing an Internal Audit Program
Froehlich, W. R.
Magazine of Bank Administration
Vol 53, pp 22 - 24
1978

(40) Planning and Operation of the Internal Audit Department
Wilson, P. W.
Retail Control
Vol 46, Jan 1978, pp 36 - 50
Vol 46, Feb 1978, pp 2 - 14

(41) Organising & Conducting an Effective Internal Audit
Program
Johnson, R. G.
Newspaper Controller
Vol 31, pp 1 - 2, 10
Oct 1977

(42) Building a Better Audit Program
Fisher, W. S.
Magazine of Bank Administration
Vol 53, pp 17 - 21
Aug 1977

(43) Optimal Internal Audit Timing
Hughes, J. S.
Accounting Review
Vol 52, pp 56 - 58
Jan 1977

(44) How do Internal Audit Departments Measure Up?
Sproul, D. R.
CA Magazine (Canada)
Vol 109, pp 47 - 51
Sept 1976

(45) Essentials of an Effective Internal Audit Department
White, A. W.
Internal Auditor
Vol 33, pp 30 - 33
April 1976

(46) Computer Assisted Strategic Planning in Small
Businesses
David, F. R.
Journal of Systems Management pp 24 - 34
July 1985

(47) How to Implement a Risk analysis System
Silverman, A. R.
Journal of Systems Management
Volume 37 pp 6 - 10
August 1986

(48) Risk Analysis in Audit Planning
     Ramachadran, R.
     CA Magazine
     Volume 120, pp 46 - 47
     July 1987

(49) EDP Audit Planning Using the Audit Risk Model
     Choo, F. & Ferrier, R. J.
     EDP Auditor Journal
     Volume 4, pp 36 - 41
     1986

(50) Risk Analysis Approach to Auditing
     Grobstein, M. & Craig, P. W.
     Auditing
     Volume 3, pp 1 - 16
     Spring 1984

(51) Allocating Resources with Strength/Weakness Analysis
     Barret, M. J.
     Internal Auditor
     Volume 41, pp 43 - 48
     December 1984

(52) Long Range Planning
     Caron, S. I. & Manos, S. S.
     Internal Auditor
     Volume 41, pp 44 - 46, 48, 50
     December 1984

(53) Modern Auditing (3rd Ed)
     Kell, W. G. et al
     John Wiley (Pub)
     New York
     1986

(54) Risk Management of the Internal Audit Function
     Siers, H. L. & Blyskal, J. K.
     Management Accounting (NAA)
     Volume 68, pp 29 - 35
     February 1987

(55) Security/Risk Analysis & Audit Resource Assignment
     Howard, C. J.
     Internal Auditor
     Volume 38, pp 63 - 68
     June 1981

APPENDIX 1

SYSTEM FLOWCHARTS

The System flowcharts of the experimental system follow this page.

COMBINED PLANNING & MONITORING SYSTEM

```
                              LHSCOM1
                                 |
                                 |------------LHSCOM6
                                 |            (Missing File)
                                 |
                        (Opening Tests)----LHSCOM12
                                 |          (First Time
                                 |           Registration)
                              LHSCOM2
                                 |
                          (Main Menu)
                                 |
                                 |
       |-------------------------|-------------------------|
       |          |              |              |          |
       A          B              C              D          Z
       |          |              |              |          |
    LHRSKC1    LHPMSC1        LHSCOM3        LHSCOM4    LHSCOM5
   (Planning  (Monitoring    (System        (Change    (Close
    System)    System)*      Defaults)      Drive)     System)
```
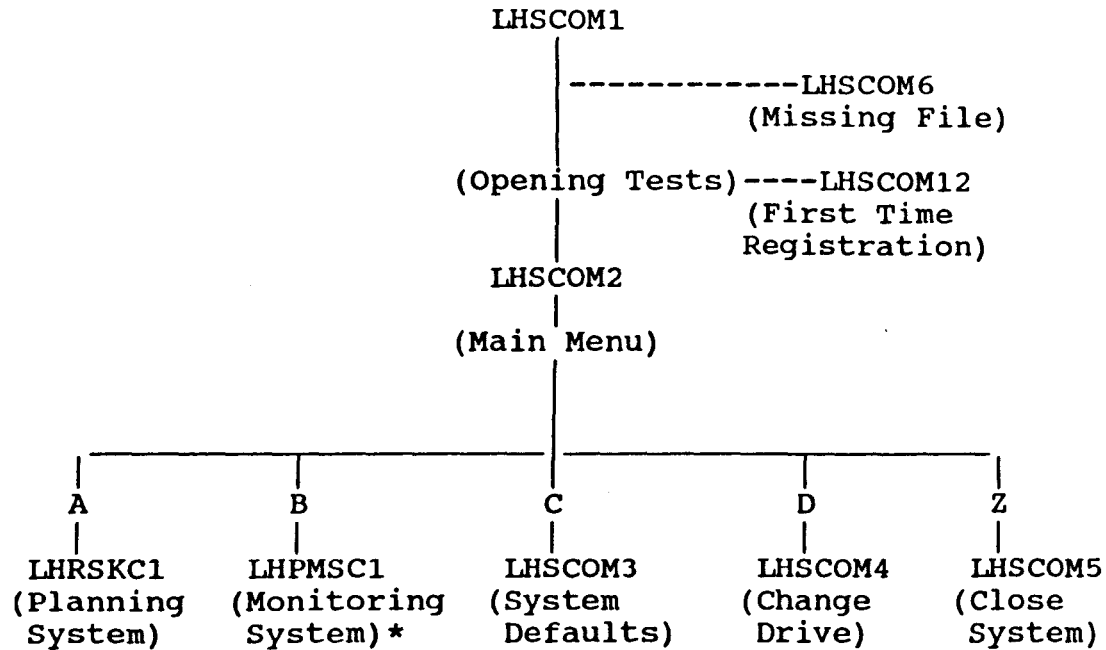
* The Monitoring System which collects historic data, such as time taken to do
  an audit, is not dealt with in detail by this research and is only shown here
  for completeness.

THE PLANNING SYSTEM

```
                              LHRSKC1
                            (Main Menu)
                                 |
  ┌──────┬──────┬──────┬────────┼────────┬──────┬──────┐
  A      B      C      D        E        F      G
  |      |      |      |        |        |      |
LHSCOM10 LHRSKC17 LHRSKC84 LHRSKC11 LHRSKC10 LHRSKC16 LHRSKC85
(BA    (Project (Param  (Calc   (Reports (Train) (Inter-
Menu)  Menu)   Menu)   Menu)   Menu)            face
Menu)                                    
Menu)
                          ┌──────┼──────┐
                          H      I      J
                          |      |      |
                        LHRSKC86 LHRSKC73 LHRSKC63
                        (House  (Control (Location
                        Keeping Objects  Menu)
                        Menu)   Menu)
```

AMEND PLANNING PARAMETERS

```
                        LHRSKC18
                    (Amend Parameters)
                            │
    ┌───────────┬───────────┼───────────┬───────────┐
    │           │           │           │           │
    A           B           C           D           E
    │           │           │           │           │
 LHRSKC6     LHRSKC8     LHRSKC9     LHRSKC4     LHRSKC24
 (Annual)    (Ratios)    (Weights)    (Freq)     (Complex)
```
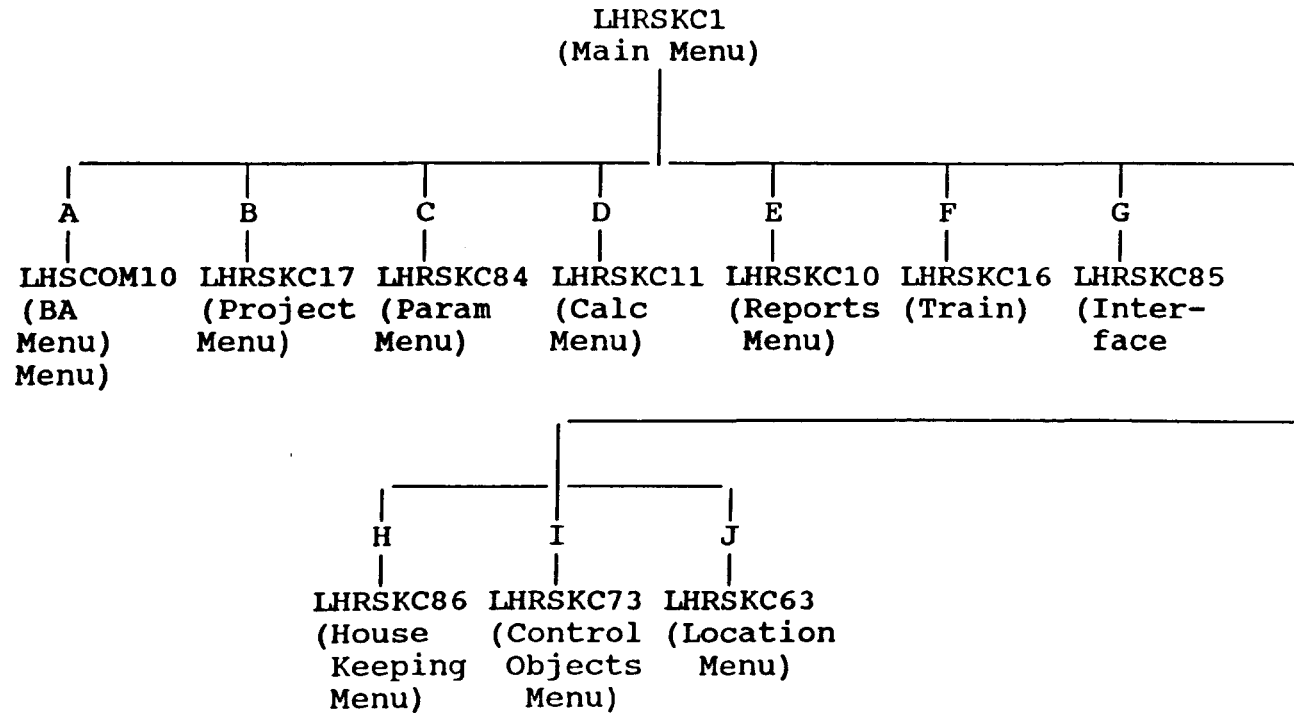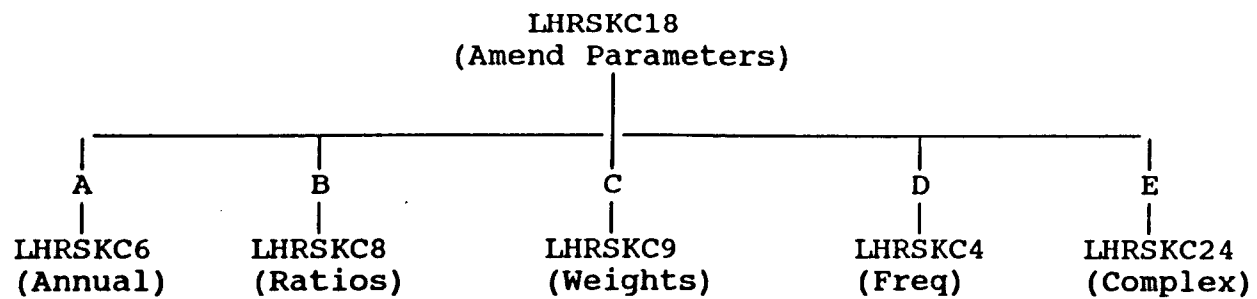
BUSINESS AREAS MAINTENANCE

```
                        LHSCOM10
                  (Business Area Menu)
                           |
                           |
         _____  |  _____
        |                  |                  |
        A                  B                  C
        |                  |                  |
    LHSCOM7            LHSCOM8            LHSCOM9
   (Add Area)        (Amend Area)      (Delete Area)
```

AUDIT PORTFOLIO MAINTENANCE

```
                          LHRSKC17
                       (Projects Menu)
                             |
    _____|_____
    |                        |                  |              |
    A                        B                  C              D
    |                        |                  |              |
LHRSKC3                  LHRSKC7            LHRSKC2         LHRSKC14
(New                     (Amend             (Amend          (Delete
 Project)                 Suggested          Project          Project)
 Budgets)                 Budgets)
```

PRINT REPORTS

```
LHSCOM15 ------- LHRSKC10 -----------LHSCOM16
(Set Printer)    (Reports Menu)      (Clear Printer)
```

A	B	C	D	E	F	G
LHRSKP1	LHRSKP2	LHRSKP3	LHRSKP4	LHRSKP5	LHRSKP6	LHRSKP7
(Report	(Report	(Report	(Report	(Report	(Report	(Report
01)	02)	03)	04)	05)	06)	07)
System	Portfolio	Plan by	Plan by	Plan by	Business	BA
Params	by	Freq	Freq/Days	Freq/Days	Areas	Budgets
	Score		& Score	& Sel Score		

H	I	J	K	L	M
LHRSKP8	LHRSKP9	LHRSKP10	LHRSKP11	LHRSKP12	LHRSKP13
(Report	(Report	(Report	(Report	(Report	(Report
08)	09)	10)	11)	12)	13)
Nom./Sys	Strat.	Portfolio	Nom./System	'Must Do'	Control
Freq	Plan	Details	Budgets	Jobs	Objectives
Compare			Compare		

N	O	P
LHRSKP14	LHRSKP15	LHRSKP16
(Report	(Report	(Report
14)	15)	16)
Locations	Incomplete	Planing

CALCULATIONS MENU

```
                              LHRSKC84
                          (Calculations Menu)
                                   |
         _____|_____
        |          |         |          |          |         |        |
        A          B         C          D          E         F        G
        |          |         |          |          |         |        |
   LHRSKC13   LHRSKC12  LHRSKC25  LHRSKC20   LHRSKC15  LHRSKC11  LHRSKC20
   (Import    (Freq)    (Budgets) (BA        (Strat    (Recalc)  (Recalc )
    Score)                         Budgets)   Plan)    (Strat    )(  BA   )
                                                       (Plan     )(Budgets)
```

INTERFACE MENU

```
                        LHRSKC85
                     (Interface Menu)
                            |
        _____
        |                   |                          |
        A                   B                          C
        |                   |                          |
    LHRSKC16            LHRSKC89                   LHRSKC82
   (Export Data)       (Import Data)             (Extract for)
        |                                        (Consolidation)
    _____
    |            |                  |
    A            B                  C
    |            |                  |
 LHRSKC26    LHRSKC27           LHRSKC28
 ( Auto   )  (Display)         (Individual)
 (Transfer)  (Transfer)        ( Transfer )
```

HOUSEKEEPING MENU

```
                              LHRSKC86
                         (Housekeeping Menu)
                                  |
  _____|_____
  |           |           |           |           |         |         |
  A           B           C           D           E         F         G
  |           |           |           |           |         |         |
LHRSKC30   LHRSKC81   LHRSKC83    LHRSKC88    LHRSKC87   LHRSKC90  LHRSKC91
(Check     (Tidy      (Set Office (Secure     (Restore   (Renum    (Clear Must
 Files)     Files)     Code)       Files)      Files)     Audit     Do Inds.)
                                                          Portfolio)
```

CONTROL OBJECTIVES MAINTENANCE

```
                            LHRSKC73
                    (Control Objectives Menu)
                                |
          _____
         |                      |                           |
         A                      B                           C
         |                      |                           |
     LHRSKC70               LHRSKC71                    LHRSKC72
   (Add Objective)       (Amend Objective)           (Delete Objective)
```

LOCATIONS MAINTENANCE

```
                         LHRSK63
                     (Locations Menu)
                            |
        ┌───────────────────┼───────────────────┐
        |                    |                   |
        A                    B                   C
        |                    |                   |
    LHRSKC60             LHRSKC61            LHRSKC62
  (Add Location)     (Amend Location)    (Delete Location)
```

APPENDIX 2

OUTPUT FROM THE EXPERIMENTAL SYSTEM

A2.1   Introduction

A2.1.1 The following reports are a complete set derived
from the experimental system based on the
Planning Parameters shown in Report LHRSKP1 and
the audit portfolio shown in Report LHRSKP10.

STANDARD REPORTS FROM THE SYSTEM

Report	Description
LHRSKP1	Planning Parameters
LHRSKP2	Audit Portfolio Ranked by Importance Score
LHRSKP3	Annual Plan Based on Frequency Only
LHRSKP4	Annual Plan Based on Frequency & Available Resource
LHRSKP5	Annual Plan Based on Frequency, Importance and Resource
LHSCOM6	Business Area Descriptions
LHRSKP7	Business Area Budgets
LHRSKP8	Suggested Frequency Based on Importance
LHRSKP9	Strategic Audit Plan
LHRSKP10	Audit Project Portfolio
LHRSKP11	Nominal and System Budget Comparison
LHRSKP12	'Must Do' Projects
LHRSKP13	Control Objectives
LHRSKP14	Audit Locations
LHRSKP15	Incomplete Control Objective Coverage
LHRSKP16	Planning Horizons

A2.2   **Planning Parameters (LHRSKP1)**
A2.2.1 This report lists all the parameters used by
        the system to manipulate the raw data contained
        in the Audit Project Portfolio file.

THE FOLLOWING PARAMETERS ARE USED IN ALL SCORE AND PLANNING
CALCULATIONS FOR THE SYSTEM. IF YOU WISH TO CHANGE ANY OF
THE PARAMETERS YOU CAN DO SO FROM THE MAIN MENU OPTION

ANNUAL PARAMETERS   FREQUENCY SELECTION CRITERIA
=================   ============================
TURNOVER   (Millions)   = 9,424.00   EVERY 5 YEARS FOR   0 ·   36
STORES   (Millions)   =   296.00   EVERY 4 YEARS FOR >   36 ·   72
FIXED ASSETS (Millions) = 2,746.00   EVERY 3 YEARS FOR >   72 · 108
PAYROLL   (Millions)   = 3,164.00   EVERY 2 YEARS FOR > 108 · 144
CURRENT A/C minus PAY   = 2,273.00   ANNUALY FOR ABOVE   144
START YEAR OF PLAN   =   89
AVAILABLE AUDIT DAYS   =   4536

RISK FACTOR RATIOS   FORMULA IN USE
=================   ==
BUSINESS IMPACT (B) =   7   SCORE = 7B+ 2T+ 4C+ 7S
TEPTATION FACTOR (T) =   2
INTERNAL CONTROL (C) =   4
SIZE/VALUE   (S) =   7

AUDIT COMPLEXITY WEIGHTS   BUSINESS IMPACT WEIGHTS
=========================   ========================
HIGH COMPLEXITY AUDIT   = 1.20   HIGH   = 9
MEDIUM COMPLEXITY AUDIT = 1.00   MEDIUM   = 7
LOW COMPLEXITY AUDIT   = 0.80   LOW   = 3
                                        NONE   = 1

TEMPTATION WEIGHTS   SIZE/VALUE (% Base Value) WEIGHTS
==================   =================================

HIGH   = 9   > 1.0% = 9
MEDIUM   = 7   >0.4 · <=1.0% = 7
LOW   = 3   >0.1 · <=0.4% = 3
NONE   = 1   <= 0.1% = 1

INTERNAL CONTROL WEIGHTS
========================

HIGH (Good)   = 9
MEDIUM (Satisfactory) = 7
LOW (Unsatisfactory) = 3
NONE (Critical)   = 1

A2.3   **Audit Portfolio Ranked By Importance (LHRSKP2)**

A2.3.1   After score calculation, this report provides a
         sorted list of all projects within the audit
         portfolio in importance score sequence. The
         highest scoring project appears first and the
         lowest is printed last.

THE RANKINGS ARE BASED ON THE DETAILS THAT YOU HAVE GIVEN
FOR EACH AUDIT AND THE CURRENT PLANNING PARAMETERS

KEY TO COLUMN HEADINGS
=======================

CODE	= PROJECT CODE
DESCRIPTION	= PROJECT DESCRIPTION
SCORE	= IMPORTANCE SCORE CALCULATED BY THE SYSTEM
DIV	= DIVISION
DIS	= DISTICT/UNIT
CSA	= CSA/LOCATION
MUST	= MUST DO PROJECT REGARDLESS OF SCORE (YES/NO)
JT	= JOB TYPE (P = Project, R = Regulatory)
Z	= ZONE CODE

CODE	DESCRIPTION	DIV	DIS	CSA	SCORE	MUST	JT	Z
3018	OTHER OPERATING COSTS	R&T			180		R	F
4122	RENTS & RATES	PCS	BMD		168		R	F
3050	DIRECT DELIVERY CABLE	ME			168		R	F
3048	DIRECT DISTRIBUTION	ME			168		R	F
3037	MSA III POST IMP	ME			168		R	F
3026	PURCHASING - SUPD/MSA	ME			168	YES	R	F
1173	TSCR-SUBSIDIARY/BILLING	BTE	MOC		168	YES	R	F
1170	ACCOUNTING-SUN ACCOUNTS	BTE	MOC		168	YES	R	F
1165	INCOME/BILLING-LEEDS	BTE	MOC		168		R	F
1139	ACCOUNTING-SUN ACCOUNTS	BTE	YEP		168		R	F
1134	INCOME/BILLING	BTE	YEP		168	YES	R	F
3011	A.P. MILLENIUM	R&T			162		R	F
4129	INVENTORY CONTROL	IPD	NPO	BMF	159	YES	R	F
4105	CORPORATE RELATIONS DEPT	SEC	CRD		159	YES	R	F
3075	STOCKTAKING	ME		ND	156		R	F
3069	STOCKTAKING	ME		BD	156	YES	R	F
3063	STOCKTAKING	ME		CD	156		R	F
3062	DEPOT RECEIPTS	ME		CD	156		R	F
3061	DEPOT ISSUES CRAYFORD	ME		CD	156	YES	R	F
3059	PHONECARDS	ME			156	YES	R	F
3039	INTERFACE UKC STORES SYSTEMS	ME			156		R	F
4005	CASHIERS	CFD	F2		156		R	F
4077	ACCOUNTS PAYABLE	IPD	TS	DCM	153		R	F
4076	PROCUREMENT	IPD	TS	DCM	153	YES	R	F
1137	PURCHASING-CONTRACTS	BTE	YEP		153		R	F
3047	SCORE LDS INTERFACE	ME			152	YES	R	F
1236	FIXED ASSETS	BTI			150	YES	R	F
1202	ISAACS (INTL SETTLEMENTS)	BTI			150		R	F
4121	CONTRACTS/PURCHASING	PCS	BMD		147		R	F
4120	CAPITAL PROJECT CONTROL	PCS	BMD		147		R	F
3049	DIRECT DELIVERY CWM	ME			147		R	F
4149	FOREIGN CURRENCY EXPOSURE	CFD	F2		144	YES	R	F
3034	TRANSFER CHARGING	ME			144	YES	R	F
1253	YEAR END REPORTING	BTI			144	YES	R	F
1252	GL;M (GENERAL LEDGER)	BTI			144		R	F
1175	TSCR/FINANCIAL ACCOUNTING	BTE	MOC		144	YES	R	F
3030	MANPOWER	ME			142	YES	R	F
3007	MANPOWER	R&T			142		R	F
4139	INVENTORY CONTROL	IPD	NPO	ENF	141	YES	R	F
4123	FINANCIAL ACCOUNTING (NAS)	PCS	BMD		141	YES	R	F
1239	SATELLITE INVESTMENTS	BTI	SL		141		R	F
1238	CAPITAL INVESTMENT APPRAISAL	BTI			141		R	F
1237	PROJECT ACCOUNTING	BTI			141	YES	R	F
1203	ITALICS (INTL TELEX)	BTI			141		R	F
4078	STOCK MANAGEMENT	IPD	TS	DCM	141		R	F
3010	TRANSFER CHARGING	R&T			140		R	F
3082	LDS PRE IMP B'HAM/CRAYFORD				138	YES	R	F
3081	CONTRACTS				138	YES	R	F
3080	STOCK VAL'N B'HAM DEPOT				138	YES	R	F
4112	CORPORATE PERSONNEL MISC	PCS	CPD		138		R	F
3054	OTHER OPERATING COSTS	ME			138		R	F
3036	YEAR END	ME			136	YES	R	F
3032	GL MILLENIUM	ME			136		R	F
3013	YEAR END	R&T			136	YES	R	F
3074	DEPOT RECEIPTS CRAYFORD	ME		ND	135		R	F

CODE	DESCRIPTION	DIV	DIS	CSA	SCORE	MUST	JT	Z
3073	DEPOT ISSUES NTHA D	ME		ND	135		R	F
3068	DEPOT RECEIPTS NTHA D	ME		BD	135	YES	R	F
3067	DEPOT ISSUES	ME		BD	135		R	F
3008	FIXED ASSETS REGISTER	R&T			135	YES	R	F
1230	OVERHEAD ALLOCATION	BTI			135	YES	R	F
1226	EMD (ESTATES MANAGEMENT)	BTI	EMD		135		R	F
4106	INVESTIGATION DIVISION	SEC	ID		132	YES	R	F
3046	SCORE ACCOUNTING	ME			132		R	F
3043	STOCK VALUATION	ME			132		R	F
4093	PROCUREMENT	IPD	ITS	IS	132		R	F
4071	PROCUREMENT	IPD	TS	SP	132		R	F
1172	STORES	BTE	MOC		132		R	F
1164	STORES	BTE	BBS		132		R	F
1131	ACCOUNTING-SUN ACCOUNTS	BTE	TMS		132		R	F
1103	INCOME/BILLING-SABS	BTE	VAB		132		R	F
1180	DATA CENTRES	BTE	MC		129	YES	R	F
1178	DATA CENTRES	BTE	DN		129		R	F
3033	ACCOUNTS PAYABLE PHASE 1.2	ME			129	YES	R	F
3002	BT&D TECHNOLOGIES LTD	BTD			129	YES	R	F
3001	BT&D TECHNOLOGIES LTD	BTD			129	YES	R	F
1291	STORES & WIP	OO	IAL	STH	129		R	F
1241	STORES	BTI			129		R	F
1222	PAY AND PERSONNEL (OP)	BTI	OP	EH	129		R	F
1221	PAY AND PERSONNEL	BTI	CFD		129		R	F
1184	COVENTRY CABLE LTD	BTE	BTV		126	YES	R	F
1183	SWINDON CABLE LTD	BTE	BTV		126		R	F
4144	PRODUCTION CONTROL	IPD	NPO	ENF	126		R	F
4125	COMPUTER INTEGRITY	PCS	BMD		126	YES	R	F
4124	MANAGEMENT ACCOUNTING	PCS	BMD		126		R	F
4110	PENSION ADMINISTRATION	PCS	PAC		126	YES	R	F
4104	SOLICITORS OFFICE	SEC	SOL		126	YES	R	F
3051	DIRECT DELIVERY POLES	ME			126		R	F
3038	AFSTA / STOCKTAKING	ME			126		R	F
3004	INCOME · SALES LEDGER	R&T			126		R	F
4103	GOVERNMENT RELATIONS DEPT	SEC	GRD		126	YES	R	F
4082	COMPUTER INTEGRITY	IPD	TS	DCM	126		R	F
1174	BTCR-SUBSIDIARY	BTE	MOC		126		R	F
1167	PURCHASING	BTE	MOC		126		R	F
1163	ACCOUNTING	BTE	BBS		126		R	F
1160	PURCHASING/STOCKS	BTE	BBS		126	YES	R	F
1157	FIXED ASSETS	BTE	DNS		126		R	F
1156	ACCOUNTING-TETRA PLAN	BTE	DNS		126		R	F
1153	PURCHASING P.O/CONTRACTS	BTE	DNS		126	YES	R	F
1151	INCOME/BILLING-MANUAL	BTE	DNS		126	YES	R	F
1146	ACCOUNTING-SUN ACCOUNTS	BTE	BTA		126		R	F
1142	INCOME/BILLING	BTE	BTA		126		R	F
1124	ACCOUNTING	BTE	MES		126		R	F
1120	INCOME/BILLING	BTE	MES		126	YES	R	F
1114	SUPERCALL	BTE	SPE		126	YES	R	F
1107	ACCOUNTING-FALCON	BTE	VAB		126	YES	R	F
4003	MANSION PLACE LEASING	CFD	F2		124	YES	R	F
1118	TSL-SUBSIDIARY	BTE	SPE		124	YES	R	F
3056	TRANSPORT DIVISION	ME			123	YES	R	F
3009	G.L. MILLENIUM	R&T			123		R	F
1251	TRANSFER CHARGING	BTI			123		R	F

CODE	DESCRIPTION	DIV	DIS	CSA	SCORE	MUST	JT	Z
4153	IPD OVERVIEW REPORTS	IPD	ALL		122	YES	R	F
4053	COMM.REG.ANALYSIS	CCD	CRA		122		R	F
4135	ACCOUNTS PAYABLE INC CASH/BNK	IPD	NPO	BMF	120		R	F
4133	PROCUREMENT	IPD	NPO	BMF	120	YES	R	F
4128	SALES ORDER PROCESSING	IPD	NPO	BMF	120		R	F
1201	INTL PRIVATE LEASED CIRCUITS	BTI	PS		120		R	F
4072	STOCK MANAGEMENT	IPD	TS	SP	120	YES	R	F
4021	DIRECT INCOME	IPD	TTD		120		R	F
1101	PAYROLL	BTE	CEN		120	YES	R	F
4107	SECURITY DIVISION	SEC	STY		118	YES	R	F
3042	STOCKING POLICY	ME			118		R	F
4028	FOREIGN SUBS-FRANKFURT	IPD	TTD		118		R	F
4041	INVENTORY CONTROL	IPD	NPO	CE	117	YES	R	F
4148	COMPUTER INTEGRITY	IPD	NPO	ENF	114		R	F
4137	COMPUTER INTEGRITY	IPD	NPO	BMF	114		R	F
4136	PRODUCTION CONTROL	IPD	NPO	BMF	114		R	F
4131	FINANCIAL ACCOUNTS	IPD	NPO	BMF	114		R	F
4111	BTPAC COMPUTER INTEGRITY	PCS	PAC		114	YES	R	F
3077	SALVAGE RETURNS/DISPOSALS	ME		ND	112		R	F
3071	SALVAGE RETURNS/DISPOSALS	ME		BD	112		R	F
3065	SALVAGE RETURNS/DISPOSALS	ME		CD	112		R	F
3040	GOPS / KEYS INDICATORS	ME			112	YES	R	F
3006	PURCHASING - CONTRACTS	R&T			112		R	F
3005	PURCHASING-LOCAL PURCHASES	R&T			112		R	F
1264	BTI SUMMARY REPORTS	BTI			112	YES	R	F
4046	MARKETING IN IPD	IPD	ALL		112		R	F
4013	VAT	CFD	F8		112	YES	R	F
4011	CORPORATION TAX	CFD	F8		112		R	F
4010	GATIS	CFD	F7		112		R	F
4004	COMMERCIAL PAPER	CFD	F2		112		R	F
4002	STERLING DEALING	CFD	F2		112		R	F
1126	DIALCOM-USA	BTE	MES		112		R	F
1111	FARMLINK-SUBSIDIARY	BTE			112		R	F
4138	SALES ORDER PROCESSING	IPD	NPO	ENF	111	YES	R	F
4084	PROCUREMENT	IPD	IS	GAP	111		R	F
1182	DATA CENTRES	BTE	SPE		108		R	F
4108	THE BOARD	SEC	BRD		108		R	F
1281	PAY AND PERSONNEL	OD	IAL	STH	108		R	F
1266	BILLING SERVICES DIV	OD	IAL	STH	108		R	F
1227	MSD (MARKETING SERVICES)	BTI	MSD		108		R	F
1218	LOCAL PURCHASES	BTI			108		R	F
1216	AP (ACCOUNTS PAYABLE)	BTI			108		R	F
4059	CORPORATE STRATEGY UNIT	CCD	CST		108		R	F
4054	ECONOMIC ADVISORY DIVISION	CCD	EAD		108		R	F
4052	INTERCONN.POLICY	CCD	CAM		108		R	F
4051	PRICING POLICY	CCD	CAP		108		R	F
4050	COMMERCIAL REGULATION	CCD	CAR		108		R	F
4049	INVESTMENT ANALYSIS	CCD	CAI		108		R	F
4048	PLANNING	CCD	CAP		108		R	F
3057	CASHIERS + T&S	ME			106		R	F
3019	CASHIERS + T&S	R&T			106	YES	R	F
4031	SUBSIDIARY - AUSTRALIA	IPD	TTD		106		R	F
4030	SUBSIDIARY- PARIS	IPD	TTD		106		R	F
4080	MANAGEMENT ACCOUNTING	IPD	TS	DCM	105		R	F
4079	FINANCIAL ACCOUNTING MSAGL	IPD	TS	DCM	105		R	F

CODE	DESCRIPTION	DIV	DIS	CSA	SCORE	MUST	JT	Z
4063	INVENTORY CONTROL	IPD	ITS	CBP	105	YES	R	F
4043	FINANCIAL ACCOUNTING	IPD	NPO	CE	105		R	F
4023	INVENTORY CONTROL	IPD	TTD		105		R	F
1171	FIXED ASSETS	BTE	MOC		105		R	F
1169	PERSONNEL	BTE	MOC		105		R	F
1159	INCOME/BILLING	BTE	BBS		105	YES	R	F
1155	PERSONNEL	BTE	DNS		105		R	F
1150	INCOME/BILLING-DISTRICTS	BTE	DNS		105	YES	R	F
1127	INCOME/BILLING	BTE	TMS		105		R	F
1122	PURCHASING ·TETRA PLAN	BTE	MES		105	YES	R	F
1117	TELECOM RED	BTE	SPE		105		R	F
1105	PURCHASING	BTE	VAB		105		R	F
4145	FINANCIAL ACCOUNTING	IPD	NPO	ENF	102		R	F
4143	FIXED ASSETS	IPD	NPO	ENF	102		R	F
3035	MGMT ACCOUNTS/BUDGETRY CNTL	ME			102		R	F
3012	MGMT ACCOUNTS/BUDGETERY CNT	R&T			102	YES	R	F
1144	PURCHASING	BTE	BTA		102		R	F
1115	TALKABOUT	BTE	SPE		102		R	F
3017	SECURITY & SAFETY	R&T			100		R	F
1293	GENERAL LEDGER	OO	IAL	STH	100		R	F
1254	BUDGETTING & FORECASTING	BTI			100		R	F
1217	CONTRACTS	BTI			100		R	F
1209	PRICING	BTI			100		R	F
4012	PERSONAL TAX	CFD	F8		100		R	F
4132	PAYROLL/PERSONNEL (INC T&S)	IPD	NPO	BMF	99		R	F
1223	TRAVEL & SUBSISTENCE	BTI			99		R	F
3044	PEXOS PROVISION	ME			98		R	F
1168	EXPENDITURE-INTER BUS. T.GOLD	BTE	MOC		98		R	F
1154	EXPENDITURE-INTER BUS. T.GOLD	BTE	DNS		98		R	F
4119	COMPUTER INTEGRITY	PCS	ASD	AS3	97	YES	R	F
4100	AGM COSTS	SEC	SO		97		R	F
4083	SALES ORDER PROCESSING	IPD	IS	GAP	97	YES	R	F
4075	SALES ORDER PROCESSING	IPD	TS	DCM	97	YES	R	F
3053	SECURITY	ME			94		R	F
3022	COMP INST 4381 GL&AP	R&T			94		R	F
3021	COMP INST OFFICE AUTO WEB	R&T			94		R	F
3020	COMP INST	R&T			94	YES	R	F
1296	MANX LOCATION	OO	MNX	MNX	94		R	F
4134	FIXED ASSETS	IPD	NPO	BMF	93		R	F
4130	MANAGEMENT ACCOUNTS	IPD	NPO	BMF	93		R	F
1292	CASH AND BANK	OO	IAL	STH	93		R	F
3028	MSP CONTRACTS - OTHER	ME			92	YES	R	F
3027	MSP CONTRACTS-EXCHANGE EQUIP	ME			92	YES	R	F
4146	FULCRUM HQ MISC	IPD	NPO	HQ	91		R	F
4117	MANAGEMENT ACCOUNTS	PCS	ASD	AS3	91	YES	R	F
4109	BTPAC HQ	PCS	PAC	HQ	91	YES	R	F
4099	SHARE REGISTER	SEC	SO		91		R	F
4096	PROJECT CONTROL	IPD	ITS	IS	91		R	F
4087	PROJECT CONTROL	IPD	IS	GAP	91		R	F
1259	LONDON TELEPORT	BTI	SL		91		R	F
4014	INVESTOR RELATIONS	CFD	F9		91		R	F
1149	INCOME BILLING-BIPASS	BTE	DNS		91	YES	R	F
1113	CONSOLIDATION	BTE	SPE		91	YES	R	F
4113	AS1 OFFICE SERVICES	PCS	ASD	AS1	90		R	F
4102	PURCHASING	SEC	SO		90		R	F

CODE	DESCRIPTION	DIV	DIS	CSA	SCORE	MUST	JT	Z
4097	INTERNAL AUDIT DIVISION	CFD	IAD		90		R	F
4095	INVENTORY CONTROL	IPD	ITS	IS	90	YES	R	F
4089	STOCK MANAGEMENT	IPD	TS	PUB	90	YES	R	F
4085	INVENTORY CONTROL	IPD	IS	GAP	90	YES	R	F
4034	STOCK MANAGEMENT	IPD	TS	CTP	90	YES	R	F
1158	STORES	BTE	DNS		90		R	F
4150	BTPAC QUARTERLY REVIEW	PCS	PAC		87	YES	R	F
1181	DATA CENTRES	BTE	BTA		87		R	F
1179	DATA CENTRES	BTE	BS		87		R	F
1177	DATA CENTRES	BTE	MES		87		R	F
1176	DATA CENTRES	BTE	VAB		87		R	F
3055	REPROGRAPHICS	ME			87		R	F
3014	STOCK CONTROL SYSTEM COMMODITY	R&T			87		R	F
1286	MARKETING	OO	IAL	STH	87		R	F
4060	MSCU	CCD	MSC		87		R	F
4047	MANAGEMENT ACCOUNTING	CCD	CAB		87	YES	R	F
1102	ACCOUNTING-CONSOLIDATION	BTE	CEN		87		R	F
4142	ACCOUNTS PAYABLE	IPD	NPO	ENF	85		R	F
4141	PROCUREMENT	IPD	NPO	ENF	85	YES	R	F
1275	PURCHASING IAL	OO	IAL	STH	85	YES	R	F
1271	BILLING MANX TELECOM	OO	MNX	MNX	85		R	F
1208	INTL 0800 BILLING	BTI	PD		85		R	F
4069	ACCOUNTS PAYABLE	IPD	ITS	CBP	85		R	F
4062	PROCUREMENT	IPD	ITS	CBP	85	YES	R	F
4061	DIRECT INCOME	IPD	CBP		85	YES	R	F
4127	STAFF RESTAURANTS	PCS	CAT		84	YES	R	F
4074	ACCOUNTS,MANAGEMENT/FINANCIAL	IPD	TS	SP	84		R	F
4057	OVERSEAS CO-ORDINATION UNIT	CCD	OCU		84		R	F
4018	PROCUREMENT	IPD	PRO	HQ	84	YES	R	F
1147	PERSONNEL	BTE	BTA		84	YES	R	F
1141	PERSONNEL	BTE	YEP		84		R	F
1140	FIXED ASSETS-TETRA PLAN	BTE	YEP		84	YES	R	F
1136	PURCHASING	BTE	YEP		84		R	F
1130	PAYROLL/PERSONNEL	BTE	TMS		84		R	F
1129	PURCHASING	BTE	TMS		84		R	F
1123	PAYROLL/PERSONNEL	BTE	MES		84		R	F
1112	PERSONNEL	BTE	SPE		84		R	F
1109	STORES-FALCON	BTE	VAB		84		R	F
4040	ACCOUNTS PAYABLE	IPD	NPO	CE	82		R	F
4140	MANAGEMENT ACCOUNTS	IPD	NPO	ENF	81		R	F
3045	PEXOS WRITE OFFS	ME			81		R	F
1116	MIPS	BTE	S	PE	81	YES	R	F
4101	MANAGEMENT ACCOUNTS	SEC	SO		80		R	F
4044	MANAGEMENT ACCOUNTING	IPD	NPO	CE	80		R	F
4001	PLANMASTER CONSOLIDATION	CFD	F1		80		R	F
1247	COMMERCIAL CASHIERS	BTI	CF		79		R	F
1246	DOMESTIC CASHIERS	BTI	CF		79		R	F
4067	COMPUTER INTEGRITY	IPD	ITS	CBP	79		R	F
1207	STAR (SATELLITE TRAFFIC ACCT)	BTI			78		R	F
4022	PURCHASING	IPD	TTD		78		R	F
1161	EXPENDITURE	BTE	BBS		77		R	F
1145	EXPENDITURE-INTER BUS. T.GOLD	BTE	BTA		77	YES	R	F
1138	EXPENDITURE-INTER BUS. T.GOLD	BTE	YEP		77		R	F
1133	EXPENDITURE-INTER BUS. T.GOLD	BTE	TMS		77	YES	R	F
4147	EDINBURGH FACTORY	IPD	NPO	EDF	76		R	F

CODE	DESCRIPTION	DIV	DIS	CSA	SCORE	MUST	JT	Z
4092	SALES ORDER PROCESSING	IPD	IS	IS	76	YES	R	F
4090	PROCUREMENT	IPD	TS	PUB	76		R	F
4088	SALES ORDER PROCESSING	IPD	TS	PUB	76	YES	R	F
4070	SALES ORDER PROCESSING	IPD	TS	SP	76	YES	R	F
4039	PROCUREMENT	IPD	NPO	CE	76	YES	R	F
4037	SALES/ORDER PROCESSING	IPD	NPO	CE	76	YES	R	F
4032	SALES ORDER PROCESSING	IPD	TS	CTP	76	YES	R	F
4066	MANAGEMENT ACCOUNTING	IPD	ITS	CBP	75		R	F
4065	FINANCIAL ACCOUNTING	IPD	ITS	CBP	75		R	F
4020	STRATEGY & CO-ORDINATION	IPD	S&C	HQ	75		R	F
4115	ACCOUNTS PAYABLE	PCS	ASD	AS3	73		R	F
4114	PAYROLL/PERSONNEL (INC T&SETC)	PCS	ASD		73		R	F
3058	TRANSHIPMENTS	ME			73	YES	R	F
1298	ADAMS IAL	OD	IAL	ADS	73		R	F
1294	YEAR END REPORTING	OD	IAL	STH	73		R	F
1290	FIXED ASSETS	OD	IAL		73		R	F
1289	CRANFIELD COLLEGE	OD	IAL	CR	73		R	F
1268	BILLING - COMMERCIAL	OD	COM	STH	73		R	F
1228	SALES DIV (SD)	BTI	SD		73		R	F
4027	COMPUTER INTEGRITY	IPD	TTD		72		R	F
4025	FINANCIAL ACCOUNTS (HPFA)	IPD	TTD		72		R	F
4019	PROCUREMENT ADMINISTRATION	IPD	PRO	HQ	72	YES	R	F
4126	ACTION FOR DISABLED CUSTS.	PCS	ADC		70		R	F
3003	INCOME - SALE OF SCRAP	R&T			70		R	F
4094	MANAGEMENT ACCOUNTS	IPD	ITS	IS	70		R	F
4091	MANAGEMENT ACCOUNTS	IPD	TS	PUB	70		R	F
4086	MANAGEMENT ACCOUNTS	IPD	IS	GAP	70		R	F
1260	ABERDEEN EARTH STATION	BTI	SL	ABD	70		R	F
1258	MADLEY EARTH STATION	BTI	SL	MDY	70		R	F
4081	FIXED ASSETS	IPD	TS	DCM	70		R	F
4073	FIXED ASSETS	IPD	TS	SP	70		R	F
4058	EURODATA FOUNDATION	CCD	EUF		70		R	F
4045	COMPUTER INTEGRITY	IPD	NPO	CE	70	YES	R	F
4042	FIXED ASSETS	IPD	NPO	CE	70		R	F
4038	PAYROLL/PERSONNEL	IPD	NPO	CE	70		R	F
4008	OPERATIONAL AUDIT	CFD	F3		70		R	F
1162	PAYROLL/PERSONNEL	BTE	BBS		70		R	F
1148	FIXED ASSETS	BTE	BTA		70		R	F
1132	FIXED ASSETS	BTE	TMS		70	YES	R	F
1125	FIXED ASSETS	BTE	MES		70		R	F
1108	FIXED ASSETS-FALCON	BTE	VAB		70		R	F
3031	FIXED ASSETS REGISTERS	ME			69		R	F
4026	MANAGEMENT ACCTS INC TR CHGING	IPD	TTD		68		R	F
4116	FINANCIAL ACCOUNTING	PCS	ASD	AS3	67		R	F
3024	PROJECT CONTROL & COSTINGS	R&T			67	YES	R	F
3023	SPONSORSHIP	R&T			67		R	F
1295	BUDGET SETTING	OD	IAL	STH	67		R	F
1257	GOONHILLY	BTI	SL	GHL	67		R	F
4009	MANAGEMENT ACCOUNTING	CFD	F6		67		R	F
4152	SALES LEDGER/INVOICING	IPD	TS	HQ	66	YES	R	F
3015	STOCK CONTROL SYSTEM BES	R&T			66		R	F
1231	TRAINING	BTI			66		R	F
1206	COMBS (MARITIME BILLING)	BTI	PSP		66		R	F
4016	YEAR END ACCOUNTS	IPD	FIN	HQ	66	YES	R	F
1104	INCOME/INTER-BUSINESS-T.GOLD	BTE	VAB		66		R	F

CODE	DESCRIPTION	DIV	DIS	CSA	SCORE	MUST	JT	Z
4033	PROCUREMENT	IPD	TS	CTP	64	YES	R	F
4029	ACCOUNTS PAYABLE	IPD	TTD		64		R	F
4151	INVENTORY ACCOUNTING	IPD	TS	HQ	60	YES	R	F
3072	DEPOTS OTHERS	ME		BD	60		R	F
3066	DEPOT OTHER	ME		CD	60		R	F
1204	BABS (BROADCAST ACCTS/BILLING)	BTI	PSP		60		R	F
1110	PERSONNEL	BTE	VAB		60		R	F
3076	STOCK DISCREPANCY CASES	ME		ND	58		R	F
3070	STOCK DISCREPANCY CASES	ME		BD	58		R	F
3064	STOCK DISCREPANCY CASES	ME		CD	58		R	F
3025	INCOME - SALES LEDGER	ME			58	YES	R	F
4068	PERSONNEL	IPD	ITS	CBP	58		R	F
4064	FIXED ASSETS	IPD	ITS	CBP	58		R	F
4056	REVENUE ACCOUNTING	CCD	IPU		58	YES	R	F
4055	COMPUTER INTEGRITY	CCD	IPU		58	YES	R	F
4035	FIXED ASSETS	IPD	TS	CTP	58		R	F
4024	FIXED ASSETS	IPD	TTD		58		R	F
4017	PERSONNEL	IPD	PER	HQ	58		R	F
4015	OPERATIONAL AUDIT RMID	CFD	RMI		58		R	F
4098	OCCUPATIONAL HEALTH SERVICE	PCS	OHS		56		R	F
1166	INCOME-INTER BUS. T.GOLD	BTE	MOC		56		R	F
1152	INCOME-INTER BUS. T.GOLD	BTE	DNS		56		R	F
1143	INCOME-INTER BUS. T.GOLD	BTE	BTA		56	YES	R	F
1128	INCOME-INTER BUS. T.GOLD	BTE	TMS		56		R	F
1106	EXPENDITURE-INTER BUS.T.GOLD	BTE	VAB		56		R	F
4036	MANAGEMENT ACCOUNTS	IPD	TS	CTP	54		R	F
4118	ACCOUNTS RECEIVABLE	PCS	ASD	AS3	52		R	F
3052	CATERING	ME			52		R	F
3016	CATERING	R&T			52		R	F
1297	IAL OVERSEAS TRIPS	OO	IAL		52		R	F
1288	BAILBROOK COLLEGE	OO	IAL	BAI	52		R	F
1287	TRAINING	OO	IAL		52		R	F
1284	TRAVEL AND SUBSISTENCE MANX	OO	MAN	MAN	52		R	F
1283	TRAVEL & SUBSISTENCE	OO	IAL	STH	52		R	F
1282	PAYROLL MANX	OO	MAN	MAN	52		R	F
1276	PURCHASING MANX	OO	MNX		52		R	F
1270	BILLING BUKIT ASSAM	OO	IAL	STH	52		R	F
1269	BILLING CONSULTANCY & NI	OO	TEL	STH	52		R	F
1267	BILLING SYSTEMS	OO	IAL	STH	52		R	F
1256	BT MARINE LOCATION AUDIT	BTI	MAR		52		R	F
1229	CATERING	BTI			52		R	F
1205	ACIDS (INT DATA SERVICES				52		R	F
3029	PURCHASING - LOCAL PURCHASING	ME			50		R	F
3079	ESTATES MANAGEMENT	R&T			46		R	F
3078	DEPOT OTHERS	ME		ND	46	YES	R	F
3060	ESTATES MANAGEMENT	ME			46	YES	R	F
4007	MANAGEMENT ACCOUNTS	CFD	F2		46		R	F
4006	PERIOD END ACCOUNTS	CFD	F2		46	YES	R	F
3041	CABLE DRUMS	ME			42		R	F
1135	INCOME-INTER BUS. T.GOLD	BTE	YEP		42		R	F
1121	INCOME/INTER BUS.T.GOLD	BTE	MES		42		R	F

A2.4   Annual Plan Based On Frequency Only (LHRSKP3)

A2.4.1 This report provides details of those projects which are scheduled to be done in the first year of the current cycle, regardless of their importance score, or resource availability. Inclusion is determined simply by summing when they were last done and their frequency of review and ascertaining whether the resulting year matches the first year of the plan.

