

1972/138
copy 3

COMMONWEALTH OF AUSTRALIA

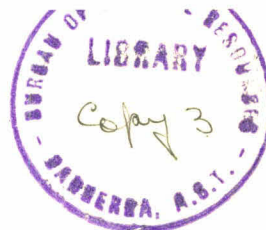
DEPARTMENT OF
NATIONAL DEVELOPMENT
**BUREAU OF MINERAL
RESOURCES GEOLOGY
AND**



Internal Use Only

~~RESTRICTED~~

Record 1972/138



Interim Terms of Reference and Background Information
for a Proposed Management Consultancy Assignment
Involving the Survey of Requirements for, and Strategic
Design of, a Technical Information Storage and Retrieval
System for the Bureau of Mineral Resources.

Canberra
November, 1972

The information contained in this report has been obtained by the Department of National Development as part of the policy of the Commonwealth Government to assist in the exploration and development of mineral resources. It may not be published in any form or used in a company prospectus or statement without the permission in writing of the Director, Bureau of Mineral Resources, Geology & Geophysics.

BMR
Record
1972/138
c.3

~~RESTRICTED~~

Internal Use Only

Record 1972/138

COMMONWEALTH OF AUSTRALIA

DEPARTMENT OF NATIONAL DEVELOPMENT

**Interim Terms of Reference and Background Information
for a Proposed Management Consultancy Assignment
Involving the Survey of Requirements for, and Strategic
Design of, a Technical Information Storage and Retrieval
System for the Bureau of Mineral Resources.**

**Canberra
November, 1972**

CONTENTS

	<u>Page</u>
SECTION 1: INTRODUCTION	1
1.1 Explanation of Terms Used	1
1.2 Functions and organisation of BMR	1
1.3 Information in BMR	1
1.4 Intra departmental relationships	2
1.5 Co-ordination with other organisations	3
SECTION 2: SCOPE OF ASSIGNMENT	4
2.1 Purpose of assignment	4
2.2 Exclusions	4
2.3 Requirements	5
2.4 Criteria of effectiveness	6
2.5 Detailed requirements	6
SECTION 3: MANAGEMENT OF ASSIGNMENT	8
3.1 Steering Committee	8
3.2 Reports	9
3.3 Departmental support	9
3.4 Liaison	10
3.5 Variation of assignment	10
SECTION 4: CONDITIONS OF ASSIGNMENT	10
4.1 Duration of assignment	10
4.2 Other Conditions of Assignment	11
 ANNEXURE A Functions of the Bureau of Mineral Resources, Geology and Geophysics.	
 ANNEXURE B Organisational structure of the Bureau of Mineral Resources, Geology and Geophysics.	
 ANNEXURE C Possible division of earth science information.	
 ANNEXURE D Diagrammatic information relationships.	
 ANNEXURE E Main indexes in the Bureau of Mineral Resources, Geology and Geophysics.	

1. INTRODUCTION

1.1 Explanation of Terms Used.

1. The "Department" means the Department of National Development and the initials "BMR" or words "Bureau of Mineral Resources" means the Bureau of Mineral Resources, Geology and Geophysics, of the Department of National Development.

2. "Information" means the information and data collected, used, and produced by BMR for or by its activities. The form of the information ranges from raw observational data of one type or another (field books, seismic records, well logs, results of laboratory work etc.) through reduced data (much of it on digital tape) to compilations and syntheses e.g. maps and unpublished and published reports, review statements, briefs etc. Geological samples also are part of this information reservoir, as is the library. Most of this information is available directly or indirectly to the public, particularly the mining and petroleum exploration industries.

1.2 Functions and Organisation of BMR

1. The Department is concerned generally with the assessment and development of the natural resources of Australia. The Bureau of Mineral Resources as part of the Department has as its primary function to obtain, study, publish and provide basic geological and geophysical information necessary for the exploration and development of the nation's mineral resources. A full statement of its functions is set out in Annexure A.

2. BMR has a staff of over 600, including nearly 300 professional and a further 200 technical staff. Some professional staff (hereafter called Resident Staff) are based at Port Moresby and Rabaul on secondment to the Papua New Guinea Administration. In addition, BMR maintains a small geological and geophysical group in Darwin, and geophysical observatories manned by professional and technical staff at Mundaring (W.A.), Port Moresby (PNG) and Melbourne (Vic.), and (manned by one professional officer each) at Mawson and Macquarie Island in Antarctica.

3. BMR is divided into five branches which are subdivided into sections, sub-sections and groups. Diagrams showing the structure of BMR and its branches are attached as Annexure B. This structure is at present under review but the form of a new structure has not yet been decided.

1.3 Information in BMR

1. The Bureau of Mineral Resources holds a large amount of earth science information pertaining to the Australian region, together with information pertaining to the earth sciences in general and other scientific and technical fields related to its work.

2. The volume of this information material is increasing rapidly. In 1969, it was estimated that over 20,000 square feet of floor space was used to store this material and that the expected overall annual growth rate would be 10 percent.

3. Some of this information is generated by BMR and some by other organisations. It is held by various groups in BMR, most of which maintain indexes to information which concerns them. These are mainly manual card indexes, most of which index only a particular aspect of the information. A few groups have developed or are developing computer-based storage and retrieval systems but, in general, information retrieval facilities are fragmented and inadequate for present day requirements and the indexing effort of different groups overlaps to a greater or lesser degree.

4. Related to the problem of retrieval is the problem of ensuring that individuals and groups receive or are made aware of information generated by or received by BMR that is relevant to their work. Formal and informal lines of communication have developed over the years for this purpose, but the effectiveness of these arrangements, especially where the information is marginal to the interests of a group, is a matter for consideration as part of the assignment.

5. Information exists in a wide variety of physical forms, ranging from published books through tabulated numerical observational data, maps, graphical records such as well logs and seismic records, to paper and magnetic tape and geological samples. The physical volume occupied by some of this material is becoming a problem.

6. A diagram showing in generalised form the main fields of information and the main links between these fields is attached as Annexure C. A chart showing the kinds of information which are of interest to the various groups in BMR is attached as Annexure D. A list of the main indexes to information which now exist in BMR is included as Annexure E; this list is not necessarily complete.

7. These Annexures are included to assist in gauging the complexity and scope of the problem. They are intended to be indicative only.

1.4 Intra-Departmental Relationships

1. The Bureau of Mineral Resources is an important and essential information source for the Department. The policy Divisions, i.e.

Policy and Central Secretariat Division
Minerals and Forests Policy Division
Energy and Water Division
Northern Division

are constantly seeking expert advice on resources related to mineral development from BMR. The information thus obtained is required with information from other sources to frame recommendations on policy and development projects for Government and in negotiations with industry.

1.5 Co-ordination with other Organisations

1. Other Australian organisations, particularly the Mines Departments of the States and Territories, also hold large amounts of earth science information. As is the case for BMR, most of this information is available to the public. Most of these organisations face the same problems as BMR and have also recognised the need for a national co-ordinated retrieval system for Australian earth science information. Such a system would co-ordinate the present independent information storage and retrieval operations of the organisations involved and make the combined retrieval facilities widely available. Organisations in the mineral industry also have emphasised the benefits to be gained from a national system, particularly the savings of expenditure and technological effort which would result.

2. Several organisations have looked to BMR to give a lead in developing a national system. It is desirable, therefore, that the information storage and retrieval system adopted by BMR should be such that it could be regarded as a model for, and the basis of, an eventual national system which will allow exchange of information retrieval facilities. Furthermore, it is important that the system adopted by BMR should not inhibit transfer of the information itself to another organisation.

3. A committee, the Scientific and Technological Information Services Enquiry Committee (STISEC), has been set up by the Commonwealth Government to investigate the national need for scientific and technological information services in Australia and to suggest means whereby needs identified by its enquiries may be met in the national interest. An information system developed on the national scale for the earth sciences would very probably be a component of any national scientific and technological information system which may be developed as a result of STISEC's enquiries.

4. Moves are being made also at the international level toward co-ordination of national activities in storing, retrieving and processing of earth science information. The form which such a system might take is not clear at

present. Nevertheless, it is necessary to keep in mind that BMR might eventually wish to exchange information retrieval facilities and the information itself with overseas organisations.