A2.4.2 Where a project has no previous review date then the Frequency Determination table is used to ascertain how soon it should be scheduled by examining its importance score and converting this into a review frequency. If the frequency so determined is "1", then the project is scheduled into the annual plan. The reason for checking the importance score is to avoid putting all projects that have not previously been reviewed into the first year of the planning cycle.

A2.4.3 The effect of using the Frequency Determination criteria is to spread these projects over the full planning horizon based on their importance. That is the higher scoring projects are scheduled earlier than those with a lower score. This plan makes no reference to available resource and it is possible to have a total man-day requirement in excess of that which is available.

THIS PLAN IS BASED ON NOMINAL FREQUENCY AND NOMINAL BUDGETS
IF YOU WISH TO SEE THE EFFECT OF USING SYSTEM BUDGET
PRINT REPORTS 04 AND 05
IF YOU WISH TO SEE THE EFFECT OF USING SYSTEM FREQUENCY
RE-CALCULATE THE STRATEGIC PLAN AND THEN RE-PRINT THIS REPORT

KEY TO COLUMN HEADINGS
=======================

CODE   = PROJECT CODE
DESCRIPTION = PROJECT DESCRIPTION
DIV   = DIVISION
DIS   = DISTRICT/UNIT
CSA   = CUSTOMER SERVICE AREA/LOCATION
BUDGET   = BUDGETED DAYS FOR PROJECT INCLUDING TRAVEL TIME
MUST   = MUST DO THIS PROJECT REGARDLESS OF RISK (YES/NO)
SCORE   = IMPORTANCE SCORE
THIS REPORT IS IN DIVISION SEQUENCE AND IS FOR YEAR   89

BA	CODE	DESCRIPTION	DIV	DIS	CSA	BUDGET	MUST	SCORE	JT	Z
66	3080	STOCK VAL'N B'HAM DEPOT				11	Y	138	R	F
66	3082	LDS PRE IMP B'HAM/CRAYFORD				80	Y	138	R	F
67	3081	CONTRACTS				6	Y	138	R	F
53	3001	BT&D TECHNOLOGIES LTD	BTD			53	Y	129	R	F
53	3002	BT&D TECHNOLOGIES LTD	BTD			53	Y	129	R	F
68	1165	INCOME/BILLING-LEEDS	BTE	MOC		44	N	168	R	F
68	1170	ACCOUNTING-SUN ACCOUNTS	BTE	MOC		44	Y	168	R	F
68	1173	TSCR-SUBSIDIARY/BILLING	BTE	MOC		60	Y	168	R	F
68	1134	INCOME/BILLING	BTE	YEP		54	Y	168	R	F
68	1139	ACCOUNTING-SUN ACCOUNTS	BTE	YEP		44	N	168	R	F
68	1175	TSCR/FINANCIAL ACCOUNTING	BTE	MOC		30	Y	144	R	F
68	1180	DATA CENTRES	BTE	MC		20	Y	129	R	F
68	1160	PURCHASING/STOCKS	BTE	BBS		73	Y	126	R	F
68	1142	INCOME/BILLING	BTE	BTA		48	N	126	R	F
68	1184	COVENTRY CABLE LTD	BTE	BTV		13	Y	126	R	F
68	1151	INCOME/BILLING-MANUAL	BTE	DNS		30	Y	126	R	F
68	1153	PURCHASING P.O/CONTRACTS	BTE	DNS		30	Y	126	R	F
68	1120	INCOME/BILLING	BTE	MES		35	Y	126	R	F
68	1114	SUPERCALL	BTE	SPE		30	Y	126	R	F
68	1107	ACCOUNTING-FALCON	BTE	VAB		60	Y	126	R	F
68	1118	TSL-SUBSIDIARY	BTE	SPE		30	Y	124	R	F
68	1101	PAYROLL	BTE	CEN		30	Y	120	R	F
68	1159	INCOME/BILLING	BTE	BBS		20	Y	105	R	F
68	1150	INCOME/BILLING-DISTRICTS	BTE	DNS		30	Y	105	R	F
68	1122	PURCHASING -TETRA PLAN	BTE	MES		30	Y	105	R	F
68	1149	INCOME BILLING-BIPASS	BTE	DNS		33	Y	91	R	F
68	1113	CONSOLIDATION	BTE	SPE		15	Y	91	R	F
68	1147	PERSONNEL	BTE	BTA		30	Y	84	R	F
68	1140	FIXED ASSETS-TETRA PLAN	BTE	YEP		24	Y	84	R	F
68	1116	MIPS	BTE	S PE		30	Y	81	R	F
68	1145	EXPENDITURE-INTER BUS. T.GOLD	BTE	BTA		15	Y	77	R	F
68	1133	EXPENDITURE-INTER BUS. T.GOLD	BTE	TMS		15	Y	77	R	F
68	1132	FIXED ASSETS	BTE	TMS		20	Y	70	R	F
68	1143	INCOME-INTER BUS. T.GOLD	BTE	BTA		15	Y	56	R	F
64	1236	FIXED ASSETS	BTI			25	Y	150	R	F
64	1253	YEAR END REPORTING	BTI			20	Y	144	R	F
64	1237	PROJECT ACCOUNTING	BTI			20	Y	141	R	F
64	1230	OVERHEAD ALLOCATION	BTI			25	Y	135	R	F
64	1241	STORES	BTI			25	N	129	R	F
64	1264	BTI SUMMARY REPORTS	BTI			10	Y	112	R	F
64	1227	MSD (MARKETING SERVICES)	BTI	MSD		20	N	108	R	F
64	1223	TRAVEL & SUBSISTENCE	BTI			20	N	99	R	F
64	1246	DOMESTIC CASHIERS	BTI	CF		15	N	79	R	F
64	1247	COMMERCIAL CASHIERS	BTI	CF		15	N	79	R	F
64	1207	STAR (SATELLITE TRAFFIC ACCT)	BTI			20	N	78	R	F
64	1256	BT MARINE LOCATION AUDIT	BTI	MAR		32	N	52	R	F
71	4047	MANAGEMENT ACCOUNTING	CCD	CAB		20	Y	87	R	F
71	4055	COMPUTER INTEGRITY	CCD	IPU		15	Y	58	R	F
71	4056	REVENUE ACCOUNTING	CCD	IPU		20	Y	58	R	F
71	4149	FOREIGN CURRENCY EXPOSURE	CFD	F2		30	Y	144	R	F
71	4003	MANSION PLACE LEASING	CFD	F2		20	Y	124	R	F
71	4004	COMMERCIAL PAPER	CFD	F2		30	N	112	R	F
71	4013	VAT	CFD	F8		30	Y	112	R	F
71	4001	PLANMASTER CONSOLIDATION	CFD	F1		20	N	80	R	F
71	4006	PERIOD END ACCOUNTS	CFD	F2		10	Y	46	R	F

BA CODE	DESCRIPTION	DIV	DIS	CSA	BUDGET	MUST	SCORE	JT	Z
69 4129	INVENTORY CONTROL	IPD	NPO	BMF	33	Y	159	R	F
69 4076	PROCUREMENT	IPD	TS	DCM	20	Y	153	R	F
69 4077	ACCOUNTS PAYABLE	IPD	TS	DCM	10	N	153	R	F
69 4139	INVENTORY CONTROL	IPD	NPO	ENF	26	Y	141	R	F
69 4153	IPD OVERVIEW REPORTS	IPD	ALL		10	Y	122	R	F
69 4133	PROCUREMENT	IPD	NPO	BMF	33	Y	120	R	F
69 4135	ACCOUNTS PAYABLE INC CASH/BNK	IPD	NPO	BMF	22	N	120	R	F
69 4072	STOCK MANAGEMENT	IPD	TS	SP	23	Y	120	R	F
69 4041	INVENTORY CONTROL	IPD	NPO	CE	22	Y	117	R	F
69 4138	SALES ORDER PROCESSING	IPD	NPO	ENF	21	Y	111	R	F
69 4063	INVENTORY CONTROL	IPD	ITS	CBP	31	Y	105	R	F
69 4079	FINANCIAL ACCOUNTING MSAGL	IPD	TS	DCM	20	N	105	R	F
69 4143	FIXED ASSETS	IPD	NPO	ENF	21	N	102	R	F
69 4145	FINANCIAL ACCOUNTING	IPD	NPO	ENF	21	N	102	R	F
69 4083	SALES ORDER PROCESSING	IPD	IS	GAP	12	Y	97	R	F
69 4075	SALES ORDER PROCESSING	IPD	TS	DCM	20	Y	97	R	F
69 4130	MANAGEMENT ACCOUNTS	IPD	NPO	BMF	33	N	93	R	F
69 4085	INVENTORY CONTROL	IPD	IS	GAP	17	Y	90	R	F
69 4095	INVENTORY CONTROL	IPD	ITS	IS	6	Y	90	R	F
69 4034	STOCK MANAGEMENT	IPD	TS	CTP	10	Y	90	R	F
69 4089	STOCK MANAGEMENT	IPD	TS	PUB	6	Y	90	R	F
69 4061	DIRECT INCOME	IPD	CBP		21	Y	85	R	F
69 4062	PROCUREMENT	IPD	ITS	CBP	21	Y	85	R	F
69 4141	PROCUREMENT	IPD	NPO	ENF	21	Y	85	R	F
69 4142	ACCOUNTS PAYABLE	IPD	NPO	ENF	21	N	85	R	F
69 4018	PROCUREMENT	IPD	PRO	HQ	34	Y	84	R	F
69 4092	SALES ORDER PROCESSING	IPD	IS	IS	11	Y	76	R	F
69 4037	SALES/ORDER PROCESSING	IPD	NPO	CE	17	Y	76	R	F
69 4039	PROCUREMENT	IPD	NPO	CE	22	Y	76	R	F
69 4032	SALES ORDER PROCESSING	IPD	TS	CTP	10	Y	76	R	F
69 4088	SALES ORDER PROCESSING	IPD	TS	PUB	6	Y	76	R	F
69 4070	SALES ORDER PROCESSING	IPD	TS	SP	10	Y	76	R	F
69 4019	PROCUREMENT ADMINISTRATION	IPD	PRO	HQ	30	Y	72	R	F
69 4045	COMPUTER INTEGRITY	IPD	NPO	CE	17	Y	70	R	F
69 4016	YEAR END ACCOUNTS	IPD	FIN	HQ	15	Y	66	R	F
69 4152	SALES LEDGER/INVOICING	IPD	TS	HQ	30	Y	66	R	F
69 4033	PROCUREMENT	IPD	TS	CTP	20	Y	64	R	F
69 4151	INVENTORY ACCOUNTING	IPD	TS	HQ	30	Y	60	R	F
66 3026	PURCHASING - SUPD/MSA	ME			68	Y	168	R	F
66 3059	PHONECARDS	ME			36	Y	156	R	F
66 3069	STOCKTAKING	ME		BD	26	Y	156	R	F
66 3061	DEPOT ISSUES CRAYFORD	ME		CD	35	Y	156	R	F
66 3062	DEPOT RECEIPTS	ME		CD	38	N	156	R	F
66 3075	STOCKTAKING	ME		ND	26	N	156	R	F
66 3047	SCORE LDS INTERFACE	ME			34	Y	152	R	F
66 3034	TRANSFER CHARGING	ME			17	Y	144	R	F
66 3030	MANPOWER	ME			46	Y	142	R	F
66 3036	YEAR END	ME			17	Y	136	R	F
66 3067	DEPOT ISSUES	ME		BD	41	N	135	R	F
66 3068	DEPOT RECEIPTS NTHA D	ME		BD	41	Y	135	R	F
66 3033	ACCOUNTS PAYABLE PHASE 1.2	ME			44	Y	129	R	F
66 3056	TRANSPORT DIVISION	ME			34	Y	123	R	F
66 3040	GOPS / KEYS INDICATORS	ME			48	Y	112	R	F
66 3057	CASHIERS + T&S	ME			34	N	106	R	F
66 3027	MSP CONTRACTS-EXCHANGE EQUIP	ME			68	Y	92	R	F

BA	CODE	DESCRIPTION	DIV	DIS	CSA	BUDGET	MUST	SCORE	JT	Z
66	3028	MSP CONTRACTS - OTHER	ME			34	Y	92	R	F
66	3058	TRANSHIPMENTS	ME			24	Y	73	R	F
66	3025	INCOME - SALES LEDGER	ME			34	Y	58	R	F
66	3070	STOCK DISCREPANCY CASES	ME		BD	14	N	58	R	F
66	3064	STOCK DISCREPANCY CASES	ME		CD	12	N	58	R	F
66	3076	STOCK DISCREPANCY CASES	ME		ND	14	N	58	R	F
66	3060	ESTATES MANAGEMENT	ME			34	Y	46	R	F
66	3078	DEPOT OTHERS	ME		ND	26	Y	46	R	F
65	1275	PURCHASING IAL	OD	IAL	STH	25	Y	85	R	F
65	1269	BILLING CONSULTANCY & NI	OD	TEL	STH	25	N	52	R	F
17	4122	RENTS & RATES	PCS	BMD		10	N	168	R	F
17	4120	CAPITAL PROJECT CONTROL	PCS	BMD		30	N	147	R	F
17	4121	CONTRACTS/PURCHASING	PCS	BMD		30	N	147	R	F
17	4123	FINANCIAL ACCOUNTING (NAS)	PCS	BMD		10	Y	141	R	F
17	4125	COMPUTER INTEGRITY	PCS	BMD		20	Y	126	R	F
17	4110	PENSION ADMINISTRATION	PCS	PAC		88	Y	126	R	F
17	4111	BTPAC COMPUTER INTEGRITY	PCS	PAC		24	Y	114	R	F
17	4119	COMPUTER INTEGRITY	PCS	ASD	AS3	20	Y	97	R	F
17	4117	MANAGEMENT ACCOUNTS	PCS	ASD	AS3	25	Y	91	R	F
17	4109	BTPAC HQ	PCS	PAC	HQ	10	Y	91	R	F
17	4150	BTPAC QUARTERLY REVIEW	PCS	PAC		20	Y	87	R	F
17	4127	STAFF RESTAURANTS	PCS	CAT		20	Y	84	R	F
17	4114	PAYROLL/PERSONNEL (INC T&SETC)	PCS	ASD		60	N	73	R	F
17	4115	ACCOUNTS PAYABLE	PCS	ASD	AS3	30	N	73	R	F
17	4118	ACCOUNTS RECEIVABLE	PCS	ASD	AS3	5	N	52	R	F
67	3018	OTHER OPERATING COSTS	R&T			36	N	180	R	F
67	3013	YEAR END	R&T			18	Y	136	R	F
67	3008	FIXED ASSETS REGISTER	R&T			36	Y	135	R	F
67	3019	CASHIERS + T&S	R&T			36	Y	106	R	F
67	3012	MGMT ACCOUNTS/BUDGETERY CNT	R&T			48	Y	102	R	F
67	3020	COMP INST	R&T			36	Y	94	R	F
67	3024	PROJECT CONTROL & COSTINGS	R&T			36	Y	67	R	F
17	4105	CORPORATE RELATIONS DEPT	SEC	CRD		70	Y	159	R	F
17	4106	INVESTIGATION DIVISION	SEC	ID		25	Y	132	R	F
17	4103	GOVERNMENT RELATIONS DEPT	SEC	GRD		15	Y	126	R	F
17	4104	SOLICITORS OFFICE	SEC	SOL		25	Y	126	R	F
17	4107	SECURITY DIVISION	SEC	STY		10	Y	118	R	F

** TOTAL DAYS REQUIRED FOR PLAN **   4038

A2.5   **Annual Plan Based On Frequency And Resource (LHRSKP4)**

A2.5.1 Although this plan selects projects in a similar manner to the previous one it also uses the available resource by spreading it across the selected projects based on their importance scores. It does this by calculating the ratio of available days against the sum of all the importance scores and then allocates budgets based on that ratio, as shown in the example below.

            Available Man-day Resource = 100
            Sum of Importance Scores   = 1000
            Ratio Resource:Score = 100:1000 = 1:10

A2.5.2 Therefore 1 man-day of resource will be allocated for each 10 points of a project's importance score. If we have a project with an importance score of 300 it will be allocated 300/10 = 30 days. Because the sum of all importance scores was used the available days will be completely and consistently allocated. The problem with this method of allocation is that it is conceivable that there will be many low importance projects selected for the annual plan (because selection is based on frequency) which will absorb a large amount of resource in very small amounts in each case. Indeed, these amounts may be so small that a workable audit is impossible. For example if a project only had an importance score of 10, it would attract only one day of resource, which is unlikely to provide sufficient time for an audit. If there were 50 projects with that score, then 50 days would have been absorbed from the 100 available, but none of it would have allocated into workable amounts. This problem is overcome in the following report.

THIS PLAN IS BASED ON NOMINAL FREQUENCY AND SYSTEM BUDGET
        IF YOU WISH TO SEE THE EFFECT OF USING SYSTEM FREQUENCY

RE-CALCULATE THE STRATEGIC PLAN FROM THE MAIN MENU OPTION
            AND THEN RE-PRINT THIS REPORT
            KEY TO COLUMN HEADINGS
            ======================
CODE   = PROJECT CODE
DESCRIPTION = PROJECT DESCRIPTION
DIV   = DIVISION
DIS   = DISTRICT/UNIT
CSA   = CUSTOMER SERVICE AREA/LOCATION
BUDGET   = BUDGETED DAYS BASED ON SCORE & AVAILABLE DAYS
MUST   = MUST DO THIS PROJECT REGARDLESS OF RISK (YES/NO)
SCORE   = IMPORTANCE SCORE
THIS REPORT IS IN DIVISION SEQUENCE AND IS FOR YEAR   89

BA CODE	DESCRIPTION	DIV	DIS	CSA	BUDGET	MUST	SCORE	JT	Z
66 3080	STOCK VAL'N B'HAM DEPOT				39	Y	138	R	F
66 3082	LDS PRE IMP B'HAM/CRAYFORD				37	Y	138	R	F
67 3081	CONTRACTS				40	Y	138	R	F
53 3001	BT&D TECHNOLOGIES LTD	BTD			43	Y	129	R	F
53 3002	BT&D TECHNOLOGIES LTD	BTD			43	Y	129	R	F
68 1116	MIPS	BTE	S	PE	22	Y	81	R	F
68 1159	INCOME/BILLING	BTE	BBS		28	Y	105	R	F
68 1160	PURCHASING/STOCKS	BTE	BBS		37	Y	126	R	F
68 1142	INCOME/BILLING	BTE	BTA		38	N	126	R	F
68 1143	INCOME-INTER BUS. T.GOLD	BTE	BTA		15	Y	56	R	F
68 1145	EXPENDITURE-INTER BUS. T.GOLD	BTE	BTA		21	Y	77	R	F
68 1147	PERSONNEL	BTE	BTA		23	Y	84	R	F
68 1184	COVENTRY CABLE LTD	BTE	BTV		34	Y	126	R	F
68 1101	PAYROLL	BTE	CEN		32	Y	120	R	F
68 1149	INCOME BILLING-BIPASS	BTE	DNS		25	Y	91	R	F
68 1150	INCOME/BILLING-DISTRICTS	BTE	DNS		28	Y	105	R	F
68 1151	INCOME/BILLING-MANUAL	BTE	DNS		34	Y	126	R	F
68 1153	PURCHASING P.O/CONTRACTS	BTE	DNS		34	Y	126	R	F
68 1180	DATA CENTRES	BTE	MC		35	Y	129	R	F
68 1120	INCOME/BILLING	BTE	MES		34	Y	126	R	F
68 1122	PURCHASING -TETRA PLAN	BTE	MES		28	Y	105	R	F
68 1165	INCOME/BILLING-LEEDS	BTE	MOC		49	N	168	R	F
68 1170	ACCOUNTING-SUN ACCOUNTS	BTE	MOC		45	Y	168	R	F
68 1173	TSCR-SUBSIDIARY/BILLING	BTE	MOC		45	Y	168	R	F
68 1175	TSCR/FINANCIAL ACCOUNTING	BTE	MOC		39	Y	144	R	F
68 1113	CONSOLIDATION	BTE	SPE		25	Y	91	R	F
68 1114	SUPERCALL	BTE	SPE		34	Y	126	R	F
68 1118	TSL-SUBSIDIARY	BTE	SPE		34	Y	124	R	F
68 1132	FIXED ASSETS	BTE	TMS		19	Y	70	R	F
68 1133	EXPENDITURE-INTER BUS. T.GOLD	BTE	TMS		21	Y	77	R	F
68 1107	ACCOUNTING-FALCON	BTE	VAB		34	Y	126	R	F
68 1134	INCOME/BILLING	BTE	YEP		47	Y	168	R	F
68 1139	ACCOUNTING-SUN ACCOUNTS	BTE	YEP		47	N	168	R	F
68 1140	FIXED ASSETS-TETRA PLAN	BTE	YEP		25	Y	84	R	F
64 1207	STAR (SATELLITE TRAFFIC ACCT)	BTI			21	N	78	R	F
64 1223	TRAVEL & SUBSISTENCE	BTI			27	N	99	R	F
64 1230	OVERHEAD ALLOCATION	BTI			36	Y	135	R	F
64 1236	FIXED ASSETS	BTI			41	Y	150	R	F
64 1237	PROJECT ACCOUNTING	BTI			38	Y	141	R	F
64 1241	STORES	BTI			37	N	129	R	F
64 1253	YEAR END REPORTING	BTI			39	Y	144	R	F
64 1264	BTI SUMMARY REPORTS	BTI			30	Y	112	R	F
64 1246	DOMESTIC CASHIERS	BTI	CF		21	N	79	R	F
64 1247	COMMERCIAL CASHIERS	BTI	CF		21	N	79	R	F
64 1256	BT MARINE LOCATION AUDIT	BTI	MAR		16	N	52	R	F
64 1227	MSD (MARKETING SERVICES)	BTI	MSD		29	N	108	R	F
71 4047	MANAGEMENT ACCOUNTING	CCD	CAB		24	Y	87	R	F
71 4055	COMPUTER INTEGRITY	CCD	IPU		16	Y	58	R	F
71 4056	REVENUE ACCOUNTING	CCD	IPU		16	Y	58	R	F
71 4001	PLANMASTER CONSOLIDATION	CFD	F1		22	N	80	R	F
71 4003	MANSION PLACE LEASING	CFD	F2		34	Y	124	R	F
71 4004	COMMERCIAL PAPER	CFD	F2		30	N	112	R	F
71 4006	PERIOD END ACCOUNTS	CFD	F2		12	Y	46	R	F
71 4149	FOREIGN CURRENCY EXPOSURE	CFD	F2		39	Y	144	R	F
71 4013	VAT	CFD	F8		30	Y	112	R	F

BA CODE	DESCRIPTION	DIV	DIS	CSA	BUDGET	MUST	SCORE	JT	Z
69 4153	IPD OVERVIEW REPORTS	IPD	ALL		33	Y	122	R	F
69 4061	DIRECT INCOME	IPD	CBP		24	Y	85	R	F
69 4016	YEAR END ACCOUNTS	IPD	FIN	HQ	18	Y	66	R	F
69 4083	SALES ORDER PROCESSING	IPD	IS	GAP	28	Y	97	R	F
69 4085	INVENTORY CONTROL	IPD	IS	GAP	26	Y	90	R	F
69 4092	SALES ORDER PROCESSING	IPD	IS	IS	22	Y	76	R	F
69 4095	INVENTORY CONTROL	IPD	ITS	IS	25	Y	90	R	F
69 4062	PROCUREMENT	IPD	ITS	CBP	24	Y	85	R	F
69 4063	INVENTORY CONTROL	IPD	ITS	CBP	29	Y	105	R	F
69 4129	INVENTORY CONTROL	IPD	NPO	BMF	46	Y	159	R	F
69 4130	MANAGEMENT ACCOUNTS	IPD	NPO	BMF	28	N	93	R	F
69 4133	PROCUREMENT	IPD	NPO	BMF	35	Y	120	R	F
69 4135	ACCOUNTS PAYABLE INC CASH/BNK	IPD	NPO	BMF	34	N	120	R	F
69 4037	SALES/ORDER PROCESSING	IPD	NPO	CE	23	Y	76	R	F
69 4039	PROCUREMENT	IPD	NPO	CE	23	Y	76	R	F
69 4041	INVENTORY CONTROL	IPD	NPO	CE	34	Y	117	R	F
69 4045	COMPUTER INTEGRITY	IPD	NPO	CE	21	Y	70	R	F
69 4138	SALES ORDER PROCESSING	IPD	NPO	ENF	31	Y	111	R	F
69 4139	INVENTORY CONTROL	IPD	NPO	ENF	39	Y	141	R	F
69 4141	PROCUREMENT	IPD	NPO	ENF	24	Y	85	R	F
69 4142	ACCOUNTS PAYABLE	IPD	NPO	ENF	24	N	85	R	F
69 4143	FIXED ASSETS	IPD	NPO	ENF	29	N	102	R	F
69 4145	FINANCIAL ACCOUNTING	IPD	NPO	ENF	29	N	102	R	F
69 4018	PROCUREMENT	IPD	PRO	HQ	27	Y	84	R	F
69 4019	PROCUREMENT ADMINISTRATION	IPD	PRO	HQ	19	Y	72	R	F
69 4032	SALES ORDER PROCESSING	IPD	TS	CTP	21	Y	76	R	F
69 4033	PROCUREMENT	IPD	TS	CTP	17	Y	64	R	F
69 4034	STOCK MANAGEMENT	IPD	TS	CTP	24	Y	90	R	F
69 4075	SALES ORDER PROCESSING	IPD	TS	DCM	26	Y	97	R	F
69 4076	PROCUREMENT	IPD	TS	DCM	41	Y	153	R	F
69 4077	ACCOUNTS PAYABLE	IPD	TS	DCM	41	N	153	R	F
69 4079	FINANCIAL ACCOUNTING MSAGL	IPD	TS	DCM	28	N	105	R	F
69 4151	INVENTORY ACCOUNTING	IPD	TS	HQ	16	Y	60	R	F
69 4152	SALES LEDGER/INVOICING	IPD	TS	HQ	18	Y	66	R	F
69 4088	SALES ORDER PROCESSING	IPD	TS	PUB	22	Y	76	R	F
69 4089	STOCK MANAGEMENT	IPD	TS	PUB	25	Y	90	R	F
69 4070	SALES ORDER PROCESSING	IPD	TS	SP	21	Y	76	R	F
69 4072	STOCK MANAGEMENT	IPD	TS	SP	35	Y	120	R	F
66 3025	INCOME - SALES LEDGER	ME			20	Y	58	R	F
66 3026	PURCHASING - SUPD/MSA	ME			53	Y	168	R	F
66 3027	MSP CONTRACTS-EXCHANGE EQUIP	ME			33	Y	92	R	F
66 3028	MSP CONTRACTS - OTHER	ME			29	Y	92	R	F
66 3030	MANPOWER	ME			44	Y	142	R	F
66 3033	ACCOUNTS PAYABLE PHASE 1.2	ME			39	Y	129	R	F
66 3034	TRANSFER CHARGING	ME			41	Y	144	R	F
66 3036	YEAR END	ME			39	Y	136	R	F
66 3040	GOPS / KEYS INDICATORS	ME			38	Y	112	R	F
66 3047	SCORE LDS INTERFACE	ME			45	Y	152	R	F
66 3056	TRANSPORT DIVISION	ME			37	Y	123	R	F
66 3057	CASHIERS + T&S	ME			33	N	106	R	F
66 3058	TRANSHIPMENTS	ME			24	Y	73	R	F
66 3059	PHONECARDS	ME			48	Y	156	R	F
66 3060	ESTATES MANAGEMENT	ME			16	Y	46	R	F
66 3067	DEPOT ISSUES	ME		BD	42	N	135	R	F
66 3068	DEPOT RECEIPTS NTHA D	ME		BD	42	Y	135	R	F

BA CODE	DESCRIPTION	DIV	DIS	CSA	BUDGET	MUST	SCORE	JT	Z
66 3069	STOCKTAKING	ME		BD	48	Y	156	R	F
66 3070	STOCK DISCREPANCY CASES	ME		BD	20	N	58	R	F
66 3061	DEPOT ISSUES CRAYFORD	ME		CD	45	Y	156	R	F
66 3062	DEPOT RECEIPTS	ME		CD	45	N	156	R	F
66 3064	STOCK DISCREPANCY CASES	ME		CD	18	N	58	R	F
66 3075	STOCKTAKING	ME		ND	48	N	156	R	F
66 3076	STOCK DISCREPANCY CASES	ME		ND	20	N	58	R	F
66 3078	DEPOT OTHERS	ME		ND	18	Y	46	R	F
65 1275	PURCHASING IAL	OO	IAL	STH	28	Y	85	R	F
65 1269	BILLING CONSULTANCY & NI	OO	TEL	STH	19	N	52	R	F
17 4114	PAYROLL/PERSONNEL (INC T&SETC)	PCS	ASD		20	N	73	R	F
17 4115	ACCOUNTS PAYABLE	PCS	ASD	AS3	20	N	73	R	F
17 4117	MANAGEMENT ACCOUNTS	PCS	ASD	AS3	25	Y	91	R	F
17 4118	ACCOUNTS RECEIVABLE	PCS	ASD	AS3	14	N	52	R	F
17 4119	COMPUTER INTEGRITY	PCS	ASD	AS3	26	Y	97	R	F
17 4120	CAPITAL PROJECT CONTROL	PCS	BMD		40	N	147	R	F
17 4121	CONTRACTS/PURCHASING	PCS	BMD		40	N	147	R	F
17 4122	RENTS & RATES	PCS	BMD		45	N	168	R	F
17 4123	FINANCIAL ACCOUNTING (NAS)	PCS	BMD		38	Y	141	R	F
17 4125	COMPUTER INTEGRITY	PCS	BMD		34	Y	126	R	F
17 4127	STAFF RESTAURANTS	PCS	CAT		23	Y	84	R	F
17 4110	PENSION ADMINISTRATION	PCS	PAC		42	Y	126	R	F
17 4111	BTPAC COMPUTER INTEGRITY	PCS	PAC		35	Y	114	R	F
17 4150	BTPAC QUARTERLY REVIEW	PCS	PAC		28	Y	87	R	F
17 4109	BTPAC HQ	PCS	PAC	HQ	25	Y	91	R	F
67 3008	FIXED ASSETS REGISTER	R&T			42	Y	135	R	F
67 3012	MGMT ACCOUNTS/BUDGETERY CNT	R&T			36	Y	102	R	F
67 3013	YEAR END	R&T			40	Y	136	R	F
67 3018	OTHER OPERATING COSTS	R&T			55	N	180	R	F
67 3019	CASHIERS + T&S	R&T			35	Y	106	R	F
67 3020	COMP INST	R&T			31	Y	94	R	F
67 3024	PROJECT CONTROL & COSTINGS	R&T			24	Y	67	R	F
17 4105	CORPORATE RELATIONS DEPT	SEC	CRD		43	Y	159	R	F
17 4103	GOVERNMENT RELATIONS DEPT	SEC	GRD		34	Y	126	R	F
17 4106	INVESTIGATION DIVISION	SEC	ID		36	Y	132	R	F
17 4104	SOLICITORS OFFICE	SEC	SOL		34	Y	126	R	F
17 4107	SECURITY DIVISION	SEC	STY		32	Y	118	R	F

** TOTAL DAYS REQUIRED FOR PLAN **   4572

A2.6   **Annual Plan Based On Frequency,Importance &**
        Available Days
        (LHRSKP5)

A2.6.1 This report attempts to overcome the problem
        described above by providing the option of
        ignoring those projects whose importance score
        falls below a certain value (this value may be
        varied at reporting time). This enables the
        resource which would have been allocated in
        unworkable small amounts to be used elsewhere.
        It is conceivable however, that certain low
        importance projects must be included in the plan
        and this is achieved by flagging them as 'Must
        Do' regardless of importance and frequency. The
        flagging is done within the project itself (see
        Audit Portfolio Input) and this report allows the
        user the option of either including, or
        excluding, such projects. If the user chooses to
        include them, then the system ignores the
        instruction to reject a project if its score
        falls below the minimum required for inclusion
        and includes it anyway.

        For example if the minimum score for selection
        was set at 50 and 'Must Do' projects were
        excluded the the following project would be
        rejected:

            Score = 49   Must Do Flag = Yes

        If however, it had been decided to include 'Must
        Do' projects then it would be included.

THIS PLAN IS BASED ON NOMINAL FREQUENCY AND SYSTEM BUDGET
        IF YOU WISH TO SEE THE EFFECT OF USING SYSTEM FREQUENCY
RE-CALCULATE THE STRATEGIC PLAN FROM THE MAIN MENU OPTION
            AND THEN RE-PRINT THIS REPORT

            KEY TO COLUMN HEADINGS
            ======================
    CODE   = PROJECT CODE
    DESCRIPTION = PROJECT DESCRIPTION
    DIV   = DIVISION
    DIS   = DISTRICT/UNIT
    CSA   = CUSTOMER SERVICE AREA/LOCATION
    BUDGET   = BUDGETED DAYS FOR PROJECT INCLUDING TRAVEL TIME
    MUST   = MUST DO THIS PROJECT REGARDLESS OF RISK (YES/NO)
    SCORE   = IMPORTANCE SCORE
LOWEST SCORE SELECTED =   50   'MUST DO's' INCLUDED REGARDLESS OF SCORE
        THIS REPORT IS IN DIVISION SEQUENCE AND IS FOR YEAR   89

BA CODE	DESCRIPTION	DIV DIS CSA	BUDGET	MUST	SCORE	JT	Z
66 3080	STOCK VAL'N B'HAM DEPOT		37	Y	138	R	F
66 3082	LDS PRE IMP B'HAM/CRAYFORD		37	Y	138	R	F
67 3081	CONTRACTS		37	Y	138	R	F
53 3001	BT&D TECHNOLOGIES LTD	BTD	35	Y	129	R	F
53 3002	BT&D TECHNOLOGIES LTD	BTD	35	Y	129	R	F
68 1116	MIPS	BTE S PE	22	Y	81	R	F
68 1159	INCOME/BILLING	BTE BBS	28	Y	105	R	F
68 1160	PURCHASING/STOCKS	BTE BBS	34	Y	126	R	F
68 1142	INCOME/BILLING	BTE BTA	34	N	126	R	F
68 1143	INCOME-INTER BUS. T.GOLD	BTE BTA	15	Y	56	R	F
68 1145	EXPENDITURE-INTER BUS. T.GOLD	BTE BTA	21	Y	77	R	F
68 1147	PERSONNEL	BTE BTA	23	Y	84	R	F
68 1184	COVENTRY CABLE LTD	BTE BTV	34	Y	126	R	F
68 1101	PAYROLL	BTE CEN	32	Y	120	R	F
68 1149	INCOME BILLING-BIPASS	BTE DNS	25	Y	91	R	F
68 1150	INCOME/BILLING-DISTRICTS	BTE DNS	28	Y	105	R	F
68 1151	INCOME/BILLING-MANUAL	BTE DNS	34	Y	126	R	F
68 1153	PURCHASING P.O/CONTRACTS	BTE DNS	34	Y	126	R	F
68 1180	DATA CENTRES	BTE MC	35	Y	129	R	F
68 1120	INCOME/BILLING	BTE MES	34	Y	126	R	F
68 1122	PURCHASING -TETRA PLAN	BTE MES	28	Y	105	R	F
68 1165	INCOME/BILLING-LEEDS	BTE MOC	45	N	168	R	F
68 1170	ACCOUNTING-SUN ACCOUNTS	BTE MOC	45	Y	168	R	F
68 1173	TSCR-SUBSIDIARY/BILLING	BTE MOC	45	Y	168	R	F
68 1175	TSCR/FINANCIAL ACCOUNTING	BTE MOC	39	Y	144	R	F
68 1113	CONSOLIDATION	BTE SPE	25	Y	91	R	F
68 1114	SUPERCALL	BTE SPE	34	Y	126	R	F
68 1118	TSL-SUBSIDIARY	BTE SPE	34	Y	124	R	F
68 1132	FIXED ASSETS	BTE TMS	19	Y	70	R	F
68 1133	EXPENDITURE-INTER BUS. T.GOLD	BTE TMS	21	Y	77	R	F
68 1107	ACCOUNTING-FALCON	BTE VAB	34	Y	126	R	F
68 1134	INCOME/BILLING	BTE YEP	45	Y	168	R	F
68 1139	ACCOUNTING-SUN ACCOUNTS	BTE YEP	45	N	168	R	F
68 1140	FIXED ASSETS-TETRA PLAN	BTE YEP	23	Y	84	R	F
64 1207	STAR (SATELLITE TRAFFIC ACCT)	BTI	21	N	78	R	F
64 1223	TRAVEL & SUBSISTENCE	BTI	27	N	99	R	F
64 1230	OVERHEAD ALLOCATION	BTI	36	Y	135	R	F
64 1236	FIXED ASSETS	BTI	41	Y	150	R	F
64 1237	PROJECT ACCOUNTING	BTI	38	Y	141	R	F
64 1241	STORES	BTI	35	N	129	R	F
64 1253	YEAR END REPORTING	BTI	39	Y	144	R	F
64 1264	BTI SUMMARY REPORTS	BTI	30	Y	112	R	F
64 1246	DOMESTIC CASHIERS	BTI CF	21	N	79	R	F
64 1247	COMMERCIAL CASHIERS	BTI CF	21	N	79	R	F
64 1256	BT MARINE LOCATION AUDIT	BTI MAR	14	N	52	R	F
64 1227	MSD (MARKETING SERVICES)	BTI MSD	29	N	108	R	F
71 4047	MANAGEMENT ACCOUNTING	CCD CAB	24	Y	87	R	F
71 4055	COMPUTER INTEGRITY	CCD IPU	16	Y	58	R	F
71 4056	REVENUE ACCOUNTING	CCD IPU	16	Y	58	R	F
71 4001	PLANMASTER CONSOLIDATION	CFD F1	22	N	80	R	F
71 4003	MANSION PLACE LEASING	CFD F2	34	Y	124	R	F
71 4004	COMMERCIAL PAPER	CFD F2	30	N	112	R	F
71 4006	PERIOD END ACCOUNTS	CFD F2	12	Y	46	R	F
71 4149	FOREIGN CURRENCY EXPOSURE	CFD F2	39	Y	144	R	F
71 4013	VAT	CFD F8	30	Y	112	R	F

BA CODE	DESCRIPTION	DIV	DIS	CSA	BUDGET	MUST	SCORE	JT	Z
69 4153	IPD OVERVIEW REPORTS	IPD	ALL		33	Y	122	R	F
69 4061	DIRECT INCOME	IPD	CBP		23	Y	85	R	F
69 4016	YEAR END ACCOUNTS	IPD	FIN	HQ	18	Y	66	R	F
69 4083	SALES ORDER PROCESSING	IPD	IS	GAP	26	Y	97	R	F
69 4085	INVENTORY CONTROL	IPD	IS	GAP	24	Y	90	R	F
69 4092	SALES ORDER PROCESSING	IPD	IS	IS	21	Y	76	R	F
69 4095	INVENTORY CONTROL	IPD	ITS	IS	24	Y	90	R	F
69 4062	PROCUREMENT	IPD	ITS	CBP	23	Y	85	R	F
69 4063	INVENTORY CONTROL	IPD	ITS	CBP	28	Y	105	R	F
69 4129	INVENTORY CONTROL	IPD	NPO	BMF	43	Y	159	R	F
69 4130	MANAGEMENT ACCOUNTS	IPD	NPO	BMF	25	N	93	R	F
69 4133	PROCUREMENT	IPD	NPO	BMF	32	Y	120	R	F
69 4135	ACCOUNTS PAYABLE INC CASH/BNK	IPD	NPO	BMF	32	N	120	R	F
69 4037	SALES/ORDER PROCESSING	IPD	NPO	CE	21	Y	76	R	F
69 4039	PROCUREMENT	IPD	NPO	CE	21	Y	76	R	F
69 4041	INVENTORY CONTROL	IPD	NPO	CE	32	Y	117	R	F
69 4045	COMPUTER INTEGRITY	IPD	NPO	CE	19	Y	70	R	F
69 4138	SALES ORDER PROCESSING	IPD	NPO	ENF	30	Y	111	R	F
69 4139	INVENTORY CONTROL	IPD	NPO	ENF	38	Y	141	R	F
69 4141	PROCUREMENT	IPD	NPO	ENF	23	Y	85	R	F
69 4142	ACCOUNTS PAYABLE	IPD	NPO	ENF	23	N	85	R	F
69 4143	FIXED ASSETS	IPD	NPO	ENF	28	N	102	R	F
69 4145	FINANCIAL ACCOUNTING	IPD	NPO	ENF	28	N	102	R	F
69 4018	PROCUREMENT	IPD	PRO	HQ	23	Y	84	R	F
69 4019	PROCUREMENT ADMINISTRATION	IPD	PRO	HQ	19	Y	72	R	F
69 4032	SALES ORDER PROCESSING	IPD	TS	CTP	21	Y	76	R	F
69 4033	PROCUREMENT	IPD	TS	CTP	17	Y	64	R	F
69 4034	STOCK MANAGEMENT	IPD	TS	CTP	24	Y	90	R	F
69 4075	SALES ORDER PROCESSING	IPD	TS	DCM	26	Y	97	R	F
69 4076	PROCUREMENT	IPD	TS	DCM	41	Y	153	R	F
69 4077	ACCOUNTS PAYABLE	IPD	TS	DCM	41	N	153	R	F
69 4079	FINANCIAL ACCOUNTING MSAGL	IPD	TS	DCM	28	N	105	R	F
69 4151	INVENTORY ACCOUNTING	IPD	TS	HQ	16	Y	60	R	F
69 4152	SALES LEDGER/INVOICING	IPD	TS	HQ	18	Y	66	R	F
69 4088	SALES ORDER PROCESSING	IPD	TS	PUB	21	Y	76	R	F
69 4089	STOCK MANAGEMENT	IPD	TS	PUB	24	Y	90	R	F
69 4070	SALES ORDER PROCESSING	IPD	TS	SP	21	Y	76	R	F
69 4072	STOCK MANAGEMENT	IPD	TS	SP	32	Y	120	R	F
66 3025	INCOME - SALES LEDGER	ME			16	Y	58	R	F
66 3026	PURCHASING - SUPD/MSA	ME			45	Y	168	R	F
66 3027	MSP CONTRACTS-EXCHANGE EQUIP	ME			25	Y	92	R	F
66 3028	MSP CONTRACTS - OTHER	ME			25	Y	92	R	F
66 3030	MANPOWER	ME			38	Y	142	R	F
66 3033	ACCOUNTS PAYABLE PHASE 1.2	ME			35	Y	129	R	F
66 3034	TRANSFER CHARGING	ME			39	Y	144	R	F
66 3036	YEAR END	ME			37	Y	136	R	F
66 3040	GOPS / KEYS INDICATORS	ME			30	Y	112	R	F
66 3047	SCORE LDS INTERFACE	ME			41	Y	152	R	F
66 3056	TRANSPORT DIVISION	ME			33	Y	123	R	F
66 3057	CASHIERS + T&S	ME			29	N	106	R	F
66 3058	TRANSHIPMENTS	ME			20	Y	73	R	F
66 3059	PHONECARDS	ME			42	Y	156	R	F
66 3060	ESTATES MANAGEMENT	ME			12	Y	46	R	F
66 3067	DEPOT ISSUES	ME		BD	36	N	135	R	F
66 3068	DEPOT RECEIPTS NTHA D	ME		BD	36	Y	135	R	F

BA CODE	DESCRIPTION	DIV	DIS	CSA	BUDGET	MUST	SCORE	JT	Z
66 3069	STOCKTAKING	ME		BD	42	Y	156	R	F
66 3070	STOCK DISCREPANCY CASES	ME		BD	16	N	58	R	F
66 3061	DEPOT ISSUES CRAYFORD	ME		CD	42	Y	156	R	F
66 3062	DEPOT RECEIPTS	ME		CD	42	N	156	R	F
66 3064	STOCK DISCREPANCY CASES	ME		CD	16	N	58	R	F
66 3075	STOCKTAKING	ME		ND	42	N	156	R	F
66 3076	STOCK DISCREPANCY CASES	ME		ND	16	N	58	R	F
66 3078	DEPOT OTHERS	ME		ND	12	Y	46	R	F
65 1275	PURCHASING IAL	OO	IAL	STH	23	Y	85	R	F
65 1269	BILLING CONSULTANCY & NI	OO	TEL	STH	14	N	52	R	F
17 4114	PAYROLL/PERSONNEL (INC T&SETC)	PCS	ASD		20	N	73	R	F
17 4115	ACCOUNTS PAYABLE	PCS	ASD	AS3	20	N	73	R	F
17 4117	MANAGEMENT ACCOUNTS	PCS	ASD	AS3	25	Y	91	R	F
17 4118	ACCOUNTS RECEIVABLE	PCS	ASD	AS3	14	N	52	R	F
17 4119	COMPUTER INTEGRITY	PCS	ASD	AS3	26	Y	97	R	F
17 4120	CAPITAL PROJECT CONTROL	PCS	BMD		40	N	147	R	F
17 4121	CONTRACTS/PURCHASING	PCS	BMD		40	N	147	R	F
17 4122	RENTS & RATES	PCS	BMD		45	N	168	R	F
17 4123	FINANCIAL ACCOUNTING (NAS)	PCS	BMD		38	Y	141	R	F
17 4125	COMPUTER INTEGRITY	PCS	BMD		34	Y	126	R	F
17 4127	STAFF RESTAURANTS	PCS	CAT		23	Y	84	R	F
17 4110	PENSION ADMINISTRATION	PCS	PAC		34	Y	126	R	F
17 4111	BTPAC COMPUTER INTEGRITY	PCS	PAC		31	Y	114	R	F
17 4150	BTPAC QUARTERLY REVIEW	PCS	PAC		24	Y	87	R	F
17 4109	BTPAC HQ	PCS	PAC	HQ	25	Y	91	R	F
67 3008	FIXED ASSETS REGISTER	R&T			36	Y	135	R	F
67 3012	MGMT ACCOUNTS/BUDGETERY CNT	R&T			28	Y	102	R	F
67 3013	YEAR END	R&T			37	Y	136	R	F
67 3018	OTHER OPERATING COSTS	R&T			49	N	180	R	F
67 3019	CASHIERS + T&S	R&T			29	Y	106	R	F
67 3020	COMP INST	R&T			25	Y	94	R	F
67 3024	PROJECT CONTROL & COSTINGS	R&T			18	Y	67	R	F
17 4105	CORPORATE RELATIONS DEPT	SEC	CRD		43	Y	159	R	F
17 4103	GOVERNMENT RELATIONS DEPT	SEC	GRD		34	Y	126	R	F
17 4106	INVESTIGATION DIVISION	SEC	ID		36	Y	132	R	F
17 4104	SOLICITORS OFFICE	SEC	SOL		34	Y	126	R	F
17 4107	SECURITY DIVISION	SEC	STY		32	Y	118	R	F

** TOTAL DAYS REQUIRED FOR PLAN **   4572

A2.7   **Business Area Descriptions (LHRSKP6)**
A2.7.1 This report simply lists all allocated Business
        Areas so that their descriptions are available.

THE DESCRIPTIONS MAY BE AMENDED
FROM THE BUSINESS AREA MENU

KEY TO COLUMN HEADINGS
=======================
BA   = BUSINESS AREA CODE
DESCRIPTION = BUSINESS AREA DESCRIPTION

BA DESCRIPTION

01 CSS DISU SET-UP
02 CSS DISU READINESS
03 CSS DISU POST-IMPLEMENTATION
04 CSS DISU REGULATORY
05 CSS PRE-IMPLEMETATION INTERIM
06 CSS PRE-IMP FOLLOW-UP
07 CSS CONVERSION
08 CSS POST DAY-ONE
09 CSS IMPLEMENATATION
10 MADC
11 NON-CSS IBM DISU
12 IBM 4300 TYPE CENTRES
13 OTHER COMPUTER AUDIT ACTIVITY
15 CUSTOMER SERVICE
16 FINANCIAL & MANAGEMENT ACCOUNT
17 CORPORATE PERSONNEL & CMN SRVS
18 FOLLOW-UP WORK
19 TERRITORY WORK
20 PLANT & EQUIPMENT
21 MOTOR TRANSPORT
22 CONTRACTS
23 PROPERTY
24 PERIOD END ACCOUNTS
25 TELEPHONE INCOME
26 PRIVATE CIRCUITS INCOME
27 TELEX INCOME
28 DIRECT SALES INCOME
29 PCO INCOME
30 REPAYMENT WORKS
31 IC/RMTO
32 GENERAL AUDIT SOFTWARE
33 CSS INCOME
34 FRAUD INVESTIGATION
35 MANPOWER
36 MARKETING (+ALL LEAD Z. TIME)
37 PURCHASING
38 REASEARCH & DEVELOPMENT
39 PENSIONS
40 DSM STORES
41 CULLINET STORES
42 MCS STORES
43 ESCAP STORES
44 STORES (OTHER)
45 DEPOTS (ME)
46 DEPOTS (IC/CPE)
48 SYSTEMS DEVELOPMENT & MAINT.
50 IAD PROJECTS (NOT LEAD ZONE)
51 MANAGEMENT
52 SERVICES
53 SUBSIDIARIES/JOINT VENTURES
54 MANUFACTURING (FULCRUM)
55 DIRECT TIME (CONTROLLER & PS)
56 LOANS TO OTHER DEPARTMENTS
57 LEAD ZONE WORK
60 LOCAL PROJECTS (NOT LEAD ZONE)

BA DESCRIPTION

61 BUSINESS SERVICES
62 IC/BROADBAND SERVICES
63 IC/TRUNK NETWORKS
64 BTI
65 OVERSEAS DIVISION
66 MATERIALS EXECUTIVE
67 TECHNOLOGY
68 BTE
69 INTERNATIONAL PRODUCTS
70 CPE (EX-FOLLOW-UP SUMP)
71 CORPORATE FINANCE
72 ICHQ
86 WORKING PARTIES
87 AUDIT PLAN PREPARATION
88 CONFERENCES
89 RESEARCH & METHODOLGY
90 SECRETARIAL ACTIVITIES
91 EXTERNAL AUDIT SUPPORT
92 NON-IAD ACTIVITIES
93 MANAGEMENT & ADMINISTRATION
94 LEAVE
95 SICKNESS
96 TRAINING
97 VACANT POSTS
98 QUALITY CONTROL
99 TIMESHEET SUSPENSE

A2.8   **Business Area Budget Totals (LHRSKP7)**

A2.A2.1 This report aggregates the individual project
         budgets for each year of the plan into their
         relevant Business Areas. This provides a useful
         summary of how the resource is to be used. This
         may reveal that (say) an undue amount of resource
         is to be used for stores as against payroll.

THE FOLLOWING BUDGETS ARE BASED ON NOMINAL FREQUENCY AND NOMINAL BUDGET
IF YOU WISH TO SEE THE EFFECT OF USING SYSTEM FREQUENCY AND SYSTEM BUDGET
RE-CALCULATE THE STRATEGIC PLAN FROM THE MAIN MENU OPTION
                    AND THEN RE-PRINT THIS REPORT

        THE BUSINESS AREA BUDGET TOTALS ARE THE ADDITIONS OF ALL
            THE AUDIT PROJECT TOTALS FOR EACH BUSINESS AREA

                    KEY TO COLUMN HEADINGS
                    ======================
BA   = BUSINESS AREA
DESCRIPTION = BUSINESS AREA DESCRIPTION
YEAR 1-5   = BUDGETS FOR EACH YEAR OF THE PLAN

BA DESCRIPTION	1989	1990	1991	1992	1993
01 CSS DISU SET-UP	0	0	0	0	0
02 CSS DISU READINESS	0	0	0	0	0
03 CSS DISU POST-IMPLEMENTATION	0	0	0	0	0
04 CSS DISU REGULATORY	0	0	0	0	0
05 CSS PRE-IMPLEMETATION INTERIM	0	0	0	0	0
06 CSS PRE-IMP FOLLOW-UP	0	0	0	0	0
07 CSS CONVERSION	0	0	0	0	0
08 CSS POST DAY-ONE	0	0	0	0	0
09 CSS IMPLEMENATATION	0	0	0	0	0
10 MADC	0	0	0	0	0
11 NON-CSS IBM DISU	0	0	0	0	0
12 IBM 4300 TYPE CENTRES	0	0	0	0	0
13 OTHER COMPUTER AUDIT ACTIVITY	0	0	0	0	0
15 CUSTOMER SERVICE	0	0	0	0	0
16 FINANACIAL & MANAGEMENT ACCNT	0	0	0	0	0
17 CORPORATE PERSONNEL & CMN SRVS	547	70	363	369	248
18 FOLLOW-UP OF PREVIOUS AUDITS	0	0	0	0	0
19 TERRITORY WORK	0	0	0	0	0
20 PLANT & EQUIPMENT	0	0	0	0	0
21 MOTOR TRANSPORT	0	0	0	0	0
22 CONTRACTS	0	0	0	0	0
23 PROPERTY	0	0	0	0	0
24 PERIOD END WORK	0	0	0	0	0
25 TELEPHONE INCOME	0	0	0	0	0
26 PRIVATE CIRCUITS INCOME	0	0	0	0	0
27 TELEX INCOME	0	0	0	0	0
28 DIRECT SALES INCOME	0	0	0	0	0
29 PCO INCOME	0	0	0	0	0
30 REPAYMENT WORKS	0	0	0	0	0
31 IC/RMTO	0	0	0	0	0
32 GENERAL AUDIT SOFTWARE	0	0	0	0	0
33 CSS INCOME	0	0	0	0	0
34 FRAUD INVESTIGATION	0	0	0	0	0
35 MANPOWER	0	0	0	0	0
36 MARKETING	0	0	0	0	0
37 PURCHASING	0	0	0	0	0
38 REASEARCH & DEVELOPMENT	0	0	0	0	0
39 PENSIONS	0	0	0	0	0
40 DSM STORES	0	0	0	0	0
41 CULLINET STORES	0	0	0	0	0
42 MCS STORES	0	0	0	0	0
43 ESCAP STORES	0	0	0	0	0
44 STORES (OTHER)	0	0	0	0	0
45 DEPOTS (ME)	0	0	0	0	0
46 DEPOTS (IC/CPE)	0	0	0	0	0
48 SYSTEMS DEVELOPMENT & MAINT.	0	0	0	0	0
49 CSS DEVELOPMENT WORK	0	0	0	0	0
50 IAD PROJECTS (NOT LEAD ZONE)	0	0	0	0	0
51 MANAGEMENT	0	0	0	0	0
52 SERVICES	0	0	0	0	0
53 SUBSIDIARIES/JOINT VENTURES	106	106	106	106	106
54 MANUFACTURING (FULCRUM)	0	0	0	0	0
55 DIRECT TIME (CONTROLLER & PS)	0	0	0	0	0
56 LOANS TO OTHER DEPARTMENTS	0	0	0	0	0
57 LEAD ZONE WORK	0	0	0	0	0

BA DESCRIPTION	1989	1990	1991	1992	1993
60 LOCAL PROJECTS (NOT LEAD ZONE)	0	21	0	0	21
61 BUSINESS SERVICES	0	0	0	0	0
62 IC/BROADBAND SERVICES	0	0	0	0	0
63 IC/TRUNK NETWORKS	0	0	0	0	0
64 BTI	247	427	161	312	459
65 OVERSEAS DIVISION	50	69	356	185	119
66 MATERIALS EXECUTIVE	936	337	564	970	308
67 TECHNOLOGY	252	92	420	252	97
68 BTE	952	843	1035	895	900
69 INTERNATIONAL PRODUCTS	753	287	820	763	287
70 CPE	0	0	0	0	0
71 CORPORATE FINANCE	195	80	286	195	80
72 ICHQ	0	0	0	0	0
86 WORKING PARTIES	0	0	0	0	0
87 AUDIT PLAN PREPARATION	0	0	0	0	0
88 CONFERENCES	0	0	0	0	0
89 RESEARCH & METHODOLGY	0	0	0	0	0
90 SECRETARIAL ACTIVITIES	0	0	0	0	0
91 EXTERNAL AUDIT SUPPORT	0	0	0	0	0
92 NON-IAD ACTIVITIES	0	0	0	0	0
93 MANAGEMENT & ADMINISTRATION	0	0	0	0	0
94 LEAVE	0	0	0	0	0
95 SICKNESS	0	0	0	0	0
96 TRAINING	0	0	0	0	0
97 VACANT POSTS	0	0	0	0	0
98 QUALITY CONTROL	0	0	0	0	0
99 TIMESHEET SUSPENSE	0	0	0	0	0
BUSINESS AREA TOTALS	4038	2332	4111	4047	2625

A2.9   **Suggested Frequency Based on Score (LHRSKP8)**

A2.9.1   This report takes the importance score of each
         project, compares it against the frequency
         determination criteria parameters and suggests an
         appropriate frequency. This can be compared
         against the frequency allocated by the user to
         ascertain any difference. This may well reveal
         that the user is either doing some projects more,
         or less frequently, than their importance
         suggests.

CRITERIA USED FOR ALLOCATING FREQUENCY
==

EVERY 5 YEARS FOR SCORE BETWEEN   0 AND   36
EVERY 4 YEARS FOR SCORE BETWEEN   >   36 AND   72
EVERY 3 YEARS FOR SCORE BETWEEN   >   72 AND   108
EVERY 2 YEARS FOR SCORE BETWEEN   >   108 AND   144
ANNUALLY FOR SCORE   >   144

KEY TO COLUMN HEADINGS
======================

CODE   = PROJECT CODE
DESCRIPTION = PROJECT DESCRIPTION
SCORE FREQ = FREQUENCY IN YEARS CALCULATED BY THE SYSTEM
YOUR FREQ   = NOMINAL FREQUENCY IN YEARS ALLOCATED BY YOU
DIFFERENCE = DIFFERENCE BETWEEN SYSTEM FREQUENCY & YOURS
SCORE   = IMPORTANCE SCORE

CODE	DESCRIPTION	SYSTEM FREQ	YOUR FREQ	DIFFERENCE (SYS-YOUR)	SCORE
3039	INTERFACE UKC STORES SYSTEMS	1	3	-2	156
3061	DEPOT ISSUES CRAYFORD	1	3	-2	156
4129	INVENTORY CONTROL	1	3	-2	159
1165	INCOME/BILLING-LEEDS	1	2	-1	168
4122	RENTS & RATES	1	2	-1	168
1170	ACCOUNTING-SUN ACCOUNTS	1	3	-2	168
4105	CORPORATE RELATIONS DEPT	1	3	-2	159
4077	ACCOUNTS PAYABLE	1	3	-2	153
1202	ISAACS (INTL SETTLEMENTS)	1	3	-2	150
3059	PHONECARDS	1	3	-2	156
4005	CASHIERS	1	3	-2	156
1139	ACCOUNTING-SUN ACCOUNTS	1	2	-1	168
1236	FIXED ASSETS	1	3	-2	150
3075	STOCKTAKING	1	3	-2	156
3069	STOCKTAKING	1	3	-2	156
1137	PURCHASING-CONTRACTS	1	3	-2	153
3063	STOCKTAKING	1	3	-2	156
3018	OTHER OPERATING COSTS	1	3	-2	180
1134	INCOME/BILLING	1	3	-2	168
3026	PURCHASING - SUPD/MSA	1	3	-2	168
3037	MSA III POST IMP	1	3	-2	168
1173	TSCR-SUBSIDIARY/BILLING	1	3	-2	168
4076	PROCUREMENT	1	3	-2	153
3011	A.P. MILLENIUM	1	3	-2	162
3062	DEPOT RECEIPTS	1	3	-2	156
3050	DIRECT DELIVERY CABLE	1	3	-2	168
3048	DIRECT DISTRIBUTION	1	3	-2	168
3047	SCORE LDS INTERFACE	1	3	-2	152
1122	PURCHASING -TETRA PLAN	2	3	-1	105
1131	ACCOUNTING-SUN ACCOUNTS	2	3	-1	132
1120	INCOME/BILLING	2	3	-1	126
1118	TSL-SUBSIDIARY	2	3	-1	124
1117	TELECOM RED	2	3	-1	105
1127	INCOME/BILLING	2	3	-1	105
1115	TALKABOUT	2	3	-1	102
1114	SUPERCALL	2	3	-1	126
1111	FARMLINK-SUBSIDIARY	2	3	-1	112
1126	DIALCOM-USA	2	3	-1	112
1107	ACCOUNTING-FALCON	2	3	-1	126
1105	PURCHASING	2	3	-1	105
1142	INCOME/BILLING	2	2	0	126
1103	INCOME/BILLING-SABS	2	3	-1	132
1144	PURCHASING	2	3	-1	102
1124	ACCOUNTING	2	3	-1	126
1146	ACCOUNTING-SUN ACCOUNTS	2	3	-1	126
1101	PAYROLL	2	3	-1	120
4093	PROCUREMENT	2	3	-1	132
4139	INVENTORY CONTROL	2	3	-1	141
4013	VAT	2	3	-1	112
4012	PERSONAL TAX	2	3	-1	100
4021	DIRECT INCOME	2	3	-1	120
4138	SALES ORDER PROCESSING	2	3	-1	111
1150	INCOME/BILLING-DISTRICTS	2	2	0	105
1155	PERSONNEL	2	2	0	105
4011	CORPORATION TAX	2	3	-1	112

CODE	DESCRIPTION	SYSTEM FREQ	YOUR FREQ	DIFFERENCE (SYS-YOUR)	SCORE
3001	BT&D TECHNOLOGIES LTD	2	1	1	129
1157	FIXED ASSETS	2	2	0	126
3002	BT&D TECHNOLOGIES LTD	2	1	1	129
1159	INCOME/BILLING	2	2	0	105
1160	PURCHASING/STOCKS	2	2	0	126
4010	GATIS	2	3	-1	112
4023	INVENTORY CONTROL	2	3	-1	105
4028	FOREIGN SUBS-FRANKFURT	2	3	-1	118
1163	ACCOUNTING	2	2	0	126
4137	COMPUTER INTEGRITY	2	3	-1	114
4030	SUBSIDIARY- PARIS	2	3	-1	106
3004	INCOME - SALES LEDGER	2	3	-1	126
1167	PURCHASING	2	3	-1	126
1169	PERSONNEL	2	3	-1	105
1171	FIXED ASSETS	2	3	-1	105
4003	MANSION PLACE LEASING	2	3	-1	124
3005	PURCHASING-LOCAL PURCHASES	2	3	-1	112
4136	PRODUCTION CONTROL	2	3	-1	114
3006	PURCHASING - CONTRACTS	2	3	-1	112
1175	TSCR/FINANCIAL ACCOUNTING	2	3	-1	144
3007	MANPOWER	2	3	-1	142
1178	DATA CENTRES	2	3	-1	129
4002	STERLING DEALING	2	3	-1	112
3008	FIXED ASSETS REGISTER	2	3	-1	135
1180	DATA CENTRES	2	3	-1	129
3009	G.L. MILLENIUM	2	3	-1	123
1182	DATA CENTRES	2	3	-1	108
3010	TRANSFER CHARGING	2	3	-1	140
1184	COVENTRY CABLE LTD	2	3	-1	126
1201	INTL PRIVATE LEASED CIRCUITS	2	3	-1	120
3082	LDS PRE IMP B'HAM/CRAYFORD	2	1	1	138
1203	ITALICS (INTL TELEX)	2	3	-1	141
4135	ACCOUNTS PAYABLE INC CASH/BNK	2	3	-1	120
4133	PROCUREMENT	2	3	-1	120
3012	MGMT ACCOUNTS/BUDGETERY CNT	2	3	-1	102
4131	FINANCIAL ACCOUNTS	2	3	-1	114
3080	STOCK VAL'N B'HAM DEPOT	2	3	-1	138
1209	PRICING	2	4	-2	100
3013	YEAR END	2	1	1	136
1217	CONTRACTS	2	3	-1	100
1218	LOCAL PURCHASES	2	4	-2	108
1221	PAY AND PERSONNEL	2	3	-1	129
1222	PAY AND PERSONNEL (OP)	2	3	-1	129
4084	PROCUREMENT	2	3	-1	111
1226	EMD (ESTATES MANAGEMENT)	2	3	-1	135
4082	COMPUTER INTEGRITY	2	3	-1	126
4128	SALES ORDER PROCESSING	2	3	-1	120
3077	SALVAGE RETURNS/DISPOSALS	2	3	-1	112
3017	SECURITY & SAFETY	2	3	-1	100
4125	COMPUTER INTEGRITY	2	2	0	126
1230	OVERHEAD ALLOCATION	2	3	-1	135
4043	FINANCIAL ACCOUNTING	2	3	-1	105
1238	CAPITAL INVESTMENT APPRAISAL	2	3	-1	141
1237	PROJECT ACCOUNTING	2	3	-1	141
1241	STORES	2	3	-1	129

CODE	DESCRIPTION	SYSTEM FREQ	YOUR FREQ	DIFFERENCE (SYS-YOUR)	SCORE
3019	CASHIERS + T&S	2	3	-1	106
1251	TRANSFER CHARGING	2	3	-1	123
3073	DEPOT ISSUES NTHA D	2	3	-1	135
1252	GL;M (GENERAL LEDGER)	2	3	-1	144
1253	YEAR END REPORTING	2	1	1	144
1254	BUDGETTING & FORECASTING	2	3	-1	100
4124	MANAGEMENT ACCOUNTING	2	2	0	126
4123	FINANCIAL ACCOUNTING (NAS)	2	2	0	141
3071	SALVAGE RETURNS/DISPOSALS	2	3	-1	112
3068	DEPOT RECEIPTS NTHA D	2	3	-1	135
4048	PLANNING	2	3	-1	108
1264	BTI SUMMARY REPORTS	2	1	1	112
1266	BILLING SERVICES DIV	2	3	-1	108
4121	CONTRACTS/PURCHASING	2	2	0	147
4120	CAPITAL PROJECT CONTROL	2	2	0	147
4049	INVESTMENT ANALYSIS	2	3	-1	108
4080	MANAGEMENT ACCOUNTING	2	3	-1	105
4112	CORPORATE PERSONNEL MISC	2	3	-1	138
3065	SALVAGE RETURNS/DISPOSALS	2	3	-1	112
4111	BTPAC COMPUTER INTEGRITY	2	3	-1	114
4079	FINANCIAL ACCOUNTING MSAGL	2	3	-1	105
4110	PENSION ADMINISTRATION	2	2	0	126
4078	STOCK MANAGEMENT	2	3	-1	141
4107	SECURITY DIVISION	2	3	-1	118
4072	STOCK MANAGEMENT	2	3	-1	120
4106	INVESTIGATION DIVISION	2	3	-1	132
4104	SOLICITORS OFFICE	2	3	-1	126
4052	INTERCONN.POLICY	2	3	-1	108
4053	COMM.REG.ANALYSIS	2	3	-1	122
4051	PRICING POLICY	2	3	-1	108
1291	STORES & WIP	2	4	-2	129
1293	GENERAL LEDGER	2	3	-1	100
4103	GOVERNMENT RELATIONS DEPT	2	3	-1	126
3056	TRANSPORT DIVISION	2	3	-1	123
1151	INCOME/BILLING-MANUAL	2	2	0	126
3054	OTHER OPERATING COSTS	2	3	-1	138
1153	PURCHASING P.O/CONTRACTS	2	2	0	126
1156	ACCOUNTING-TETRA PLAN	2	2	0	126
1164	STORES	2	2	0	132
4004	COMMERCIAL PAPER	2	3	-1	112
1172	STORES	2	3	-1	132
1174	BTCR-SUBSIDIARY	2	3	-1	126
3051	DIRECT DELIVERY POLES	2	3	-1	126
4054	ECONOMIC ADVISORY DIVISION	2	3	-1	108
3049	DIRECT DELIVERY CWM	2	3	-1	147
1183	SWINDON CABLE LTD	2	3	-1	126
3046	SCORE ACCOUNTING	2	3	-1	132
3081	CONTRACTS	2	3	-1	138
1216	AP (ACCOUNTS PAYABLE)	2	3	-1	108
4031	SUBSIDIARY - AUSTRALIA	2	3	-1	106
1227	MSD (MARKETING SERVICES)	2	3	-1	108
3042	STOCKING POLICY	2	3	-1	118
4071	PROCUREMENT	2	3	-1	132
1239	SATELLITE INVESTMENTS	2	3	-1	141
3030	MANPOWER	2	3	-1	142

CODE	DESCRIPTION	SYSTEM FREQ	YOUR FREQ	DIFFERENCE (SYS-YOUR)	SCORE
4046	MARKETING IN IPD	2	3	-1	112
4063	INVENTORY CONTROL	2	3	-1	105
3067	DEPOT ISSUES	2	3	-1	135
3032	GL MILLENIUM	2	2	0	136
1281	PAY AND PERSONNEL	2	3	-1	108
3033	ACCOUNTS PAYABLE PHASE 1.2	2	3	-1	129
3057	CASHIERS + T&S	2	3	-1	106
3034	TRANSFER CHARGING	2	3	-1	144
4041	INVENTORY CONTROL	2	3	-1	117
3035	MGMT ACCOUNTS/BUDGETRY CNTL	2	3	-1	102
3074	DEPOT RECEIPTS CRAYFORD	2	3	-1	135
4050	COMMERCIAL REGULATION	2	3	-1	108
4108	THE BOARD	2	3	-1	108
3043	STOCK VALUATION	2	3	-1	132
3040	GOPS / KEYS INDICATORS	2	3	-1	112
4059	CORPORATE STRATEGY UNIT	2	3	-1	108
3036	YEAR END	2	1	1	136
3038	AFSTA / STOCKTAKING	2	3	-1	126
4153	IPD OVERVIEW REPORTS	2	1	1	122
4143	FIXED ASSETS	2	3	-1	102
4144	PRODUCTION CONTROL	2	3	-1	126
4145	FINANCIAL ACCOUNTING	2	3	-1	102
4148	COMPUTER INTEGRITY	2	3	-1	114
4149	FOREIGN CURRENCY EXPOSURE	2	3	-1	144
1133	EXPENDITURE-INTER BUS. T.GOLD	3	3	0	77
1102	ACCOUNTING-CONSOLIDATION	3	3	0	87
1260	ABERDEEN EARTH STATION	3	5	-2	70
1246	DOMESTIC CASHIERS	3	3	0	79
1223	TRAVEL & SUBSISTENCE	3	3	0	99
1181	DATA CENTRES	3	3	0	87
3044	PEXOS PROVISION	3	3	0	98
3045	PEXOS WRITE OFFS	3	3	0	81
1179	DATA CENTRES	3	3	0	87
1132	FIXED ASSETS	3	3	0	70
1130	PAYROLL/PERSONNEL	3	3	0	84
1176	DATA CENTRES	3	3	0	87
1129	PURCHASING	3	3	0	84
3028	MSP CONTRACTS - OTHER	3	3	0	92
1158	STORES	3	2	1	90
3053	SECURITY	3	3	0	94
1290	FIXED ASSETS	3	3	0	73
3055	REPROGRAPHICS	3	3	0	87
1294	YEAR END REPORTING	3	1	2	73
1292	CASH AND BANK	3	3	0	93
3058	TRANSHIPMENTS	3	3	0	73
1286	MARKETING	3	3	0	87
1289	CRANFIELD COLLEGE	3	4	-1	73
1125	FIXED ASSETS	3	3	0	70
1148	FIXED ASSETS	3	3	0	70
3027	MSP CONTRACTS-EXCHANGE EQUIP	3	3	0	92
1275	PURCHASING IAL	3	3	0	85
1271	BILLING MANX TELECOM	3	3	0	85
1268	BILLING - COMMERCIAL	3	3	0	73
3022	COMP INST 4381 GL&AP	3	3	0	94
1259	LONDON TELEPORT	3	5	-2	91

CODE	DESCRIPTION	SYSTEM FREQ	YOUR FREQ	DIFFERENCE (SYS-YOUR)	SCORE
1116	MIPS	3	3	0	81
1258	MADLEY EARTH STATION	3	4	-1	70
3021	COMP INST OFFICE AUTO WEB	3	3	0	94
3020	COMP INST	3	3	0	94
1247	COMMERCIAL CASHIERS	3	3	0	79
1140	FIXED ASSETS-TETRA PLAN	3	3	0	84
1113	CONSOLIDATION	3	3	0	91
1136	PURCHASING	3	3	0	84
1228	SALES DIV (SD)	3	3	0	73
3014	STOCK CONTROL SYSTEM COMMODITY	3	3	0	87
1208	INTL 0800 BILLING	3	3	0	85
1207	STAR (SATELLITE TRAFFIC ACCT)	3	3	0	78
1141	PERSONNEL	3	3	0	84
1138	EXPENDITURE-INTER BUS. T.GOLD	3	3	0	77
4001	PLANMASTER CONSOLIDATION	3	3	0	80
1177	DATA CENTRES	3	3	0	87
1145	EXPENDITURE-INTER BUS. T.GOLD	3	3	0	77
1168	EXPENDITURE-INTER BUS. T.GOLD	3	3	0	98
1112	PERSONNEL	3	3	0	84
1147	PERSONNEL	3	3	0	84
1162	PAYROLL/PERSONNEL	3	2	1	70
4008	OPERATIONAL AUDIT	3	3	0	70
1161	EXPENDITURE	3	2	1	77
3003	INCOME - SALE OF SCRAP	3	3	0	70
1154	EXPENDITURE-INTER BUS. T.GOLD	3	2	1	98
1296	MANX LOCATION	3	2	1	94
1149	INCOME BILLING-BIPASS	3	2	1	91
4014	INVESTOR RELATIONS	3	3	0	91
1298	ADAMS IAL	3	3	0	73
1123	PAYROLL/PERSONNEL	3	3	0	84
4141	PROCUREMENT	3	3	0	85
4140	MANAGEMENT ACCOUNTS	3	3	0	81
4075	SALES ORDER PROCESSING	3	3	0	97
4132	PAYROLL/PERSONNEL (INC T&S)	3	3	0	99
4134	FIXED ASSETS	3	3	0	93
4020	STRATEGY & CO-ORDINATION	3	3	0	75
4022	PURCHASING	3	3	0	78
4130	MANAGEMENT ACCOUNTS	3	3	0	93
4127	STAFF RESTAURANTS	3	1	2	84
4025	FINANCIAL ACCOUNTS (HPFA)	3	3	0	72
4070	SALES ORDER PROCESSING	3	3	0	76
4117	MANAGEMENT ACCOUNTS	3	3	0	91
4115	ACCOUNTS PAYABLE	3	3	0	73
4114	PAYROLL/PERSONNEL (INC T&SETC)	3	3	0	73
4069	ACCOUNTS PAYABLE	3	3	0	85
4113	AS1 OFFICE SERVICES	3	3	0	90
4032	SALES ORDER PROCESSING	3	3	0	76
4109	BTPAC HQ	3	3	0	91
1108	FIXED ASSETS-FALCON	3	3	0	70
4102	PURCHASING	3	3	0	90
4101	MANAGEMENT ACCOUNTS	3	3	0	80
4037	SALES/ORDER PROCESSING	3	3	0	76
4038	PAYROLL/PERSONNEL	3	3	0	70
4039	PROCUREMENT	3	3	0	76
4040	ACCOUNTS PAYABLE	3	3	0	82

CODE	DESCRIPTION	SYSTEM FREQ	YOUR FREQ	DIFFERENCE (SYS-YOUR)	SCORE
4099	SHARE REGISTER	3	3	0	91
4097	INTERNAL AUDIT DIVISION	3	3	0	90
4042	FIXED ASSETS	3	3	0	70
4044	MANAGEMENT ACCOUNTING	3	3	0	80
4034	STOCK MANAGEMENT	3	3	0	90
4047	MANAGEMENT ACCOUNTING	3	3	0	87
4096	PROJECT CONTROL	3	3	0	91
4119	COMPUTER INTEGRITY	3	3	0	97
4045	COMPUTER INTEGRITY	3	3	0	70
4094	MANAGEMENT ACCOUNTS	3	3	0	70
4092	SALES ORDER PROCESSING	3	3	0	76
4091	MANAGEMENT ACCOUNTS	3	3	0	70
4090	PROCUREMENT	3	3	0	76
4089	STOCK MANAGEMENT	3	3	0	90
4088	SALES ORDER PROCESSING	3	3	0	76
4087	PROJECT CONTROL	3	3	0	91
4057	OVERSEAS CO-ORDINATION UNIT	3	3	0	84
4095	INVENTORY CONTROL	3	3	0	90
4060	MSCU	3	3	0	87
4085	INVENTORY CONTROL	3	3	0	90
4073	FIXED ASSETS	3	3	0	70
4062	PROCUREMENT	3	3	0	85
4074	ACCOUNTS,MANAGEMENT/FINANCIAL	3	3	0	84
4061	DIRECT INCOME	3	3	0	85
4083	SALES ORDER PROCESSING	3	3	0	97
4066	MANAGEMENT ACCOUNTING	3	3	0	75
4065	FINANCIAL ACCOUNTING	3	3	0	75
4100	AGM COSTS	3	3	0	97
4126	ACTION FOR DISABLED CUSTS.	3	3	0	70
4086	MANAGEMENT ACCOUNTS	3	3	0	70
4081	FIXED ASSETS	3	3	0	70
4067	COMPUTER INTEGRITY	3	3	0	79
4058	EURODATA FOUNDATION	3	3	0	70
4027	COMPUTER INTEGRITY	3	3	0	72
1109	STORES-FALCON	3	3	0	84
4018	PROCUREMENT	3	3	0	84
4019	PROCUREMENT ADMINISTRATION	3	3	0	72
4146	FULCRUM HQ MISC	3	3	0	91
4142	ACCOUNTS PAYABLE	3	3	0	85
4150	BTPAC QUARTERLY REVIEW	3	1	2	87
4147	EDINBURGH FACTORY	3	3	0	76
3078	DEPOT OTHERS	4	3	1	46
3024	PROJECT CONTROL & COSTINGS	4	3	1	67
3041	CABLE DRUMS	4	3	1	42
3023	SPONSORSHIP	4	3	1	67
4064	FIXED ASSETS	4	3	1	58
3016	CATERING	4	5	-1	52
3052	CATERING	4	5	-1	52
4056	REVENUE ACCOUNTING	4	3	1	58
4055	COMPUTER INTEGRITY	4	3	1	58
1128	INCOME-INTER BUS. T.GOLD	4	3	1	56
3060	ESTATES MANAGEMENT	4	3	1	46
1121	INCOME/INTER BUS.T.GOLD	4	3	1	42
3064	STOCK DISCREPANCY CASES	4	3	1	58
3072	DEPOTS OTHERS	4	3	1	60

CODE	DESCRIPTION	SYSTEM FREQ	YOUR FREQ	DIFFERENCE (SYS-YOUR)	SCORE
3015	STOCK CONTROL SYSTEM BES	4	3	1	66
3066	DEPOT OTHER	4	3	1	60
3070	STOCK DISCREPANCY CASES	4	3	1	58
3076	STOCK DISCREPANCY CASES	4	3	1	58
3079	ESTATES MANAGEMENT	4	3	1	46
4098	OCCUPATIONAL HEALTH SERVICE	4	3	1	56
4036	MANAGEMENT ACCOUNTS	4	3	1	54
4035	FIXED ASSETS	4	3	1	58
4068	PERSONNEL	4	3	1	58
4033	PROCUREMENT	4	3	1	64
1297	IAL OVERSEAS TRIPS	4	3	1	52
1295	BUDGET SETTING	4	3	1	67
4006	PERIOD END ACCOUNTS	4	3	1	46
1288	BAILBROOK COLLEGE	4	4	0	52
1287	TRAINING	4	4	0	52
1284	TRAVEL AND SUBSISTENCE MANX	4	3	1	52
4007	MANAGEMENT ACCOUNTS	4	3	1	46
1283	TRAVEL & SUBSISTENCE	4	3	1	52
1282	PAYROLL MANX	4	3	1	52
1276	PURCHASING MANX	4	3	1	52
4029	ACCOUNTS PAYABLE	4	3	1	64
4009	MANAGEMENT ACCOUNTING	4	3	1	67
3031	FIXED ASSETS REGISTERS	4	3	1	69
4116	FINANCIAL ACCOUNTING	4	3	1	67
3029	PURCHASING - LOCAL PURCHASING	4	3	1	50
4118	ACCOUNTS RECEIVABLE	4	3	1	52
4026	MANAGEMENT ACCTS INC TR CHGING	4	3	1	68
1270	BILLING BUKIT ASSAM	4	4	0	52
1269	BILLING CONSULTANCY & NI	4	3	1	52
1106	EXPENDITURE-INTER BUS.T.GOLD	4	3	1	56
1267	BILLING SYSTEMS	4	3	1	52
1257	GOONHILLY	4	4	0	67
1256	BT MARINE LOCATION AUDIT	4	2	2	52
4024	FIXED ASSETS	4	3	1	58
4015	OPERATIONAL AUDIT RMID	4	3	1	58
1231	TRAINING	4	4	0	66
1104	INCOME/INTER-BUSINESS-T.GOLD	4	3	1	66
4016	YEAR END ACCOUNTS	4	3	1	66
1229	CATERING	4	4	0	52
1110	PERSONNEL	4	3	1	60
1206	COMBS (MARITIME BILLING)	4	3	1	66
4017	PERSONNEL	4	3	1	58
1205	ACIDS (INT DATA SERVICES	4	3	1	52
1204	BABS (BROADCAST ACCTS/BILLING)	4	3	1	60
1143	INCOME-INTER BUS. T.GOLD	4	3	1	56
1166	INCOME-INTER BUS. T.GOLD	4	3	1	56
1152	INCOME-INTER BUS. T.GOLD	4	2	2	56
1135	INCOME-INTER BUS. T.GOLD	4	3	1	42
3025	INCOME - SALES LEDGER	4	3	1	58
4152	SALES LEDGER/INVOICING	4	3	1	66
4151	INVENTORY ACCOUNTING	4	3	1	60

A2.10 **Strategic Audit Plan (LHRSKP9)**

A2.10.1 This report shows for each project in the portfolio where it is scheduled in the strategic plan based on its year of last review and it frequency, or if it has not been previously reviewed when it will be first scheduled, based on its importance score and suggested frequency. The frequency to be used may be either the Nominal frequency entered against each project in its raw data, or that determined by the system based on the importance score and the frequency determination criteria, the 'System' frequency.