2. SCOPE OF ASSIGNMENT

2.1 Purpose of Assignment

1. The Department is in the process of developing a technical information storage and retrieval system covering the natural resources of Australia. A system is to be designed for BMR which will enable it to carry out related functions.

2. It is envisaged that, in the development of a system, there would be several phases, possibly:

- .1 Survey of needs
- .2 Strategic design
- .3 Detailed design
- .4 Programme construction
- .5 Testing
- .6 Implementation

3. This assignment covers Phases 1 and 2 above. The project is to assess the current and projected technical information storage and retrieval requirements of BMR and to recommend the strategic design for a system which will meet these requirements.

4. A selected Consultant would need to become familiar in general terms with other areas of the Department of National Development but it is expected that he would spend not more than, say, five days visiting those areas.

2.2 Exclusions

1. The assignment does not include phases 3 to 6 (vide para. 2.1.2) of development of the recommended system.

2. The following aspects of information handling are specifically excluded from the assignment except insofar as consideration of them is needed to meet the objectives of the assignment:

- a. The scientific methods used to collect information.
- b. The scientific processing of information, e.g. numerical calculations, scientific report writing, etc.
- c. Purely administrative functions within BMR, e.g. registry and personnel procedures.
- d. The information activities of Resident Staff in Papua New Guinea, except for that information which is transferred to or from BMR.

2.3 Requirements

1. The assignment is envisaged as being in two phases, corresponding to phases 1 and 2 listed in paragraph 2.1.2:

2. Phase 1

- a. Examine the types of information coming into BMR and generated by its own activities, the flow of information through BMR, and assess the current and projected volumes of each type of information.
- b. Identify the types of information requirements of various groups in BMR bearing in mind that some of this information is required for dissemination to the public and some to other areas of the Department and through them in various forms to Government, Statutory Authorities and the public, and assess the current and projected volumes of each type of information.
- c. Submit a report and recommendations to the Department on the results of these examinations.

3. Phase 2

On the basis of decisions taken by the Department following consideration of the report on phase 1:

- a. List and describe in general terms types of information storage and retrieval systems which would cope with the types and volumes of information to be collected and disseminated for current and, insofar as they can be forecast, future needs.
- b. Recommend the system considered best suited to BMR's needs, and present its strategic design.

- c. Report on the recommended system in terms of its technical feasibility, its suitability, and its costs and benefits, in relation to other possible systems, bearing in mind that the system may eventually become part of a national and even international system for storage and retrieval of scientific and technological information relating to earth sciences.
- d. Present a development plan itemising and describing the steps to be taken to implement the recommended system and include an estimate of the time and costs involved and staff required.
- e. Recommend detailed procedures for the capture and collation of existing information held in BMR, its conversion to a form suitable for preparation of input into the proposed system and the preparation of input. Give an estimate of work volumes, staff requirements, equipment, and costs related to a time scale agreed with BMR.

4. Specific requirements or aspects of the problem which the study should cover are set out in paragraph 2.5.

2.4 Criteria of Effectiveness

The criteria of effectiveness to be taken into account in selecting the recommended system desirably would include:

- a. the need to ensure that the various groups in BMR receive or become aware, without delay or unnecessary duplication, of the existence of all those parts of the total information flow which are relative to their work.
- b. the need for an information retrieval system which will allow an enquirer to quickly retrieve on a consistent basis all information relevant to his enquiry and which does not involve unnecessary duplication of input effort.
- c. the need to store information of various categories in the physical form most appropriate to the requirements of permanence, accessibility, reproducibility, retrievability, and statutory and other conditions governing availability, which pertain to that category.
- d. the costs of establishing and maintaining the recommended system and its benefits in relation to the costs and benefits of other feasible systems.

2.5 Detailed Requirements

Some of the requirements of the assignment are set out in detail below and should be read in conjunction with paragraph 2.3 above. They indicate minimum requirements of the assignment and it is not intended that the

assignment be confined to such aspects. It is expected that all the studies necessary for proper completion of the assignment will be undertaken but the consultant certainly will need to:

- a. identify the existing information flows in BMR including examination of existing methods of collecting and storing information, the types of material involved, and the existing information retrieval processes,
- b. assess current and projected volumes of information for input, storage, and retrieval purposes,
- c. define the types of information needed by the different groups, the acceptable delay between its time of origin and its receipt and the quantity involved on each occasion,
- d. consider all aspects of security of the system and its contents with particular emphasis on the various degrees of confidentiality of classified material,
- e. determine the overall information requirements of BMR including the various categories of retrieval requirements and the acceptable time for retrieval of each category, bearing in mind the degree of overlap of the requirements of information from group to group,
- f. against the background that the BMR system could be the model for a national earth science system, of the need to facilitate exchange of information between BMR and other organisations in Australia and overseas, and of the possible development of a national scientific and technological information system, develop the strategic design for a system which will meet BMR's requirements in an efficient and economic manner,
- g. provide factual assurance that the recommended system will be sufficiently flexible to cater for changes in scientific knowledge and techniques and, in particular, will allow the incorporation of new sub-systems for storage, input, and output of categories of information not envisaged at the time of design of the system and allow addition or deletion of retrieval indexing terms to or from existing categories,
- h. state any characteristics of the recommended system which would limit the flexibility or expansion of the system, particularly in relation to item g. above,
- i. state any characteristics of the recommended system which would tend to limit transfer of information from the system to the systems of other organisations. BMR accepts that this statement can be made only in general terms because of lack of knowledge of the characteristics of other systems which may be developed,

- j. consider control of access by BMR staff to the system for both interrogation and updating.
- k. in relation to the development plan, consider in general terms detailed systems analysis and design, hardware and software requirements and acquisition or development, system installation, acceptance and handover, number, types, and training of operating and support staff at various stages of implementation, and familiarisation and procedural training of BMR staff,
- l. determine the most appropriate physical storage methods for the various types of information, with regard to statutory and confidentiality requirements, costs, volume of material, time for and ease of retrieval, permanence and ease of reproduction of material, and user convenience.

3. MANAGEMENT OF ASSIGNMENT

3.1 Steering Committee

- 1. It is intended that a Steering Committee will be established, consisting of one senior representative of the Consultancy organisation, Departmental Management, BMR, and the Commonwealth Public Service Board. The Departmental Management representative would chair the committee. Other staff of the Consultant, the Department and other organisations could attend meetings of the Steering Committee as appropriate.
- 2. The Steering Committee will consider the Consultant's progress reports, and would be convened by the Chairman for such other meetings as the Consultant or the Department considered necessary.
- 3. The Steering Committee would be able to offer suggestions for changes in the Consultant's approach to the task but changes of this nature would ultimately be decided between the Department and the Consultant.

3.2 Reports

1. The Consultant will be expected to report progress of the project regularly to the Steering Committee. The first report would need to be presented within approximately one month of the date of commencement of the project, and subsequent reports at intervals close to two weeks thereafter. The reports are seen as consisting of a short written summary of progress and expected lines of activity for the following period, followed by such verbal amplification and discussion as may be required by, or appropriate to, the circumstances.

2. It is intended that, at the end of phase 1 and at the completion of the project, the Consultant will submit to the Department a written report, in which findings, conclusions and recommendations are properly documented, with appropriate supporting data. It is expected that some 40 copies of each report will be required. The documentation would need to be sufficiently detailed to allow detailed design of all or part of the accepted system with a minimum of additional investigation.

3. The Consultant would be able to submit any additional written reports he considers necessary. The numbers of copies of each such report would need to be decided in consultation with the Department, but it is not expected that more than 40 normally would be needed.

4. The Department may request the Consultant to supply in writing any additional material which the Department reasonably considers necessary to clarify or amplify any part or parts of a written report. The Consultant would be expected to supply an appropriate number of copies of the requested material within a reasonable period which normally should not exceed one month.

3.3 Departmental Support

1. A Departmental officer with broad knowledge of BMR and its existing information storage and retrieval activities will be made available full-time to assist the selected Consultant.

2. The Consultant would be expected and permitted to ascertain the operation of the present system and requirements of the future system by interview of departmental officers and other appropriate means.