A2.10.2 The strategic plan provides an overview of the likely resource requirements over the planning horizon, which will enable the user to identify peaks and troughs in the proposed coverage and potential periods of over, or under resource utilisation. Fine tuning for any particular year can be achieved by producing the three reports relating to annual planning (LHRSKP3 - LHRSKP5), which have been described above.

A2.10.3 The budgets to be used for the strategic plan can be either the 'Nominal' budgets entered by the user against each project, or the 'System' budgets calculated by the system based on each projects importance score and the available annual resource. Thus there is the possibility of producing a number of strategic plans which use the same raw data, but which are flexed by the system parameters. The eight types of plan capable of production in this way are:

a) Nominal Frequencies & Nominal Budgets
b) Nominal Frequencies & System Calculated Budgets
c) Nominal Frequencies & Standard Budgets
d) Nominal Frequencies & Audit Complexity Budgets
e) System Frequencies & Nominal Budgets
f) System Frequencies & System Calculated Budgets
g) System Frequencies & Standard Budgets
h) System Frequencies & Audit Complexity Budgets

A2.10.4 Where the Nominal Budgets are those entered against each project by the user; System Calculated Budgets are those produced by the system by determining the ratio of available man-days against the sum of the importance scores and allocating a budget based on that ratio; Standard Budgets use the time entered against each Control Objective to be covered during the audit; and Audit Complexity Budgets take those

Standard Times and multiply them by a weighting which indicates the local complexity of doing the job.

A2.10.5 The strategic plan provides a powerful argument for requiring either more resource, or for dropping, or re-scheduling jobs in order to match the demand against available supply, which is one of the prime reasons for audit planning.

THIS PLAN IS BASED ON NOMINAL FREQUENCY AND NOMINAL BUDGET
IF YOU WISH TO SEE THE EFFECT OF USING
SYSTEM FREQUENCY AND SYSTEM BUDGET
RECALCULATE THE STRATEGIC PLAN FROM THE MAIN MENU OPTION
AND THEN RE-PRINT THIS REPORT

KEY TO COLUMN HEADINGS

=======================

CODE   = PROJECT CODE
DESCRIPTION = PROJECT DESCRIPTION
DIV   = DIVISION
DIS   = DISTRICT/UNIT
CSA   = CUSTOMER SERVICE AREA/LOCATION
BA   = BUSINESS AREA
OBJECTIVES = CONTROL OBJECTIVES
YEAR 1-5   = BUDGETED DAYS FOR EACH YEAR OF THE PLAN
THIS REPORT IS IN DIVISION SEQUENCE

10/06/88
LHS PLANNING   STRATEGIC AUDIT PLAN   LHRSKP9B

DIV DIS CSA DESCRIPTION
CODE BA OBJECTIVES

DIV DIS CSA DESCRIPTION / CODE BA OBJECTIVES	1989	1990	1991	1992	1993
ACIDS (INT DATA SERVICES					
1205 64 ALL OBJECTIVES	0	20	0	0	20
STOCK VAL'N B'HAM DEPOT					
3080 66 ALL OBJECTIVES	11	0	0	11	0
LDS PRE IMP B'HAM/CRAYFORD					
3082 66 ALL OBJECTIVES	80	80	80	80	80
CONTRACTS					
3081 67 ALL OBJECTIVES	6	0	0	6	0
BTD BT&D TECHNOLOGIES LTD					
3001 53 ALL OBJECTIVES	53	53	53	53	53
BTD BT&D TECHNOLOGIES LTD					
3002 53 ALL OBJECTIVES	53	53	53	53	53
BTD *** DIVISIONAL TOTALS ********	203	206	186	203	206
BTE FARMLINK-SUBSIDIARY					
1111 68 ALL OBJECTIVES	0	0	30	0	0
BTE S PE MIPS					
1116 68 ALL OBJECTIVES	30	0	0	30	0
BTE BBS INCOME/BILLING					
1159 68 ALL OBJECTIVES	20	0	20	0	20
BTE BBS PURCHASING/STOCKS					
1160 68 ALL OBJECTIVES	73	0	73	0	73
BTE BBS EXPENDITURE					
1161 68 ALL OBJECTIVES	0	15	0	15	0
BTE BBS PAYROLL/PERSONNEL					
1162 68 ALL OBJECTIVES	0	35	0	35	0
BTE BBS ACCOUNTING					
1163 68 ALL OBJECTIVES	0	40	0	40	0
BTE BBS STORES					
1164 68 ALL OBJECTIVES	0	35	0	35	0
BTE BS DATA CENTRES					
1179 68 ALL OBJECTIVES	0	0	20	0	0
BTE BTA INCOME/BILLING					
1142 68 ALL OBJECTIVES	48	0	48	0	48
BTE BTA INCOME-INTER BUS. T.GOLD					
1143 68 ALL OBJECTIVES	15	0	0	15	0
BTE BTA PURCHASING					
1144 68 ALL OBJECTIVES	0	43	0	0	43

DIV DIS CSA DESCRIPTION
CODE BA OBJECTIVES   1989   1990   1991   1992   1993

BTE BTA   EXPENDITURE-INTER BUS. T.GOLD
1145 68 ALL OBJECTIVES   15   0   0   15   0

BTE BTA   ACCOUNTING-SUN ACCOUNTS
1146 68 ALL OBJECTIVES   0   48   0   0   48

BTE BTA   PERSONNEL
1147 68 ALL OBJECTIVES   30   0   0   30   0

BTE BTA   FIXED ASSETS
1148 68 ALL OBJECTIVES   0   38   0   0   38

BTE BTA   DATA CENTRES
1181 68 ALL OBJECTIVES   0   0   20   0   0

BTE BTV   SWINDON CABLE LTD
1183 68 ALL OBJECTIVES   0   0   30   0   0

BTE BTV   COVENTRY CABLE LTD
1184 68 ALL OBJECTIVES   13   0   0   13   0

BTE CEN   PAYROLL
1101 68 ALL OBJECTIVES   30   0   0   30   0

BTE CEN   ACCOUNTING-CONSOLIDATION
1102 68 ALL OBJECTIVES   0   0   25   0   0

BTE DN   DATA CENTRES
1178 68 ALL OBJECTIVES   0   0   20   0   0

BTE DNS   INCOME BILLING-BIPASS
1149 68 ALL OBJECTIVES   33   0   33   0   33

BTE DNS   INCOME/BILLING-DISTRICTS
1150 68 ALL OBJECTIVES   30   0   30   0   30

BTE DNS   INCOME/BILLING-MANUAL
1151 68 ALL OBJECTIVES   30   0   30   0   30

BTE DNS   INCOME-INTER BUS. T.GOLD
1152 68 ALL OBJECTIVES   0   20   0   20   0

BTE DNS   PURCHASING P.O/CONTRACTS
1153 68 ALL OBJECTIVES   30   0   30   0   30

BTE DNS   EXPENDITURE-INTER BUS. T.GOLD
1154 68 ALL OBJECTIVES   0   20   0   20   0

BTE DNS   PERSONNEL
1155 68 ALL OBJECTIVES   0   30   0   30   0

BTE DNS   ACCOUNTING-TETRA PLAN
1156 68 ALL OBJECTIVES   0   30   0   30   0

BTE DNS   FIXED ASSETS
1157 68 ALL OBJECTIVES   0   40   0   40   0

DIV DIS CSA DESCRIPTION CODE BA OBJECTIVES	1989	1990	1991	1992	1993
BTE DNS STORES 1158 68 ALL OBJECTIVES	0	30	0	30	0
BTE MC DATA CENTRES 1180 68 ALL OBJECTIVES	20	0	0	20	0
BTE MES INCOME/BILLING 1120 68 ALL OBJECTIVES	35	0	0	35	0
BTE MES INCOME/INTER BUS.T.GOLD 1121 68 ALL OBJECTIVES	0	0	15	0	0
BTE MES PURCHASING -TETRA PLAN 1122 68 ALL OBJECTIVES	30	0	0	30	0
BTE MES PAYROLL/PERSONNEL 1123 68 ALL OBJECTIVES	0	0	30	0	0
BTE MES ACCOUNTING 1124 68 ALL OBJECTIVES	0	0	30	0	0
BTE MES FIXED ASSETS 1125 68 ALL OBJECTIVES	0	0	25	0	0
BTE MES DIALCOM-USA 1126 68 ALL OBJECTIVES	0	32	0	0	32
BTE MES DATA CENTRES 1177 68 ALL OBJECTIVES	0	0	20	0	0
BTE MOC INCOME/BILLING-LEEDS 1165 68 ALL OBJECTIVES	44	0	44	0	44
BTE MOC INCOME-INTER BUS. T.GOLD 1166 68 ALL OBJECTIVES	0	20	0	0	20
BTE MOC PURCHASING 1167 68 ALL OBJECTIVES	0	40	0	0	40
BTE MOC EXPENDITURE-INTER BUS. T.GOLD 1168 68 ALL OBJECTIVES	0	0	15	0	0
BTE MOC PERSONNEL 1169 68 ALL OBJECTIVES	0	0	25	0	0
BTE MOC ACCOUNTING-SUN ACCOUNTS 1170 68 ALL OBJECTIVES	44	0	0	44	0
BTE MOC FIXED ASSETS 1171 68 ALL OBJECTIVES	0	30	0	0	30
BTE MOC STORES 1172 68 ALL OBJECTIVES	0	30	0	0	30
BTE MOC TSCR-SUBSIDIARY/BILLING 1173 68 ALL OBJECTIVES	60	0	0	60	0

DIV DIS CSA DESCRIPTION
CODE BA OBJECTIVES   1989   1990   1991   1992   1993

BTE MOC   BTCR-SUBSIDIARY
1174 68 ALL OBJECTIVES   0   0   35   0   0

BTE MOC   TSCR/FINANCIAL ACCOUNTING
1175 68 ALL OBJECTIVES   30   0   0   30   0

BTE SPE   PERSONNEL
1112 68 ALL OBJECTIVES   0   0   35   0   0

BTE SPE   CONSOLIDATION
1113 68 ALL OBJECTIVES   15   0   0   15   0

BTE SPE   SUPERCALL
1114 68 ALL OBJECTIVES   30   0   0   30   0

BTE SPE   TALKABOUT
1115 68 ALL OBJECTIVES   0   30   0   0   30

BTE SPE   TELECOM RED
1117 68 ALL OBJECTIVES   0   0   35   0   0

BTE SPE   TSL-SUBSIDIARY
1118 68 ALL OBJECTIVES   30   0   0   30   0

BTE SPE   DATA CENTRES
1182 68 / / / / / / / / /0   0   0   20   0   0

BTE TMS   INCOME/BILLING
1127 68 ALL OBJECTIVES   0   39   0   0   39

BTE TMS   INCOME-INTER BUS. T.GOLD
1128 68 ALL OBJECTIVES   0   0   15   0   0

BTE TMS   PURCHASING
1129 68 ALL OBJECTIVES   0   34   0   0   34

BTE TMS   PAYROLL/PERSONNEL
1130 68 ALL OBJECTIVES   0   34   0   0   34

BTE TMS   ACCOUNTING-SUN ACCOUNTS
1131 68 ALL OBJECTIVES   0   35   0   0   35

BTE TMS   FIXED ASSETS
1132 68 ALL OBJECTIVES   20   0   0   20   0

BTE TMS   EXPENDITURE-INTER BUS. T.GOLD
1133 68 ALL OBJECTIVES   15   0   0   15   0

BTE VAB   INCOME/BILLING-SABS
1103 68 ALL OBJECTIVES   0   45   0   0   45

BTE VAB   INCOME/INTER-BUSINESS-T.GOLD
1104 68 ALL OBJECTIVES   0   0   15   0   0

BTE VAB   PURCHASING
1105 68 ALL OBJECTIVES   0   0   30   0   0

| DIV DIS CSA DESCRIPTION | | | | | |
CODE BA OBJECTIVES	1989	1990	1991	1992	1993
BTE VAB EXPENDITURE-INTER BUS.T.GOLD					
1106 68 ALL OBJECTIVES	0	0	15	0	0
BTE VAB ACCOUNTING-FALCON					
1107 68 ALL OBJECTIVES	60	0	0	60	0
BTE VAB FIXED ASSETS-FALCON					
1108 68 ALL OBJECTIVES	0	0	25	0	0
BTE VAB STORES-FALCON					
1109 68 ALL OBJECTIVES	0	0	25	0	0
BTE VAB PERSONNEL					
1110 68 ALL OBJECTIVES	0	0	25	0	0
BTE VAB DATA CENTRES					
1176 68 ALL OBJECTIVES	0	0	20	0	0
BTE YEP INCOME/BILLING					
1134 68 ALL OBJECTIVES	54	0	0	54	0
BTE YEP INCOME-INTER BUS. T.GOLD					
1135 68 ALL OBJECTIVES	0	0	15	0	0
BTE YEP PURCHASING					
1136 68 ALL OBJECTIVES	0	35	0	0	35
BTE YEP PURCHASING-CONTRACTS					
1137 68 ALL OBJECTIVES	0	0	39	0	0
BTE YEP EXPENDITURE-INTER BUS. T.GOLD					
1138 68 ALL OBJECTIVES	0	15	0	0	15
BTE YEP ACCOUNTING-SUN ACCOUNTS					
1139 68 ALL OBJECTIVES	44	0	44	0	44
BTE YEP FIXED ASSETS-TETRA PLAN					
1140 68 ALL OBJECTIVES	24	0	0	24	0
BTE YEP PERSONNEL					
1141 68 ALL OBJECTIVES	0	0	29	0	0
BTE *** DIVISIONAL TOTALS ********	952	843	1035	895	900
BTI ISAACS (INTL SETTLEMENTS)					
1202 64 ALL OBJECTIVES	0	42	0	0	42
BTI ITALICS (INTL TELEX)					
1203 64 ALL OBJECTIVES	0	20	0	0	20
BTI STAR (SATELLITE TRAFFIC ACCT)					
1207 64 ALL OBJECTIVES	20	0	0	20	0
BTI PRICING					
1209 64 ALL OBJECTIVES	0	0	0	25	0

DIV DIS CSA DESCRIPTION
CODE BA OBJECTIVES   1989   1990   1991   1992   1993

		1989	1990	1991	1992	1993
BTI	AP (ACCOUNTS PAYABLE)					
1216 64 ALL	OBJECTIVES	0	25	0	0	25
BTI	CONTRACTS					
1217 64 ALL	OBJECTIVES	0	20	0	0	20
BTI	LOCAL PURCHASES					
1218 64 ALL	OBJECTIVES	0	20	0	0	0
BTI	TRAVEL & SUBSISTENCE					
1223 64 ALL	OBJECTIVES	20	0	0	20	0
BTI	CATERING					
1229 64 ALL	OBJECTIVES	0	25	0	0	0
BTI	OVERHEAD ALLOCATION					
1230 64 ALL	OBJECTIVES	25	0	0	25	0
BTI	TRAINING					
1231 64 ALL	OBJECTIVES	0	0	0	22	0
BTI	FIXED ASSETS					
1236 64 ALL	OBJECTIVES	25	0	0	25	0
BTI	PROJECT ACCOUNTING					
1237 64 ALL	OBJECTIVES	20	0	0	20	0
BTI	CAPITAL INVESTMENT APPRAISAL					
1238 64 ALL	OBJECTIVES	0	35	0	0	35
BTI	STORES					
1241 64 ALL	OBJECTIVES	25	0	0	25	0
BTI	TRANSFER CHARGING					
1251 64 ALL	OBJECTIVES	0	25	0	0	25
BTI	GL;M (GENERAL LEDGER)					
1252 64 ALL	OBJECTIVES	0	20	0	0	20
BTI	YEAR END REPORTING					
1253 64 ALL	OBJECTIVES	20	20	20	20	20
BTI	BUDGETTING & FORECASTING					
1254 64 ALL	OBJECTIVES	0	0	25	0	0
BTI	BTI SUMMARY REPORTS					
1264 64 ALL	OBJECTIVES	10	10	10	10	10
BTI CF	DOMESTIC CASHIERS					
1246 64 ALL	OBJECTIVES	15	0	0	15	0
BTI CF	COMMERCIAL CASHIERS					
1247 64 ALL	OBJECTIVES	15	0	0	15	0
BTI CFD	PAY AND PERSONNEL					
1221 64 ALL	OBJECTIVES	0	0	25	0	0

DIV DIS CSA DESCRIPTION CODE BA OBJECTIVES	1989	1990	1991	1992	1993
BTI EMD EMD (ESTATES MANAGEMENT) 1226 64 ALL OBJECTIVES	0	30	0	0	30
BTI MAR BT MARINE LOCATION AUDIT 1256 64 ALL OBJECTIVES	32	0	32	0	32
BTI MSD MSD (MARKETING SERVICES) 1227 64 ALL OBJECTIVES	20	0	0	20	0
BTI OP EH PAY AND PERSONNEL (OP) 1222 64 ALL OBJECTIVES	0	25	0	0	25
BTI PD INTL 0800 BILLING 1208 64 ALL OBJECTIVES	0	0	15	0	0
BTI PS INTL PRIVATE LEASED CIRCUITS 1201 64 ALL OBJECTIVES	0	20	0	0	20
BTI PSP BABS (BROADCAST ACCTS/BILLING) 1204 64 ALL OBJECTIVES	0	20	0	0	20
BTI PSP COMBS (MARITIME BILLING) 1206 64 ALL OBJECTIVES	0	0	0	20	0
BTI SD SALES DIV (SD) 1228 64 ALL OBJECTIVES	0	25	0	0	25
BTI SL SATELLITE INVESTMENTS 1239 64 ALL OBJECTIVES	0	25	0	0	25
BTI SL LONDON TELEPORT 1259 64 ALL OBJECTIVES	0	0	0	0	20
BTI SL ABD ABERDEEN EARTH STATION 1260 64 ALL OBJECTIVES	0	0	0	0	25
BTI SL GHL GOONHILLY 1257 64 ALL OBJECTIVES	0	0	34	0	0
BTI SL MDY MADLEY EARTH STATION 1258 64 ALL OBJECTIVES	0	0	0	30	0
BTI *** DIVISIONAL TOTALS ********	247	407	161	312	439
CCD CAB MANAGEMENT ACCOUNTING 4047 71 ALL OBJECTIVES	20	0	0	20	0
CCD CAI INVESTMENT ANALYSIS 4049 71 ALL OBJECTIVES	0	0	20	0	0
CCD CAM INTERCONN.POLICY 4052 71 ALL OBJECTIVES	0	0	20	0	0
CCD CAP PLANNING 4048 71 ALL OBJECTIVES	0	0	20	0	0

DIV DIS CSA DESCRIPTION CODE BA OBJECTIVES	1989	1990	1991	1992	1993
CCD CAP PRICING POLICY 4051 71 ALL OBJECTIVES	0	0	30	0	0
CCD CAR COMMERCIAL REGULATION 4050 71 ALL OBJECTIVES	0	0	5	0	0
CCD CRA COMM.REG.ANALYSIS 4053 71 ALL OBJECTIVES	0	0	20	0	0
CCD CST CORPORATE STRATEGY UNIT 4059 71 ALL OBJECTIVES	0	0	15	0	0
CCD EAD ECONOMIC ADVISORY DIVISION 4054 71 ALL OBJECTIVES	0	0	20	0	0
CCD EUF EURODATA FOUNDATION 4058 71 ALL OBJECTIVES	0	0	10	0	0
CCD IPU COMPUTER INTEGRITY 4055 71 ALL OBJECTIVES	15	0	0	15	0
CCD IPU REVENUE ACCOUNTING 4056 71 ALL OBJECTIVES	20	0	0	20	0
CCD MSC MSCU 4060 71 ALL OBJECTIVES	0	0	20	0	0
CCD OCU OVERSEAS CO-ORDINATION UNIT 4057 71 ALL OBJECTIVES	0	0	15	0	0
CCD *** DIVISIONAL TOTALS ********	55	0	195	55	0
CFD F1 PLANMASTER CONSOLIDATION 4001 71 ALL OBJECTIVES	20	0	0	20	0
CFD F2 STERLING DEALING 4002 71 ALL OBJECTIVES	0	10	0	0	10
CFD F2 MANSION PLACE LEASING 4003 71 ALL OBJECTIVES	20	0	0	20	0
CFD F2 COMMERCIAL PAPER 4004 71 ALL OBJECTIVES	30	0	0	30	0
CFD F2 CASHIERS 4005 71 ALL OBJECTIVES	0	20	0	0	20
CFD F2 PERIOD END ACCOUNTS 4006 71 ALL OBJECTIVES	10	0	0	10	0
CFD F2 MANAGEMENT ACCOUNTS 4007 71 ALL OBJECTIVES	0	0	5	0	0
CFD F2 FOREIGN CURRENCY EXPOSURE 4149 71 ALL OBJECTIVES	30	0	0	30	0

DIV DIS CSA DESCRIPTION CODE BA OBJECTIVES	1989	1990	1991	1992	1993
CFD F3 OPERATIONAL AUDIT 4008 71 ALL OBJECTIVES	0	0	5	0	0
CFD F6 MANAGEMENT ACCOUNTING 4009 71 ALL OBJECTIVES	0	0	20	0	0
CFD F7 GATIS 4010 71 ALL OBJECTIVES	0	0	10	0	0
CFD F8 CORPORATION TAX 4011 71 ALL OBJECTIVES	0	0	24	0	0
CFD F8 PERSONAL TAX 4012 71 ALL OBJECTIVES	0	20	0	0	20
CFD F8 VAT 4013 71 ALL OBJECTIVES	30	0	0	30	0
CFD F9 INVESTOR RELATIONS 4014 71 ALL OBJECTIVES	0	0	10	0	0
CFD IAD INTERNAL AUDIT DIVISION 4097 71 ALL OBJECTIVES	0	0	17	0	0
CFD RMI OPERATIONAL AUDIT RMID 4015 71 ALL OBJECTIVES	0	30	0	0	30
CFD *** DIVISIONAL TOTALS ********	140	80	91	140	80
IPD ALL MARKETING IN IPD 4046 69 ALL OBJECTIVES	0	0	52	0	0
IPD ALL IPD OVERVIEW REPORTS 4153 69 ALL OBJECTIVES	10	10	10	10	10
IPD CBP DIRECT INCOME 4061 69 ALL OBJECTIVES	21	0	0	21	0
IPD FIN HQ YEAR END ACCOUNTS 4016 69 ALL OBJECTIVES	15	0	0	15	0
IPD IS GAP SALES ORDER PROCESSING 4083 69 ALL OBJECTIVES	12	0	0	12	0
IPD IS GAP PROCUREMENT 4084 69 ALL OBJECTIVES	0	0	22	0	0
IPD IS GAP INVENTORY CONTROL 4085 69 ALL OBJECTIVES	17	0	0	17	0
IPD IS GAP MANAGEMENT ACCOUNTS 4086 69 ALL OBJECTIVES	0	0	12	0	0
IPD IS GAP PROJECT CONTROL 4087 69 ALL OBJECTIVES	0	0	22	0	0

DIV DIS CSA DESCRIPTION CODE BA OBJECTIVES	1989	1990	1991	1992	1993
IPD IS IS SALES ORDER PROCESSING 4092 69 ALL OBJECTIVES	11	0	0	11	0
IPD ITS IS INVENTORY CONTROL 4095 69 ALL OBJECTIVES	6	0	0	6	0
IPD ITS CBP PROCUREMENT 4062 69 ALL OBJECTIVES	21	0	0	21	0
IPD ITS CBP INVENTORY CONTROL 4063 69 ALL OBJECTIVES	31	0	0	31	0
IPD ITS CBP FIXED ASSETS 4064 69 ALL OBJECTIVES	0	0	21	0	0
IPD ITS CBP FINANCIAL ACCOUNTING 4065 69 ALL OBJECTIVES	0	0	21	0	0
IPD ITS CBP MANAGEMENT ACCOUNTING 4066 69 ALL OBJECTIVES	0	0	31	0	0
IPD ITS CBP COMPUTER INTEGRITY 4067 69 ALL OBJECTIVES	0	0	16	0	0
IPD ITS CBP PERSONNEL 4068 69 ALL OBJECTIVES	0	0	11	0	0
IPD ITS CBP ACCOUNTS PAYABLE 4069 69 ALL OBJECTIVES	0	0	21	0	0
IPD ITS IS PROCUREMENT 4093 69 ALL OBJECTIVES	0	0	10	0	0
IPD ITS IS MANAGEMENT ACCOUNTS 4094 69 ALL OBJECTIVES	0	0	6	0	0
IPD ITS IS PROJECT CONTROL 4096 69 ALL OBJECTIVES	0	0	11	0	0
IPD NPO BMF SALES ORDER PROCESSING 4128 69 ALL OBJECTIVES	0	33	0	0	33
IPD NPO BMF INVENTORY CONTROL 4129 69 ALL OBJECTIVES	33	0	0	33	0
IPD NPO BMF MANAGEMENT ACCOUNTS 4130 69 ALL OBJECTIVES	33	0	0	33	0
IPD NPO BMF FINANCIAL ACCOUNTS 4131 69 ALL OBJECTIVES	0	33	0	0	33
IPD NPO BMF PAYROLL/PERSONNEL (INC T&S) 4132 69 ALL OBJECTIVES	0	0	44	0	0
IPD NPO BMF PROCUREMENT 4133 69 ALL OBJECTIVES	33	0	0	33	0

DIV DIS CSA DESCRIPTION CODE BA OBJECTIVES	1989	1990	1991	1992	1993
IPD NPO BMF FIXED ASSETS					
4134 69 ALL OBJECTIVES	0	0	22	0	0
IPD NPO BMF ACCOUNTS PAYABLE INC CASH/BNK					
4135 69 ALL OBJECTIVES	22	0	0	22	0
IPD NPO BMF PRODUCTION CONTROL					
4136 69 ALL OBJECTIVES	0	0	33	0	0
IPD NPO BMF COMPUTER INTEGRITY					
4137 69 ALL OBJECTIVES	0	0	27	0	0
IPD NPO CE SALES/ORDER PROCESSING					
4037 69 ALL OBJECTIVES	17	0	0	17	0
IPD NPO CE PAYROLL/PERSONNEL					
4038 69 ALL OBJECTIVES	0	0	22	0	0
IPD NPO CE PROCUREMENT					
4039 69 ALL OBJECTIVES	22	0	0	22	0
IPD NPO CE ACCOUNTS PAYABLE					
4040 69 ALL OBJECTIVES	0	0	11	0	0
IPD NPO CE INVENTORY CONTROL					
4041 69 ALL OBJECTIVES	22	0	0	22	0
IPD NPO CE FIXED ASSETS					
4042 69 ALL OBJECTIVES	0	0	22	0	0
IPD NPO CE FINANCIAL ACCOUNTING					
4043 69 ALL OBJECTIVES	0	0	22	0	0
IPD NPO CE MANAGEMENT ACCOUNTING					
4044 69 ALL OBJECTIVES	0	0	22	0	0
IPD NPO CE COMPUTER INTEGRITY					
4045 69 ALL OBJECTIVES	17	0	0	17	0
IPD NPO EDF EDINBURGH FACTORY					
4147 69 ALL OBJECTIVES	0	0	27	0	0
IPD NPO ENF MANAGEMENT ACCOUNTS					
4140 60 ALL OBJECTIVES	0	21	0	0	21
IPD NPO ENF SALES ORDER PROCESSING					
4138 69 ALL OBJECTIVES	21	0	0	21	0
IPD NPO ENF INVENTORY CONTROL					
4139 69 ALL OBJECTIVES	26	0	0	26	0
IPD NPO ENF PROCUREMENT					
4141 69 ALL OBJECTIVES	21	0	0	21	0
IPD NPO ENF ACCOUNTS PAYABLE					
4142 69 ALL OBJECTIVES	21	0	0	21	0

DIV DIS CSA DESCRIPTION CODE BA OBJECTIVES	1989	1990	1991	1992	1993
IPD NPO ENF FIXED ASSETS 4143 69 ALL OBJECTIVES	21	0	0	21	0
IPD NPO ENF PRODUCTION CONTROL 4144 69 ALL OBJECTIVES	0	0	32	0	0
IPD NPO ENF FINANCIAL ACCOUNTING 4145 69 ALL OBJECTIVES	21	0	0	21	0
IPD NPO ENF COMPUTER INTEGRITY 4148 69 ALL OBJECTIVES	0	26	0	0	26
IPD NPO HQ FULCRUM HQ MISC 4146 69 ALL OBJECTIVES	0	0	20	0	0
IPD PER HQ PERSONNEL 4017 69 ALL OBJECTIVES	0	0	0	10	0
IPD PRO HQ PROCUREMENT 4018 69 ALL OBJECTIVES	34	0	0	34	0
IPD PRO HQ PROCUREMENT ADMINISTRATION 4019 69 ALL OBJECTIVES	30	0	0	30	0
IPD S&C HQ STRATEGY & CO-ORDINATION 4020 69 ALL OBJECTIVES	0	0	10	0	0
IPD TS CTP SALES ORDER PROCESSING 4032 69 ALL OBJECTIVES	10	0	0	10	0
IPD TS CTP PROCUREMENT 4033 69 ALL OBJECTIVES	20	0	0	20	0
IPD TS CTP STOCK MANAGEMENT 4034 69 ALL OBJECTIVES	10	0	0	10	0
IPD TS CTP FIXED ASSETS 4035 69 ALL OBJECTIVES	0	0	5	0	0
IPD TS CTP MANAGEMENT ACCOUNTS 4036 69 ALL OBJECTIVES	0	0	20	0	0
IPD TS DCM SALES ORDER PROCESSING 4075 69 ALL OBJECTIVES	20	0	0	20	0
IPD TS DCM PROCUREMENT 4076 69 ALL OBJECTIVES	20	0	0	20	0
IPD TS DCM ACCOUNTS PAYABLE 4077 69 ALL OBJECTIVES	10	0	0	10	0
IPD TS DCM STOCK MANAGEMENT 4078 69 ALL OBJECTIVES	0	23	0	0	23
IPD TS DCM FINANCIAL ACCOUNTING MSAGL 4079 69 ALL OBJECTIVES	20	0	0	20	0

DIV DIS CSA DESCRIPTION CODE BA OBJECTIVES	1989	1990	1991	1992	1993
IPD TS DCM MANAGEMENT ACCOUNTING 4080 69 ALL OBJECTIVES	0	0	20	0	0
IPD TS DCM FIXED ASSETS 4081 69 ALL OBJECTIVES	0	0	10	0	0
IPD TS DCM COMPUTER INTEGRITY 4082 69 ALL OBJECTIVES	0	0	20	0	0
IPD TS HQ INVENTORY ACCOUNTING 4151 69 ALL OBJECTIVES	30	0	0	30	0
IPD TS HQ SALES LEDGER/INVOICING 4152 69 ALL OBJECTIVES	30	0	0	30	0
IPD TS PUB SALES ORDER PROCESSING 4088 69 ALL OBJECTIVES	6	0	0	6	0
IPD TS PUB STOCK MANAGEMENT 4089 69 ALL OBJECTIVES	6	0	0	6	0
IPD TS PUB PROCUREMENT 4090 69 ALL OBJECTIVES	0	0	12	0	0
IPD TS PUB MANAGEMENT ACCOUNTS 4091 69 ALL OBJECTIVES	0	0	6	0	0
IPD TS SP SALES ORDER PROCESSING 4070 69 ALL OBJECTIVES	10	0	0	10	0
IPD TS SP PROCUREMENT 4071 69 ALL OBJECTIVES	0	0	20	0	0
IPD TS SP STOCK MANAGEMENT 4072 69 ALL OBJECTIVES	23	0	0	23	0
IPD TS SP FIXED ASSETS 4073 69 ALL OBJECTIVES	0	0	10	0	0
IPD TS SP ACCOUNTS,MANAGEMENT/FINANCIAL 4074 69 ALL OBJECTIVES	0	0	20	0	0
IPD TTD DIRECT INCOME 4021 69 ALL OBJECTIVES	0	0	20	0	0
IPD TTD PURCHASING 4022 69 ALL OBJECTIVES	0	0	30	0	0
IPD TTD INVENTORY CONTROL 4023 69 ALL OBJECTIVES	0	0	27	0	0
IPD TTD FIXED ASSETS 4024 69 ALL OBJECTIVES	0	0	10	0	0
IPD TTD FINANCIAL ACCOUNTS (HPFA) 4025 69 ALL OBJECTIVES	0	30	0	0	30

DIV DIS CSA DESCRIPTION					
CODE BA OBJECTIVES	1989	1990	1991	1992	1993

IPD TTD MANAGEMENT ACCTS INC TR CHGING					
4026 69 ALL OBJECTIVES	0	0	10	0	0

IPD TTD COMPUTER INTEGRITY					
4027 69 ALL OBJECTIVES	0	20	0	0	20

IPD TTD FOREIGN SUBS-FRANKFURT					
4028 69 ALL OBJECTIVES	0	34	0	0	34

IPD TTD ACCOUNTS PAYABLE					
4029 69 ALL OBJECTIVES	0	10	0	0	10

IPD TTD SUBSIDIARY- PARIS					
4030 69 ALL OBJECTIVES	0	34	0	0	34

IPD TTD SUBSIDIARY - AUSTRALIA					
4031 69 ALL OBJECTIVES	0	34	0	0	34

IPD *** DIVISIONAL TOTALS ********	753	308	820	763	308

ME INCOME - SALES LEDGER					
3025 66 ALL OBJECTIVES	34	0	0	34	0

ME PURCHASING - SUPD/MSA					
3026 66 ALL OBJECTIVES	68	0	0	68	0

ME MSP CONTRACTS-EXCHANGE EQUIP					
3027 66 ALL OBJECTIVES	68	0	0	68	0

ME MSP CONTRACTS - OTHER					
3028 66 ALL OBJECTIVES	34	0	0	34	0

ME PURCHASING - LOCAL PURCHASING					
3029 66 ALL OBJECTIVES	0	0	23	0	0

ME MANPOWER					
3030 66 ALL OBJECTIVES	46	0	0	46	0

ME FIXED ASSETS REGISTERS					
3031 66 ALL OBJECTIVES	0	0	22	0	0

ME GL MILLENIUM					
3032 66 ALL OBJECTIVES	0	34	0	34	0

ME ACCOUNTS PAYABLE PHASE 1.2					
3033 66 ALL OBJECTIVES	44	0	0	44	0

ME TRANSFER CHARGING					
3034 66 ALL OBJECTIVES	17	0	0	17	0

ME MGMT ACCOUNTS/BUDGETRY CNTL					
3035 66 ALL OBJECTIVES	0	0	44	0	0

ME YEAR END					
3036 66 ALL OBJECTIVES	17	17	17	17	17

DIV DIS CSA DESCRIPTION
CODE BA OBJECTIVES   1989   1990   1991   1992   1993

ME 3037 66 ALL	MSA III POST IMP OBJECTIVES	0	0	54	0	0
ME 3038 66 ALL	AFSTA / STOCKTAKING OBJECTIVES	0	34	0	0	34
ME 3039 66 ALL	INTERFACE UKC STORES SYSTEMS OBJECTIVES	0	0	24	0	0
ME 3040 66 ALL	GOPS / KEYS INDICATORS OBJECTIVES	48	0	0	48	0
ME 3041 66 ALL	CABLE DRUMS OBJECTIVES	0	0	17	0	0
ME 3042 66 ALL	STOCKING POLICY OBJECTIVES	0	0	34	0	0
ME 3043 66 ALL	STOCK VALUATION OBJECTIVES	0	0	11	0	0
ME 3044 66 ALL	PEXOS PROVISION OBJECTIVES	0	0	17	0	0
ME 3045 66 ALL	PEXOS WRITE OFFS OBJECTIVES	0	0	11	0	0
ME 3046 66 ALL	SCORE ACCOUNTING OBJECTIVES	0	0	11	0	0
ME 3047 66 ALL	SCORE LDS INTERFACE OBJECTIVES	34	0	0	34	0
ME 3048 66 ALL	DIRECT DISTRIBUTION OBJECTIVES	0	0	24	0	0
ME 3049 66 ALL	DIRECT DELIVERY CWM OBJECTIVES	0	0	34	0	0
ME 3050 66 ALL	DIRECT DELIVERY CABLE OBJECTIVES	0	0	34	0	0
ME 3051 66 ALL	DIRECT DELIVERY POLES OBJECTIVES	0	0	11	0	0
ME 3052 66 ALL	CATERING OBJECTIVES	0	0	0	0	5
ME 3053 66 ALL	SECURITY OBJECTIVES	0	0	12	0	0
ME 3054 66 ALL	OTHER OPERATING COSTS OBJECTIVES	0	0	34	0	0
ME 3055 66 ALL	REPROGRAPHICS OBJECTIVES	0	30	0	0	30

DIV DIS CSA DESCRIPTION					
CODE BA OBJECTIVES	1989	1990	1991	1992	1993
ME TRANSPORT DIVISION					
3056 66 ALL OBJECTIVES	34	0	0	34	0
ME CASHIERS + T&S					
3057 66 ALL OBJECTIVES	34	0	0	34	0
ME TRANSHIPMENTS					
3058 66 ALL OBJECTIVES	24	0	0	24	0
ME PHONECARDS					
3059 66 ALL OBJECTIVES	36	0	0	36	0
ME ESTATES MANAGEMENT					
3060 66 ALL OBJECTIVES	34	0	0	34	0
ME BD DEPOT ISSUES					
3067 66 ALL OBJECTIVES	41	0	0	41	0
ME BD DEPOT RECEIPTS NTHA D					
3068 66 ALL OBJECTIVES	41	0	0	41	0
ME BD STOCKTAKING					
3069 66 ALL OBJECTIVES	26	0	0	26	0
ME BD STOCK DISCREPANCY CASES					
3070 66 ALL OBJECTIVES	14	0	0	14	0
ME BD SALVAGE RETURNS/DISPOSALS					
3071 66 ALL OBJECTIVES	0	14	0	0	14
ME BD DEPOTS OTHERS					
3072 66 ALL OBJECTIVES	0	0	26	0	0
ME CD DEPOT ISSUES CRAYFORD					
3061 66 ALL OBJECTIVES	35	0	0	35	0
ME CD DEPOT RECEIPTS					
3062 66 ALL OBJECTIVES	38	0	0	38	0
ME CD STOCKTAKING					
3063 66 ALL OBJECTIVES	0	23	0	0	23
ME CD STOCK DISCREPANCY CASES					
3064 66 ALL OBJECTIVES	12	0	0	12	0
ME CD SALVAGE RETURNS/DISPOSALS					
3065 66 ALL OBJECTIVES	0	12	0	0	12
ME CD DEPOT OTHER					
3066 66 ALL OBJECTIVES	0	0	24	0	0
ME ND DEPOT ISSUES NTHA D					
3073 66 ALL OBJECTIVES	0	41	0	0	41
ME ND DEPOT RECEIPTS CRAYFORD					
3074 66 ALL OBJECTIVES	0	38	0	0	38

| DIV DIS CSA DESCRIPTION | | | | | |
CODE BA OBJECTIVES	1989	1990	1991	1992	1993
ME ND STOCKTAKING					
3075 66 ALL OBJECTIVES	26	0	0	26	0
ME ND STOCK DISCREPANCY CASES					
3076 66 ALL OBJECTIVES	14	0	0	14	0
ME ND SALVAGE RETURNS/DISPOSALS					
3077 66 ALL OBJECTIVES	0	14	0	0	14
ME ND DEPOT OTHERS					
3078 66 ALL OBJECTIVES	26	0	0	26	0
ME *** DIVISIONAL TOTALS ********	845	257	484	879	228
OO COM STH BILLING - COMMERCIAL					
1268 65 ALL OBJECTIVES	0	0	25	0	0
OO IAL TRAINING					
1287 65 ALL OBJECTIVES	0	0	0	18	0
OO IAL FIXED ASSETS					
1290 65 ALL OBJECTIVES	0	0	25	0	0
OO IAL IAL OVERSEAS TRIPS					
1297 65 ALL OBJECTIVES	0	0	24	0	0
OO IAL ADS ADAMS IAL					
1298 65 ALL OBJECTIVES	0	0	25	0	0
OO IAL BAI BAILBROOK COLLEGE					
1288 65 ALL OBJECTIVES	0	0	0	24	0
OO IAL CR CRANFIELD COLLEGE					
1289 65 ALL OBJECTIVES	0	0	0	18	0
OO IAL STH BILLING SERVICES DIV					
1266 65 ALL OBJECTIVES	0	0	25	0	0
OO IAL STH BILLING SYSTEMS					
1267 65 ALL OBJECTIVES	0	0	20	0	0
OO IAL STH BILLING BUKIT ASSAM					
1270 65 ALL OBJECTIVES	0	0	0	25	0
OO IAL STH PURCHASING IAL					
1275 65 ALL OBJECTIVES	25	0	0	25	0
OO IAL STH PAY AND PERSONNEL					
1281 65 ALL OBJECTIVES	0	25	0	0	25
OO IAL STH TRAVEL & SUBSISTENCE					
1283 65 ALL OBJECTIVES	0	20	0	0	20
OO IAL STH MARKETING					
1286 65 ALL OBJECTIVES	0	0	30	0	0