3. It is expected that material representative of all types involved in BMR's information storage and retrieval activities will be made available for inspection by the Consultant. Nevertheless, the Department naturally will need to control access by the Consultant to all material held by the Department.

4. Quantitative data needed for the project, such as volumes of material and rates of growth, will be supplied by the Department wherever possible.

5. While the Department accepts that discussions with departmental staff on their work and requirements will be essential, it expects that interference with its normal work will be kept to a minimum commensurate with the requirements of the project.

3.4 Liaison

It is expected that, before the date of commencement of the project, the Department and the Consultant would each nominate a representative, who would be responsible for day-to-day liaison between the Department and the Consultant. Each representative of the Consultant shall be acceptable to the Department which, of course, would reserve the right to exclude any representative by notifying the Consultant.

3.5 Variation of Assignment

The assignment could be varied where mutually agreed between the Consultant and the Department, subject to the approval in writing of the Department.

4. CONDITIONS OF ASSIGNMENT

4.1 Duration of Assignment

1. It is expected that the assignment should be completed and all reports submitted to the Department within a period of 6 months from the date of commencement of the assignment plus the time intervening from the Department's receipt of the report on phase 1 of the assignment to the Department's notification to the Consultant that it accepts that report.

2. The Department will notify the Consultant of its decisions taken following the assessments in the phase 1 report as soon as possible.

3. The date of commencement of the assignment will be mutually agreed between the Consultant and the Department at the beginning of the work.

4. The Consultant may at his discretion, and with the agreement of the Department, begin work on phase 2 of the project after completing work on phase 1 but before the Department notifies the Consultant of its decisions taken following the assessments in the phase 1 report.

4.2 Other Conditions of Assignment

It is expected that other conditions governing the conduct of the assignment will generally conform with usual business practice. They will be decided in the light of submissions from Consultants and, where appropriate, following discussion between the Consultant and the Department.

ANNEXURE A

FUNCTIONS OF THE BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS

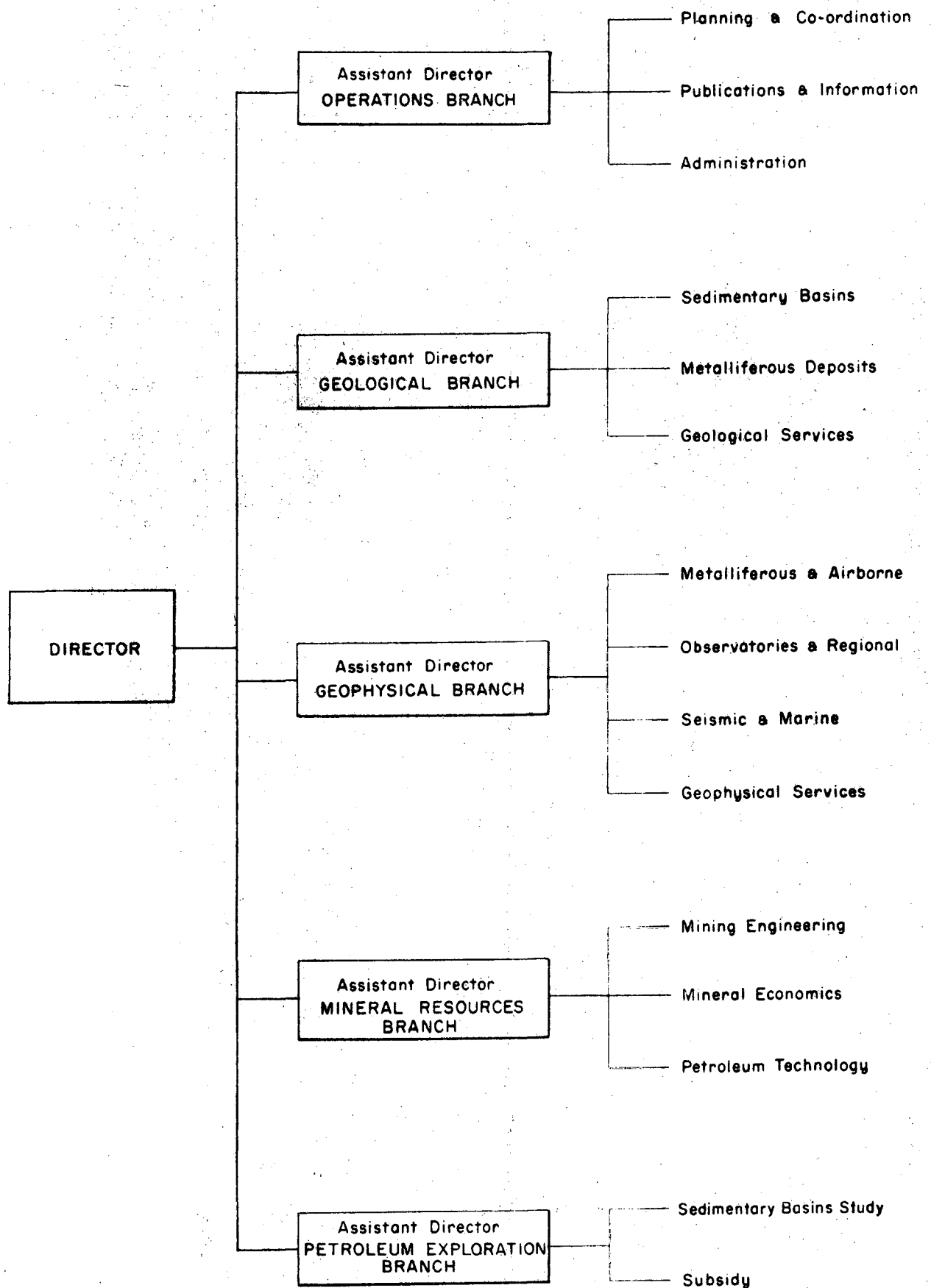
1. As a primary function, to obtain, study, publish and provide basic geological and geophysical information necessary for the exploration and development of the nation's mineral resources; this to be done where appropriate in co-operation with State and Territorial authorities.
2. In order to support the function of obtaining basic information to undertake experimental studies and research into geology and geophysics.
3. To make basic investigations of the earth's magnetic and gravitational fields and in seismology and vulcanology.
4. To complement the work of the State and Territorial authorities by undertaking geological and geophysical investigations into the occurrence and distribution of underground water.
5. To undertake geological and geophysical investigations on behalf of other Commonwealth Departments and authorities including the provision of resident staff by arrangement with the Territories.
6. To obtain basic information on, and review the mineral resources of the Commonwealth and its Territories; to study the various sectors of the mineral industry both in the national and international spheres; to publish and provide information about the mineral industry.
7. To undertake such investigations in mining engineering and petroleum technology as are relevant to (1) and (6) above.
8. To prepare advice for Government on the mineral industry, including the exploration and development of mineral resources in the national interest.
9. When directed by Government, to administer schemes for the assistance of sectors of the mineral industry and to undertake special mineral projects.