DIV DIS CSA DESCRIPTION
CODE BA OBJECTIVES   1989   1990   1991   1992   1993

DIV DIS CSA DESCRIPTION / CODE BA OBJECTIVES	1989	1990	1991	1992	1993
OO IAL STH STORES & WIP					
1291 65 ALL OBJECTIVES	0	0	0	25	0
OO IAL STH CASH AND BANK					
1292 65 ALL OBJECTIVES	0	0	25	0	0
OO IAL STH GENERAL LEDGER					
1293 65 ALL OBJECTIVES	0	0	25	0	0
OO IAL STH YEAR END REPORTING					
1294 65 ALL OBJECTIVES	0	0	25	25	25
OO IAL STH BUDGET SETTING					
1295 65 ALL OBJECTIVES	0	0	25	0	0
OO MAN MAN PAYROLL MANX					
1282 65 ALL OBJECTIVES	0	0	20	0	0
OO MAN MAN TRAVEL AND SUBSISTENCE MANX					
1284 65 ALL OBJECTIVES	0	0	12	0	0
OO MNX PURCHASING MANX					
1276 65 ALL OBJECTIVES	0	0	25	0	0
OO MNX MNX BILLING MANX TELECOM					
1271 65 ALL OBJECTIVES	0	24	0	0	24
OO MNX MNX MANX LOCATION					
1296 65 ALL OBJECTIVES	0	0	25	0	25
OO TEL STH BILLING CONSULTANCY & NI					
1269 65 ALL OBJECTIVES	25	0	0	25	0
OO *** DIVISIONAL TOTALS ********	50	69	356	185	119
PCS ADC ACTION FOR DISABLED CUSTS.					
4126 17 ALL OBJECTIVES	0	0	20	0	0
PCS ASD PAYROLL/PERSONNEL (INC T&SETC)					
4114 17 ALL OBJECTIVES	60	0	0	60	0
PCS ASD AS1 AS1 OFFICE SERVICES					
4113 17 ALL OBJECTIVES	0	0	25	0	0
PCS ASD AS3 ACCOUNTS PAYABLE					
4115 17 ALL OBJECTIVES	30	0	0	30	0
PCS ASD AS3 FINANCIAL ACCOUNTING					
4116 17 ALL OBJECTIVES	0	20	0	0	20
PCS ASD AS3 MANAGEMENT ACCOUNTS					
4117 17 ALL OBJECTIVES	25	0	0	25	0
PCS ASD AS3 ACCOUNTS RECEIVABLE					
4118 17 ALL OBJECTIVES	5	0	0	5	0

DIV DIS CSA DESCRIPTION CODE BA OBJECTIVES	1989	1990	1991	1992	1993
PCS ASD AS3 COMPUTER INTEGRITY 4119 17 ALL OBJECTIVES	20	0	0	20	0
PCS BMD CAPITAL PROJECT CONTROL 4120 17 ALL OBJECTIVES	30	0	30	0	30
PCS BMD CONTRACTS/PURCHASING 4121 17 ALL OBJECTIVES	30	0	30	0	30
PCS BMD RENTS & RATES 4122 17 ALL OBJECTIVES	10	0	10	0	10
PCS BMD FINANCIAL ACCOUNTING (NAS) 4123 17 ALL OBJECTIVES	10	0	10	0	10
PCS BMD MANAGEMENT ACCOUNTING 4124 17 ALL OBJECTIVES	0	10	0	10	0
PCS BMD COMPUTER INTEGRITY 4125 17 ALL OBJECTIVES	20	0	20	0	20
PCS CAT STAFF RESTAURANTS 4127 17 ALL OBJECTIVES	20	20	20	20	20
PCS CPD CORPORATE PERSONNEL MISC 4112 17 ALL OBJECTIVES	0	0	25	0	0
PCS OHS OCCUPATIONAL HEALTH SERVICE 4098 17 ALL OBJECTIVES	0	0	5	0	0
PCS PAC PENSION ADMINISTRATION 4110 17 ALL OBJECTIVES	88	0	88	0	88
PCS PAC BTPAC COMPUTER INTEGRITY 4111 17 ALL OBJECTIVES	24	0	0	24	0
PCS PAC BTPAC QUARTERLY REVIEW 4150 17 ALL OBJECTIVES	20	20	20	20	20
PCS PAC HQ BTPAC HQ 4109 17 ALL OBJECTIVES	10	0	0	10	0
PCS *** DIVISIONAL TOTALS ********	402	70	303	224	248
R&T INCOME - SALE OF SCRAP 3003 67 ALL OBJECTIVES	0	0	18	0	0
R&T INCOME - SALES LEDGER 3004 67 ALL OBJECTIVES	0	0	36	0	0
R&T PURCHASING-LOCAL PURCHASES 3005 67 ALL OBJECTIVES	0	0	36	0	0
R&T PURCHASING - CONTRACTS 3006 67 ALL OBJECTIVES	0	0	36	0	0

DIV DIS CSA DESCRIPTION CODE BA OBJECTIVES	1989	1990	1991	1992	1993
R&T MANPOWER 3007 67 ALL OBJECTIVES	0	0	48	0	0
R&T FIXED ASSETS REGISTER 3008 67 ALL OBJECTIVES	36	0	0	36	0
R&T G.L. MILLENIUM 3009 67 ALL OBJECTIVES	0	36	0	0	36
R&T TRANSFER CHARGING 3010 67 ALL OBJECTIVES	0	18	0	0	18
R&T A.P. MILLENIUM 3011 67 ALL OBJECTIVES	0	0	48	0	0
R&T MGMT ACCOUNTS/BUDGETERY CNT 3012 67 ALL OBJECTIVES	48	0	0	48	0
R&T YEAR END 3013 67 ALL OBJECTIVES	18	18	18	18	18
R&T STOCK CONTROL SYSTEM COMMODITY 3014 67 ALL OBJECTIVES	0	12	0	0	12
R&T STOCK CONTROL SYSTEM BES 3015 67 ALL OBJECTIVES	0	8	0	0	8
R&T CATERING 3016 67 ALL OBJECTIVES	0	0	0	0	5
R&T SECURITY & SAFETY 3017 67 ALL OBJECTIVES	0	0	36	0	0
R&T OTHER OPERATING COSTS 3018 67 ALL OBJECTIVES	36	0	0	36	0
R&T CASHIERS + T&S 3019 67 ALL OBJECTIVES	36	0	0	36	0
R&T COMP INST 3020 67 ALL OBJECTIVES	36	0	0	36	0
R&T COMP INST OFFICE AUTO WEB 3021 67 ALL OBJECTIVES	0	0	36	0	0
R&T COMP INST 4381 GL&AP 3022 67 ALL OBJECTIVES	0	0	36	0	0
R&T SPONSORSHIP 3023 67 ALL OBJECTIVES	0	0	36	0	0
R&T PROJECT CONTROL & COSTINGS 3024 67 ALL OBJECTIVES	36	0	0	36	0
R&T ESTATES MANAGEMENT 3079 67 ALL OBJECTIVES	0	0	36	0	0

DIV DIS CSA DESCRIPTION CODE BA OBJECTIVES	1989	1990	1991	1992	1993
R&T *** DIVISIONAL TOTALS ********	246	92	420	246	97
SEC BRD THE BOARD 4108 17 ALL OBJECTIVES	0	0	10	0	0
SEC CRD CORPORATE RELATIONS DEPT 4105 17 ALL OBJECTIVES	70	0	0	70	0
SEC GRD GOVERNMENT RELATIONS DEPT 4103 17 ALL OBJECTIVES	15	0	0	15	0
SEC ID INVESTIGATION DIVISION 4106 17 ALL OBJECTIVES	25	0	0	25	0
SEC SO SHARE REGISTER 4099 17 ALL OBJECTIVES	0	0	15	0	0
SEC SO AGM COSTS 4100 17 ALL OBJECTIVES	0	0	15	0	0
SEC SO MANAGEMENT ACCOUNTS 4101 17 ALL OBJECTIVES	0	0	10	0	0
SEC SO PURCHASING 4102 17 ALL OBJECTIVES	0	0	10	0	0
SEC SOL SOLICITORS OFFICE 4104 17 ALL OBJECTIVES	25	0	0	25	0
SEC STY SECURITY DIVISION 4107 17 ALL OBJECTIVES	10	0	0	10	0
SEC *** DIVISIONAL TOTALS ********	145	0	60	145	0
*** *** GRAND TOTALS ***************	4038	2332	4111	4047	2625

A2.11   **Audit Project Portfolio (LHRSKP10)**

A2.11.1 This report lists the raw data held against each
       project in the portfolio for checking purposes.

THE DETAILS FOR EACH PROJECT MAY BE AMENDED VIA THE PROJECT MENU

KEY TO COLUMN HEADINGS

========================

CODE	= PROJECT CODE	DESCRIPTION = PROJECT DESCRIPTION
BA	= BUSINESS AREA	CONTROL OBJECTIVES = AUDIT OBJECTIVES
DIV	= DIVISION DIS = DISTRICT/UNIT	CSA = CSA/LOCATION
F	= FREQUENCY or YEAR if PROJECT M = MUST DO REGARDLESS (YES/NO)	
BUDGET	= DAYS REQUIRED (Excl TRAVEL) TT = TRAVEL TIME	
AC	= COMPLEXITY (H)igh, (M)edium, (L)ow	
YR	= YEAR LAST REVIEWED	
BI	= BUSINESS IMPACT · (H)igh, (M)edium, (L)ow, (N)one	
IC	= INTERNAL CONTROL · (H)igh, (M)edium, (L)ow, (N)one	
TF	= TEMPTATION FACTOR ·(H)igh, (M)edium, (L)ow, (N)one	
SIZE	= SIZE OF THIS AREA (millions)	
VT	= VALUE TYPE · A=Asset,B=Income,C=Spend,D=Stores,E=Wages	
JT	= JOB TYPE (P=Project, R=Regulatory)	

THIS REPORT IS IN DIVISION SEQUENCE

```
CODE DESCRIPTION                        BA CONTROL OBJECTIVES
DIV DIS CSA FR MD BUDGET TT YR AC BI IC TF     VALUE VT JT


1205 ACIDS (INT DATA SERVICES           64 ALL OBJECTIVES
             3 N    20 0 87 M  L  M  M       9.00 B  R


3080 STOCK VAL'N B'HAM DEPOT            66 ALL OBJECTIVES
             3 Y     9 2  0 H  H  N  H       1.00 D  R


3081 CONTRACTS                          67 ALL OBJECTIVES
             3 Y     3 3  0 H  H  N  H       1.00 D  R


3082 LDS PRE IMP B'HAM/CRAYFORD         66 ALL OBJECTIVES
             1 Y    80 0  0 H  H  N  H       1.00 D  R


3001 BT&D TECHNOLOGIES LTD              53 ALL OBJECTIVES
BTD          1 Y    45 8 87 M  H  M  M      55.00 B  R


3002 BT&D TECHNOLOGIES LTD              53 ALL OBJECTIVES
BTD          1 Y    45 8 87 M  H  M  M      55.00 B  R


1111 FARMLINK-SUBSIDIARY                68 ALL OBJECTIVES
BTE          3 N    30 0  0 L  H  N  L       1.00 B  R


1116 MIPS                               68 ALL OBJECTIVES
BTE  S PE    3 Y    30 0 87 M  M  M  L       9.00 C  R


1159 INCOME/BILLING                     68 ALL OBJECTIVES
BTE BBS      2 Y    20 0 86 M  M  N  L      14.00 B  R


1160  PURCHASING/STOCKS                 68 ALL OBJECTIVES
BTE BBS      2 Y    70 3 85 M  L  N  L      23.00 C  R


1161 EXPENDITURE                        68 ALL OBJECTIVES
BTE BBS      2 N    15 0  0 L  L  M  N      14.00 C  R


1162 PAYROLL/PERSONNEL                  68 ALL OBJECTIVES
BTE BBS      2 N    35 0  0 L  L  N  L       2.00 C  R


1163 ACCOUNTING                         68 ALL OBJECTIVES
BTE BBS      2 N    40 0  0 M  H  N  L      13.00 B  R


1164 STORES                             68 ALL OBJECTIVES
BTE BBS      2 N    33 2  0 M  L  N  M       4.00 D  R


1179 DATA CENTRES                       68 ALL OBJECTIVES
BTE BS       3 N    20 0  0 M  M  M  M      13.00 B  R


1142 INCOME/BILLING                     68 ALL OBJECTIVES
BTE BTA      2 N    44 4 87 M  H  N  L      15.00 B  R


1143 INCOME-INTER BUS. T.GOLD           68 ALL OBJECTIVES
BTE BTA      3 Y    15 0  0 L  L  M  N      15.00 B  R


1144 PURCHASING                         68 ALL OBJECTIVES
BTE BTA      3 N    39 4 87 L  L  M  L      17.00 D  R


1145 EXPENDITURE-INTER BUS. T.GOLD      68 ALL OBJECTIVES
BTE BTA      3 Y    15 0  0 L  L  M  N       2.00 D  R
```

CODE DESCRIPTION							BA CONTROL OBJECTIVES							
DIV DIS	CSA	FR	MD	BUDGET	TT	YR	AC	BI	IC	TF	VALUE	VT	JT	

1146 ACCOUNTING-SUN ACCOUNTS   68 ALL OBJECTIVES

BTE BTA	3	N		44	4	87	M	H	N	L	15.00	B	R

1147 PERSONNEL   68 ALL OBJECTIVES

BTE BTA	3	Y		30	0	0	L	L	N	L	12.00	E	R

1148 FIXED ASSETS   68 ALL OBJECTIVES

BTE BTA	3	N		34	4	87	M	L	N	L	2.00	A	R

1181 DATA CENTRES   68 ALL OBJECTIVES

BTE BTA	3	N		20	0	0	M	M	M	M	29.00	B	R

1183 SWINDON CABLE LTD   68 ALL OBJECTIVES

BTE BTV	3	N		30	0	0	M	H	N	L	1.00	D	R

1184 COVENTRY CABLE LTD   68 ALL OBJECTIVES

BTE BTV	3	Y		13	0	0	M	H	N	L	1.00	D	R

1101 PAYROLL   68 ALL OBJECTIVES

BTE CEN	3	Y		30	0	0	L	L	L	M	40.00	E	R

1102 ACCOUNTING-CONSOLIDATION   68 ALL OBJECTIVES

BTE CEN	3	N		25	0	0	L	M	N	N	1.00	C	R

1178 DATA CENTRES   68 ALL OBJECTIVES

BTE DN	3	N		20	0	0	M	M	M	M	128.00	B	R

1149 INCOME BILLING-BIPASS   68 ALL OBJECTIVES

BTE DNS	2	Y		33	0	0	M	M	N	L	3.00	B	R

1150 INCOME/BILLING-DISTRICTS   68 ALL OBJECTIVES

BTE DNS	2	Y		30	0	0	M	M	N	L	35.00	B	R

1151 INCOME/BILLING-MANUAL   68 ALL OBJECTIVES

BTE DNS	2	Y		30	0	0	L	M	N	L	48.00	B	R

1152 INCOME-INTER BUS. T.GOLD   68 ALL OBJECTIVES

BTE DNS	2	N		20	0	0	L	L	M	N	23.00	B	R

1153 PURCHASING P.O/CONTRACTS   68 ALL OBJECTIVES

BTE DNS	2	Y		30	0	0	M	L	N	L	46.00	C	R

1154 EXPENDITURE-INTER BUS. T.GOLD   68 ALL OBJECTIVES

BTE DNS	2	N		20	0	0	L	L	M	N	88.00	C	R

1155 PERSONNEL   68 ALL OBJECTIVES

BTE DNS	2	N		30	0	0	L	L	N	L	16.00	E	R

1156 ACCOUNTING-TETRA PLAN   68 ALL OBJECTIVES

BTE DNS	2	N		30	0	0	M	L	N	L	105.00	B	R

1157 FIXED ASSETS   68 ALL OBJECTIVES

BTE DNS	2	N		40	0	0	M	L	N	L	30.00	A	R

1158 STORES   68 ALL OBJECTIVES

BTE DNS	2	N		30	0	0	M	L	N	M	1.00	D	R

```
CODE DESCRIPTION                      BA CONTROL OBJECTIVES
DIV DIS CSA FR MD BUDGET TT YR AC BI IC TF     VALUE VT JT


1180 DATA CENTRES                     68 ALL OBJECTIVES
BTE MC      3  Y    20  0  0  M  M  M  M    169.00  B  R


1120 INCOME/BILLING                   68 ALL OBJECTIVES
BTE MES     3  Y    35  0  0  M  H  N  L     11.00  B  R


1121 INCOME/INTER BUS.T.GOLD          68 ALL OBJECTIVES
BTE MES     3  N    15  0  0  L  L  M  N      6.00  B  R


1122 PURCHASING -TETRA PLAN           68 ALL OBJECTIVES
BTE MES     3  Y    30  0  0  M  L  N  L     11.00  C  R


1123 PAYROLL/PERSONNEL                68 ALL OBJECTIVES
BTE MES     3  N    30  0  0  L  L  N  L      6.00  E  R


1124 ACCOUNTING                       68 ALL OBJECTIVES
BTE MES     3  N    30  0  0  M  H  N  L     11.00  B  R


1125 FIXED ASSETS                     68 ALL OBJECTIVES
BTE MES     3  N    25  0  0  M  L  N  L      1.00  A  R


1126 DIALCOM-USA                      68 ALL OBJECTIVES
BTE MES     3  N    30  2 87  M  H  N  L      1.00  B  R


1177 DATA CENTRES                     68 ALL OBJECTIVES
BTE MES     3  N    20  0  0  M  M  M  M     16.00  B  R


1165 INCOME/BILLING-LEEDS             68 ALL OBJECTIVES
BTE MOC     2  N    40  4 87  M  H  N  L    118.00  B  R


1166 INCOME-INTER BUS. T.GOLD         68 ALL OBJECTIVES
BTE MOC     3  N    20  0 87  L  L  M  N     27.00  B  R


1167 PURCHASING                       68 ALL OBJECTIVES
BTE MOC     3  N    40  0 87  M  L  N  L     53.00  C  R


1168 EXPENDITURE-INTER BUS. T.GOLD    68 ALL OBJECTIVES
BTE MOC     3  N    15  0  0  L  L  M  N     35.00  C  R


1169 PERSONNEL                        68 ALL OBJECTIVES
BTE MOC     3  N    25  0  0  L  L  N  L     16.00  C  R


1170 ACCOUNTING-SUN ACCOUNTS          68 ALL OBJECTIVES
BTE MOC     3  Y    44  0  0  M  H  N  L    118.00  B  R


1171 FIXED ASSETS                     68 ALL OBJECTIVES
BTE MOC     3  N    30  0 87  M  M  N  L      8.00  A  R


1172 STORES                           68 ALL OBJECTIVES
BTE MOC     3  N    30  0 87  M  L  N  M      5.00  D  R


1173 TSCR-SUBSIDIARY/BILLING          68 ALL OBJECTIVES
BTE MOC     3  Y    60  0  0  M  H  N  L     50.00  C  R


1174 BTCR-SUBSIDIARY                  68 ALL OBJECTIVES
BTE MOC     3  N    35  0  0  M  H  N  L      6.00  C  R
```

CODE DESCRIPTION   BA CONTROL OBJECTIVES
DIV DIS CSA FR MD BUDGET TT YR AC BI IC TF   VALUE VT JT

1175 TSCR/FINANCIAL ACCOUNTING   68 ALL OBJECTIVES
BTE MOC   3 Y   30 0 0 M H M L   70.00 C R

1112 PERSONNEL   68 ALL OBJECTIVES
BTE SPE   3 N   35 0 0 L L N L   7.00 E R

1113 CONSOLIDATION   68 ALL OBJECTIVES
BTE SPE   3 Y   15 0 0 M M N L   2.00 C R

1114 SUPERCALL   68 ALL OBJECTIVES
BTE SPE   3 Y   30 0 0 M M N L   12.00 C R

1115 TALKABOUT   68 ALL OBJECTIVES
BTE SPE   3 N   30 0 87 M M M L   15.00 C R

1117 TELECOM RED   68 ALL OBJECTIVES
BTE SPE   3 N   35 0 0 M M N L   4.00 C R

1118 TSL-SUBSIDIARY   68 ALL OBJECTIVES
BTE SPE   3 Y   30 0 0 M H N H   7.00 B R

1182 DATA CENTRES   68 / / / / / / / / /0
BTE SPE   3 N   20 0 0 M M M M   58.00 B R

1127 INCOME/BILLING   68 ALL OBJECTIVES
BTE TMS   3 N   37 2 87 M M N L   11.00 B R

1128 INCOME-INTER BUS. T.GOLD   68 ALL OBJECTIVES
BTE TMS   3 N   15 0 0 L L M N   10.00 B R

1129 PURCHASING   68 ALL OBJECTIVES
BTE TMS   3 N   32 2 87 M L N L   6.00 C R

1130 PAYROLL/PERSONNEL   68 ALL OBJECTIVES
BTE TMS   3 N   32 2 87 L L N L   10.00 E R

1131 ACCOUNTING-SUN ACCOUNTS   68 ALL OBJECTIVES
BTE TMS   3 N   35 0 87 M H N M   10.00 B R

1132 FIXED ASSETS   68 ALL OBJECTIVES
BTE TMS   3 Y   20 0 0 M L N L   2.00 A R

1133 EXPENDITURE-INTER BUS. T.GOLD   68 ALL OBJECTIVES
BTE TMS   3 Y   15 0 0 L L M N   15.00 C R

1103 INCOME/BILLING-SABS   68 ALL OBJECTIVES
BTE VAB   3 N   45 0 85 M H N M   24.00 B R

1104 INCOME/INTER-BUSINESS-T.GOLD   68 ALL OBJECTIVES
BTE VAB   3 N   15 0 0 L L N N   1.00 B R

1105 PURCHASING   68 ALL OBJECTIVES
BTE VAB   3 N   30 0 0 M L N L   15.00 C R

1106 EXPENDITURE-INTER BUS.T.GOLD   68 ALL OBJECTIVES
BTE VAB   3 N   15 0 0 L L M N   3.00 C R

CODE DESCRIPTION   BA CONTROL OBJECTIVES
DIV DIS CSA FR MD BUDGET TT YR AC BI IC TF   VALUE VT JT

1107 ACCOUNTING-FALCON   68 ALL OBJECTIVES
BTE VAB   3 Y   60 0 0 M H N L   24.00 B R

1108 FIXED ASSETS-FALCON   68 ALL OBJECTIVES
BTE VAB   3 N   25 0 0 M L N L   2.00 A R

1109 STORES-FALCON   68 ALL OBJECTIVES
BTE VAB   3 N   25 0 0 M L N L   1.00 D R

1110 PERSONNEL   68 ALL OBJECTIVES
BTE VAB   3 N   25 0 0 L L M L   8.00 E R

1176 DATA CENTRES   68 ALL OBJECTIVES
BTE VAB   3 N   20 0 0 M M M M   25.00 B R

1134 INCOME/BILLING   68 ALL OBJECTIVES
BTE YEP   3 Y   52 2 86 M H N L   170.00 B R

1135 INCOME-INTER BUS. T.GOLD   68 ALL OBJECTIVES
BTE YEP   3 N   15 0 0 L L M N   4.00 B R

1136 PURCHASING   68 ALL OBJECTIVES
BTE YEP   3 N   35 0 87 L L N L   4.00 C R

1137 PURCHASING-CONTRACTS   68 ALL OBJECTIVES
BTE YEP   3 N   37 2 0 M M N M   48.00 C R

1138 EXPENDITURE-INTER BUS. T.GOLD   68 ALL OBJECTIVES
BTE YEP   3 N   15 0 87 L L M N   18.00 C R

1139 ACCOUNTING-SUN ACCOUNTS   68 ALL OBJECTIVES
BTE YEP   2 N   42 2 86 M H N L   170.00 B R

1140 FIXED ASSETS-TETRA PLAN   68 ALL OBJECTIVES
BTE YEP   3 Y   22 2 0 M L N L   5.00 A R

1141 PERSONNEL   68 ALL OBJECTIVES
BTE YEP   3 N   27 2 0 L L N L   10.00 E R

1202 ISAACS (INTL SETTLEMENTS)   64 ALL OBJECTIVES
BTI   3 N   42 0 87 M H M M   500.00 B R

1203 ITALICS (INTL TELEX)   64 ALL OBJECTIVES
BTI   3 N   20 0 87 M M L M   200.00 B R

1207 STAR (SATELLITE TRAFFIC ACCT)   64 ALL OBJECTIVES
BTI   3 N   20 0 86 M L L M   20.00 B R

1209 PRICING   64 ALL OBJECTIVES
BTI   4 N   25 0 0 H H L L   1.00 B R

1216 AP (ACCOUNTS PAYABLE)   64 ALL OBJECTIVES
BTI   3 N   25 0 87 M M M M   18.00 C R

1217 CONTRACTS   64 ALL OBJECTIVES
BTI   3 N   20 0 85 M H M H   1.00 C R

CODE DESCRIPTION   BA CONTROL OBJECTIVES
DIV DIS CSA FR MD BUDGET TT YR AC BI IC TF   VALUE VT JT

1218 LOCAL PURCHASES   64 ALL OBJECTIVES
BTI   4 N   20 0 86 L M M M   12.00 C R

1223 TRAVEL & SUBSISTENCE   64 ALL OBJECTIVES
BTI   3 N   20 0 86 L M L M   7.00 C R

1229 CATERING   64 ALL OBJECTIVES
BTI   4 N   25 0 86 L L M M   1.00 C R

1230 OVERHEAD ALLOCATION   64 ALL OBJECTIVES
BTI   3 Y   25 0 0 M M L L   59.00 C R

1231 TRAINING   64 ALL OBJECTIVES
BTI   4 N   20 2 0 L L M M   3.00 C R

1236 FIXED ASSETS   64 ALL OBJECTIVES
BTI   3 Y   25 0 86 M H M M   100.00 A R

1237 PROJECT ACCOUNTING   64 ALL OBJECTIVES
BTI   3 Y   20 0 85 M M L M   35.00 C R

1238 CAPITAL INVESTMENT APPRAISAL   64 ALL OBJECTIVES
BTI   3 N   35 0 87 M M L M   100.00 A R

1241 STORES   64 ALL OBJECTIVES
BTI   3 N   23 2 86 M M M M   5.00 D R

1251 TRANSFER CHARGING   64 ALL OBJECTIVES
BTI   3 N   25 0 87 M M M L   900.00 C R

1252 GL;M (GENERAL LEDGER)   64 ALL OBJECTIVES
BTI   3 N   20 0 85 M H M L   700.00 B R

1253 YEAR END REPORTING   64 ALL OBJECTIVES
BTI   1 Y   20 0 87 M H M L   600.00 B R

1254 BUDGETTING & FORECASTING   64 ALL OBJECTIVES
BTI   3 N   25 0 0 M H L L   1.00 B R

1264 BTI SUMMARY REPORTS   64 ALL OBJECTIVES
BTI   1 Y   10 0 0 L H N L   1.00 C R

1246 DOMESTIC CASHIERS   64 ALL OBJECTIVES
BTI CF   3 N   15 0 86 L M M H   1.00 C R

1247 COMMERCIAL CASHIERS   64 ALL OBJECTIVES
BTI CF   3 N   15 0 86 L M M H   1.00 C R

1221 PAY AND PERSONNEL   64 ALL OBJECTIVES
BTI CFD   3 N   25 0 0 M M M M   250.00 E R

1226 EMD (ESTATES MANAGEMENT)   64 ALL OBJECTIVES
BTI EMD   3 N   30 0 87 M M M H   44.00 C R

1256 BT MARINE LOCATION AUDIT   64 ALL OBJECTIVES
BTI MAR   2 N   30 2 87 M L M M   1.00 B R

```
CODE DESCRIPTION                         BA CONTROL OBJECTIVES
DIV DIS CSA FR MD BUDGET TT YR AC BI IC TF    VALUE VT JT


1227 MSD (MARKETING SERVICES)            64 ALL OBJECTIVES
BTI MSD      3  N    20  0 86  M  M  M  M     16.00  C  R


1222 PAY AND PERSONNEL (OP)              64 ALL OBJECTIVES
BTI OP  EH   3  N    25  0 87  M  M  M  M    172.00  E  R


1208 INTL 0800 BILLING                   64 ALL OBJECTIVES
BTI PD       3  N    15  0  0  M  M  L  M      3.00  B  R


1201 INTL PRIVATE LEASED CIRCUITS        64 ALL OBJECTIVES
BTI PS       3  N    20  0 85  M  M  L  M     94.00  B  R


1204 BABS (BROADCAST ACCTS/BILLING)      64 ALL OBJECTIVES
BTI PSP      3  N    20  0 87  M  L  M  L     18.00  B  R


1206 COMBS (MARITIME BILLING)            64 ALL OBJECTIVES
BTI PSP      3  N    20  0 85  M  L  M  M     35.00  B  R


1228 SALES DIV (SD)                      64 ALL OBJECTIVES
BTI SD       3  N    25  0 87  M  M  M  M      2.00  C  R


1239 SATELLITE INVESTMENTS               64 ALL OBJECTIVES
BTI SL       3  N    25  0 87  M  M  L  M    120.00  A  R


1259 LONDON TELEPORT                     64 ALL OBJECTIVES
BTI SL       5  N    20  0  0  M  M  N  L      1.00  C  R


1260 ABERDEEN EARTH STATION              64 ALL OBJECTIVES
BTI SL  ABD  5  N    20  5  0  M  L  N  L      1.00  C  R


1257 GOONHILLY                           64 ALL OBJECTIVES
BTI SL  GHL  4  N    30  4 87  M  M  M  L      1.00  C  R


1258 MADLEY EARTH STATION                64 ALL OBJECTIVES
BTI SL  MDY  4  N    25  5  0  M  L  N  L      1.00  C  R


4047 MANAGEMENT ACCOUNTING               71 ALL OBJECTIVES
CCD CAB      3  Y    20  0  0  M  M  N  N      0.40  C  R


4049 INVESTMENT ANALYSIS                 71 ALL OBJECTIVES
CCD CAI      3  N    20  0  0  H  H  N  N      1.00  B  R


4052 INTERCONN.POLICY                    71 ALL OBJECTIVES
CCD CAM      3  N    20  0  0  H  H  N  N      0.20  C  R


4048 PLANNING                            71 ALL OBJECTIVES
CCD CAP      3  N    20  0  0  H  H  N  N      0.20  C  R


4051 PRICING POLICY                      71 ALL OBJECTIVES
CCD CAP      3  N    30  0  0  H  H  N  N      0.10  C  R


4050 COMMERCIAL REGULATION               71 ALL OBJECTIVES
CCD CAR      3  N     5  0  0  H  H  N  N      0.10  C  R


4053 COMM.REG.ANALYSIS                   71 ALL OBJECTIVES
CCD CRA      3  N    20  0  0  H  H  N  N      1.00  D  R
```

```
CODE DESCRIPTION                    BA CONTROL OBJECTIVES
DIV DIS CSA FR MD BUDGET TT YR AC BI IC TF    VALUE VT JT


4059 CORPORATE STRATEGY UNIT           71 ALL OBJECTIVES
CCD CST      3  N    15  0  0  H  H  N  N      4.00  B  R


4054 ECONOMIC ADVISORY DIVISION        71 ALL OBJECTIVES
CCD EAD      3  N    20  0  0  H  H  N  N      0.40  C  R


4058 EURODATA FOUNDATION               71 ALL OBJECTIVES
CCD EUF      3  N    10  0  0  L  L  N  L      1.00  A  R


4055 COMPUTER INTEGRITY                71 ALL OBJECTIVES
CCD IPU      3  Y    15  0 85  L  L  L  L      8.00  B  R


4056 REVENUE ACCOUNTING                71 ALL OBJECTIVES
CCD IPU      3  Y    20  0 85  L  L  L  L      5.00  B  R


4060 MSCU                              71 ALL OBJECTIVES
CCD MSC      3  N    20  0  0  H  M  N  N      2.00  E  R


4057 OVERSEAS CO-ORDINATION UNIT       71 ALL OBJECTIVES
CCD OCU      3  N    15  0  0  L  L  N  L      4.00  C  R


4001 PLANMASTER CONSOLIDATION          71 ALL OBJECTIVES
CFD F1       3  N    20  0 86  H  H  H  L      2.50  E  R


4002 STERLING DEALING                  71 ALL OBJECTIVES
CFD F2       3  N    10  0 87  M  H  L  H      2.00  C  R


4003 MANSION PLACE LEASING             71 ALL OBJECTIVES
CFD F2       3  Y    20  0 87  H  H  N  H      2.00  C  R


4004 COMMERCIAL PAPER                  71 ALL OBJECTIVES
CFD F2       3  N    30  0 86  H  H  L  H      2.00  C  R


4005 CASHIERS                          71 ALL OBJECTIVES
CFD F2       3  N    20  0 87  H  H  M  H   9999.00  C  R


4006 PERIOD END ACCOUNTS               71 ALL OBJECTIVES
CFD F2       3  Y    10  0 87  M  L  M  L      2.00  C  R


4007 MANAGEMENT ACCOUNTS               71 ALL OBJECTIVES
CFD F2       3  N     5  0  0  L  L  M  L      2.00  C  R


4149 FOREIGN CURRENCY EXPOSURE         71 ALL OBJECTIVES
CFD F2       3  Y    30  0  0  H  H  M  L   9999.00  B  R


4008 OPERATIONAL AUDIT                 71 ALL OBJECTIVES
CFD F3       3  N     5  0  0  L  L  N  L      0.40  E  R


4009 MANAGEMENT ACCOUNTING             71 ALL OBJECTIVES
CFD F6       3  N    20  0  0  M  M  M  L      1.30  E  R


4010 GATIS                             71 ALL OBJECTIVES
CFD F7       3  N    10  0  0  H  H  N  L      0.30  E  R


4011 CORPORATION TAX                   71 ALL OBJECTIVES
CFD F8       3  N    20  4  0  H  H  N  L      0.70  E  R
```

```
CODE DESCRIPTION                          BA CONTROL OBJECTIVES
DIV DIS CSA FR MD BUDGET TT YR AC BI IC TF     VALUE VT JT


4012 PERSONAL TAX                         71 ALL OBJECTIVES
CFD F8      3  N    20 0 20  H  H  L  L      0.70  E  R


4013 VAT                                  71 ALL OBJECTIVES
CFD F8      3  Y    30 0 84  M  H  N  L      0.70  E  R


4014 INVESTOR RELATIONS                   71 ALL OBJECTIVES
CFD F9      3  N    10 0  0  M  M  N  L      0.20  E  R


4097 INTERNAL AUDIT DIVISION              71 ALL OBJECTIVES
CFD IAD     3  N    15 2  0  L  L  N  M      5.00  E  R


4015 OPERATIONAL AUDIT RMID               71 ALL OBJECTIVES
CFD RMI     3  N    30 0 87  H  L  L  L      0.50  E  R


4046 MARKETING IN IPD                     69 ALL OBJECTIVES
IPD ALL     3  N    50 2  0  H  H  N  L      1.00  B  R


4153 IPD OVERVIEW REPORTS                 69 ALL OBJECTIVES
IPD ALL     1  Y    10 0  0  M  H  N  N      1.00  D  R


4061 DIRECT INCOME                        69 ALL OBJECTIVES
IPD CBP     3  Y    20 1 85  M  M  L  M      1.00  B  R


4016 YEAR END ACCOUNTS                    69 ALL OBJECTIVES
IPD FIN HQ  3  Y    15 0  0  M  L  N  N      0.25  E  R


4083 SALES ORDER PROCESSING              69 ALL OBJECTIVES
IPD IS GAP 3  Y    10 2  0  M  M  N  M      8.80  B  R


4084 PROCUREMENT                          69 ALL OBJECTIVES
IPD IS GAP 3  N    20 2  0  M  M  N  M      7.60  C  R


4085 INVENTORY CONTROL                    69 ALL OBJECTIVES
IPD IS GAP 3  Y    15 2  0  M  L  N  M      1.00  D  R


4086 MANAGEMENT ACCOUNTS                  69 ALL OBJECTIVES
IPD IS GAP 3  N    10 2  0  M  L  N  L      8.80  B  R


4087 PROJECT CONTROL                      69 ALL OBJECTIVES
IPD IS GAP 3  N    20 2  0  H  M  N  L      8.80  B  R


4092 SALES ORDER PROCESSING              69 ALL OBJECTIVES
IPD IS IS  3  Y    10 1  0  M  L  N  M      7.50  B  R


4095 INVENTORY CONTROL                    69 ALL OBJECTIVES
IPD ITS IS 3  Y     5 1  0  M  L  N  M      1.00  D  R


4062 PROCUREMENT                          69 ALL OBJECTIVES
IPD ITS CBP 3 Y    20 1 85  M  M  L  M      1.00  C  R


4063 INVENTORY CONTROL                    69 ALL OBJECTIVES
IPD ITS CBP 3 Y    30 1 85  M  M  L  H      1.00  D  R


4064 FIXED ASSETS                         69 ALL OBJECTIVES
IPD ITS CBP 3 N    20 1  0  M  L  L  L      1.00  A  R
```

CODE DESCRIPTION   BA CONTROL OBJECTIVES
DIV DIS CSA FR MD BUDGET TT YR AC BI IC TF   VALUE VT JT

4065 FINANCIAL ACCOUNTING   69 ALL OBJECTIVES
IPD ITS CBP 3 N   20 1 85 M M L N   1.00 B R

4066 MANAGEMENT ACCOUNTING   69 ALL OBJECTIVES
IPD ITS CBP 3 N   30 1 85 H M L N   1.00 B R

4067 COMPUTER INTEGRITY   69 ALL OBJECTIVES
IPD ITS CBP 3 N   15 1 85 H M L L   1.00 B R

4068 PERSONNEL   69 ALL OBJECTIVES
IPD ITS CBP 3 N   10 1 0 L L L L   1.00 E R

4069 ACCOUNTS PAYABLE   69 ALL OBJECTIVES
IPD ITS CBP 3 N   20 1 0 L M L M   1.00 C R

4093 PROCUREMENT   69 ALL OBJECTIVES
IPD ITS IS   3 N   10 0 0 M L N M   26.00 C R

4094 MANAGEMENT ACCOUNTS   69 ALL OBJECTIVES
IPD ITS IS   3 N   5 1 0 M L N L   7.50 B R

4096 PROJECT CONTROL   69 ALL OBJECTIVES
IPD ITS IS   3 N   10 1 0 H M N L   7.50 B R

4128 SALES ORDER PROCESSING   69 ALL OBJECTIVES
IPD NPO BMF 3 N   30 3 87 M M L M   38.00 B R

4129 INVENTORY CONTROL   69 ALL OBJECTIVES
IPD NPO BMF 3 Y   30 3 0 M M N H   13.00 D R

4130 MANAGEMENT ACCOUNTS   69 ALL OBJECTIVES
IPD NPO BMF 3 N   30 3 86 M L L L   38.00 B R

4131 FINANCIAL ACCOUNTS   69 ALL OBJECTIVES
IPD NPO BMF 3 N   30 3 84 M M L L   38.00 B R

4132 PAYROLL/PERSONNEL (INC T&S)   69 ALL OBJECTIVES
IPD NPO BMF 3 N   40 4 85 M M L M   7.30 E R

4133 PROCUREMENT   69 ALL OBJECTIVES
IPD NPO BMF 3 Y   30 3 86 M M L M   21.00 C R

4134 FIXED ASSETS   69 ALL OBJECTIVES
IPD NPO BMF 3 N   20 2 84 M L L L   17.60 A R

4135 ACCOUNTS PAYABLE INC CASH/BNK   69 ALL OBJECTIVES
IPD NPO BMF 3 N   20 2 86 M M L M   21.00 C R

4136 PRODUCTION CONTROL   69 ALL OBJECTIVES
IPD NPO BMF 3 N   30 3 0 H M L L   38.00 B R

4137 COMPUTER INTEGRITY   69 ALL OBJECTIVES
IPD NPO BMF 3 N   25 2 0 H M L L   38.00 B R

4037 SALES/ORDER PROCESSING   69 ALL OBJECTIVES
IPD NPO CE   3 Y   15 2 0 L L N M   1.00 B JT

CODE DESCRIPTION   BA CONTROL OBJECTIVES
DIV DIS CSA FR MD BUDGET TT YR AC BI IC TF   VALUE VT JT

Code	Description	DIV	DIS	CSA	FR	MD	BUDGET	TT	YR	AC	BI	IC	TF	BA	Control Objectives	VALUE	VT	JT
4038	PAYROLL/PERSONNEL	IPD	NPO	CE	3	N	20	2	0	L	L	L	H	69	ALL OBJECTIVES	1.00	E	R
4039	PROCUREMENT	IPD	NPO	CE	3	Y	20	2	0	M	L	N	M	69	ALL OBJECTIVES	1.00	C	R
4040	ACCOUNTS PAYABLE	IPD	NPO	CE	3	N	10	1	0	L	L	N	H	69	ALL OBJECTIVES	1.00	C	R
4041	INVENTORY CONTROL	IPD	NPO	CE	3	Y	20	2	87	M	M	N	H	69	ALL OBJECTIVES	1.00	D	R
4042	FIXED ASSETS	IPD	NPO	CE	3	N	20	2	0	M	L	N	L	69	ALL OBJECTIVES	1.00	A	R
4043	FINANCIAL ACCOUNTING	IPD	NPO	CE	3	N	20	2	0	H	M	N	L	69	ALL OBJECTIVES	22.00	B	R
4044	MANAGEMENT ACCOUNTING	IPD	NPO	CE	3	N	20	2	0	M	L	N	N	69	ALL OBJECTIVES	22.00	B	R
4045	COMPUTER INTEGRITY	IPD	NPO	CE	3	Y	15	2	0	H	L	N	L	69	ALL OBJECTIVES	1.00	B	R
4147	EDINBURGH FACTORY	IPD	NPO	EDF	3	N	25	2	0	M	L	N	M	69	ALL OBJECTIVES	1.00	B	R
4138	SALES ORDER PROCESSING	IPD	NPO	ENF	3	Y	20	1	0	M	L	N	M	69	ALL OBJECTIVES	44.00	B	R
4139	INVENTORY CONTROL	IPD	NPO	ENF	3	Y	25	1	86	M	M	L	M	69	ALL OBJECTIVES	10.00	D	R
4140	MANAGEMENT ACCOUNTS	IPD	NPO	ENF	3	N	20	1	87	M	L	M	L	60	ALL OBJECTIVES	44.00	B	R
4141	PROCUREMENT	IPD	NPO	ENF	3	Y	20	1	86	M	M	L	M	69	ALL OBJECTIVES	1.00	C	R
4142	ACCOUNTS PAYABLE	IPD	NPO	ENF	3	N	20	1	86	M	M	L	M	69	ALL OBJECTIVES	1.00	C	R
4143	FIXED ASSETS	IPD	NPO	ENF	3	N	20	1	86	M	M	M	L	69	ALL OBJECTIVES	24.00	A	R
4144	PRODUCTION CONTROL	IPD	NPO	ENF	3	N	30	2	0	H	M	N	L	69	ALL OBJECTIVES	44.00	B	R
4145	FINANCIAL ACCOUNTING	IPD	NPO	ENF	3	N	20	1	86	M	M	M	L	69	ALL OBJECTIVES	44.00	B	R
4148	COMPUTER INTEGRITY	IPD	NPO	ENF	3	N	25	1	87	H	M	L	L	69	ALL OBJECTIVES	44.00	B	R
4146	FULCRUM HQ MISC	IPD	NPO	HQ	3	N	20	0	0	M	M	N	L	69	ALL OBJECTIVES	1.00	B	R