ANNEXURE B

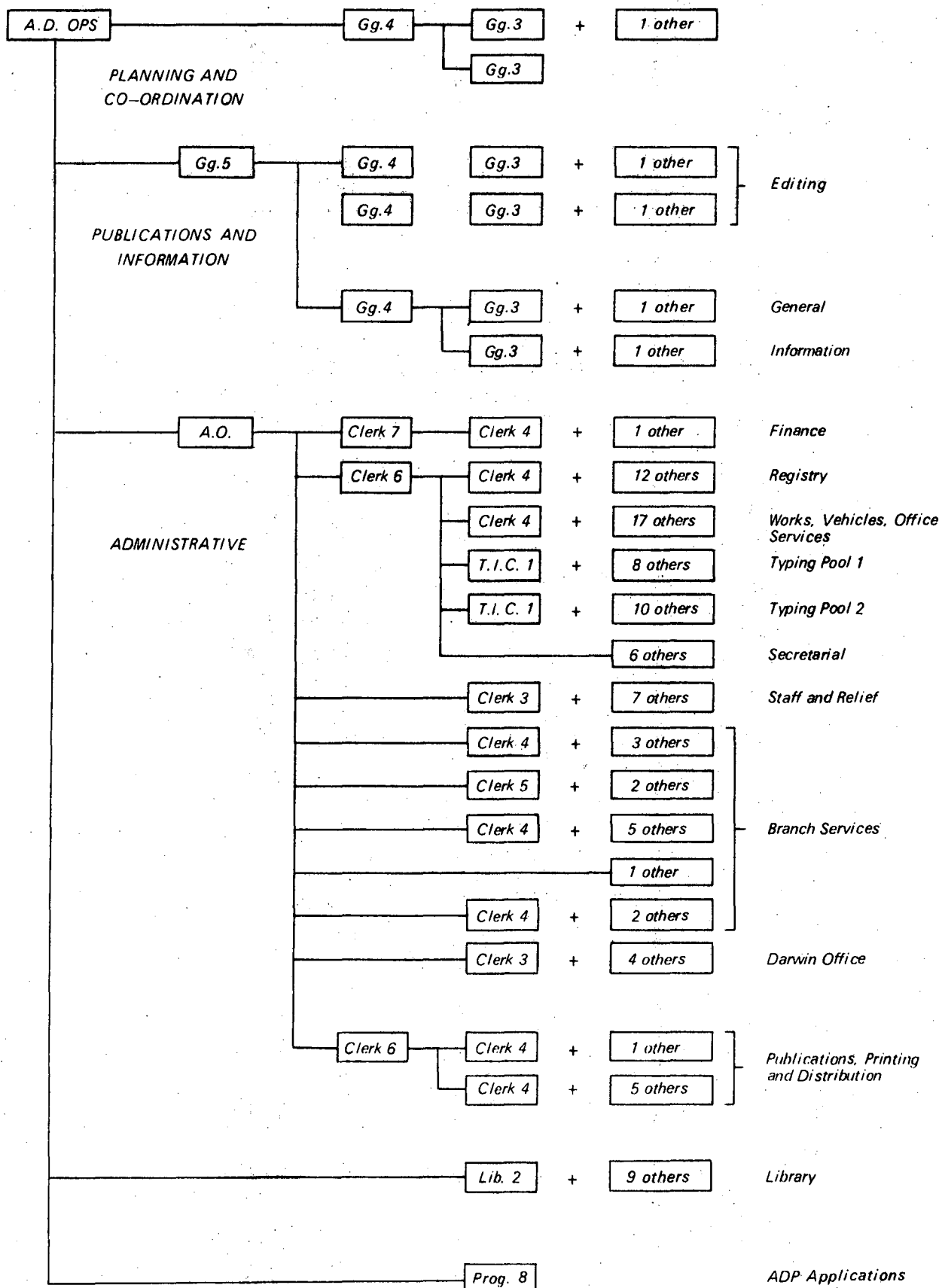
ORGANISATIONAL STRUCTURE OF THE BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS

Annexure B shows the structure of each of the five Branches of BMR. The professional level of senior staff is shown in boxes, e.g. Gg4 means Geologist Class 4. These levels are different from the clerical levels which have the same number. "Others" includes both professional and non-professional staff. In general a Class 4 professional heads a Sub-section and Class 3 a Group. Group names are shown in the right-hand column.

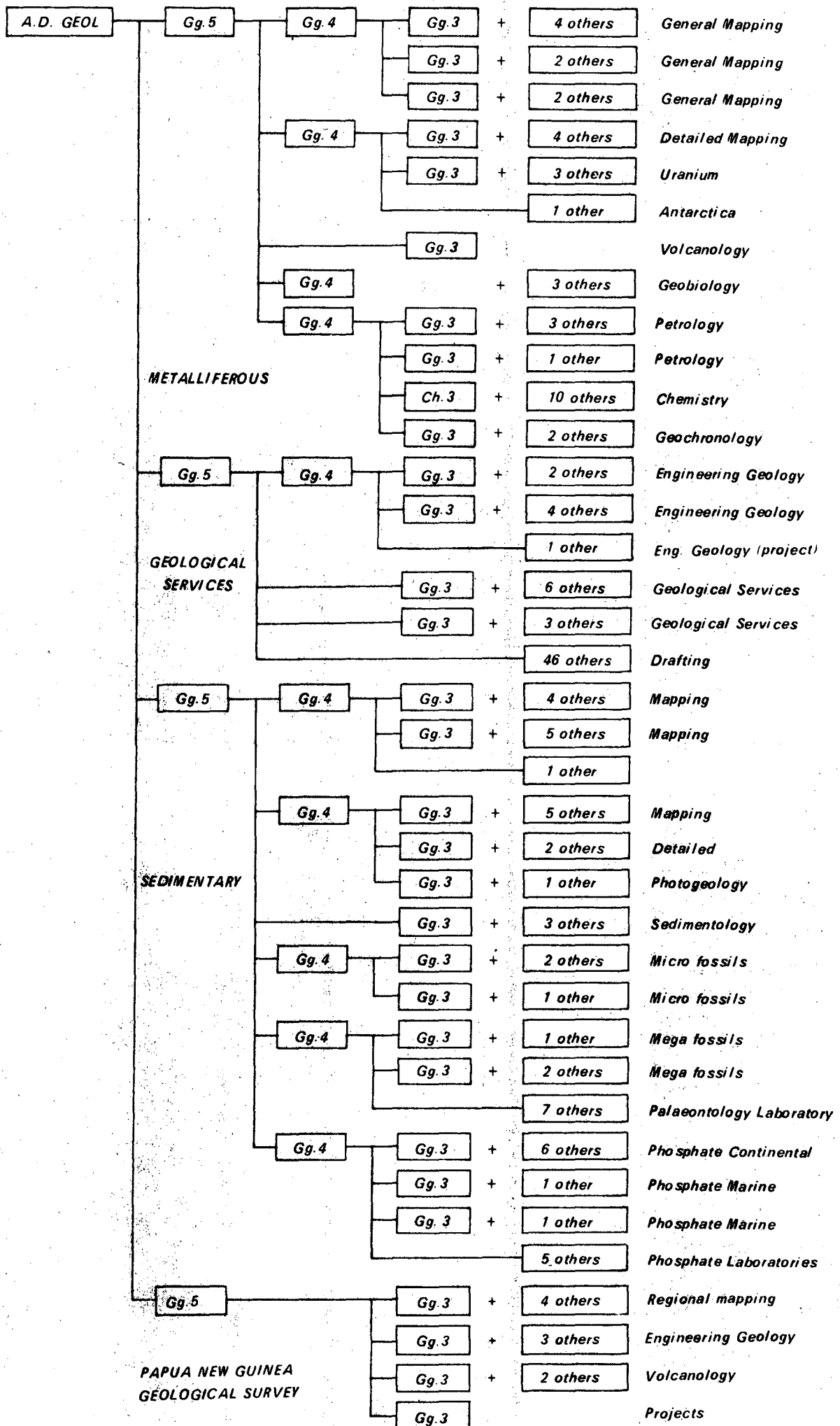
BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS



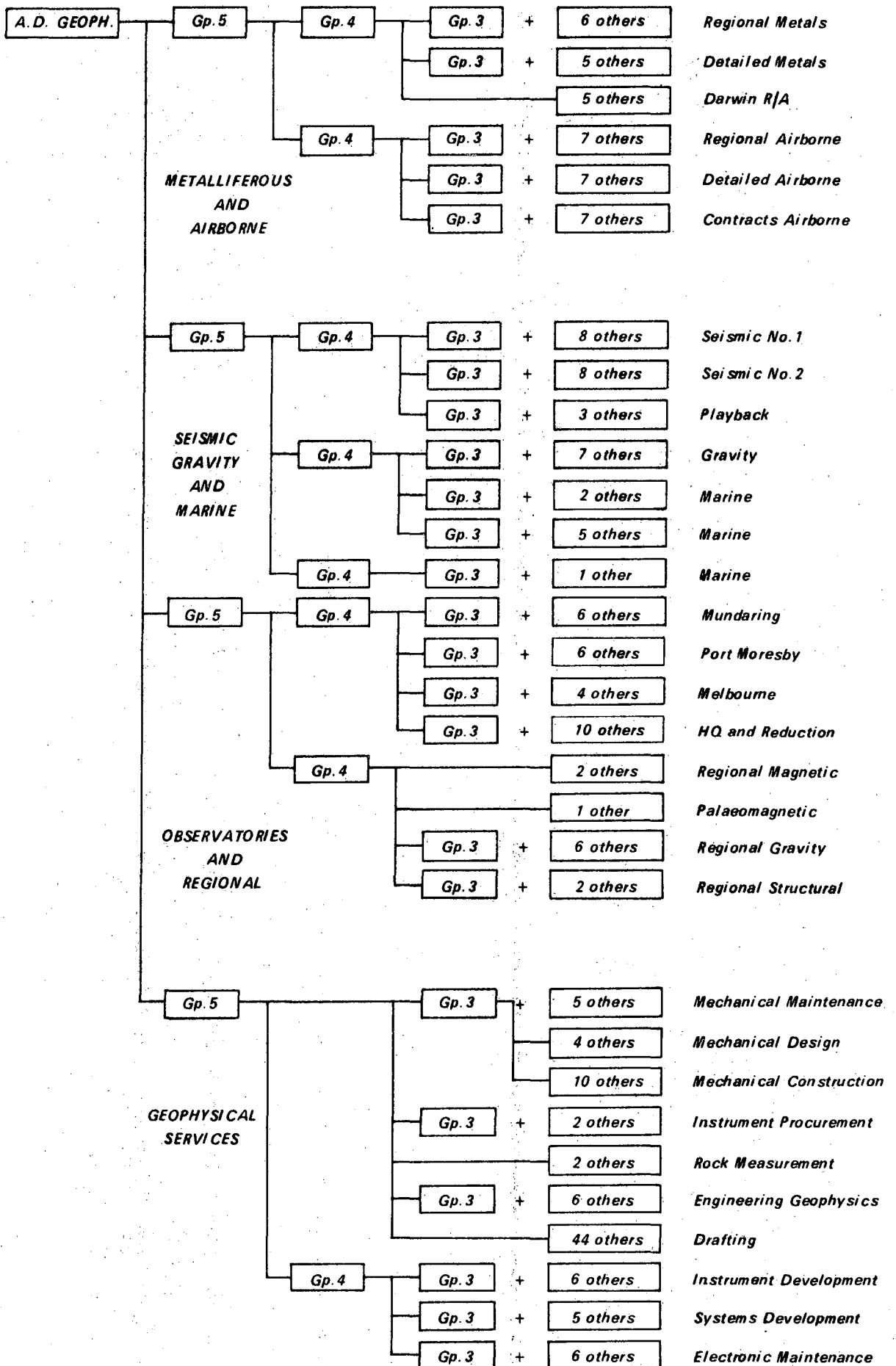
BUREAU OF MINERAL RESOURCES OPERATIONS BRANCH



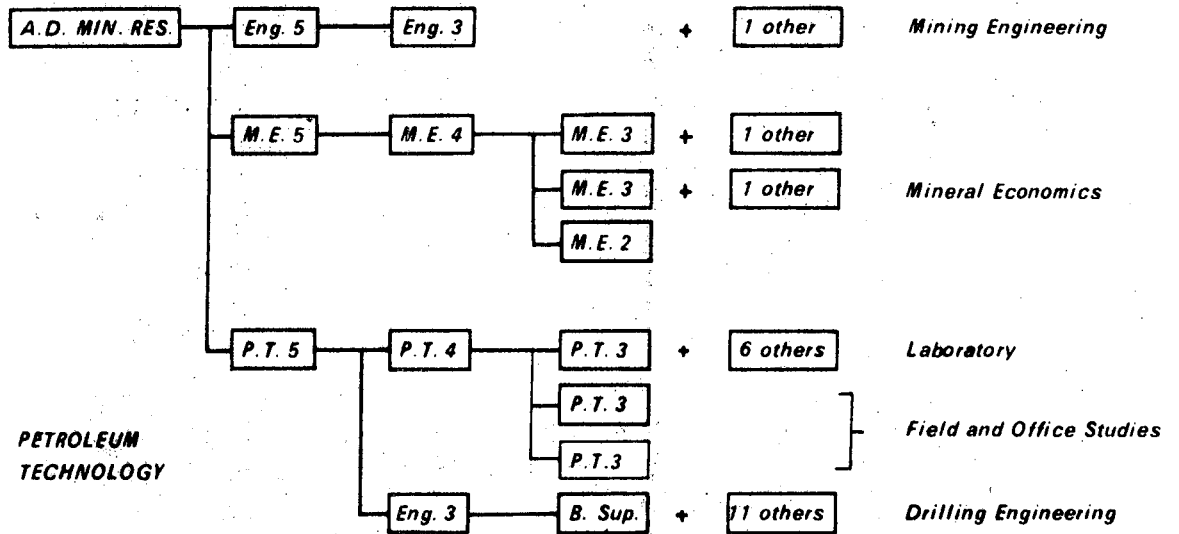
**BUREAU OF MINERAL RESOURCES
GEOLOGICAL BRANCH**



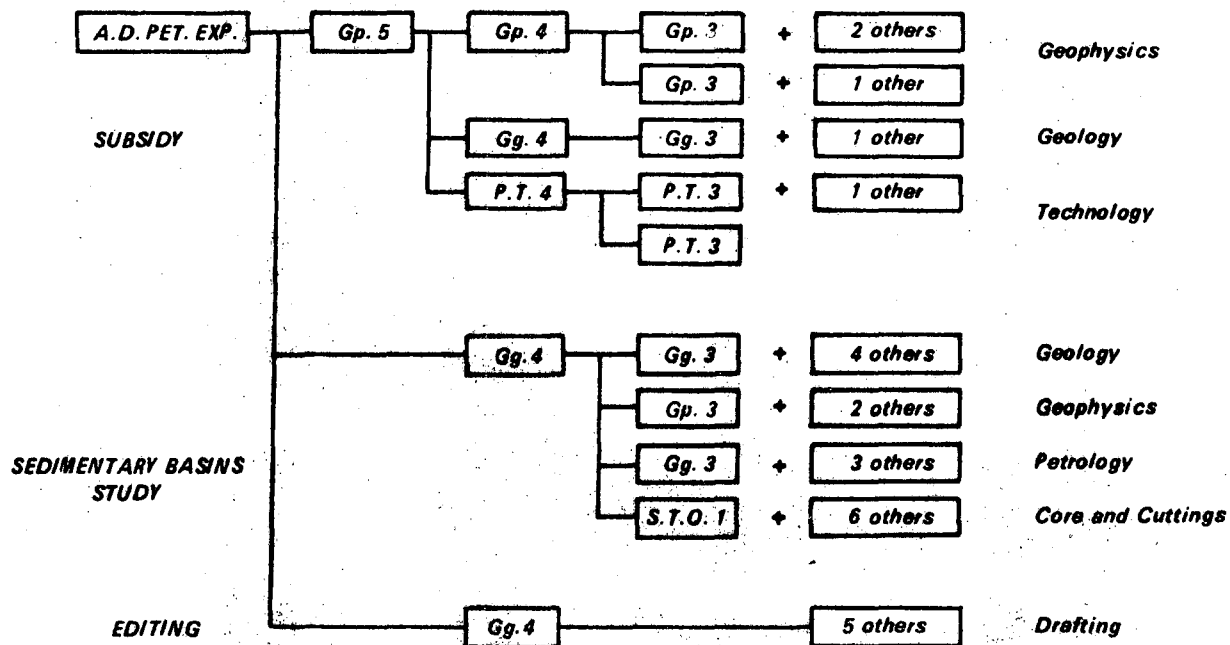
**BUREAU OF MINERAL RESOURCES
GEOPHYSICAL BRANCH**



BUREAU OF MINERAL RESOURCES
MINERAL RESOURCES BRANCH



**BUREAU OF MINERAL RESOURCES
PETROLEUM EXPLORATION BRANCH**



ANNEXURE C

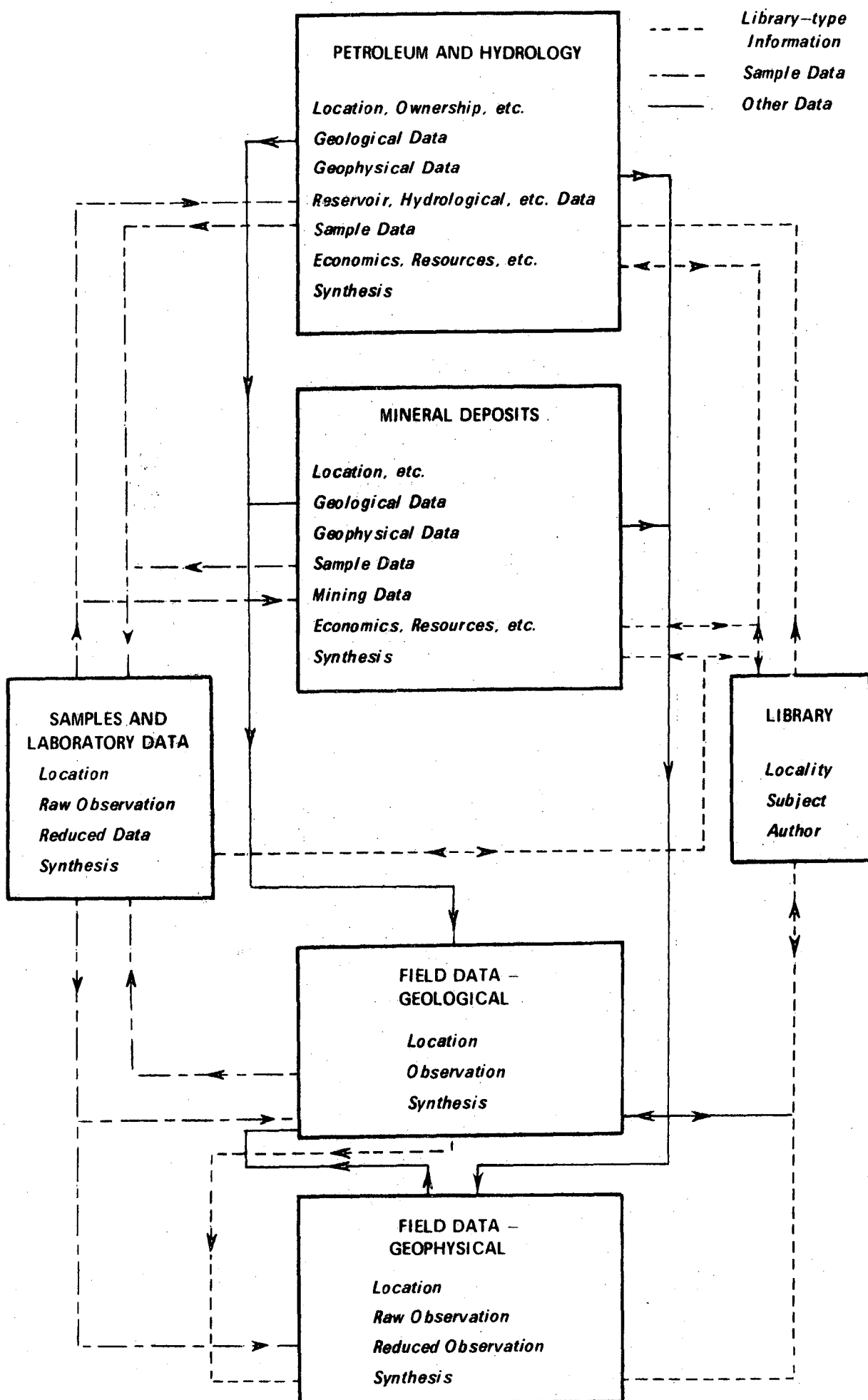
POSSIBLE DIVISION OF EARTH SCIENCE INFORMATION

Annexure C shows a possible division of earth science information into six main fields, and the main links between sub-divisions of these fields particularly as they apply in BMR.

The subdivisions are not intended to predicate possible discrete files in an information system; they are to show the kinds of subfields within the main fields and their informational links with other fields.

Only the main links are shown; in practice, a link of some sort would probably exist between each subfield and all other subfields.

POSSIBLE MAIN FIELDS OF INFORMATION



ANNEXURE D

DIAGRAMMATIC INFORMATION RELATIONSHIPS

Annexure D illustrates diagrammatically and in general terms the information relationships between the various Groups in BMR and the main fields of information shown in Annexure C; the library field is not shown because it has links with all Groups. A symbol in a column opposite a group name indicates that the group contributes information to, or draws information from, that field.

xx indicates that a relatively important volume of information is involved.

x indicates that the volume is less important.

The absence of a symbol does not necessarily mean that there is no need for transfer of information.

Group names are taken, with some amalgamation, from Annexure B.

Interests of Groups in BMR in main fields of information

Group	Petroleum	Mineral deposits	Samples and lab. data	Field data-geological	Field data-geophysical
Geological Branch					
Mapping (incl. Darwin)	xx	xx	xx	xx	x
Volcanology			x	x	xx
Geobiology	x	xx	x	x	
Petrology	xx	xx	xx	xx	
Chemistry	x	xx	xx	xx	
Geochronology	x	x	xx	xx	
Engineering geol.			x	xx	xx
Residents (T.P.N.G.)			x	x	x
Geol. services (incl. Museum)	x	xx	x	x	
	x	x	xx	xx	
Drafting	xx	xx		xx	x
Photo geology	x	x		x	
Sedimentology	xx	x	xx	xx	