CODE DESCRIPTION   BA CONTROL OBJECTIVES
DIV DIS CSA FR MD BUDGET TT YR AC BI IC TF   VALUE VT JT

4017 PERSONNEL   69 ALL OBJECTIVES
IPD PER HQ 3 N   10 0 85 L L L L   0.20 E R

4018 PROCUREMENT   69 ALL OBJECTIVES
IPD PRO HQ 3 Y   30 4 86 M L L H   8.60 C R

4019 PROCUREMENT ADMINISTRATION   69 ALL OBJECTIVES
IPD PRO HQ 3 Y   30 0 86 M L L L   8.60 C R

4020 STRATEGY & CO-ORDINATION   69 ALL OBJECTIVES
IPD S&C HQ 3 N   10 0 0 H M L N   0.20 E R

4032 SALES ORDER PROCESSING   69 ALL OBJECTIVES
IPD TS CTP 3 Y   10 0 0 L L N M   0.30 B R

4033 PROCUREMENT   69 ALL OBJECTIVES
IPD TS CTP 3 Y   20 0 0 L L L M   1.00 C R

4034 STOCK MANAGEMENT   69 ALL OBJECTIVES
IPD TS CTP 3 Y   10 0 0 L L N M   1.00 D R

4035 FIXED ASSETS   69 ALL OBJECTIVES
IPD TS CTP 3 N   5 0 0 L L L L   1.00 A R

4036 MANAGEMENT ACCOUNTS   69 ALL OBJECTIVES
IPD TS CTP 3 N   20 0 0 M L L N   1.00 B R

4075 SALES ORDER PROCESSING   69 ALL OBJECTIVES
IPD TS DCM 3 Y   20 0 0 M M N M   5.50 B R

4076 PROCUREMENT   69 ALL OBJECTIVES
IPD TS DCM 3 Y   20 0 0 M M N M   50.00 C R

4077 ACCOUNTS PAYABLE   69 ALL OBJECTIVES
IPD TS DCM 3 N   10 0 86 M M N M   50.00 C R

4078 STOCK MANAGEMENT   69 ALL OBJECTIVES
IPD TS DCM 3 N   20 3 87 M M L M   7.60 D R

4079 FINANCIAL ACCOUNTING MSAGL   69 ALL OBJECTIVES
IPD TS DCM 3 N   20 0 86 M L N L   55.80 B R

4080 MANAGEMENT ACCOUNTING   69 ALL OBJECTIVES
IPD TS DCM 3 N   20 0 0 M L N L   55.80 B R

4081 FIXED ASSETS   69 ALL OBJECTIVES
IPD TS DCM 3 N   10 0 0 M L N L   1.25 A R

4082 COMPUTER INTEGRITY   69 ALL OBJECTIVES
IPD TS DCM 3 N   20 0 0 H M N L   55.80 B R

4151 INVENTORY ACCOUNTING   69 ALL OBJECTIVES
IPD TS HQ 3 Y   30 0 0 M L M L   1.00 D R

4152 SALES LEDGER/INVOICING   69 ALL OBJECTIVES
IPD TS HQ 3 Y   30 0 0 L L M M   1.00 D R

```
CODE DESCRIPTION                          BA CONTROL OBJECTIVES
DIV DIS CSA FR MD BUDGET TT YR AC BI IC TF     VALUE VT JT


4088 SALES ORDER PROCESSING               69 ALL OBJECTIVES
IPD TS PUB  3  Y      5  1  0  M  L  N  M      1.00  B  R

4089 STOCK MANAGEMENT                     69 ALL OBJECTIVES
IPD TS PUB  3  Y      5  1  0  M  L  N  M      0.50  D  R

4090 PROCUREMENT                          69 ALL OBJECTIVES
IPD TS PUB  3  N     10  2  0  L  L  N  M      1.00  C  R

4091 MANAGEMENT ACCOUNTS                  69 ALL OBJECTIVES
IPD TS PUB  3  N      5  1  0  L  L  N  L      1.00  B  R

4070 SALES ORDER PROCESSING               69 ALL OBJECTIVES
IPD TS SP   3  Y     10  0  0  M  L  N  M      1.28  B  R

4071 PROCUREMENT                          69 ALL OBJECTIVES
IPD TS SP   3  N     20  0  0  L  L  N  M     23.00  C  R

4072 STOCK MANAGEMENT                     69 ALL OBJECTIVES
IPD TS SP   3  Y     20  3 87  M  L  L  M      7.00  D  R

4073 FIXED ASSETS                         69 ALL OBJECTIVES
IPD TS SP   3  N     10  0  0  M  L  N  L      0.50  A  R

4074 ACCOUNTS,MANAGEMENT/FINANCIAL        69 ALL OBJECTIVES
IPD TS SP   3  N     20  0  0  M  L  N  L     28.00  B  R

4021 DIRECT INCOME                        69 ALL OBJECTIVES
IPD TTD     3  N     20  0  0  M  H  L  M     17.00  B  R

4022 PURCHASING                           69 ALL OBJECTIVES
IPD TTD     3  N     30  0  0  M  L  L  M      1.00  D  R

4023 INVENTORY CONTROL                    69 ALL OBJECTIVES
IPD TTD     3  N     25  2  0  L  M  L  H      1.00  D  R

4024 FIXED ASSETS                         69 ALL OBJECTIVES
IPD TTD     3  N     10  0  0  M  L  L  L      1.00  A  R

4025 FINANCIAL ACCOUNTS (HPFA)            69 ALL OBJECTIVES
IPD TTD     3  N     30  0 87  M  L  L  L     17.00  B  R

4026 MANAGEMENT ACCTS INC TR CHGING       69 ALL OBJECTIVES
IPD TTD     3  N     10  0  0  M  L  L  N     17.00  B  R

4027 COMPUTER INTEGRITY                   69 ALL OBJECTIVES
IPD TTD     3  N     20  0 87  H  L  L  L     17.00  B  R

4028 FOREIGN SUBS-FRANKFURT               69 ALL OBJECTIVES
IPD TTD     3  N     30  4 87  H  H  N  M      1.00  B  R

4029 ACCOUNTS PAYABLE                     69 ALL OBJECTIVES
IPD TTD     3  N     10  0 87  L  L  L  M      1.00  C  R

4030 SUBSIDIARY- PARIS                    69 ALL OBJECTIVES
IPD TTD     3  N     30  4 87  H  H  L  M      1.00  B  R
```

CODE DESCRIPTION   BA CONTROL OBJECTIVES
DIV DIS CSA FR MD BUDGET TT YR AC BI IC TF   VALUE VT JT

4031 SUBSIDIARY - AUSTRALIA   69 ALL OBJECTIVES
IPD TTD   3 N   30 4 87 H H L M   1.00 B R

3025 INCOME - SALES LEDGER   66 ALL OBJECTIVES
ME   3 Y   30 4 0 L L H M   15.00 B R

3026 PURCHASING - SUPD/MSA   66 ALL OBJECTIVES
ME   3 Y   60 8 0 H H L H   463.00 C R

3027 MSP CONTRACTS-EXCHANGE EQUIP   66 ALL OBJECTIVES
ME   3 Y   60 8 0 M H H H   1.00 C R

3028 MSP CONTRACTS - OTHER   66 ALL OBJECTIVES
ME   3 Y   30 4 0 M H H H   1.00 C R

3029 PURCHASING - LOCAL PURCHASING   66 ALL OBJECTIVES
ME   3 N   20 3 0 L L H H   1.00 C R

3030 MANPOWER   66 ALL OBJECTIVES
ME   3 Y   40 6 0 L H H M   59.00 E R

3031 FIXED ASSETS REGISTERS   66 ALL OBJECTIVES
ME   3 N   20 2 0 L L H N   14.00 A R

3032 GL MILLENIUM   66 ALL OBJECTIVES
ME   2 N   30 4 0 M H H L   500.00 C R

3033 ACCOUNTS PAYABLE PHASE 1.2   66 ALL OBJECTIVES
ME   3 Y   40 4 0 M M M M   50.00 C R

3034 TRANSFER CHARGING   66 ALL OBJECTIVES
ME   3 Y   15 2 0 M H M L   889.00 C R

3035 MGMT ACCOUNTS/BUDGETRY CNTL   66 ALL OBJECTIVES
ME   3 N   40 4 0 H H M L   10.00 B R

3036 YEAR END   66 ALL OBJECTIVES
ME   1 Y   15 2 87 L H H L   92.00 C R

3037 MSA III POST IMP   66 ALL OBJECTIVES
ME   3 N   45 9 0 M H L H   463.00 C R

3038 AFSTA / STOCKTAKING   66 ALL OBJECTIVES
ME   3 N   30 4 87 M H L H   1.00 D R

3039 INTERFACE UKC STORES SYSTEMS   66 ALL OBJECTIVES
ME   3 N   20 4 0 M H M H   123.00 C R

3040 GOPS / KEYS INDICATORS   66 ALL OBJECTIVES
ME   3 Y   40 8 0 H H L H   1.00 C R

3041 CABLE DRUMS   66 ALL OBJECTIVES
ME   3 N   15 2 0 L L M N   3.00 B R

3042 STOCKING POLICY   66 ALL OBJECTIVES
ME   3 N   30 4 0 H H N M   1.00 C R

CODE DESCRIPTION   BA CONTROL OBJECTIVES
DIV DIS CSA FR MD BUDGET TT YR AC BI IC TF   VALUE VT JT

3043 STOCK VALUATION   66 ALL OBJECTIVES

DIV	DIS	CSA	FR	MD	BUDGET	TT	YR	AC	BI	IC	TF	VALUE	VT	JT
ME			3	N		10	1	0	M	H	H	N	172.00	D	R

3044 PEXOS PROVISION   66 ALL OBJECTIVES

| ME | | | 3 | N | | 15 | 2 | 0 | M | L | M | N | 27.00 | C | R |

3045 PEXOS WRITE OFFS   66 ALL OBJECTIVES

| ME | | | 3 | N | | 10 | 1 | 0 | L | M | M | L | 9.00 | C | R |

3046 SCORE ACCOUNTING   66 ALL OBJECTIVES

| ME | | | 3 | N | | 10 | 1 | 0 | M | H | H | N | 172.00 | D | R |

3047 SCORE LDS INTERFACE   66 ALL OBJECTIVES

| ME | | | 3 | Y | | 30 | 4 | 0 | H | H | L | N | 172.00 | D | R |

3048 DIRECT DISTRIBUTION   66 ALL OBJECTIVES

| ME | | | 3 | N | | 20 | 4 | 0 | M | H | L | H | 71.00 | C | R |

3049 DIRECT DELIVERY CWM   66 ALL OBJECTIVES

| ME | | | 3 | N | | 30 | 4 | 0 | M | H | L | H | 11.00 | C | R |

3050 DIRECT DELIVERY CABLE   66 ALL OBJECTIVES

| ME | | | 3 | N | | 30 | 4 | 0 | M | H | L | H | 24.00 | C | R |

3051 DIRECT DELIVERY POLES   66 ALL OBJECTIVES

| ME | | | 3 | N | | 10 | 1 | 0 | M | H | L | H | 5.00 | C | R |

3053 SECURITY   66 ALL OBJECTIVES

| ME | | | 3 | N | | 10 | 2 | 0 | M | H | M | M | 1.00 | C | R |

3052 CATERING   66 ALL OBJECTIVES

| ME | | | 5 | N | | 5 | 0 | 0 | L | L | M | M | 1.00 | C | R |

3054 OTHER OPERATING COSTS   66 ALL OBJECTIVES

| ME | | | 3 | N | | 30 | 4 | 0 | H | H | N | H | 8.00 | C | R |

3055 REPROGRAPHICS   66 ALL OBJECTIVES

| ME | | | 3 | N | | 30 | 0 | 87 | M | L | M | M | 17.00 | C | R |

3056 TRANSPORT DIVISION   66 ALL OBJECTIVES

| ME | | | 3 | Y | | 30 | 4 | 0 | M | H | M | L | 12.00 | C | R |

3057 CASHIERS + T&S   66 ALL OBJECTIVES

| ME | | | 3 | N | | 30 | 4 | 86 | L | L | H | H | 465.00 | C | R |

3058 TRANSHIPMENTS   66 ALL OBJECTIVES

| ME | | | 3 | Y | | 20 | 4 | 0 | M | M | M | M | 1.00 | C | R |

3059 PHONECARDS   66 ALL OBJECTIVES

| ME | | | 3 | Y | | 30 | 6 | 0 | M | H | M | H | 60.00 | D | R |

3060 ESTATES MANAGEMENT   66 ALL OBJECTIVES

| ME | | | 3 | Y | | 30 | 4 | 0 | M | L | M | L | 1.00 | C | R |

3067 DEPOT ISSUES   66 ALL OBJECTIVES

| ME | BD | | 3 | N | | 35 | 6 | 86 | M | H | M | H | 84.00 | B | R |

```
CODE DESCRIPTION                          BA CONTROL OBJECTIVES
DIV DIS CSA FR MD BUDGET TT YR AC BI IC TF    VALUE VT JT


3068 DEPOT RECEIPTS NTHA D                66 ALL OBJECTIVES
ME      BD  3  Y     35 6 86  L  H  M  H      60.00  B  R


3069 STOCKTAKING                          66 ALL OBJECTIVES
ME      BD  3  Y     20 6 86  L  H  M  H      43.00  D  R


3070 STOCK DISCREPANCY CASES              66 ALL OBJECTIVES
ME      BD  3  N     10 4 86  M  L  M  H       1.00  C  R


3071 SALVAGE RETURNS/DISPOSALS            66 ALL OBJECTIVES
ME      BD  3  N     10 4 87  M  H  L  H       2.00  B  R


3072 DEPOTS OTHERS                        66 ALL OBJECTIVES
ME      BD  3  N     20 6  0  M  L  M  L       4.00  C  R


3065 SALVAGE RETURNS/DISPOSALS            66 ALL OBJECTIVES
ME      CD  3  N     10 2 87  M  H  L  H       3.00  B  R


3061 DEPOT ISSUES CRAYFORD                66 ALL OBJECTIVES
ME      CD  3  Y     32 3 86  M  H  M  H     130.00  B  R


3062 DEPOT RECEIPTS                       66 ALL OBJECTIVES
ME      CD  3  N     35 3 86  L  H  M  H      98.00  B  R


3063 STOCKTAKING                          66 ALL OBJECTIVES
ME      CD  3  N     20 3 87  L  H  M  H      58.00  D  R


3064 STOCK DISCREPANCY CASES              66 ALL OBJECTIVES
ME      CD  3  N     10 2 86  M  L  M  H       1.00  C  R


3066 DEPOT OTHER                          66 ALL OBJECTIVES
ME      CD  3  N     20 4  0  M  L  M  L       5.00  C  R


3073 DEPOT ISSUES NTHA D                  66 ALL OBJECTIVES
ME      ND  3  N     35 6 85  M  H  M  H      52.00  B  R


3074 DEPOT RECEIPTS CRAYFORD              66 ALL OBJECTIVES
ME      ND  3  N     32 6 85  L  H  M  H      50.00  B  R


3075 STOCKTAKING                          66 ALL OBJECTIVES
ME      ND  3  N     20 6 85  L  H  M  H      26.00  D  R


3076 STOCK DISCREPANCY CASES              66 ALL OBJECTIVES
ME      ND  3  N     10 4 86  M  L  M  H       1.00  C  R


3077 SALVAGE RETURNS/DISPOSALS            66 ALL OBJECTIVES
ME      ND  3  N     10 4 87  M  H  L  H       2.00  B  R


3078 DEPOT OTHERS                         66 ALL OBJECTIVES
ME      ND  3  Y     20 6  0  M  L  M  L       2.00  C  R


1268 BILLING · COMMERCIAL                 65 ALL OBJECTIVES
OO  COM STH 3  N     20 5  0  M  M  M  M       3.00  B  R


1287 TRAINING                             65 ALL OBJECTIVES
OO  IAL     4  N     15 3  0  L  L  M  M       1.00  C  R
```

CODE DESCRIPTION   BA CONTROL OBJECTIVES
DIV DIS CSA FR MD BUDGET TT YR AC BI IC TF   VALUE VT JT

1290 FIXED ASSETS   65 ALL OBJECTIVES
OO IAL   3 N   20 5 0 M M M M   1.00 A R

1297 IAL OVERSEAS TRIPS   65 ALL OBJECTIVES
OO IAL   3 N   20 4 0 M L M M   1.00 C R

1298 ADAMS IAL   65 ALL OBJECTIVES
OO IAL ADS 3 N   20 5 0 M M M M   1.00 C R

1288 BAILBROOK COLLEGE   65 ALL OBJECTIVES
OO IAL BAI 4 N   20 4 0 M L M M   1.00 C R

1289 CRANFIELD COLLEGE   65 ALL OBJECTIVES
OO IAL CR 4 N   15 3 0 M M M M   1.00 C R

1266 BILLING SERVICES DIV   65 ALL OBJECTIVES
OO IAL STH 3 N   20 5 0 M M M M   41.00 B R

1267 BILLING SYSTEMS   65 ALL OBJECTIVES
OO IAL STH 3 N   15 5 0 M L M M   8.00 B R

1270 BILLING BUKIT ASSAM   65 ALL OBJECTIVES
OO IAL STH 4 N   20 5 0 M L M M   7.00 B R

1275 PURCHASING IAL   65 ALL OBJECTIVES
OO IAL STH 3 Y   20 5 0 M M L M   1.00 C R

1281 PAY AND PERSONNEL   65 ALL OBJECTIVES
OO IAL STH 3 N   20 5 87 L M M M   14.00 E R

1283 TRAVEL & SUBSISTENCE   65 ALL OBJECTIVES
OO IAL STH 3 N   15 5 87 L L M M   1.00 C R

1286 MARKETING   65 ALL OBJECTIVES
OO IAL STH 3 N   25 5 0 M M M M   3.00 C R

1291 STORES & WIP   65 ALL OBJECTIVES
OO IAL STH 4 N   20 5 0 M M M M   4.00 D R

1292 CASH AND BANK   65 ALL OBJECTIVES
OO IAL STH 3 N   20 5 0 H M M H   7.00 C R

1293 GENERAL LEDGER   65 ALL OBJECTIVES
OO IAL STH 3 N   20 5 0 M H L L   1.00 C R

1294 YEAR END REPORTING   65 ALL OBJECTIVES
OO IAL STH 1 N   20 5 86 H M M M   1.00 C R

1295 BUDGET SETTING   65 ALL OBJECTIVES
OO IAL STH 3 N   20 5 0 M M M L   1.00 C R

1282 PAYROLL MANX   65 ALL OBJECTIVES
OO MAN MAN 3 N   15 5 0 L L M M   2.00 E R

1284 TRAVEL AND SUBSISTENCE MANX   65 ALL OBJECTIVES
OO MAN MAN 3 N   10 2 0 L L M M   1.00 C R

CODE DESCRIPTION   BA CONTROL OBJECTIVES
DIV DIS CSA FR MD BUDGET TT YR AC BI IC TF   VALUE VT JT

1276 PURCHASING MANX   65 ALL OBJECTIVES
OO MNX   3 N   20 5 0 M L M M   1.00 C R

1271 BILLING MANX TELECOM   65 ALL OBJECTIVES
OO MNX MNX 3 N   20 4 87 M M L M   8.00 B R

1296 MANX LOCATION   65 ALL OBJECTIVES
OO MNX MNX 2 N   20 5 86 M H M M   1.00 C R

1269 BILLING CONSULTANCY & NI   65 ALL OBJECTIVES
OO TEL STH 3 N   20 5 86 M L M M   6.00 B R

4126 ACTION FOR DISABLED CUSTS.   17 ALL OBJECTIVES
PCS ADC   3 N   20 0 0 L L N L   0.40 E R

4114 PAYROLL/PERSONNEL (INC T&SETC)   17 ALL OBJECTIVES
PCS ASD   3 N   60 0 86 M M M M   2.40 E R

4113 AS1 OFFICE SERVICES   17 ALL OBJECTIVES
PCS ASD AS1 3 N   25 0 0 L L N M   5.30 E R

4115 ACCOUNTS PAYABLE   17 ALL OBJECTIVES
PCS ASD AS3 3 N   30 0 86 M M M M   2.40 E R

4116 FINANCIAL ACCOUNTING   17 ALL OBJECTIVES
PCS ASD AS3 3 N   20 0 87 M M M L   2.40 E R

4117 MANAGEMENT ACCOUNTS   17 ALL OBJECTIVES
PCS ASD AS3 3 Y   25 0 0 M M N L   2.40 E R

4118 ACCOUNTS RECEIVABLE   17 ALL OBJECTIVES
PCS ASD AS3 3 N   5 0 86 L L M M   1.00 B R

4119 COMPUTER INTEGRITY   17 ALL OBJECTIVES
PCS ASD AS3 3 Y   20 0 0 H M N M   2.40 E R

4120 CAPITAL PROJECT CONTROL   17 ALL OBJECTIVES
PCS BMD   2 N   30 0 87 H M L H   30.00 A R

4121 CONTRACTS/PURCHASING   17 ALL OBJECTIVES
PCS BMD   2 N   30 0 87 H M L H   40.00 C R

4122 RENTS & RATES   17 ALL OBJECTIVES
PCS BMD   2 N   10 0 87 L H L H   84.00 C R

4123 FINANCIAL ACCOUNTING (NAS)   17 ALL OBJECTIVES
PCS BMD   2 Y   10 0 87 M M L M   113.00 C R

4124 MANAGEMENT ACCOUNTING   17 ALL OBJECTIVES
PCS BMD   2 N   10 0 0 M L N L   113.00 C R

4125 COMPUTER INTEGRITY   17 ALL OBJECTIVES
PCS BMD   2 Y   20 0 0 H L N L   113.00 C R

4127 STAFF RESTAURANTS   17 ALL OBJECTIVES
PCS CAT   1 Y   20 0 87 L L L H   4.90 C R

CODE DESCRIPTION   BA CONTROL OBJECTIVES
DIV DIS CSA FR MO BUDGET TT YR AC BI IC TF   VALUE VT JT

4112 CORPORATE PERSONNEL MISC   17 ALL OBJECTIVES
PCS CPD   3 N   25 0 0 M H N H   8.20 E. R

4098 OCCUPATIONAL HEALTH SERVICE   17 ALL OBJECTIVES
PCS OHS   3 N   5 0 0 L N N L   0.35 E R

4110 PENSION ADMINISTRATION   17 ALL OBJECTIVES
PCS PAC   2 Y   80 8 86 M H L H   6.00 E R

4111 BTPAC COMPUTER INTEGRITY   17 ALL OBJECTIVES
PCS PAC   3 Y   20 4 86 H H L L   6.00 E R

4150 BTPAC QUARTERLY REVIEW   17 ALL OBJECTIVES
PCS PAC   1 Y   16 4 0 H M M M   6.00 E R

4109 BTPAC HQ   17 ALL OBJECTIVES
PCS PAC HQ 3 Y   10 0 0 L M N L   0.60 E R

3003 INCOME - SALE OF SCRAP   67 ALL OBJECTIVES
R&T   3 N   15 3 0 L L L H   1.00 B R

3004 INCOME - SALES LEDGER   67 ALL OBJECTIVES
R&T   3 N   30 6 0 H H L H   22.00 B R

3005 PURCHASING-LOCAL PURCHASES   67 ALL OBJECTIVES
R&T   3 N   30 6 0 M H L H   1.00 C R

3006 PURCHASING - CONTRACTS   67 ALL OBJECTIVES
R&T   3 N   30 6 0 M H L H   1.00 C R

3007 MANPOWER   67 ALL OBJECTIVES
R&T   3 N   40 8 0 L H H M   70.00 E R

3008 FIXED ASSETS REGISTER   67 ALL OBJECTIVES
R&T   3 Y   30 6 0 M H L L   14.00 A R

3009 G.L. MILLENIUM   67 ALL OBJECTIVES
R&T   3 N   30 6 87 M M M L   124.00 C R

3010 TRANSFER CHARGING   67 ALL OBJECTIVES
R&T   3 N   15 3 87 L H M N   78.00 C R

3011 A.P. MILLENIUM   67 ALL OBJECTIVES
R&T   3 N   40 8 88 M H L M   98.00 C R

3012 MGMT ACCOUNTS/BUDGETERY CNT   67 ALL OBJECTIVES
R&T   3 Y   40 8 0 H H M L   10.00 B R

3013 YEAR END   67 ALL OBJECTIVES
R&T   1 Y   15 3 87 L H H L   1000.00 C R

3014 STOCK CONTROL SYSTEM COMMODITY   67 ALL OBJECTIVES
R&T   3 N   10 2 87 L L M M   2.00 D R

3015 STOCK CONTROL SYSTEM BES   67 ALL OBJECTIVES
R&T   3 N   7 1 87 L L M M   1.00 D R

CODE DESCRIPTION									BA CONTROL OBJECTIVES					
DIV	DIS	CSA	FR	MD	BUDGET	TT	YR	AC	BI	IC	TF	VALUE	VT	JT
3016 CATERING								**67 ALL OBJECTIVES**						
R&T			5	N	5	0	0	L	L	M	M	1.00	C	R
3017 SECURITY & SAFETY								**67 ALL OBJECTIVES**						
R&T			3	N	30	6	0	M	H	M	H	1.00	C	R
3018 OTHER OPERATING COSTS								**67 ALL OBJECTIVES**						
R&T			3	N	30	6	85	H	H	N	H	60.00	C	R
3019 CASHIERS + T&S								**67 ALL OBJECTIVES**						
R&T			3	Y	30	6	0	L	L	H	H	86.00	C	R
3020 COMP INST								**67 ALL OBJECTIVES**						
R&T			3	Y	30	6	0	M	H	M	M	1.00	C	R
3021 COMP INST OFFICE AUTO WEB								**67 ALL OBJECTIVES**						
R&T			3	N	30	6	0	M	H	M	M	1.00	C	R
3022 COMP INST 4381 GL&AP								**67 ALL OBJECTIVES**						
R&T			3	N	30	6	0	M	H	M	M	1.00	C	R
3023 SPONSORSHIP								**67 ALL OBJECTIVES**						
R&T			3	N	30	6	0	M	M	M	L	1.00	C	R
3024 PROJECT CONTROL & COSTINGS								**67 ALL OBJECTIVES**						
R&T			3	Y	30	6	0	M	M	M	L	1.00	C	R
3079 ESTATES MANAGEMENT								**67 ALL OBJECTIVES**						
R&T			3	N	30	6	0	M	L	M	L	1.00	C	R
4108 THE BOARD								**17 ALL OBJECTIVES**						
SEC	BRD		3	N	10	0	0	M	H	N	N	1.00	E	R
4105 CORPORATE RELATIONS DEPT								**17 ALL OBJECTIVES**						
SEC	CRD		3	Y	70	0	86	M	H	N	H	13.70	C	R
4103 GOVERNMENT RELATIONS DEPT								**17 ALL OBJECTIVES**						
SEC	GRD		3	Y	15	0	0	M	H	N	L	6.20	E	R
4106 INVESTIGATION DIVISION								**17 ALL OBJECTIVES**						
SEC	ID		3	Y	25	0	0	M	H	N	M	3.40	E	R
4099 SHARE REGISTER								**17 ALL OBJECTIVES**						
SEC	SO		3	N	15	0	0	H	M	N	L	2.70	E	R
4100 AGM COSTS								**17 ALL OBJECTIVES**						
SEC	SO		3	N	15	0	0	M	M	N	M	1.20	C	R
4101 MANAGEMENT ACCOUNTS								**17 ALL OBJECTIVES**						
SEC	SO		3	N	10	0	0	M	L	N	N	6.70	C	R
4102 PURCHASING								**17 ALL OBJECTIVES**						
SEC	SO		3	N	10	0	0	M	L	N	M	8.00	C	R
4104 SOLICITORS OFFICE								**17 ALL OBJECTIVES**						
SEC	SOL		3	Y	25	0	0	M	H	N	L	5.80	E	R

CODE DESCRIPTION   BA CONTROL OBJECTIVES
DIV DIS CSA FR MD BUDGET TT YR AC BI IC TF   VALUE VT JT

4107 SECURITY DIVISION   17 ALL OBJECTIVES
SEC STY   3 Y   10 0 0 M H N M   0.50 E R

A2.12   **Nominal & System Budget Comparison (LHRSKP11)**
A2.12.1 This report compares the four types of budget
         (Nominal, System Calculated, Standard Time &
         Audit Complexity Time) to show variations which
         may help in determining a suitable budget for a
         particular job.

KEY TO COLUMN HEADINGS
======================

CODE   = PROJECT CODE
DESCRIPTION   = PROJECT DESCRIPTION
YOUR BUDGET   = BUDGET ALLOCATED BY YOU
SYSTEM BUDGET   = SYSTEM BUDGET BASED ON IMPORTANCE SCORE ONLY
COMPLEX BUDGET = SYSTEM BUDGET BASED ON SCORE & AUDIT COMPLEXITY
SCORE   = IMPORTANCE SCORE

CODE	DESCRIPTION	YOUR BUDGET	SYSTEM BUDGET	COMPLEX BUDGET	SCORE
1101	PAYROLL	30	71	58	120
1102	ACCOUNTING-CONSOLIDATION	25	52	42	87
1103	INCOME/BILLING-SABS	45	78	79	132
1104	INCOME/INTER-BUSINESS-T.GOLD	15	39	32	66
1105	PURCHASING	30	62	63	105
1106	EXPENDITURE-INTER BUS.T.GOLD	15	33	27	56
1107	ACCOUNTING-FALCON	60	75	76	126
1108	FIXED ASSETS-FALCON	25	42	42	70
1109	STORES-FALCON	25	50	50	84
1110	PERSONNEL	25	36	29	60
1111	FARMLINK-SUBSIDIARY	30	67	54	112
1112	PERSONNEL	35	50	40	84
1113	CONSOLIDATION	15	54	55	91
1114	SUPERCALL	30	75	76	126
1115	TALKABOUT	30	61	61	102
1116	MIPS	30	48	49	81
1117	TELECOM RED	35	62	63	105
1118	TSL-SUBSIDIARY	30	74	74	124
1120	INCOME/BILLING	35	75	76	126
1121	INCOME/INTER BUS.T.GOLD	15	25	20	42
1122	PURCHASING -TETRA PLAN	30	62	63	105
1123	PAYROLL/PERSONNEL	30	50	40	84
1124	ACCOUNTING	30	75	76	126
1125	FIXED ASSETS	25	42	42	70
1126	DIALCOM-USA	30	67	67	112
1127	INCOME/BILLING	37	62	63	105
1128	INCOME-INTER BUS. T.GOLD	15	33	27	56
1129	PURCHASING	32	50	50	84
1130	PAYROLL/PERSONNEL	32	50	40	84
1131	ACCOUNTING-SUN ACCOUNTS	35	78	79	132
1132	FIXED ASSETS	20	42	42	70
1133	EXPENDITURE-INTER BUS. T.GOLD	15	46	37	77
1134	INCOME/BILLING	52	100	101	168
1135	INCOME-INTER BUS. T.GOLD	15	25	20	42
1136	PURCHASING	35	50	40	84
1137	PURCHASING-CONTRACTS	37	91	92	153
1138	EXPENDITURE-INTER BUS. T.GOLD	15	46	37	77
1139	ACCOUNTING-SUN ACCOUNTS	42	100	101	168
1140	FIXED ASSETS-TETRA PLAN	22	50	50	84
1141	PERSONNEL	27	50	40	84
1142	INCOME/BILLING	44	75	76	126
1143	INCOME-INTER BUS. T.GOLD	15	33	27	56
1144	PURCHASING	39	61	49	102
1145	EXPENDITURE-INTER BUS. T.GOLD	15	46	37	77
1146	ACCOUNTING-SUN ACCOUNTS	44	75	76	126
1147	PERSONNEL	30	50	40	84
1148	FIXED ASSETS	34	42	42	70
1149	INCOME BILLING-BIPASS	33	54	55	91
1150	INCOME/BILLING-DISTRICTS	30	62	63	105
1151	INCOME/BILLING-MANUAL	30	75	60	126
1152	INCOME-INTER BUS. T.GOLD	20	33	27	56
1153	PURCHASING P.O/CONTRACTS	30	75	76	126
1154	EXPENDITURE-INTER BUS. T.GOLD	20	58	47	98
1155	PERSONNEL	30	62	50	105
1156	ACCOUNTING-TETRA PLAN	30	75	76	126

CODE	DESCRIPTION	YOUR BUDGET	SYSTEM BUDGET	COMPLEX BUDGET	SCORE
1157	FIXED ASSETS	40	75	76	126
1158	STORES	30	53	54	90
1159	INCOME/BILLING	20	62	63	105
1160	PURCHASING/STOCKS	70	75	76	126
1161	EXPENDITURE	15	46	37	77
1162	PAYROLL/PERSONNEL	35	42	34	70
1163	ACCOUNTING	40	75	76	126
1164	STORES	33	78	79	132
1165	INCOME/BILLING-LEEDS	40	100	101	168
1166	INCOME-INTER BUS. T.GOLD	20	33	27	56
1167	PURCHASING	40	75	76	126
1168	EXPENDITURE-INTER BUS. T.GOLD	15	58	47	98
1169	PERSONNEL	25	62	50	105
1170	ACCOUNTING-SUN ACCOUNTS	44	100	101	168
1171	FIXED ASSETS	30	62	63	105
1172	STORES	30	78	79	132
1173	TSCR-SUBSIDIARY/BILLING	60	100	101	168
1174	BTCR-SUBSIDIARY	35	75	76	126
1175	TSCR/FINANCIAL ACCOUNTING	30	86	86	144
1176	DATA CENTRES	20	52	52	87
1177	DATA CENTRES	20	52	52	87
1178	DATA CENTRES	20	77	77	129
1179	DATA CENTRES	20	52	52	87
1180	DATA CENTRES	20	77	77	129
1181	DATA CENTRES	20	52	52	87
1182	DATA CENTRES	20	64	65	108
1183	SWINDON CABLE LTD	30	75	76	126
1184	COVENTRY CABLE LTD	13	75	76	126
1201	INTL PRIVATE LEASED CIRCUITS	20	71	72	120
1202	ISAACS (INTL SETTLEMENTS)	42	89	90	150
1203	ITALICS (INTL TELEX)	20	84	85	141
1204	BABS (BROADCAST ACCTS/BILLING)	20	36	36	60
1205	ACIDS (INT DATA SERVICES	20	31	31	52
1206	COMBS (MARITIME BILLING)	20	39	40	66
1207	STAR (SATELLITE TRAFFIC ACCT)	20	46	47	78
1208	INTL 0800 BILLING	15	51	51	85
1209	PRICING	25	59	72	100
1216	AP (ACCOUNTS PAYABLE)	25	64	65	108
1217	CONTRACTS	20	59	60	100
1218	LOCAL PURCHASES	20	64	52	108
1221	PAY AND PERSONNEL	25	77	77	129
1222	PAY AND PERSONNEL (OP)	25	77	77	129
1223	TRAVEL & SUBSISTENCE	20	59	47	99
1226	EMD (ESTATES MANAGEMENT)	30	80	81	135
1227	MSD (MARKETING SERVICES)	20	64	65	108
1228	SALES DIV (SD)	25	43	44	73
1229	CATERING	25	31	25	52
1230	OVERHEAD ALLOCATION	25	80	81	135
1231	TRAINING	20	39	32	66
1236	FIXED ASSETS	25	89	90	150
1237	PROJECT ACCOUNTING	20	84	85	141
1238	CAPITAL INVESTMENT APPRAISAL	35	84	85	141
1239	SATELLITE INVESTMENTS	25	84	85	141
1241	STORES	23	77	77	129
1246	DOMESTIC CASHIERS	15	47	38	79

CODE	DESCRIPTION	YOUR BUDGET	SYSTEM BUDGET	COMPLEX BUDGET	SCORE
1247	COMMERCIAL CASHIERS	15	47	38	79
1251	TRANSFER CHARGING	25	73	74	123
1252	GL;M (GENERAL LEDGER)	20	86	86	144
1253	YEAR END REPORTING	20	86	86	144
1254	BUDGETTING & FORECASTING	25	59	60	100
1256	BT MARINE LOCATION AUDIT	30	31	31	52
1257	GOONHILLY	30	40	40	67
1258	MADLEY EARTH STATION	25	42	42	70
1259	LONDON TELEPORT	20	54	55	91
1260	ABERDEEN EARTH STATION	20	42	42	70
1264	BTI SUMMARY REPORTS	10	67	54	112
1266	BILLING SERVICES DIV	20	64	65	108
1267	BILLING SYSTEMS	15	31	31	52
1268	BILLING - COMMERCIAL	20	43	44	73
1269	BILLING CONSULTANCY & NI	20	31	31	52
1270	BILLING BUKIT ASSAM	20	31	31	52
1271	BILLING MANX TELECOM	20	51	51	85
1275	PURCHASING IAL	20	51	51	85
1276	PURCHASING MANX	20	31	31	52
1281	PAY AND PERSONNEL	20	64	52	108
1282	PAYROLL MANX	15	31	25	52
1283	TRAVEL & SUBSISTENCE	15	31	25	52
1284	TRAVEL AND SUBSISTENCE MANX	10	31	25	52
1286	MARKETING	25	52	52	87
1287	TRAINING	15	31	25	52
1288	BAILBROOK COLLEGE	20	31	31	52
1289	CRANFIELD COLLEGE	15	43	44	73
1290	FIXED ASSETS	20	43	44	73
1291	STORES & WIP	20	77	77	129
1292	CASH AND BANK	20	55	67	93
1293	GENERAL LEDGER	20	59	60	100
1294	YEAR END REPORTING	20	43	53	73
1295	BUDGET SETTING	20	40	40	67
1296	MANX LOCATION	20	56	56	94
1297	IAL OVERSEAS TRIPS	20	31	31	52
1298	ADAMS IAL	20	43	44	73
3001	BT&D TECHNOLOGIES LTD	45	77	77	129
3002	BT&D TECHNOLOGIES LTD	45	77	77	129
3003	INCOME - SALE OF SCRAP	15	42	34	70
3004	INCOME - SALES LEDGER	30	75	91	126
3005	PURCHASING-LOCAL PURCHASES	30	67	67	112
3006	PURCHASING - CONTRACTS	30	67	67	112
3007	MANPOWER	40	84	68	142
3008	FIXED ASSETS REGISTER	30	80	81	135
3009	G.L. MILLENIUM	30	73	74	123
3010	TRANSFER CHARGING	15	83	67	140
3011	A.P. MILLENIUM	40	96	97	162
3012	MGMT ACCOUNTS/BUDGETERY CNT	40	61	73	102
3013	YEAR END	15	81	65	136
3014	STOCK CONTROL SYSTEM COMMODITY	10	52	42	87
3015	STOCK CONTROL SYSTEM BES	7	39	32	66
3016	CATERING	5	31	25	52
3017	SECURITY & SAFETY	30	59	60	100
3018	OTHER OPERATING COSTS	30	107	129	180
3019	CASHIERS + T&S	30	63	51	106

CODE	DESCRIPTION	YOUR BUDGET	SYSTEM BUDGET	COMPLEX BUDGET	SCORE
3020	COMP INST	30	56	56	94
3021	COMP INST OFFICE AUTO WEB	30	56	56	94
3022	COMP INST 4381 GL&AP	30	56	56	94
3023	SPONSORSHIP	30	40	40	67
3024	PROJECT CONTROL & COSTINGS	30	40	40	67
3025	INCOME - SALES LEDGER	30	34	28	58
3026	PURCHASING - SUPD/MSA	60	100	121	168
3027	MSP CONTRACTS-EXCHANGE EQUIP	60	55	55	92
3028	MSP CONTRACTS - OTHER	30	55	55	92
3029	PURCHASING - LOCAL PURCHASING	20	30	24	50
3030	MANPOWER	40	84	68	142
3031	FIXED ASSETS REGISTERS	20	41	33	69
3032	GL MILLENIUM	30	81	82	136
3033	ACCOUNTS PAYABLE PHASE 1.2	40	77	77	129
3034	TRANSFER CHARGING	15	86	86	144
3035	MGMT ACCOUNTS/BUDGETRY CNTL	40	61	73	102
3036	YEAR END	15	81	65	136
3037	MSA III POST IMP	45	100	101	168
3038	AFSTA / STOCKTAKING	30	75	76	126
3039	INTERFACE UKC STORES SYSTEMS	20	93	94	156
3040	GOPS / KEYS INDICATORS	40	67	81	112
3041	CABLE DRUMS	15	25	20	42
3042	STOCKING POLICY	30	70	85	118
3043	STOCK VALUATION	10	78	79	132
3044	PEXOS PROVISION	15	58	59	98
3045	PEXOS WRITE OFFS	10	48	39	81
3046	SCORE ACCOUNTING	10	78	79	132
3047	SCORE LDS INTERFACE	30	90	109	152
3048	DIRECT DISTRIBUTION	20	100	101	168
3049	DIRECT DELIVERY CWM	30	87	88	147
3050	DIRECT DELIVERY CABLE	30	100	101	168
3051	DIRECT DELIVERY POLES	10	75	76	126
3052	CATERING	5	31	25	52
3053	SECURITY	10	56	56	94
3054	OTHER OPERATING COSTS	30	82	99	138
3055	REPROGRAPHICS	30	52	52	87
3056	TRANSPORT DIVISION	30	73	74	123
3057	CASHIERS + T&S	30	63	51	106
3058	TRANSHIPMENTS	20	43	44	73
3059	PHONECARDS	30	93	94	156
3060	ESTATES MANAGEMENT	30	27	28	46
3061	DEPOT ISSUES CRAYFORD	32	93	94	156
3062	DEPOT RECEIPTS	35	93	75	156
3063	STOCKTAKING	20	93	75	156
3064	STOCK DISCREPANCY CASES	10	34	35	58
3065	SALVAGE RETURNS/DISPOSALS	10	67	67	112
3066	DEPOT OTHER	20	36	36	60
3067	DEPOT ISSUES	35	80	81	135
3068	DEPOT RECEIPTS NTHA D	35	80	65	135
3069	STOCKTAKING	20	93	75	156
3070	STOCK DISCREPANCY CASES	10	34	35	58
3071	SALVAGE RETURNS/DISPOSALS	10	67	67	112
3072	DEPOTS OTHERS	20	36	36	60
3073	DEPOT ISSUES NTHA D	35	80	81	135
3074	DEPOT RECEIPTS CRAYFORD	32	80	65	135

CODE	DESCRIPTION	YOUR BUDGET	SYSTEM BUDGET	COMPLEX BUDGET	SCORE
3075	STOCKTAKING	20	93	75	156
3076	STOCK DISCREPANCY CASES	10	34	35	58
3077	SALVAGE RETURNS/DISPOSALS	10	67	67	112
3078	DEPOT OTHERS	20	27	28	46
3079	ESTATES MANAGEMENT	30	27	28	46
3080	STOCK VAL'N B'HAM DEPOT	9	82	99	138
3081	CONTRACTS	3	82	99	138
3082	LDS PRE IMP B'HAM/CRAYFORD	80	82	99	138
4001	PLANMASTER CONSOLIDATION	20	48	58	80
4002	STERLING DEALING	10	67	67	112
4003	MANSION PLACE LEASING	20	74	89	124
4004	COMMERCIAL PAPER	30	67	81	112
4005	CASHIERS	20	93	112	156
4006	PERIOD END ACCOUNTS	10	27	28	46
4007	MANAGEMENT ACCOUNTS	5	27	22	46
4008	OPERATIONAL AUDIT	5	42	34	70
4009	MANAGEMENT ACCOUNTING	20	40	40	67
4010	GATIS	10	67	81	112
4011	CORPORATION TAX	20	67	81	112
4012	PERSONAL TAX	20	59	72	100
4013	VAT	30	67	67	112
4014	INVESTOR RELATIONS	10	54	55	91
4015	OPERATIONAL AUDIT RMID	30	34	42	58
4016	YEAR END ACCOUNTS	15	39	40	66
4017	PERSONNEL	10	34	28	58
4018	PROCUREMENT	30	50	50	84
4019	PROCUREMENT ADMINISTRATION	30	43	43	72
4020	STRATEGY & CO-ORDINATION	10	45	54	75
4021	DIRECT INCOME	20	71	72	120
4022	PURCHASING	30	46	47	78
4023	INVENTORY CONTROL	25	62	50	105
4024	FIXED ASSETS	10	34	35	58
4025	FINANCIAL ACCOUNTS (HPFA)	30	43	43	72
4026	MANAGEMENT ACCTS INC TR CHGING	10	40	41	68
4027	COMPUTER INTEGRITY	20	43	52	72
4028	FOREIGN SUBS-FRANKFURT	30	70	85	118
4029	ACCOUNTS PAYABLE	10	38	31	64
4030	SUBSIDIARY- PARIS	30	63	76	106
4031	SUBSIDIARY - AUSTRALIA	30	63	76	106
4032	SALES ORDER PROCESSING	10	45	36	76
4033	PROCUREMENT	20	38	31	64
4034	STOCK MANAGEMENT	10	53	43	90
4035	FIXED ASSETS	5	34	28	58
4036	MANAGEMENT ACCOUNTS	20	32	32	54
4037	SALES/ORDER PROCESSING	15	45	36	76
4038	PAYROLL/PERSONNEL	20	42	34	70
4039	PROCUREMENT	20	45	46	76
4040	ACCOUNTS PAYABLE	10	49	39	82
4041	INVENTORY CONTROL	20	70	70	117
4042	FIXED ASSETS	20	42	42	70
4043	FINANCIAL ACCOUNTING	20	62	76	105
4044	MANAGEMENT ACCOUNTING	20	48	48	80
4045	COMPUTER INTEGRITY	15	42	50	70
4046	MARKETING IN IPD	50	67	81	112
4047	MANAGEMENT ACCOUNTING	20	52	52	87