Fossils	xx	x	xx	xx	
Phosphate (continent)	x	xx	xx	xx	
Phosphate (marine)	x	xx	xx	xx	x
Geophysical Branch					
Metals (incl. Darwin)		xx		x	xx
Airborne	x	xx		x	xx
Seismic	x	x		x	xx
Gravity	xx	x	x	x	xx
Marine	xx			x	xx
Observatories					xx
Magnetic	x	x			xx
Palaeomagnetism			x	x	x
Gravity (regional)	x	x		x	xx
Structural				xx	xx
Mechanical					x
Rock measurement			x	x	x
Engineering geophy.				xx	xx
Drafting	xx	xx			xx
Development					xx
Mineral Resources Branch					
Mining Engineering		xx			
Mineral Economics		xx	x		
Petrol. Tech. lab.	xx		xx	x	
Petrol. Tech. studies	xx		x		
Drilling				x	

Group	Petroleum	Mineral deposits	Samples and lab. data	Field data- geological	Field data- geophysical
Petroleum Explor.					
Branch	xx				
Subsidiy (geophys)	xx				xx
do (geol)	xx			xx	
do (technology)	xx				
Basin study (geol)	xx		x	xx	x
do (geophy)	xx			x	xx
do (petrology)	xx		xx	x	
do (core & cuttings)	xx		xx		
Drafting	xx				
Operations Branch					
Information	xx	xx			
Library	xx	xx		xx	xx

ANNEXURE E

MAIN INDEXES IN THE BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS

This list is of the main indexes in BMR and is not necessarily complete. It is included for information only.

The listing of another group against the heading "Same material indexed by" does not necessarily mean there is a significant overlap of indexing effort; the indexing categories used may differ, with perhaps only one or two common to the two indexes.

1. OPERATIONS BRANCH

1.1

Index:	Colour slides
Maintained by:	Publications and information section.
Status:	Active but incomplete
Coverage:	Selected 35 mm colour transparencies on aspects of Australian geology, geophysics, and mineral industry.
Format:	Peek-a-boo
First breakdown:	Transparency number
Cross indexing:	Various subjects
No. of entries:	500 at present
Same material indexed by:	Geological drawing office (in part)
Material of interest to:	All

1.2

Index:	BMR Records
Maintained by:	Information subsection
Status:	Active
Coverage:	All BMR Records
Format:	3" x 5" cards
First breakdown:	Chronological order, showing distribution.
Cross indexing:	Author, locality (both incomplete after 1964), subject (incomplete).
No. of entries:	3000+
Same material indexed by:	Mineral reports group
Material of interest to:	All, including library, industry.

1.3

Index:	Outside publications
Maintained by:	Information subsection
Status:	Active
Coverage:	Manuscripts submitted for the Director's approval to publish in an outside publication.
Format:	3" x 5" cards
First breakdown:	Senior author's name
Cross indexing:	Papers actually published denoted by clipping corner of card.
No. of entries:	500+
Same material indexed by:	None
Material of interest to:	All, including library

1.4

Index:	Library catalogues
Maintained by:	Library
Status:	Active but incomplete
Coverage:	Library material (unpublished reports and maps are not included at present).
Format:	3" x 5" cards
First breakdown:	Author or serial title
Cross indexing:	Subject (in part) or UDC number (in part), 1:250,000 sheet area (Australian papers, in part).
No. of entries:	10,000+
Same material indexed by:	Mineral reports group (in part), palaeontology subsection(in part), marine geophysics subsection (in part), petroleum technology section (in part) etc.
Material of interest to:	All

Note: The library is an amalgamation of three pre-existing Branch libraries. Catalogues have not been consolidated because different approaches were used. Recataloguing is in progress, but the backlog is very large.

2. GEOLOGICAL BRANCH

2.1

Index:	Technical files (restricted)
Maintained by:	Mineral reports group
Status:	Active
Coverage:	Unpublished and some published material not in report format.
Format:	Foolscap folders.
First breakdown:	1:250,000 sheet area
Cross indexing:	None
No. of entries:	10,000+
Same material indexed by:	Mineral economics section (in part)
Material of interest to:	All

2.2

Index:	BMR Records
Maintained by:	Mineral reports group
Status:	Active
Coverage:	BMR Records
Format:	3" x 5" cards
First breakdown:	1:250,000 sheet area
Cross indexing:	None
No. of entries:	3600+
Same material indexed by:	Information subsection
Material of interest to:	All, especially library, industry.

2.3

Index:	PSSA Applications and reports (restricted)
Maintained by:	Technical files
Status:	Active
Coverage:	Petroleum Search Subsidy Act Applications and reports
Format:	3" x 5" cards
First breakdown:	1:250,000 sheet area
Cross indexing:	None
No. of entries:	1000+
Same material indexed by:	Sedimentary section, subsidy section.
Material of interest to:	Sedimentary, subsidy, sedimentary basins study, seismic, petroleum technology, sections etc.

2.4

Index:	Petrographic thin sections
Maintained by:	Copies held by technical files and transit room
Status:	Inactive
Coverage:	Part of thin section collection
Format:	Computer printout
First breakdown:	1:250,000 sheet area
Cross indexing:	None - but feasible
No. of entries:	Several thousand
Same material indexed by:	Museum (in part)
Material of interest to:	Geological branch including museum, sedimentary basins study section (in part).

2.5

Index:	Stratigraphic index
Maintained by:	Mineral reports group
Status:	Active
Coverage:	All published reports and papers on Australian geology.
Format:	3" x 5" cards
First breakdown:	Stratigraphic name
Cross indexing:	Author, 1:250,000 sheet, subject.
No. of entries:	13,000+
Same material indexed by:	Library (in part)
Material of interest to:	Geological branch, mineral economics section, sedimentary basins study section, industry.

Note: Copies of author, 1:250,000 sheet, and subject cards are sent to library, and copies of relevant cards to State Mines Depts.

2.6

Index:	Bibliography of New Guinea geology
Maintained by:	Mineral reports group.
Status:	Active
Coverage:	All relevant reports
Format:	6" x 4" cards
First breakdown:	Year of publication then author
Cross indexing:	None
No. of entries:	3000+
Same material indexed by:	Library (in part)
Material of interest to:	All, including library, industry.

Note: This is not largely a by-product of the stratigraphic index.

2.7

Index:	Mineral deposits A
Maintained by:	Mineral reports group
Status:	Active
Coverage:	Published and some unpublished reports
Format:	6" x 8" cards
First breakdown:	State then commodity
Cross indexing:	None
No. of entries:	? 1000
Same material indexed by:	Mineral economics section (in part), library (in part).
Material of interest to:	Mineral reports group, metalliferous section, mineral economics section, library, industry.

Note: This is maintained in conjunction with technical files and mineral deposits B.

2.8

Index:	Mineral deposits B
Maintained by:	Mineral reports group
Status:	Active
Coverage:	Less permanent published and unpublished material - mainly aimed at ore reserves.
Format:	3" x 5" cards
First breakdown:	Commodity then locality
Cross indexing:	None
No. of entries:	? 500
Same material indexed by:	Mineral economics section (in part)
Material of interest to:	Mineral reports group, mineral economics section, industry

Note: This is maintained in conjunction with technical files and mineral deposits A.

2.9

Index:	Mineral deposits C
Status:	Inactive since about 1950, and incomplete
Coverage:	Mines Dept. published reports
Format:	3" x 5" cards
First breakdown:	Commodity, then state, then locality.
Cross indexing:	None
No. of entries:	10,000+
Same material indexed by:	Library, mineral economics section (in part)
Material of interest to:	Mineral reports group, ? mineral economics section, industry.

Note: Some major commodities e.g. copper, gold, iron, have not been included.

2.10

Index:	West Australian mineral occurrences
Maintained by:	See note
Status:	Active
Coverage:	Reports on W.A. deposits
Format:	3" x 5" cards
First breakdown:	Commodity, then locality
Cross indexing:	Author and 1:250,000 sheet to about 1950; none since
No. of entries:	10,000+
Same material indexed by:	Mineral deposits A in part (but see note), mineral economics section (in part), library
Material of interest to:	Mineral reports group, mineral economics section, library, industry.

Note: The indexing is done by W.A. Mines Dept. who sent to BMR copies of the cards at intervals of about 6 months. Scope and detail has changed since about 1960.

2.11

Index:	Water bore data
Maintained by:	Parts of sedimentary section
Status:	Dormant
Coverage:	Bores in particular basins
Format:	8" x 10" edge punch cards
First breakdown:	Water bore registered number
Cross indexing:	1:250,000 sheet, aquifer age and type, depth, water quality and quantity, basin etc.
No. of entries:	Several thousand
Same material indexed by:	Core and cuttings laboratory
Material of interest to:	Sedimentary section, sedimentary basins study section, mines departments, irrigation commissions, etc, industry.

Note: This was intended to be a co-operative effort with State mines departments/water commissions, using a standard card. Few of the BMR cards have been notched, but are merely stored in order of bore number or according to 1:250,000 sheet area.

2.12

Index:	Sedimentary basin geology (restricted)
Maintained by:	Sedimentary section
Status:	Active
Coverage:	Subsidiary and similar completion reports
Format:	8" x 10" edge punch cards
First breakdown:	Report reference
Cross indexing:	1:250,000 sheet, basin, well name and number, age of strata, subject.
No. of entries:	500+
Same material indexed by:	Sedimentary basin study section, core and cuttings lab (in part), technical files (in part)
Material of interest to:	Sedimentary section, sedimentary basin study section, petroleum technology section, (?)seismic, (?)gravity, sub-sections.

Note: This was to be a co-operative effort between sedimentary section, sedimentary basin study section, and petroleum technology section, which seems largely to have broken down; duplicate cards are kept by sedimentary basin study section.

2.13

Index:	Phosphates and marine geology
Status:	Inactive since about 1968
Coverage:	Reports on phosphate and marine geology, sample data
Format:	8" x 10" edge punch cards
First breakdown:	Report reference or sample
Cross indexing:	1:250,000 sheet, environment, lithology, composition, age, sample type, etc.
No. of entries:	500+
Same material indexed by:	Library (in part), sedimentary section (in part), sedimentary basin study section (in part).
Material of interest to:	Phosphate group, sedimentary basin study section, sedimentary section, library, (?)geological museum, (?)marine geophysics.

2.14

Index:	Palaeontological references
Maintained by:	Palaeontological section
Status:	Active
Coverage:	All literature for some taxonomic groups
Format:	Computer, modified INFOL, card storage.
First breakdown:	Bibliographic reference
Cross indexing:	Subject, taxa, age, location.
No. of entries:	Thousands
Same material indexed by:	Library (in part)
Material of interest to:	Palaeontology sub-section, library, other organisations

Note: This is a co-operative venture with several other organisations, BMR acting as the central depository.

2.15

Index:	Building stones
Maintained by:	Engineering geology sub-section
Status:	Dormant
Coverage:	Stones tested by BMR
Format:	4" x 6" cards
First breakdown:	Name of stone
Cross indexing:	None
No. of entries:	100+
Same material indexed by:	Museum (in part)
Material of interest to:	Engineering geology, (?)regional gravity sub-sections, industry.