CODE	DESCRIPTION	YOUR BUDGET	SYSTEM BUDGET	COMPLEX BUDGET	SCORE
4048	PLANNING	20	64	78	108
4049	INVESTMENT ANALYSIS	20	64	78	108
4050	COMMERCIAL REGULATION	5	64	78	108
4051	PRICING POLICY	30	64	78	108
4052	INTERCONN.POLICY	20	64	78	108
4053	COMM.REG.ANALYSIS	20	73	88	122
4054	ECONOMIC ADVISORY DIVISION	20	64	78	108
4055	COMPUTER INTEGRITY	15	34	28	58
4056	REVENUE ACCOUNTING	20	34	28	58
4057	OVERSEAS CO-ORDINATION UNIT	15	50	40	84
4058	EURODATA FOUNDATION	10	42	34	70
4059	CORPORATE STRATEGY UNIT	15	64	78	108
4060	MSCU	20	52	63	87
4061	DIRECT INCOME	20	51	51	85
4062	PROCUREMENT	20	51	51	85
4063	INVENTORY CONTROL	30	62	63	105
4064	FIXED ASSETS	20	34	35	58
4065	FINANCIAL ACCOUNTING	20	45	45	75
4066	MANAGEMENT ACCOUNTING	30	45	54	75
4067	COMPUTER INTEGRITY	15	47	57	79
4068	PERSONNEL	10	34	28	58
4069	ACCOUNTS PAYABLE	20	51	41	85
4070	SALES ORDER PROCESSING	10	45	46	76
4071	PROCUREMENT	20	78	63	132
4072	STOCK MANAGEMENT	20	71	72	120
4073	FIXED ASSETS	10	42	42	70
4074	ACCOUNTS,MANAGEMENT/FINANCIAL	20	50	50	84
4075	SALES ORDER PROCESSING	20	58	58	97
4076	PROCUREMENT	20	91	92	153
4077	ACCOUNTS PAYABLE	10	91	92	153
4078	STOCK MANAGEMENT	20	84	85	141
4079	FINANCIAL ACCOUNTING MSAGL	20	62	63	105
4080	MANAGEMENT ACCOUNTING	20	62	63	105
4081	FIXED ASSETS	10	42	42	70
4082	COMPUTER INTEGRITY	20	75	91	126
4083	SALES ORDER PROCESSING	10	58	58	97
4084	PROCUREMENT	20	66	67	111
4085	INVENTORY CONTROL	15	53	54	90
4086	MANAGEMENT ACCOUNTS	10	42	42	70
4087	PROJECT CONTROL	20	54	65	91
4088	SALES ORDER PROCESSING	5	45	46	76
4089	STOCK MANAGEMENT	5	53	54	90
4090	PROCUREMENT	10	45	36	76
4091	MANAGEMENT ACCOUNTS	5	42	34	70
4092	SALES ORDER PROCESSING	10	45	46	76
4093	PROCUREMENT	10	78	79	132
4094	MANAGEMENT ACCOUNTS	5	42	42	70
4095	INVENTORY CONTROL	5	53	54	90
4096	PROJECT CONTROL	10	54	65	91
4097	INTERNAL AUDIT DIVISION	15	53	43	90
4098	OCCUPATIONAL HEALTH SERVICE	5	33	27	56
4099	SHARE REGISTER	15	54	65	91
4100	AGM COSTS	15	58	58	97
4101	MANAGEMENT ACCOUNTS	10	48	48	80
4102	PURCHASING	10	53	54	90

CODE	DESCRIPTION	YOUR BUDGET	SYSTEM BUDGET	COMPLEX BUDGET	SCORE
4103	GOVERNMENT RELATIONS DEPT	15	75	76	126
4104	SOLICITORS OFFICE	25	75	76	126
4105	CORPORATE RELATIONS DEPT	70	94	95	159
4106	INVESTIGATION DIVISION	25	78	79	132
4107	SECURITY DIVISION	10	70	71	118
4108	THE BOARD	10	64	65	108
4109	BTPAC HQ	10	54	44	91
4110	PENSION ADMINISTRATION	80	75	76	126
4111	BTPAC COMPUTER INTEGRITY	20	68	82	114
4112	CORPORATE PERSONNEL MISC	25	82	83	138
4113	AS1 OFFICE SERVICES	25	53	43	90
4114	PAYROLL/PERSONNEL (INC T&SETC)	60	43	44	73
4115	ACCOUNTS PAYABLE	30	43	44	73
4116	FINANCIAL ACCOUNTING	20	40	40	67
4117	MANAGEMENT ACCOUNTS	25	54	55	91
4118	ACCOUNTS RECEIVABLE	5	31	25	52
4119	COMPUTER INTEGRITY	20	58	70	97
4120	CAPITAL PROJECT CONTROL	30	87	106	147
4121	CONTRACTS/PURCHASING	30	87	106	147
4122	RENTS & RATES	10	100	81	168
4123	FINANCIAL ACCOUNTING (NAS)	10	84	85	141
4124	MANAGEMENT ACCOUNTING	10	75	76	126
4125	COMPUTER INTEGRITY	20	75	91	126
4126	ACTION FOR DISABLED CUSTS.	20	42	34	70
4127	STAFF RESTAURANTS	20	50	40	84
4128	SALES ORDER PROCESSING	30	71	72	120
4129	INVENTORY CONTROL	30	94	95	159
4130	MANAGEMENT ACCOUNTS	30	55	56	93
4131	FINANCIAL ACCOUNTS	30	68	68	114
4132	PAYROLL/PERSONNEL (INC T&S)	40	59	59	99
4133	PROCUREMENT	30	71	72	120
4134	FIXED ASSETS	20	55	56	93
4135	ACCOUNTS PAYABLE INC CASH/BNK	20	71	72	120
4136	PRODUCTION CONTROL	30	68	82	114
4137	COMPUTER INTEGRITY	25	68	82	114
4138	SALES ORDER PROCESSING	20	66	67	111
4139	INVENTORY CONTROL	25	84	85	141
4140	MANAGEMENT ACCOUNTS	20	48	49	81
4141	PROCUREMENT	20	51	51	85
4142	ACCOUNTS PAYABLE	20	51	51	85
4143	FIXED ASSETS	20	61	61	102
4144	PRODUCTION CONTROL	30	75	91	126
4145	FINANCIAL ACCOUNTING	20	61	61	102
4146	FULCRUM HQ MISC	20	54	55	91
4147	EDINBURGH FACTORY	25	45	46	76
4148	COMPUTER INTEGRITY	25	68	82	114
4149	FOREIGN CURRENCY EXPOSURE	30	86	104	144
4150	BTPAC QUARTERLY REVIEW	16	52	63	87
4151	INVENTORY ACCOUNTING	30	36	36	60
4152	SALES LEDGER/INVOICING	30	39	32	66
4153	IPD OVERVIEW REPORTS	10	73	73	122

A2.13   'Must Do' Projects (LHRSKP12)
A2.13.1 This report lists all projects where the 'must
        do' indicator has been set.

THE DETAILS FOR EACH PROJECT MAY BE AMENDED VIA THE PROJECT MENU
KEY TO COLUMN HEADINGS
========================

CODE   = PROJECT CODE   DESCRIPTION = PROJECT DESCRIPTION
BA   = BUSINESS AREA   OBJECTIVES = LEAD ZONE OBJECTIVES
DIV   = DIVISION DIS = DISTRICT/UNIT   CSA = CSA/LOCATION
F   = NOMINAL REVIEW FREQUENCY   M   = MUST DO REGARDLESS (YES/NO)
BUDGET = DAYS REQUIRED (Excl TRAVEL)   TT = TRAVEL TIME

AC   = COMPLEXITY (H)igh, (M)edium, (L)ow
YR   = YEAR LAST REVIEWED
BI   = BUSINESS IMPACT · (H)igh, (M)edium, (L)ow, (N)one
IC   = INTERNAL CONTROL · (H)igh, (M)edium, (L)ow, (N)one
TP   = TEMPTATION FACTOR ·(H)igh, (M)edium, (L)ow, (N)one
SIZE   = SIZE OF THIS ASSET/AREA IN MILLIONS
VT   = VALUE TYPE · A=Asset,B=Income,C=Spend,D=Stores,E=Wages

CODE DESCRIPTION   BA OBJECTIVES
DIV DIS CSA FR MD BUDGET TT AC YR BI IC TP   SIZE ST

1101 PAYROLL   68 99/00/00/00/00/00/00/00/00/00
BTE CEN   3 Y   30 0 L 0 L L M   40.00 E

1107 ACCOUNTING-FALCON   68 99/00/00/00/00/00/00/00/00/00
BTE VAB   3 Y   60 0 M 0 H N L   24.00 B

1113 CONSOLIDATION   68 99/00/00/00/00/00/00/00/00/00
BTE SPE   3 Y   15 0 M 0 M N L   2.00 C

1114 SUPERCALL   68 99/00/00/00/00/00/00/00/00/00
BTE SPE   3 Y   30 0 M 0 M N L   12.00 C

1116 MIPS   68 99/00/00/00/00/00/00/00/00/00
BTE S PE   3 Y   30 0 M 87 M M L   9.00 C

1118 TSL-SUBSIDIARY   68 99/00/00/00/00/00/00/00/00/00
BTE SPE   3 Y   30 0 M 0 H N H   7.00 B

1120 INCOME/BILLING   68 99/00/00/00/00/00/00/00/00/00
BTE MES   3 Y   35 0 M 0 H N L   11.00 B

1122 PURCHASING -TETRA PLAN   68 99/00/00/00/00/00/00/00/00/00
BTE MES   3 Y   30 0 M 0 L N L   11.00 C

1132 FIXED ASSETS   68 99/00/00/00/00/00/00/00/00/00
BTE TMS   3 Y   20 0 M 0 L N L   2.00 A

1133 EXPENDITURE-INTER BUS. T.GOLD 68 99/00/00/00/00/00/00/00/00/00
BTE TMS   3 Y   15 0 L 0 L M N   15.00 C

1134 INCOME/BILLING   68 99/00/00/00/00/00/00/00/00/00
BTE YEP   3 Y   52 2 M 86 H N L 170.00 B

1140 FIXED ASSETS-TETRA PLAN   68 99/00/00/00/00/00/00/00/00/00
BTE YEP   3 Y   22 2 M 0 L N L   5.00 A

1143 INCOME-INTER BUS. T.GOLD   68 99/00/00/00/00/00/00/00/00/00
BTE BTA   3 Y   15 0 L 0 L M N   15.00 B

1145 EXPENDITURE-INTER BUS. T.GOLD 68 99/00/00/00/00/00/00/00/00/00
BTE BTA   3 Y   15 0 L 0 L M N   2.00 D

1147 PERSONNEL   68 99/00/00/00/00/00/00/00/00/00
BTE BTA   3 Y   30 0 L 0 L N L   12.00 E

1149 INCOME BILLING-BIPASS   68 99/00/00/00/00/00/00/00/00/00
BTE DNS   2 Y   33 0 M 0 M N L   3.00 B

1150 INCOME/BILLING-DISTRICTS   68 99/00/00/00/00/00/00/00/00/00
BTE DNS   2 Y   30 0 M 0 M N L   35.00 B

1151 INCOME/BILLING-MANUAL   68 99/00/00/00/00/00/00/00/00/00
BTE DNS   2 Y   30 0 L 0 M N L   48.00 B

1153 PURCHASING P.O/CONTRACTS   68 99/00/00/00/00/00/00/00/00/00
BTE DNS   2 Y   30 0 M 0 L N L   46.00 C

CODE DESCRIPTION   BA OBJECTIVES
DIV DIS CSA FR MO BUDGET TT AC YR BI IC TP   SIZE ST

1159 INCOME/BILLING   68 99/00/00/00/00/00/00/00/00/00
BTE BBS   2 Y   20 0 M 86 M N L   14.00 B

1160 PURCHASING/STOCKS   68 99/00/00/00/00/00/00/00/00/00
BTE BBS   2 Y   70 3 M 85 L N L   23.00 C

1170 ACCOUNTING-SUN ACCOUNTS   68 99/00/00/00/00/00/00/00/00/00
BTE MOC   3 Y   44 0 M 0 H N L 118.00 B

1173 TSCR-SUBSIDIARY/BILLING   68 99/00/00/00/00/00/00/00/00/00
BTE MOC   3 Y   60 0 M 0 H N L   50.00 C

1175 TSCR/FINANCIAL ACCOUNTING   68 99/00/00/00/00/00/00/00/00/00
BTE MOC   3 Y   30 0 M 0 H M L   70.00 C

1180 DATA CENTRES   68 99/00/00/00/00/00/00/00/00/00
BTE MC   3 Y   20 0 M 0 M M M 169.00 B

1184 COVENTRY CABLE LTD   68 99/00/00/00/00/00/00/00/00/00
BTE BTV   3 Y   13 0 M 0 H N L   1.00 D

1230 OVERHEAD ALLOCATION   64 99/00/00/00/00/00/00/00/00/00
BTI   3 Y   25 0 M 0 M L L   59.00 C

1236 FIXED ASSETS   64 99/00/00/00/00/00/00/00/00/00
BTI   3 Y   25 0 M 86 H M M 100.00 A

1237 PROJECT ACCOUNTING   64 99/00/00/00/00/00/00/00/00/00
BTI   3 Y   20 0 M 85 M L M   35.00 C

1253 YEAR END REPORTING   64 99/00/00/00/00/00/00/00/00/00
BTI   1 Y   20 0 M 87 H M L 600.00 B

1264 BTI SUMMARY REPORTS   64 99/00/00/00/00/00/00/00/00/00
BTI   1 Y   10 0 L 0 H N L   1.00 C

1275 PURCHASING IAL   65 99/00/00/00/00/00/00/00/00/00
OO IAL STH 3 Y   20 5 M 0 M L M   1.00 C

3001 BT&D TECHNOLOGIES LTD   53 99/00/00/00/00/00/00/00/00/00
BTD   1 Y   45 8 M 87 H M M   55.00 B

3002 BT&D TECHNOLOGIES LTD   53 99/00/00/00/00/00/00/00/00/00
BTD   1 Y   45 8 M 87 H M M   55.00 B

3008 FIXED ASSETS REGISTER   67 99/00/00/00/00/00/00/00/00/00
R&T   3 Y   30 6 M 0 H L L   14.00 A

3012 MGMT ACCOUNTS/BUDGETERY CNT   67 99/00/00/00/00/00/00/00/00/00
R&T   3 Y   40 8 H 0 H M L   10.00 B

3013 YEAR END   67 99/00/00/00/00/00/00/00/00/00
R&T   1 Y   15 3 L 87 H H L 1000.00 C

3019 CASHIERS + T&S   67 99/00/00/00/00/00/00/00/00/00
R&T   3 Y   30 6 L 0 L H H   86.00 C

CODE DESCRIPTION   BA OBJECTIVES
DIV DIS CSA FR MO BUDGET TT AC YR BI IC TP   SIZE ST

3020 COMP INST   67 99/00/00/00/00/00/00/00/00
R&T   3 Y   30 6 M 0 H M M   1.00 C

3024 PROJECT CONTROL & COSTINGS   67 99/00/00/00/00/00/00/00/00
R&T   3 Y   30 6 M 0 M M L   1.00 C

3025 INCOME - SALES LEDGER   66 99/00/00/00/00/00/00/00/00
ME   3 Y   30 4 L 0 L M M   15.00 B

3026 PURCHASING - SUPD/MSA   66 99/00/00/00/00/00/00/00/00
ME   3 Y   60 8 H 0 H L H 463.00 C

3027 MSP CONTRACTS-EXCHANGE EQUIP   66 99/00/00/00/00/00/00/00/00
ME   3 Y   60 8 M 0 H H H   1.00 C

3028 MSP CONTRACTS - OTHER   66 99/00/00/00/00/00/00/00/00
ME   3 Y   30 4 M 0 H H H   1.00 C

3030 MANPOWER   66 99/00/00/00/00/00/00/00/00
ME   3 Y   40 6 L 0 H M M   59.00 E

3033 ACCOUNTS PAYABLE PHASE 1.2   66 99/00/00/00/00/00/00/00/00
ME   3 Y   40 4 M 0 M M M   50.00 C

3034 TRANSFER CHARGING   66 99/00/00/00/00/00/00/00/00
ME   3 Y   15 2 M 0 H M L 889.00 C

3036 YEAR END   66 99/00/00/00/00/00/00/00/00
ME   1 Y   15 2 L 87 H H L   92.00 C

3040 GOPS / KEYS INDICATORS   66 99/00/00/00/00/00/00/00/00
ME   3 Y   40 8 H 0 H L H   1.00 C

3047 SCORE LDS INTERFACE   66 99/00/00/00/00/00/00/00/00
ME   3 Y   30 4 H 0 H L N 172.00 D

3056 TRANSPORT DIVISION   66 99/00/00/00/00/00/00/00/00
ME   3 Y   30 4 M 0 H M L   12.00 C

3058 TRANSHIPMENTS   66 99/00/00/00/00/00/00/00/00
ME   3 Y   20 4 M 0 M M M   1.00 C

3059 PHONECARDS   66 99/00/00/00/00/00/00/00/00
ME   3 Y   30 6 M 0 H M H   60.00 D

3060 ESTATES MANAGEMENT   66 99/00/00/00/00/00/00/00/00
ME   3 Y   30 4 M 0 L M L   1.00 C

3061 DEPOT ISSUES CRAYFORD   66 99/00/00/00/00/00/00/00/00
ME   CD 3 Y   32 3 M 86 H M H 130.00 B

3068 DEPOT RECEIPTS NTHA D   66 99/00/00/00/00/00/00/00/00
ME   BD 3 Y   35 6 L 86 H M H   60.00 B

3069 STOCKTAKING   66 99/00/00/00/00/00/00/00/00
ME   BD 3 Y   20 6 L 86 H M H   43.00 D

01/06/88
LHS PLANNING   'MUST DO PROJECTS   LHRSKP12

CODE DESCRIPTION   BA OBJECTIVES
DIV DIS CSA FR MD BUDGET TT AC YR BI IC TP   SIZE ST

3078 DEPOT OTHERS   66 99/00/00/00/00/00/00/00/00/00
ME   ND 3 Y   20 6 M 0 L M L   2.00 C

3080 STOCK VAL'N B'HAM DEPOT   66 99/00/00/00/00/00/00/00/00/00
          3 Y   9 2 H 0 H N H   1.00 D

3081 CONTRACTS   67 99/00/00/00/00/00/00/00/00/00
          3 Y   3 3 H 0 H N H   1.00 D

3082 LDS PRE IMP B'HAM/CRAYFORD   66 99/00/00/00/00/00/00/00/00/00
          1 Y   80 0 H 0 H N H   1.00 D

4003 MANSION PLACE LEASING   71 99/00/00/00/00/00/00/00/00/00
CFD F2   3 Y   20 0 H 87 H N H   2.00 C

4006 PERIOD END ACCOUNTS   71 99/00/00/00/00/00/00/00/00/00
CFD F2   3 Y   10 0 M 87 L M L   2.00 C

4013 VAT   71 99/00/00/00/00/00/00/00/00/00
CFD F8   3 Y   30 0 M 84 H N L   0.70 E

4016 YEAR END ACCOUNTS   69 99/00/00/00/00/00/00/00/00/00
IPD FIN HQ 3 Y   15 0 M 0 L N N   0.25 E

4018 PROCUREMENT   69 99/00/00/00/00/00/00/00/00/00
IPD PRO HQ 3 Y   30 4 M 86 L L H   8.60 C

4019 PROCUREMENT ADMINISTRATION   69 99/00/00/00/00/00/00/00/00/00
IPD PRO HQ 3 Y   30 0 M 86 L L L   8.60 C

4032 SALES ORDER PROCESSING   69 99/00/00/00/00/00/00/00/00/00
IPD TS CTP 3 Y   10 0 L 0 L N M   0.30 B

4033 PROCUREMENT   69 99/00/00/00/00/00/00/00/00/00
IPD TS CTP 3 Y   20 0 L 0 L L M   1.00 C

4034 STOCK MANAGEMENT   69 99/00/00/00/00/00/00/00/00/00
IPD TS CTP 3 Y   10 0 L 0 L N M   1.00 D

4037 SALES/ORDER PROCESSING   69 99/00/00/00/00/00/00/00/00/00
IPD NPO CE 3 Y   15 2 L 0 L N M   1.00 B

4039 PROCUREMENT   69 99/00/00/00/00/00/00/00/00/00
IPD NPO CE 3 Y   20 2 M 0 L N M   1.00 C

4041 INVENTORY CONTROL   69 99/00/00/00/00/00/00/00/00/00
IPD NPO CE 3 Y   20 2 M 87 M N H   1.00 D

4045 COMPUTER INTEGRITY   69 99/00/00/00/00/00/00/00/00/00
IPD NPO CE 3 Y   15 2 H 0 L N L   1.00 B

4047 MANAGEMENT ACCOUNTING   71 99/00/00/00/00/00/00/00/00/00
CCD CAB   3 Y   20 0 M 0 M N N   0.40 C

4055 COMPUTER INTEGRITY   71 99/00/00/00/00/00/00/00/00/00
CCD IPU   3 Y   15 0 L 85 L L L   8.00 B

01/06/88
LHS PLANNING   'MUST DO PROJECTS   LHRSKP12

CODE DESCRIPTION   BA OBJECTIVES
DIV DIS CSA FR MD BUDGET TT AC YR BI IC TP   SIZE ST

4056 REVENUE ACCOUNTING   71 99/00/00/00/00/00/00/00/00
CCD IPU   3 Y   20 0 L 85 L L L   5.00 B

4061 DIRECT INCOME   69 99/00/00/00/00/00/00/00/00
IPD CBP   3 Y   20 1 M 85 M L M   1.00 B

4062 PROCUREMENT   69 99/00/00/00/00/00/00/00/00
IPD ITS CBP 3 Y   20 1 M 85 M L M   1.00 C

4063 INVENTORY CONTROL   69 99/00/00/00/00/00/00/00/00
IPD ITS CBP 3 Y   30 1 M 85 M L H   1.00 D

4070 SALES ORDER PROCESSING   69 99/00/00/00/00/00/00/00/00
IPD TS SP 3 Y   10 0 M 0 L N M   1.28 B

4072 STOCK MANAGEMENT   69 99/00/00/00/00/00/00/00/00
IPD TS SP 3 Y   20 3 M 87 L L M   7.00 D

4075 SALES ORDER PROCESSING   69 99/00/00/00/00/00/00/00/00
IPD TS DCM 3 Y   20 0 M 0 M N M   5.50 B

4076 PROCUREMENT   69 99/00/00/00/00/00/00/00/00
IPD TS DCM 3 Y   20 0 M 0 N N M   50.00 C

4083 SALES ORDER PROCESSING   69 99/00/00/00/00/00/00/00/00
IPD IS GAP 3 Y   10 2 M 0 M N M   8.80 B

4085 INVENTORY CONTROL   69 99/00/00/00/00/00/00/00/00
IPD IS GAP 3 Y   15 2 M 0 L N M   1.00 D

4088 SALES ORDER PROCESSING   69 99/00/00/00/00/00/00/00/00
IPD TS PUB 3 Y   5 1 M 0 L N M   1.00 B

4089 STOCK MANAGEMENT   69 99/00/00/00/00/00/00/00/00
IPD TS PUB 3 Y   5 1 M 0 L N M   0.50 D

4092 SALES ORDER PROCESSING   69 99/00/00/00/00/00/00/00/00
IPD IS IS 3 Y   10 1 M 0 L N M   7.50 B

4095 INVENTORY CONTROL   69 99/00/00/00/00/00/00/00/00
IPD ITS IS 3 Y   5 1 M 0 L N M   1.00 D

4103 GOVERNMENT RELATIONS DEPT   17 99/00/00/00/00/00/00/00/00
SEC GRD   3 Y   15 0 M 0 H N L   6.20 E

4104 SOLICITORS OFFICE   17 99/00/00/00/00/00/00/00/00
SEC SOL   3 Y   25 0 M 0 H N L   5.80 E

4105 CORPORATE RELATIONS DEPT   17 99/00/00/00/00/00/00/00/00
SEC CRD   3 Y   70 0 M 86 H N H   13.70 C

4106 INVESTIGATION DIVISION   17 99/00/00/00/00/00/00/00/00
SEC ID   3 Y   25 0 M 0 H N M   3.40 E

4107 SECURITY DIVISION   17 99/00/00/00/00/00/00/00/00
SEC STY   3 Y   10 0 M 0 H N M   0.50 E

CODE DESCRIPTION   BA OBJECTIVES
DIV DIS CSA FR MD BUDGET TT AC YR BI IC TP   SIZE ST

4109 BTPAC HQ   17 99/00/00/00/00/00/00/00/00
PCS PAC HQ 3 Y   10 0 L 0 M N L   0.60 E

4110 PENSION ADMINISTRATION   17 99/00/00/00/00/00/00/00/00
PCS PAC   2 Y   80 8 M 86 H L H   6.00 E

4111 BTPAC COMPUTER INTEGRITY   17 99/00/00/00/00/00/00/00/00
PCS PAC   3 Y   20 4 H 86 H L L   6.00 E

4117 MANAGEMENT ACCOUNTS   17 99/00/00/00/00/00/00/00/00
PCS ASD AS3 3 Y   25 0 M 0 M N L   2.40 E

4119 COMPUTER INTEGRITY   17 99/00/00/00/00/00/00/00/00
PCS ASD AS3 3 Y   20 0 H 0 M N M   2.40 E

4123 FINANCIAL ACCOUNTING (NAS)   17 99/00/00/00/00/00/00/00/00
PCS BMD   2 Y   10 0 M 87 M L M 113.00 C

4125 COMPUTER INTEGRITY   17 99/00/00/00/00/00/00/00/00
PCS BMD   2 Y   20 0 H 0 L N L 113.00 C

4127 STAFF RESTAURANTS   17 99/00/00/00/00/00/00/00/00
PCS CAT   1 Y   20 0 L 87 L L H   4.90 C

4129 INVENTORY CONTROL   69 99/00/00/00/00/00/00/00/00
IPD NPO BMF 3 Y   30 3 M 0 M N H   13.00 D

4133 PROCUREMENT   69 99/00/00/00/00/00/00/00/00
IPD NPO BMF 3 Y   30 3 M 86 M L M   21.00 C

4138 SALES ORDER PROCESSING   69 99/00/00/00/00/00/00/00/00
IPD NPO ENF 3 Y   20 1 M 0 L N M   44.00 B

4139 INVENTORY CONTROL   69 99/00/00/00/00/00/00/00/00
IPD NPO ENF 3 Y   25 1 M 86 M L M   10.00 D

4141 PROCUREMENT   69 99/00/00/00/00/00/00/00/00
IPD NPO ENF 3 Y   20 1 M 86 M L M   1.00 C

4149 FOREIGN CURRENCY EXPOSURE   71 99/00/00/00/00/00/00/00/00
CFD F2   3 Y   30 0 H 0 H M L 9999.00 B

4150 BTPAC QUARTERLY REVIEW   17 99/00/00/00/00/00/00/00/00
PCS PAC   1 Y   16 4 H 0 M M M   6.00 E

4151 INVENTORY ACCOUNTING   69 99/00/00/00/00/00/00/00/00
IPD TS HQ 3 Y   30 0 M 0 L M L   1.00 D

4152 SALES LEDGER/INVOICING   69 99/00/00/00/00/00/00/00/00
IPD TS HQ 3 Y   30 0 L 0 L M N   1.00 D

4153 IPD OVERVIEW REPORTS   69 99/00/00/00/00/00/00/00/00
IPD ALL   1 Y   10 0 M 0 H N N   1.00 D

A2.14   **Control Objectives (LHRSKP13)**

A2.14.1 This report lists the various Control Objectives
        for checking purposes. The Standard Times and
        Frequencies are important as they can be used by
        the system for calculation purposes. In
        addition, the Control Objectives are used when
        the system attempt to ascertain whether complete
        coverage is scheduled for any location during the
        planning cycle. The assumption being that every
        Control Objective should be covered in every
        Location.

THE DETAILS MAY BE AMENDED
FROM THE CONTROL OBJECTIVES MENU

KEY TO COLUMN HEADINGS
=========================

BA   = BUSINESS AREA CODE
CO   = CONTROL OBJECTIVE CODE
DESCRIPTION = CONTROL OBJECTIVE DESCRIPTION
TIME   = STANDARD TIME (DAYS) TO AUDIT THE OBJECTIVE
CORE   = 'YES' - CORE, 'NO' - NON-CORE
FREQ   = STANDARD FREQUENCY OF COVERAGE (YEARS)

BA	CO	CONTROL OBJECTIVE DESCRIPTION	TIME	CORE	FREQ
01	**	CSS DISU SET-UP			
01	00	NO CORE OBJECTIVES	0.0	NO	3
01	99	ALL CORE OBJECTIVES	1.0	YES	3
02	**	CSS DISU READINESS			
02	00	NO CORE OBJECTIVES	0.0	NO	3
02	99	ALL CORE OBJECTIVES	1.0	YES	3
03	**	CSS DISU POST-IMPLEMENTATION			
03	00	NO CORE OBJECTIVES	0.0	NO	3
03	99	ALL CORE OBJECTIVES	1.0	YES	3
04	**	CSS DISU REGULATORY			
04	00	NO CORE OBJECTIVES	0.0	NO	3
04	99	ALL CORE OBJECTIVES	1.0	YES	3
05	**	CSS PRE-IMPLEMETATION INTERIM			
05	00	NO CORE OBJECTIVES	0.0	NO	3
05	99	ALL CORE OBJECTIVES	1.0	YES	3
06	**	CSS PRE-IMP FOLLOW-UP			
06	00	NO CORE OBJECTIVES	0.0	NO	3
06	99	ALL CORE OBJECTIVES	1.0	YES	3
07	**	CSS CONVERSION			
07	00	NO CORE OBJECTIVES	0.0	NO	3
07	99	ALL CORE OBJECTIVES	1.0	YES	3
08	**	CSS POST DAY-ONE			
08	00	NO CORE OBJECTIVES	0.0	NO	3
08	99	ALL CORE OBJECTIVES	1.0	YES	3
09	**	CSS IMPLEMENATATION			
09	00	NO CORE OBJECTIVES	0.0	NO	3
09	99	ALL CORE OBJECTIVES	1.0	YES	3
10	**	MADC			
10	00	NO CORE OBJECTIVES	0.0	NO	3
10	99	ALL CORE OBJECTIVES	1.0	YES	3
11	**	NON-CSS IBM DISU			
11	00	NO CORE OBJECTIVES	0.0	NO	3
11	99	ALL CORE OBJECTIVES	1.0	YES	3
12	**	IBM 4300 TYPE CENTRES			
12	00	NO CORE OBJECTIVES	0.0	NO	3
12	99	ALL CORE OBJECTIVES	1.0	YES	3
13	**	OTHER COMPUTER AUDIT ACTIVITY			
13	00	NO CORE OBJECTIVES	0.0	NO	3
15	**	CUSTOMER SERVICE			
15	00	NO CORE OBJECTIVES	0.0	NO	3
15	01	SUPPLY	1.0	YES	3
15	02	REPAIR AND MAINTENANCE	1.0	YES	3
15	03	FINANCIAL ACCOUNTING	1.0	YES	3

BA	CO	CONTROL OBJECTIVE DESCRIPTION	TIME	CORE	FREQ
15	04	CAPACITY	1.0	NO	3
15	05	CUSTOMER ENQUIRIES	1.0	NO	3
15	06	MANAGEMENT RECORDS	1.0	NO	3
15	99	ALL CORE OBJECTIVES	3.0	YES	3
16	**	FINANCIAL & MANAGEMENT ACCOUNT			
16	00	NO CORE OBJECTIVES	0.0	NO	3
16	01	METER READING SAMPLES	1.0	YES	3
16	02	READING OF METERS	1.0	YES	3
16	03	METER READING INPUT	1.0	YES	3
16	04	METER READING ADJUSTEMENTS	1.0	YES	3
16	05	CRAM CALCULATIONS	1.0	YES	3
16	06	CRAM/NBS RECONCILIATIONS	1.0	YES	3
16	07	CRAM/NBS VARIANCES	1.0	YES	3
16	08	ACCOUNTING RECORDS	1.0	YES	3
16	09	SECURITY	1.0	YES	3
16	11	ACCEPTANCE OF CHARGES	1.0	YES	3
16	12	INPUT TO GOLD - CHARGES IN	1.0	YES	3
16	13	RAISING OF CHARGES	1.0	YES	3
16	14	INPUT TO GOLD - CHARGES OUT	1.0	YES	3
16	15	JOURNAL VOUCHERS	1.0	YES	3
16	16	RECONCILIATIONS	1.0	YES	3
16	17	SECURITY	1.0	YES	3
16	18	PROCESSING	1.0	YES	3
16	19	MANAGEMENT INFORMATION	1.0	YES	3
16	21	DATA PREPARATION	1.0	YES	3
16	22	INPUT	1.0	YES	3
16	23	PROCESSING	1.0	YES	3
16	24	ERRORS	1.0	YES	3
16	25	OUTPUTS	1.0	YES	3
16	26	STANDING DATA	1.0	YES	3
16	27	SEGREGATION OF DUTIES	1.0	YES	3
16	28	STAFFING LEVELS	1.0	YES	3
16	29	SECURITY	1.0	YES	3
16	30	ON-LINE ACCESS	1.0	YES	3
16	31	BACK-UP AND RECOVERY	1.0	YES	3
16	32	SUPERVISORY CONTROLS	1.0	YES	3
16	41	ACCOUNTS PAYABLE	1.0	YES	3
16	42	AUTOMATIC PAYMENT VOUCHERS	1.0	YES	3
16	43	RECEIPTS	1.0	YES	3
16	44	CASH HOLDINGS	1.0	YES	3
16	45	BANK BALANCE	1.0	YES	3
16	46	GIROBANK	1.0	YES	3
16	47	CASHIERS BALANCES	1.0	YES	3
16	48	FUNDING POLICY	1.0	YES	3
16	49	STANDING DATA	1.0	YES	3
16	50	SECURITY OF FUNDS	1.0	YES	3
16	51	SYSTEM SECURITY	1.0	YES	3
16	52	CASH ACCOUNT	1.0	YES	3
16	53	BACK-UP FACILITIES	1.0	YES	3
16	61	INPUT STATUS REPORT	1.0	YES	3
16	62	MOH/PSO	1.0	YES	3
16	63	IMAP	1.0	YES	3
16	64	MATERIALS	1.0	YES	3
16	65	OCP/CONTRACTS	1.0	YES	3
16	66	JOURNAL VOUCHERS	1.0	YES	3

BA	CO	CONTROL OBJECTIVE DESCRIPTION	TIME	CORE	FREQ
16	67	TELEPHONE SALES LEDGER	1.0	YES	3
16	68	EXCEPTION REPORTS	1.0	YES	3
16	99	ALL CORE OBJECTIVES	1.0	YES	3
17	**	CORPORATE PERSONNEL & CMN SRVS			
17	00	NO CORE OBJECTIVES	0.0	NO	3
17	99	ALL CORE OBJECTIVES	1.0	YES	3
18	**	FOLLOW-UP WORK			
18	00	NO CORE OBJECTIVES	0.0	NO	3
18	99	ALL CORE OBJECTIVES	1.0	YES	3
19	**	TERRITORY WORK			
19	00	NO CORE OBJECTIVES	0.0	NO	3
19	99	ALL CORE OBJECTIVES	1.0	YES	3
20	**	PLANT & EQUIPMENT			
20	00	NO CORE OBJECTIVES	0.0	NO	3
20	01	CAPITAL EXPEND AUTHORISATION	1.0	YES	3
20	02	CONSTRUCTION/INSTALLATION	1.0	YES	3
20	03	FINANCIAL RECORDS	1.0	YES	3
20	04	ASSET BASE MANAGEMENT	1.0	NO	3
20	05	UTILISATION	1.0	NO	3
20	06	MAINTENANCE	1.0	NO	3
20	07	CUSTODY	1.0	NO	3
20	08	DISPOSAL	1.0	NO	3
20	99	ALL CORE OBJECTIVES	3.0	YES	3
21	**	MOTOR TRANSPORT			
21	00	NO CORE OBJECTIVES	0.0	NO	3
21	01	ASSET BASE MANAGEMENT	1.0	YES	3
21	02	PROCUREMENT	1.0	YES	3
21	03	FINANCIAL RECORDS	1.0	YES	3
21	04	UTILISATION	1.0	YES	3
21	05	AUTHORISATION	1.0	NO	3
21	06	MAINTENANCE	1.0	NO	3
21	07	CUSTODY	1.0	NO	3
21	08	DISPOSAL	1.0	NO	3
21	09	MANAGEMENT RECORDS	1.0	NO	3
21	99	ALL CORE OBJECTIVES	4.0	YES	3
22	**	CONTRACTS			
22	00	NO CORE OBJECTIVES	0.0	NO	3
22	01	AUTHORISATION	1.0	YES	3
22	02	PAYMENT	1.0	YES	3
22	03	CONTRACTURAL TERMS	1.0	YES	3
22	04	TENDERING	1.0	YES	3
22	05	PROGRESS/MONITORING	1.0	NO	3
22	06	RECORDS	1.0	NO	3
22	07	ESTIMATES	1.0	NO	3
22	99	ALL CORE OBJECTIVES	4.0	YES	3
23	**	PROPERTY			
23	00	NO CORE OBJECTIVES	0.0	NO	3
23	01	PROCUREMENT	1.0	YES	3
23	02	MANAGEMENT RECORDS	1.0	YES	3

BA	CO	CONTROL OBJECTIVE DESCRIPTION	TIME	CORE	FREQ
23	03	DISPOSALS	1.0	YES	3
23	04	PORTFOLIO MANAGEMENT	1.0	YES	3
23	05	EXTERNAL AGENTS	1.0	NO	3
23	06	MAINTENANCE	1.0	NO	3
23	07	UTILISATION	1.0	NO	3
23	08	CUSTODY	1.0	NO	3
23	99	ALL CORE OBJECTIVES	4.0	YES	3
24	**	PERIOD END ACCOUNTS			
24	00	NO CORE OBJECTIVES	0.0	NO	3
24	99	ALL CORE OBJECTIVES	1.0	YES	3
25	**	TELEPHONE INCOME			
25	00	NO CORE OBJECTIVES	0.0	NO	3
25	01	BILLING	1.0	YES	3
25	02	DEBTOR CONTROL	1.0	YES	3
25	03	FINANCIAL ACCOUNTING	1.0	YES	3
25	04	MANAGEMENT INFORMATION	1.0	YES	3
25	99	ALL CORE OBJECTIVES	4.0	YES	3
26	**	PRIVATE CIRCUITS INCOME			
26	00	NO CORE OBJECTIVES	0.0	NO	3
26	01	BILLING	1.0	YES	3
26	02	DEBTOR CONTROL	1.0	YES	3
26	03	FINANCIAL ACCOUNTING	1.0	YES	3
26	04	MANAGEMENT INFORMATION	1.0	YES	3
26	99	ALL CORE OBJECTIVES	4.0	YES	3
27	**	TELEX INCOME			
27	00	NO CORE OBJECTIVES	0.0	NO	3
27	01	BILLING	1.0	YES	3
27	02	DEBTOR CONTROL	1.0	YES	3
27	03	FINANCIAL ACCOUNTING	1.0	YES	3
27	04	MANAGEMENT INFORMATION	1.0	YES	3
27	99	ALL CORE OBJECTIVES	4.0	YES	3
28	**	DIRECT SALES INCOME			
28	00	NO CORE OBJECTIVES	0.0	NO	3
28	01	BILLING	1.0	YES	3
28	02	DEBTOR CONTROL	1.0	YES	3
28	03	FINANCIAL ACCOUNTING	1.0	YES	3
28	04	MANAGEMENT INFORMATION	1.0	YES	3
28	99	ALL CORE OBJECTIVES	4.0	YES	3
29	**	PCO INCOME			
29	00	NO CORE OBJECTIVES	0.0	NO	3
29	01	BILLING	1.0	YES	3
29	02	DEBTOR CONTROL	1.0	YES	3
29	03	FINANCIAL ACCOUNTING	1.0	YES	3
29	04	MANAGEMENT INFORMATION	1.0	YES	3
29	99	ALL CORE OBJECTIVES	4.0	YES	3
30	**	REPAYMENT WORKS			
30	00	NO CORE OBJECTIVES	0.0	NO	3
30	99	ALL CORE OBJECTIVES	1.0	YES	3
31	**	IC/RMTO			
31	00	NO CORE OBJECTIVES	0.0	NO	3

BA	CO	CONTROL OBJECTIVE DESCRIPTION	TIME	CORE	FREQ
31	99	ALL CORE OBJECTIVES	1.0	YES	3
32	**	GENERAL AUDIT SOFTWARE			
32	00	NO CORE OBJECTIVES	0.0	NO	3
32	99	ALL CORE OBJECTIVES	1.0	YES	3
33	**	CSS INCOME			
33	00	NO CORE OBJECTIVES	0.0	NO	3
33	01	BILLING	1.0	YES	3
33	02	DEBTOR CONTROL	1.0	YES	3
33	03	FINANCIAL ACCOUNTING	1.0	YES	3
33	04	MANAGEMENT INFORMATION	1.0	YES	3
33	99	ALL CORE OBJECTIVES	4.0	YES	3
34	**	FRAUD INVESTIGATION			
34	00	NO CORE OBJECTIVES	0.0	NO	3
34	99	ALL CORE OBJECTIVES	1.0	YES	3
35	**	MANPOWER			
35	00	NO CORE OBJECTIVES	0.0	NO	3
35	99	ALL CORE OBJECTIVES	1.0	YES	3
36	**	MARKETING (+ALL LEAD Z. TIME)			
36	00	NO CORE OBJECTIVES	0.0	NO	3
36	01	RETAIL OUTLETS	1.0	YES	3
36	99	ALL CORE OBJECTIVES	1.0	YES	3
37	**	PURCHASING			
37	00	NO CORE OBJECTIVES	0.0	NO	3
37	01	PRE-ACQUISITION	1.0	YES	3
37	02	PROCUREMENT	1.0	YES	3
37	03	PAYMENT	1.0	YES	3
37	04	FINANCIAL ACCOUNTING	1.0	YES	3
37	05	UTILISATION	1.0	NO	3
37	06	MANAGEMENT INFORMATION	1.0	NO	3
37	07	REVIEW	1.0	NO	3
37	08	SECURITY OF DOCUMENTATION	1.0	NO	3
37	99	ALL CORE OBJECTIVES	4.0	YES	3
38	**	REASEARCH & DEVELOPMENT			
38	00	NO CORE OBJECTIVES	0.0	NO	3
38	99	ALL CORE OBJECTIVES	1.0	YES	3
39	**	PENSIONS			
39	00	NO CORE OBJECTIVES	0.0	NO	3
39	99	ALL CORE OBJECTIVES	1.0	YES	3
40	**	DSM STORES			
40	00	NO CORE OBJECTIVES	0.0	NO	3
40	01	STOCK MANAGEMENT	1.0	YES	3
40	02	ORDERING OF STORES	1.0	YES	3
40	03	STOCK RECEIPTS	1.0	YES	3
40	04	PAYMENT FOR STORES RECEIVED	1.0	YES	3
40	05	STOCK ISSUES	1.0	YES	3
40	06	STOCK RECOVERIES FROM FIELD	1.0	YES	3
40	07	STOCK DISTRIBUTION	1.0	YES	3

BA	CO	CONTROL OBJECTIVE DESCRIPTION	TIME	CORE	FREQ
40	08	STOCK VERIFICATION	1.0	YES	3
40	09	STOCK ACCOUNTING	1.0	YES	3
40	10	DISPOSALS AND RETURNS	1.0	NO	3
40	11	STORAGE AND SECURITY	1.0	NO	3
40	99	ALL CORE OBJECTIVES	9.0	YES	3
41	**	CULLINET STORES			
41	00	NO CORE OBJECTIVES	0.0	NO	3
41	01	STOCK MANAGEMENT	1.0	YES	3
41	02	ORDERING OF STORES	1.0	YES	3
41	03	STOCK RECEIPTS	1.0	YES	3
41	04	PAYMENT FOR STORES RECEIVED	1.0	YES	3
41	05	STOCK ISSUES	1.0	YES	3
41	06	STOCK RECOVERIES FROM FIELD	1.0	YES	3
41	07	STOCK DISTRIBUTION	1.0	YES	3
41	08	STOCK VERIFICATION	1.0	YES	3
41	09	STOCK ACCOUNTING	1.0	YES	3
41	10	DISPOSALS AND RETURNS	1.0	NO	3
41	11	STORAGE AND SECURITY	1.0	NO	3
41	99	ALL CORE OBJECTIVES	9.0	YES	3
42	**	MCS STORES			
42	00	NO CORE OBJECTIVES	0.0	NO	3
42	01	STOCK MANAGEMENT	1.0	YES	3
42	02	ORDERING OF STORES	1.0	YES	3
42	03	STOCK RECEIPTS	1.0	YES	3
42	04	PAYMENT FOR STORES RECEIVED	1.0	YES	3
42	05	STOCK ISSUES	1.0	YES	3
42	06	STOCK RECOVERIES FROM FIELD	1.0	YES	3
42	07	STOCK DISTRIBUTION	1.0	YES	3
42	08	STOCK VERIFICATION	1.0	YES	3
42	09	STOCK ACCOUNTING	1.0	YES	3
42	10	DISPOSALS AND RETURNS	1.0	NO	3
42	11	STORAGE AND SECURITY	1.0	NO	3
42	99	ALL CORE OBJECTIVES	9.0	YES	3
43	**	ESCAP STORES			
43	00	NO CORE OBJECTIVES	0.0	NO	3
43	01	STOCK MANAGEMENT	1.0	YES	3
43	02	ORDERING OF STORES	1.0	YES	3
43	03	STOCK RECEIPTS	1.0	YES	3
43	04	PAYMENT FOR STORES RECEIVED	1.0	YES	3
43	05	STOCK ISSUES	1.0	YES	3
43	06	STOCK RECOVERIES FROM FIELD	1.0	YES	3
43	07	STOCK DISTRIBUTION	1.0	YES	3
43	08	STOCK VERIFICATION	1.0	YES	3
43	09	STOCK ACCOUNTING	1.0	YES	3
43	10	DISPOSALS AND RETURNS	1.0	NO	3
43	11	STORAGE AND SECURITY	1.0	NO	3
43	99	ALL CORE OBJECTIVES	9.0	YES	3
44	**	STORES (OTHER)			
44	00	NO CORE OBJECTIVES	0.0	NO	3
44	01	STOCK MANAGEMENT	1.0	YES	3
44	02	ORDERING OF STORES	1.0	YES	3
44	03	STOCK RECEIPTS	1.0	YES	3

BA	CO	CONTROL OBJECTIVE DESCRIPTION	TIME	CORE	FREQ
44	04	PAYMENT FOR STORES RECEIVED	1.0	YES	3
44	05	STOCK ISSUES	1.0	YES	3
44	06	STOCK RECOVERIES FROM FIELD	1.0	YES	3
44	07	STOCK DISTRIBUTION	1.0	YES	3
44	08	STOCK VERIFICATION	1.0	YES	3
44	09	STOCK ACCOUNTING	1.0	YES	3
44	10	DISPOSALS AND RETURNS	1.0	NO	3
44	11	STORAGE AND SECURITY	1.0	NO	3
44	99	ALL CORE OBJECTIVES	9.0	YES	3
45	**	DEPOTS (ME)			
45	00	NO CORE OBJECTIVES	1.0	NO	3
45	01	ISSUES	1.0	YES	3
45	02	RECEIPTS	1.0	YES	3
45	03	OPERATIONAL SYSTEM	1.0	YES	3
45	04	STOCKTAKING	1.0	YES	3
45	05	STOCK DISCREPANCY CHECKS	1.0	YES	3
45	06	INTER-DEPOT TRANSFERS	1.0	YES	3
45	07	SECURITY	1.0	YES	3
45	08	TRANSFER CHARGING	1.0	NO	3
45	09	SALVAGE RETURNS/DISPOSALS	1.0	NO	3
45	10	WAREHOUSE ROUTINES	1.0	NO	3
45	11	TRANSPORT	1.0	NO	3
45	12	STORES UNDER QUESTION	1.0	NO	3
45	13	NEW STORES RETURNS	1.0	NO	3
45	14	STAFF SALES	1.0	NO	3
45	15	ADMINISTRATION	1.0	NO	3
45	99	ALL CORE OBJECTIVES	7.0	YES	3
46	**	DEPOTS (IC/CPE)			
46	00	NO CORE OBJECTIVES	1.0	NO	3
46	01	ISSUES	1.0	YES	3
46	02	RECEIPTS	1.0	YES	3
46	03	OPERATIONAL SYSTEM	1.0	YES	3
46	04	STOCKTAKING	1.0	YES	3
46	05	STOCK DISCREPANCY CHECKS	1.0	YES	3
46	06	INTER-DEPOT TRANSFERS	1.0	YES	3
46	07	SECURITY	1.0	YES	3
46	08	TRANSFER CHARGING	1.0	NO	3
46	09	SALVAGE RETURNS/DISPOSALS	1.0	NO	3
46	10	WAREHOUSE ROUTINES	1.0	NO	3
46	11	TRANSPORT	1.0	NO	3
46	12	STORES UNDER QUESTION	1.0	NO	3
46	13	NEW STORES RETURNS	1.0	NO	3
46	14	STAFF SALES	1.0	NO	3
46	15	ADMINISTRATION	1.0	NO	3
46	99	ALL CORE OBJECTIVES	7.0	YES	3
48	**	SYSTEMS DEVELOPMENT & MAINT.			
48	00	NO CORE OBJECTIVES	0.0	NO	3
48	99	ALL CORE OBJECTIVES	1.0	YES	3
50	**	IAD PROJECTS (NOT LEAD ZONE)			
50	00	NO CORE OBJECTIVES	0.0	NO	3
50	99	ALL CORE OBJECTIVES	1.0	YES	3
51	**	MANAGEMENT			
51	00	NO CORE OBJECTIVES	0.0	NO	3

BA	CO	CONTROL OBJECTIVE DESCRIPTION	TIME	CORE	FREQ
51	99	ALL CORE OBJECTIVES	1.0	YES	3
52	**	SERVICES			
52	00	NO CORE OBJECTIVES	0.0	NO	3
52	99	ALL CORE OBJECTIVES	1.0	YES	3
53	**	SUBSIDIARIES/JOINT VENTURES			
53	00	NO CORE OBJECTIVES	0.0	NO	3
53	99	ALL CORE OBJECTIVES	1.0	YES	3
54	**	MANUFACTURING (FULCRUM)			
54	00	NO CORE OBJECTIVES	0.0	NO	3
54	99	ALL CORE OBJECTIVES	1.0	YES	3
55	**	DIRECT TIME (CONTROLLER & PS)			
55	00	NO CORE OBJECTIVES	0.0	NO	3
55	99	ALL CORE OBJECTIVES	1.0	YES	3
56	**	LOANS TO OTHER DEPARTMENTS			
56	00	NO CORE OBJECTIVES	0.0	NO	3
56	99	ALL CORE OBJECTIVES	1.0	YES	3
57	**	LEAD ZONE WORK			
57	00	NO CORE OBJECTIVES	0.0	NO	3
57	99	ALL CORE OBJECTIVES	1.0	YES	3
60	**	LOCAL PROJECTS (NOT LEAD ZONE)			
60	00	NO CORE OBJECTIVES	0.0	NO	3
60	99	ALL CORE OBJECTIVES	1.0	YES	3
61	**	BUSINESS SERVICES			
61	00	NO CORE OBJECTIVES	0.0	NO	3
61	99	ALL CORE OBJECTIVES	1.0	YES	3
62	**	IC/BROADBAND SERVICES			
62	00	NO CORE OBJECTIVES	0.0	NO	3
62	99	ALL CORE OBJECTIVES	1.0	YES	3
63	**	IC/TRUNK NETWORKS			
63	00	NO CORE OBJECTIVES	0.0	NO	3
63	99	ALL CORE OBJECTIVES	1.0	YES	3
64	**	BTI			
64	00	NO CORE OBJECTIVES	0.0	NO	3
64	99	ALL CORE OBJECTIVES	1.0	YES	3
65	**	OVERSEAS DIVISION			
65	00	NO CORE OBJECTIVES	0.0	NO	3
65	99	ALL CORE OBJECTIVES	1.0	YES	3
66	**	MATERIALS EXECUTIVE			
66	00	NO CORE OBJECTIVES	0.0	NO	3
66	99	ALL CORE OBJECTIVES	1.0	YES	3
67	**	TECHNOLOGY			
67	00	NO CORE OBJECTIVES	0.0	NO	3

BA	CO	CONTROL OBJECTIVE DESCRIPTION	TIME	CORE	FREQ
67	99	ALL CORE OBJECTIVES	1.0	YES	3
68	**	BTE			
68	00	NO CORE OBJECTIVES	0.0	NO	3
68	99	ALL CORE OBJECTIVES	1.0	YES	3
69	**	INTERNATIONAL PRODUCTS			
69	00	NO CORE OBJECTIVES	0.0	NO	3
69	99	ALL CORE OBJECTIVES	1.0	YES	3
70	**	CPE (EX-FOLLOW-UP SUMP)			
70	00	NO CORE OBJECTIVES	0.0	NO	3
70	99	ALL CORE OBJECTIVES	1.0	YES	3
71	**	CORPORATE FINANCE			
71	00	NO CORE OBJECTIVES	0.0	NO	3
71	99	ALL CORE OBJECTIVES	1.0	YES	3
72	**	ICHQ			
72	00	NO CORE OBJECTIVES	0.0	NO	3
72	99	ALL CORE OBJECTIVES	1.0	YES	3

A2.15   **Audit Locations (LHRSKP14)**
A2.15.1 This report shows the Locations known to the
        system and indicates whether they are Divisions,
        Districts, or Customer Service Areas. The system
        uses this location information when determining
        whether complete audit coverage is scheduled for
        a particular location in the planning cycle.

THE DETAILS MAY BE AMENDED
FROM THE AUDIT LOCATIONS MENU

KEY TO COLUMN HEADINGS
========================

LOC   = LOCATION CODE
DESCRIPTION = LOCATION DESCRIPTION
TYPE   = LOCATION TYPE (D=Division, U=Unit/District, C=CSA

LOC DESCRIPTION   TYPE

BTE BRITISH TELECOM ENTERPRISES   D
CCD COMMERCIAL DEVELOPMENT   D
CFD CORPORATE FINANCE   D
IPD INTERNATIONAL PRODUCTS   D
MAR MARINE SERVICES   D
ME MATERIALS EXECUTIVE   D
MNX MANX TELECOM   U
OD OVERSEAS DIVISION   D
PCS PERSONNEL SERVICES   D
R&T RESEARCH & TECHNOLOGY   D
SEC SECRETARIATE   D

A2.16 **Incomplete Core Coverage (LHRSKP15)**
A2.16.1 This report analyses the proposed coverage at each location and identifies any omissions. The assumption being that all Control Objectives should be covered at all locations during the planning horizon.

THIS REPORT SHOWS THOSE CORE OBJECTIVES WHICH
HAVE EITHER NOT BEEN COVERED, OR ARE NOT SCHEDULED
FOR COVERAGE

                    KEY TO COLUMN HEADINGS
                    =======================
LOC   = LOCATION CODE
BA DESCRIPTION = BUSINESS AREA DESCRIPTION
CO DESCRIPTION = CONTROL OBJECTIVE DESCRIPTION

LOC BA DESCRIPTION   CORE OBJECTIVE NOT COVERED

```
BTE 01 CSS DISU SET-UP                         99 ALL CORE OBJECTIVES
BTE 02 CSS DISU READINESS                      99 ALL CORE OBJECTIVES
BTE 03 CSS DISU POST-IMPLEMENTATION            99 ALL CORE OBJECTIVES
BTE 04 CSS DISU REGULATORY                     99 ALL CORE OBJECTIVES
BTE 05 CSS PRE-IMPLEMETATION INTERIM           99 ALL CORE OBJECTIVES
BTE 06 CSS PRE-IMP FOLLOW-UP                    99 ALL CORE OBJECTIVES
BTE 07 CSS CONVERSION                          99 ALL CORE OBJECTIVES
BTE 08 CSS POST DAY-ONE                         99 ALL CORE OBJECTIVES
BTE 09 CSS IMPLEMENATATION                      99 ALL CORE OBJECTIVES
BTE 10 MADC                                     99 ALL CORE OBJECTIVES
BTE 11 NON-CSS IBM DISU                          99 ALL CORE OBJECTIVES
BTE 12 IBM 4300 TYPE CENTRES                     99 ALL CORE OBJECTIVES
BTE 15 CUSTOMER SERVICE                          01 SUPPLY
BTE 15 CUSTOMER SERVICE                          02 REPAIR AND MAINTENANCE
BTE 15 CUSTOMER SERVICE                          03 FINANCIAL ACCOUNTING
BTE 15 CUSTOMER SERVICE                          99 ALL CORE OBJECTIVES
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           01 METER READING SAMPLES
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           02 READING OF METERS
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           03 METER READING INPUT
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           04 METER READING ADJUSTEMENTS
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           05 CRAM CALCULATIONS
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           06 CRAM/NBS RECONCILIATIONS
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           07 CRAM/NBS VARIANCES
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           08 ACCOUNTING RECORDS
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           09 SECURITY
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           11 ACCEPTANCE OF CHARGES
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           12 INPUT TO GOLD - CHARGES IN
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           13 RAISING OF CHARGES
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           14 INPUT TO GOLD - CHARGES OUT
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           15 JOURNAL VOUCHERS
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           16 RECONCILIATIONS
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           17 SECURITY
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           18 PROCESSING
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           19 MANAGEMENT INFORMATION
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           21 DATA PREPARATION
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           22 INPUT
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           23 PROCESSING
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           24 ERRORS
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           25 OUTPUTS
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           26 STANDING DATA
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           27 SEGREGATION OF DUTIES
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           28 STAFFING LEVELS
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           29 SECURITY
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           30 ON-LINE ACCESS
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           31 BACK-UP AND RECOVERY
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           32 SUPERVISORY CONTROLS
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           41 ACCOUNTS PAYABLE
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           42 AUTOMATIC PAYMENT VOUCHERS
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           43 RECEIPTS
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           44 CASH HOLDINGS
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           45 BANK BALANCE
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           46 GIROBANK
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           47 CASHIERS BALANCES
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           48 FUNDING POLICY
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           49 STANDING DATA
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT           50 SECURITY OF FUNDS
```

LOC BA DESCRIPTION   CORE OBJECTIVE NOT COVERED

BTE 16 FINANCIAL & MANAGEMENT ACCOUNT   51 SYSTEM SECURITY
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT   52 CASH ACCOUNT
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT   53 BACK-UP FACILITIES
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT   61 INPUT STATUS REPORT
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT   62 MOH/PSO
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT   63 IMAP
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT   64 MATERIALS
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT   65 OCP/CONTRACTS
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT   66 JOURNAL VOUCHERS
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT   67 TELEPHONE SALES LEDGER
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT   68 EXCEPTION REPORTS
BTE 16 FINANCIAL & MANAGEMENT ACCOUNT   99 ALL CORE OBJECTIVES
BTE 17 CORPORATE PERSONNEL & CMN SRVS   99 ALL CORE OBJECTIVES
BTE 18 FOLLOW-UP WORK   99 ALL CORE OBJECTIVES
BTE 19 TERRITORY WORK   99 ALL CORE OBJECTIVES
BTE 20 PLANT & EQUIPMENT   01 CAPITAL EXPEND AUTHORISATION
BTE 20 PLANT & EQUIPMENT   02 CONSTRUCTION/INSTALLATION
BTE 20 PLANT & EQUIPMENT   03 FINANCIAL RECORDS
BTE 20 PLANT & EQUIPMENT   99 ALL CORE OBJECTIVES
BTE 21 MOTOR TRANSPORT   01 ASSET BASE MANAGEMENT
BTE 21 MOTOR TRANSPORT   02 PROCUREMENT
BTE 21 MOTOR TRANSPORT   03 FINANCIAL RECORDS
BTE 21 MOTOR TRANSPORT   04 UTILISATION
BTE 21 MOTOR TRANSPORT   99 ALL CORE OBJECTIVES
BTE 22 CONTRACTS   01 AUTHORISATION
BTE 22 CONTRACTS   02 PAYMENT
BTE 22 CONTRACTS   03 CONTRACTURAL TERMS
BTE 22 CONTRACTS   04 TENDERING
BTE 22 CONTRACTS   99 ALL CORE OBJECTIVES
BTE 23 PROPERTY   01 PROCUREMENT
BTE 23 PROPERTY   02 MANAGEMENT RECORDS
BTE 23 PROPERTY   03 DISPOSALS
BTE 23 PROPERTY   04 PORTFOLIO MANAGEMENT
BTE 23 PROPERTY   99 ALL CORE OBJECTIVES
BTE 24 PERIOD END ACCOUNTS   99 ALL CORE OBJECTIVES
BTE 25 TELEPHONE INCOME   01 BILLING
BTE 25 TELEPHONE INCOME   02 DEBTOR CONTROL
BTE 25 TELEPHONE INCOME   03 FINANCIAL ACCOUNTING
BTE 25 TELEPHONE INCOME   04 MANAGEMENT INFORMATION
BTE 25 TELEPHONE INCOME   99 ALL CORE OBJECTIVES
BTE 26 PRIVATE CIRCUITS INCOME   01 BILLING
BTE 26 PRIVATE CIRCUITS INCOME   02 DEBTOR CONTROL
BTE 26 PRIVATE CIRCUITS INCOME   03 FINANCIAL ACCOUNTING
BTE 26 PRIVATE CIRCUITS INCOME   04 MANAGEMENT INFORMATION
BTE 26 PRIVATE CIRCUITS INCOME   99 ALL CORE OBJECTIVES
BTE 27 TELEX INCOME   01 BILLING
BTE 27 TELEX INCOME   02 DEBTOR CONTROL
BTE 27 TELEX INCOME   03 FINANCIAL ACCOUNTING
BTE 27 TELEX INCOME   04 MANAGEMENT INFORMATION
BTE 27 TELEX INCOME   99 ALL CORE OBJECTIVES
BTE 28 DIRECT SALES INCOME   01 BILLING
BTE 28 DIRECT SALES INCOME   02 DEBTOR CONTROL
BTE 28 DIRECT SALES INCOME   03 FINANCIAL ACCOUNTING
BTE 28 DIRECT SALES INCOME   04 MANAGEMENT INFORMATION
BTE 28 DIRECT SALES INCOME   99 ALL CORE OBJECTIVES
BTE 29 PCO INCOME   01 BILLING

LOC BA DESCRIPTION   CORE OBJECTIVE NOT COVERED

BTE 29 PCO INCOME   02 DEBTOR CONTROL
BTE 29 PCO INCOME   03 FINANCIAL ACCOUNTING
BTE 29 PCO INCOME   04 MANAGEMENT INFORMATION
BTE 29 PCO INCOME   99 ALL CORE OBJECTIVES
BTE 30 REPAYMENT WORKS   99 ALL CORE OBJECTIVES
BTE 31 IC/RMTO   99 ALL CORE OBJECTIVES
BTE 32 GENERAL AUDIT SOFTWARE   99 ALL CORE OBJECTIVES
BTE 33 CSS INCOME   01 BILLING
BTE 33 CSS INCOME   02 DEBTOR CONTROL
BTE 33 CSS INCOME   03 FINANCIAL ACCOUNTING
BTE 33 CSS INCOME   04 MANAGEMENT INFORMATION
BTE 33 CSS INCOME   99 ALL CORE OBJECTIVES
BTE 34 FRAUD INVESTIGATION   99 ALL CORE OBJECTIVES
BTE 35 MANPOWER   99 ALL CORE OBJECTIVES
BTE 36 MARKETING (+ALL LEAD Z. TIME) 01 RETAIL OUTLETS
BTE 36 MARKETING (+ALL LEAD Z. TIME) 99 ALL CORE OBJECTIVES
BTE 37 PURCHASING   01 PRE-ACQUISITION
BTE 37 PURCHASING   02 PROCUREMENT
BTE 37 PURCHASING   03 PAYMENT
BTE 37 PURCHASING   04 FINANCIAL ACCOUNTING
BTE 37 PURCHASING   99 ALL CORE OBJECTIVES
BTE 38 REASEARCH & DEVELOPMENT   99 ALL CORE OBJECTIVES
BTE 39 PENSIONS   99 ALL CORE OBJECTIVES
BTE 40 DSM STORES   01 STOCK MANAGEMENT
BTE 40 DSM STORES   02 ORDERING OF STORES
BTE 40 DSM STORES   03 STOCK RECEIPTS
BTE 40 DSM STORES   04 PAYMENT FOR STORES RECEIVED
BTE 40 DSM STORES   05 STOCK ISSUES
BTE 40 DSM STORES   06 STOCK RECOVERIES FROM FIELD
BTE 40 DSM STORES   07 STOCK DISTRIBUTION
BTE 40 DSM STORES   08 STOCK VERIFICATION
BTE 40 DSM STORES   09 STOCK ACCOUNTING
BTE 40 DSM STORES   99 ALL CORE OBJECTIVES
BTE 41 CULLINET STORES   01 STOCK MANAGEMENT
BTE 41 CULLINET STORES   02 ORDERING OF STORES
BTE 41 CULLINET STORES   03 STOCK RECEIPTS
BTE 41 CULLINET STORES   04 PAYMENT FOR STORES RECEIVED
BTE 41 CULLINET STORES   05 STOCK ISSUES
BTE 41 CULLINET STORES   06 STOCK RECOVERIES FROM FIELD
BTE 41 CULLINET STORES   07 STOCK DISTRIBUTION
BTE 41 CULLINET STORES   08 STOCK VERIFICATION
BTE 41 CULLINET STORES   09 STOCK ACCOUNTING
BTE 41 CULLINET STORES   99 ALL CORE OBJECTIVES
BTE 42 MCS STORES   01 STOCK MANAGEMENT
BTE 42 MCS STORES   02 ORDERING OF STORES
BTE 42 MCS STORES   03 STOCK RECEIPTS
BTE 42 MCS STORES   04 PAYMENT FOR STORES RECEIVED
BTE 42 MCS STORES   05 STOCK ISSUES
BTE 42 MCS STORES   06 STOCK RECOVERIES FROM FIELD
BTE 42 MCS STORES   07 STOCK DISTRIBUTION
BTE 42 MCS STORES   08 STOCK VERIFICATION
BTE 42 MCS STORES   09 STOCK ACCOUNTING
BTE 42 MCS STORES   99 ALL CORE OBJECTIVES
BTE 43 ESCAP STORES   01 STOCK MANAGEMENT
BTE 43 ESCAP STORES   02 ORDERING OF STORES
BTE 43 ESCAP STORES   03 STOCK RECEIPTS

LOC BA DESCRIPTION	CORE OBJECTIVE NOT COVERED
BTE 43 ESCAP STORES	04 PAYMENT FOR STORES RECEIVED
BTE 43 ESCAP STORES	05 STOCK ISSUES
BTE 43 ESCAP STORES	06 STOCK RECOVERIES FROM FIELD
BTE 43 ESCAP STORES	07 STOCK DISTRIBUTION
BTE 43 ESCAP STORES	08 STOCK VERIFICATION
BTE 43 ESCAP STORES	09 STOCK ACCOUNTING
BTE 43 ESCAP STORES	99 ALL CORE OBJECTIVES
BTE 44 STORES (OTHER)	01 STOCK MANAGEMENT
BTE 44 STORES (OTHER)	02 ORDERING OF STORES
BTE 44 STORES (OTHER)	03 STOCK RECEIPTS
BTE 44 STORES (OTHER)	04 PAYMENT FOR STORES RECEIVED
BTE 44 STORES (OTHER)	05 STOCK ISSUES
BTE 44 STORES (OTHER)	06 STOCK RECOVERIES FROM FIELD
BTE 44 STORES (OTHER)	07 STOCK DISTRIBUTION
BTE 44 STORES (OTHER)	08 STOCK VERIFICATION
BTE 44 STORES (OTHER)	09 STOCK ACCOUNTING
BTE 44 STORES (OTHER)	99 ALL CORE OBJECTIVES
BTE 45 DEPOTS (ME)	01 ISSUES
BTE 45 DEPOTS (ME)	02 RECEIPTS
BTE 45 DEPOTS (ME)	03 OPERATIONAL SYSTEM
BTE 45 DEPOTS (ME)	04 STOCKTAKING
BTE 45 DEPOTS (ME)	05 STOCK DISCREPANCY CHECKS
BTE 45 DEPOTS (ME)	06 INTER-DEPOT TRANSFERS
BTE 45 DEPOTS (ME)	07 SECURITY
BTE 45 DEPOTS (ME)	99 ALL CORE OBJECTIVES
BTE 46 DEPOTS (IC/CPE)	01 ISSUES
BTE 46 DEPOTS (IC/CPE)	02 RECEIPTS
BTE 46 DEPOTS (IC/CPE)	03 OPERATIONAL SYSTEM
BTE 46 DEPOTS (IC/CPE)	04 STOCKTAKING
BTE 46 DEPOTS (IC/CPE)	05 STOCK DISCREPANCY CHECKS
BTE 46 DEPOTS (IC/CPE)	06 INTER-DEPOT TRANSFERS
BTE 46 DEPOTS (IC/CPE)	07 SECURITY
BTE 46 DEPOTS (IC/CPE)	99 ALL CORE OBJECTIVES
BTE 48 SYSTEMS DEVELOPMENT & MAINT.	99 ALL CORE OBJECTIVES
BTE 50 IAD PROJECTS (NOT LEAD ZONE)	99 ALL CORE OBJECTIVES
BTE 51 MANAGEMENT	99 ALL CORE OBJECTIVES
BTE 52 SERVICES	99 ALL CORE OBJECTIVES
BTE 53 SUBSIDIARIES/JOINT VENTURES	99 ALL CORE OBJECTIVES
BTE 54 MANUFACTURING (FULCRUM)	99 ALL CORE OBJECTIVES
BTE 55 DIRECT TIME (CONTROLLER & PS)	99 ALL CORE OBJECTIVES
BTE 56 LOANS TO OTHER DEPARTMENTS	99 ALL CORE OBJECTIVES
BTE 57 LEAD ZONE WORK	99 ALL CORE OBJECTIVES
BTE 60 LOCAL PROJECTS (NOT LEAD ZONE)	99 ALL CORE OBJECTIVES
BTE 61 BUSINESS SERVICES	99 ALL CORE OBJECTIVES
BTE 62 IC/BROADBAND SERVICES	99 ALL CORE OBJECTIVES
BTE 63 IC/TRUNK NETWORKS	99 ALL CORE OBJECTIVES
BTE 64 BTI	99 ALL CORE OBJECTIVES
BTE 65 OVERSEAS DIVISION	99 ALL CORE OBJECTIVES
BTE 66 MATERIALS EXECUTIVE	99 ALL CORE OBJECTIVES
BTE 67 TECHNOLOGY	99 ALL CORE OBJECTIVES
BTE 69 INTERNATIONAL PRODUCTS	99 ALL CORE OBJECTIVES
BTE 70 CPE (EX-FOLLOW-UP SUMP)	99 ALL CORE OBJECTIVES
BTE 71 CORPORATE FINANCE	99 ALL CORE OBJECTIVES
BTE 72 ICHQ	99 ALL CORE OBJECTIVES

A2.17 **Planning Horizons (LHRSKP16)**

A2.17.1 This report shows the minimum cycle necessary in order to achieve complete coverage of ever audit in the portfolio based on the Nominal Budgets. It achieves this by summing the individual Nominal Budgets and dividing that figure by the available resource as held in the Annual Parameters. This immediately reveals, in an unsophisticated manner, the minimum planning cycle that is necessary in order to provide full coverage using the available annual resource.

NUMBER OF DAYS AVAILABLE ANNUALLY   4536

MAN-DAYS REQUIRED FOR 1 YEAR HORIZON   8914
MAN-DAYS REQUIRED FOR 2 YEAR HORIZON   9210
MAN-DAYS REQUIRED FOR 3 YEAR HORIZON   9506
MAN-DAYS REQUIRED FOR 4 YEAR HORIZON   10704
MAN-DAYS REQUIRED FOR 5 YEAR HORIZON   11000

APPENDIX 3

SYSTEM OPERATING INSTRUCTIONS

A3.1   **Introduction**

A3.1.1 The Planning System consists of two main
        components. The first component maintains the
        data files used by the system and from that data
        calculates importance scores, suggests audit
        frequencies and budgets, and accumulates totals.
        The second component uses the results calculated
        by the first to print suggested strategic and
        annual plans and other applicable reports.

A3.1.2 A link is provided to a project monitoring system
        for both updating the planning data files with
        historical data and for creating a current
        monitoring file from the planning system. This
        allows projects selected for review in a
        particular year to be transferred into the
        monitoring system and at the end of the year
        their "history" can be transferred back to the
        planning system.

A3.2   **The Data Files**

A3.2.1 The four separate data files used by the system
        are:

            a) Audit Locations
            b) Control Objectives
            c) Business Areas
            d) Audit Projects

        The contents of each file are described below.

A3.3   **Audit Locations File**

A3.3.1   This file holds details relating to each physical, or logical audit location. The major types of location were identified as Division, District/Unit and Customer Service Area (CSA). It was believed that these locations also contained the necessary ability to be aggregated at appropriate levels. Thus it was conceivable that certain CSA,s could be aggregated to provide a District picture and certain Districts could be aggregated to give a Divisional view.

A3.4   **Control Objectives File**

A3.4.1   This file holds details of all identified Control Objectives so that it would be possible to test for full coverage in a cycle at a particular location. It was also believed that a standard time for testing a particular control activity could be held so that for any audit, which may use a mix of control objectives, a total standard budget could be derived. It was considered that the ability for the system to construct such a budget was a useful addition, as it allowed for comparison with budgets created either by an audit manager, or by the system itself based on any importance criteria. It was also decided that a standard frequency of review, in years, should be held which again could be used for comparison purposes.

A3.5   **Business Areas File**

A3.5.1   This file contains the details of each identified Business Area and also a field which was capable of holding the aggregated budgets of all audit jobs allocated to a particular Business Area for each year of a five year planning horizon.

A3.6 Audit Projects File

A3.6.1 This file holds the details of every potential audit job that could be identified. Its purpose was to provide the raw material on which the system would operate when attempting to rank and schedule audits for the plan.

A3.7 System Parameters

A3.7.1 The majority of the variable data used by the system is held in dBase Memory Variable files so that it can be easily amended. This permits the effect of a particular change to be observed without the need to amend either the raw data held in the files, or the programs which manipulate the data.

A3.7.2 The parameters may be considered as being of three distinct types: annual, calculation and sensitivity. The annual parameters provide the base information against which the raw data held for each potential job is measured, in order to ascertain the relevant weights. Calculation parameters are used to enable the system to determine the importance score and to suggest frequencies of review. Sensitivity parameters enable the output from the system to be varied without amending either the raw data, or the formula. This provides for rapid analyses of the consequences of any change. The contents of all these parameters are described in detail later.

A3.8   **Getting Started**

A3.8.1 Before using the system you must have a legal
        copy of the dBASE III software. The system will
        not operate unless you have that software loaded
        on your computer.

A3.8.2 In order to load the system onto your computer
        make sure that you are at the DOS C:> prompt and
        then insert the supplied disk into Drive A:. If
        you have a hard disk machine type "LHSHDINS" and
        press the ENTER key. For a twin floppy machine
        with high density drives (at least 760K), type
        LHSFDINS. Follow the instructions displayed on
        the screen and the system will automatically load
        itself and configure to your installation.

A3.8.3 The system is completely menu driven and is fault
        tolerate and user friendly. Extensive on-screen
        explanations are provided at each stage of use,
        but it is strongly suggested that you study at
        least chapters 6 through 9 of this thesis prior
        to commencing serious work.

A3.9   **Setting System Defaults**

A3.9.1 The system will make certain assumptions about
        your installation based upon which installation
        instruction you used, but you can alter these at
        any time by selecting the SYSTEM PARAMETERS
        option from the opening menu. You can amend the
        drive to be used for the data files, the margin
        and page length of the printer and the screen
        colours. This information will be remembered by
        the system every time you start, until you choose
        to change it. In order to help you the system
        will offer you the option to change the defaults
        the first time it is run.

A3.10 Printing Parameters

A3.10.1 The system comes already set with many of the parameters required for importance score calculation, but you will need to alter some of them immediately, in order to make sensible use of the power of the system. In order to help you in doing this the system will automatically print them the first time it is run. You can reprint them at any time by selecting the appropriate option from the reports menu.

A3.10 Annual Parameters

A3.10.1 The system comes supplied with some annual parameters, but you will need to alter them to reflect your own organisation. The details which you are required to supply are:

a)   annual turnover;

b)   annual payroll costs;

c)   annual gross asset movements;

d)   annual stock value

e)   annual operating costs (less payroll)

f)   start year for planning purposes;

g)   mandays available for audits

Items (a) to (e) should be available from your annual accounts. The start year for planning purposes will usually be the next financial, or calendar year. The mandays available for audit work is the net figure after subtracting such overheads as leave, sickness, training and administration. Any of these parameters can be amended at any time.

A3.11 Formula Element Ratios

A3.11.1 The system comes provided with the ratios between the 4 formula elements already set to provide a sensible formula, but you can change these at any time to suit your particular organisation. It is suggested that you use the supplied formula initially and then amend it if necessary, based on the results.

A3.12 Element Weights

A3.12.1 The weights associated with each formula element are also provided, but again they can be amended at any time, in order to stretch, or compress, the results from importance score calculation, by raising or lowering the relative importance of each element. Again it is suggested that you use the supplied weights and then amend them in the light of experience.

A3.13 Sensitivity Parameters

A3.13.1 A table is supplied which links importance scores with suggested frequencies of review. This can be amended at any time, but it is suggested that this is done in the light of experience.

A3.14 Loading the Data

A3.14.1 You will now need to load data relating to Locations, Business Areas, Control Objectives and potential Audit jobs. It is strongly suggested that you carefully analyse your business and your audit approach to it before entering any data and that you carefully study chapters 6 through 9 of this thesis.

A3.14.2 You may be surprised to discover just how many Locations you have (both physical and logical). The system will allow you to define Divisions, Districts within Divisions and Areas within Districts. You may not need to have three separate levels, but it worth giving careful thought to the advantages of being able to aggregate at these different levels. In a similar manner it is worth examining the various Business Areas associated with your company and your audit coverage. You may wish to link audits of a similar nature (stores, payroll, income, etc.) together, so that you can aggregate them outside the pure Location area.

A3.14.3 Although not absolutely necessary, you can define Control Objectives associated with each Business Area. This will enable the system to check for complete coverage at each Location if you so wish. Defining the Control Objectives is really only sensible if you have to conduct many audits which test the same areas at many different locations.

A3.14.4 Only after you have considered and created the data described above are you in a position to enter the raw data of the Audit Portfolio. The data required for each potential audit project is explained on the form reproduced as Figure A3.1 and it is suggested that a copy of this form be completed for each audit prior to data entry. Although the system has sensible data validation routines built into it you should also conduct a one for one check by comparing the contents of Report 02 (Audit Portfolio) with the input forms.

PLANNING SYSTEM INPUT

CODE: DESCRIPTION:

JOB TYPE (R/P):   FREQ/YEAR (1-5):   MUST REVIEW (Y/N):

DIVISION: DISTRICT/UNIT: CSA/LOCATION:

BUSINESS AREA: CONTROL OBJECTIVES: / / / / /

SIZE OF AREA (Millions):   SIZE TYPE (A-E):

INTERNAL CONTROL (H/M/L/N):   BUSINESS IMPACT (H/M/L/N):

TEMPTATION (H/M/L/N):   AUDIT COMPLEXITY (H/M/L/):

LAST AUDITED (Year):   REPORT NUMBER:

NOMINAL BUDGET (Days):   TRAVELLING TIME (Days):

COMPLETION NOTES

```
CODE           : 4 digit numeric
DESCRIPTION    : 30 character description of the job
JOB TYPE       : Type of Job (R=Regulatory, P=Project)
FREQ/YEAR      : Year to be done for (P)roject jobs.
                 Frequency of review for (R)egulatory jobs.
MUST REVIEW    : Must be reviewed regardless of score
DIVISION       : 3 Character Division code
DISTRICT/UNIT  : 3 character District/Unit code
CSA/LOCATION   : 3 character Customer Service Area
BUSINESS AREA  : 2 digit Business Area
OBJECTIVES     : Control Objectives
SIZE OF AREA   :  The Total Value based on the type code
SIZE TYPE      :  The "makeup" of the value
                 A = Gross Asset Movements
                 B = Income
                 C = Expenditure
                 D = Stores
                 E = Wages)
INT. CONTROL   : H = Good/Satisfactory,
                 M = Satisfactory except for ....,
                 L = Unsatisfactory,
                 N = Critical
BUS. IMPACT    :  H=High M=Medium L=Low N=None
TEMPTATION     :  H=High, M=Medium, L=Low, N=None
AUDIT COMPX    :  H=High, M=Medium, L=Low
LAST AUDITED   : 2 digit year of last review
REPORT NUMBER  : 8 character report number
NOM. BUDGET    : Time required for the review
                 (excluding travel) in days
TRAVEL TIME    : Time required for travel to/from
                 job in days
```

Figure A3.1

A3.15 Calculate Importance Scores

A3.15.1 Once all the data has been entered you should use the options from the Calculations Menu to calculate the Importance Scores and list the results. At this stage you may wish to amend either the formula element ratios, or the various weights, to achieve a sensible spread and ranking of jobs, based upon your own knowledge. You can do this as often as you like until you are satisfied. You will notice that at no time are you required to amend the data associated with an individual job (unless it is incorrect) in order to do this.

A3.15.2 If at any time you add, amend, or delete any jobs from the portfolio, or you change any of the parameters, then the system will automatically force a recalculation of the importance scores. This is because the scores are used in calculating system suggested frequencies and budgets.

A3.16 Calculating Plans

A3.16.1 The system allows you to calculate both strategic and annual plans based around either the frequencies and budgets entered by you, or by using frequencies and budgets calculated by it. These two methods are defined as 'Nominal' and 'System' respectively, so if you see something described as 'nominal' it indicates that you supplied the data, whereas if you see 'system' it means that the systems itself calculated the data.

A3.16.2 As the various annual plans are derived from the
first year of the strategic plan, the system will
always calculate that plan first. The annual
plans can only be derived from the Reports Menu
and then only after all calculations have been
completed.

A3.17 **Reports**

A3.17.1 The system provides you with 16 standard reports
which should provide you with adequate
information to plan and justify your audit
activity. Chapter 8 provides a detailed
description of each one but Table A3.17 provides
an overview.

A3.17.2 If you require additional reports you can either
use the dbase Assistant facility, or you can
import the data files into other software
packages for analysis and manipulation. One
package highly recommended for this is called
Reflex. This has the advantage of reading dBase
files directly and it also provides sophisticated
graphical, totalling and cross tabling
facilities.

STANDARD REPORTS FROM THE SYSTEM

Report	Description
LHRSKP1	Planning Parameters
LHRSKP2	Audit Portfolio Ranked by Importance Score
LHRSKP3	Annual Plan Based on Frequency Only
LHRSKP4	Annual Plan Based on Frequency & Available Resource
LHRSKP5	Annual Plan Based on Frequency, Importance and Resource
LHSCOM6	Business Area Descriptions
LHRSKP7	Business Area Budgets
LHRSKP8	Suggested Frequency Based on Importance
LHRSKP9	Strategic Audit Plan
LHRSKP10	Audit Project Portfolio
LHRSKP11	Nominal and System Budget Comparison
LHRSKP12	'Must Do' Projects
LHRSKP13	Control Objectives
LHRSKP14	Audit Locations
LHRSKP15	Incomplete Control Objective Coverage
LHRSKP16	Planning Horizons

Table A3.17

A3.18   Interfacing With Other Systems

A3.18.1 Once you have derived an acceptable annual plan you can transfer the relevant audits to the Monitoring System by selecting the export option from the Interface Menu. The system will then automatically create your monitoring file for next year. Likewise, at the end of the year, you will be able to update your planning portfolio with details of the jobs completed in the current year by running the import function from that menu.

A3.19   Training Facility

A3.19.1 A training facility is provided in the form of files containing sufficient data to enable you to experiment at any time. You can use the training system even when you have loaded your own data, so that new members of staff can be trained without risk.

APPENDIX 4

DISK CONTAINING THE EXPERIMENTAL SYSTEM AND DATA

The disk attached to the back cover of this thesis
contains the programs of the experimental system and the
files containing the experimental data. Certain programs
have been disabled in order to prevent the raw data being
amended, in order to ensure that the experiment can be
re-performed on a consistent basis. All the calculation
and output modules are fully operational however, so that
the interested researcher can conduct sensitivity and
other experiments, by modifying the various parameters
and weightings.

It must be stressed that the dBASE III software which is
required to run the system is not on the disk and it is
the responsibility of the interested party to obtain a
legal version of that software.

For details of installing and running the software please
refer to the operating instructions provided in
Appendix 3 of this thesis.