2.16

Index:	Museum registered samples
Maintained by:	Museum
Status:	Active
Coverage:	Geological branch samples (largely excluding palaeontological)
Format:	Bound registers and 3" x 5" cards
First breakdown:	Sample number
Cross indexing:	Field party, country or 1:250,000 sheet, year, etc.
No. of entries:	50,000+
Same material indexed by:	Regional gravity (in part).
Material of interest to:	Geological Branch, sedimentary basin study section, gravity, sub-section.

Note: This does not include samples in bulk storage, which are not given registered numbers, and are kept in numbered boxes. The museum is considering converting to a computed-based system. The core and cuttings laboratory also handles geological samples.

2.17

Index:	Silicate analyses (A)
Maintained by:	Inactive
Coverage:	BMR silicate analyses
Format:	6" x 4" cards
First breakdown:	Sample number
Cross indexing:	None
No. of entries:	100+
Same material indexed by:	None
Material of interest to:	Metalliferous section

Note: The Geological Branch is working on a computer based index and storage system which will eventually incorporate results of all laboratory work. (see silicate analyses (B)).

2.18

Index:	Photographs
Maintained by:	Photography section
Status:	Active
Coverage:	BMR photos excluding 35 mm
Format:	6" x 4" cards
First breakdown:	Negative number
Cross indexing:	Subject, with multiple entries as appropriate
No. of entries:	14,000+
Same material indexed by:	None
Material of interest to:	All, including library, and public.

2.19

Index:	Colour transparencies
Maintained by:	Geological Branch drawing office
Status:	Dormant
Coverage:	35 mm colour transparencies held by geological drawing office.
Format:	Self index and typed foolscap sheets
First breakdown:	1:250,000 sheet area, then transparency (self index)
Cross index:	Subjects (typed sheets)
No. of entries:	3000+
Same material indexed by:	Information sub-section
Material of interest to:	All, including public.

2.20

Index:	Laboratory reports
Maintained by:	Geological Branch laboratory
Status:	Active
Coverage:	Reports of work on samples submitted to geological laboratory for identification, analysis, etc.
Format:	Register (see note)
First breakdown:	Report number (roughly chronological)
Cross indexing:	None
No. of entries:	500+
Same material indexed by:	None
Material of interest to:	Geological Branch (including museum), sedimentary basin study section, (in part), mineral economics section (in part).

Note: The reports are issued half yearly in the BMR Records series.

2.21

Index:	Silicate analyses (B)
Maintained by:	Geological laboratory
Status:	Eliminating bugs
Coverage:	BMR silicate and trace element analyses
Format:	Computer-based, special program, card storage
First breakdown:	Sample registered number
Cross indexing:	Element analysed, range of composition, year, project
No. of entries:	100,000+ (potential)
Same material indexed by:	None
Material of interest to:	Geological Branch, mineral economics section (in part) other organisations.

3. GEOPHYSICAL BRANCH

3.1

Index:	CGS listing of major earthquakes 1961-70
Maintained by:	Observatory group.
Status:	Updated annually.
Coverage:	Earthquakes greater than force 5 with epicentres in S.W. Pacific, Australia and New Guinea, and eastern Indian Ocean.
Format:	Computer printout
First breakdown:	Chronological order.
Cross indexing:	None
No. of entries:	4000+
Same material indexed by:	None
Material of interest to:	Observatory group, regional structural group.

Note: Printout received from U.S. Coast and Geodetic Survey.

3.2

Index:	Hypo-centre determinations and volcanic events 1900-1968.
Maintained by:	Observatory group
Status:	Updated on request
Coverage:	New Guinea region incl. Solomons.
Format:	Computer printout
First breakdown:	Region then chronological.
Cross indexing:	None
No. of entries:	10,000
Same material indexed by:	None
Material of interest to:	Observatory group, regional structural group.

Note: Printout received from Institute of Geological Sciences, United Kingdom.

3.3

Index:	Logged boreholes.
Maintained by:	Engineering geophysics
Status:	Active
Coverage:	Great Artesian Basin bores logged under BMR programme.
Format:	Computer printout from cards
First breakdown:	Bore number
Cross indexing:	Geographic location (lat. & long.); others possible.
No. of entries:	900+
Same material indexed by:	Sedimentary section (in part).
Material of interest to:	Engineering geophysics group, sedimentary section, sedimentary basin study section.

3.4

Index:	Seismic survey data (restricted)
Maintained by:	Seismic sub-section
Status:	Active
Coverage:	All BMR seismic surveys plus some tenement relinquishment material from Territories administrations.
Format:	Bound index book
First breakdown:	No. of survey, then record & tape location data, 1:250,000 area, basin, report no. etc.
Cross indexing:	None
No. of entries:	100+
Same material indexed by:	Subsidy section (in part)
Material of index to:	Seismic, subsidy, sedimentary basin study sections.

Note: Separate lists of records tapes and storage cylinders kept.

3.5

Index:	References to geophysical literature
Maintained by:	
Status:	Closed.
Coverage:	Papers on magnetic surveying, 1940 to 1959.
Format:	Bound foolscap book
First breakdown:	Broad subject, then chronological, then bibliographic reference.
Cross indexing:	None
No. of entries:	2500
Same material indexed by:	Library (in part)
Material of interest to:	Geophysicists in magnetic work, library.

3.6

Index:	Airborne data records
Maintained by:	Contracts and reductions group
Status:	Active
Coverage:	Records from BMR airborne magnetic surveys
Format:	5" x 8" cards
First breakdown:	State, then survey name, then year, then list of records held.
Cross indexing:	None
No. of entries:	100+
Same material indexed by:	None
Material of interest to:	Contracts and reductions groups, sedimentary basin study section (in part), industry.

3.7

Index:	National gravity data repository
Maintained by:	Regional gravity group
Status:	Active
Coverage:	All gravity data for Australia and its Territories
Format:	Field sheets, microfilm, punch cards, tape, computer printout, reports etc.
First breakdown:	Survey number then station number
Cross indexing:	Area of survey.
No. of entries:	500,000+ stations
Same material indexed by:	None
Material of interest to:	Regional gravity, gravity groups, industry, research organisations etc. (both national and international).

Note: Entry to 1:250,000 sheet classification is by key map. Data is being put onto magnetic tape.

3.8

Index:	Oceanographic work
Maintained by:	Marine geophysics sub-section
Status:	Active
Coverage:	Information on all oceanographic work in Australian area.
Format:	Bound book
First breakdown:	Type of survey (e.g. gravity, seismic,), then survey, then information available.
Cross indexing:	None
No. of entries:	100+
Same material indexed by:	Library (in part)
Material of interest to:	Marine geology, marine geophysics subsections, sedimentary basin study, subsidy, and sedimentary sections.

3.9

Index:	Rock density data
Maintained by:	Gravity group
Status:	Active but incomplete
Coverage:	Samples whose density and some other physical properties have been measured for gravity purposes.
Format:	Computer based, special programme, card storage
First breakdown:	Sample number
Cross indexing:	1:250,000 sheet
No. of entries:	1000+; thousands eventually
Same material indexed by:	Geological museum
Material of interest to:	Gravity group, geological museum.

3.10

Index:	Gravity and marine & seismic information
Maintained by:	Marine geophysics
Status:	Almost operating
Coverage:	Gravity, magnetic (some), seismic, marine reports (published & unpublished) coming to notice of group
Format:	Computer printout from tape, special programme.
First breakdown:	Bibliographic reference
Cross indexing:	Subject, 1:250,000 sheet, etc. eventually
No. of entries:	300+; thousands eventually.
Same material indexed by:	Library (in part).
Material of interest to:	Marine geophysics and geology subsections, regional gravity and regional structural studies groups, library, industry.

3.11

Index:	Marine gravity, magnetic, seismic, bathymetric, and navigation information.
Maintained by:	Marine geophysics
Status:	Operational (as a register only)
Coverage:	Data from BMR contracts and most marine work by other organisations within the area 0-50°S, 90-170°E. (Charts, magnetic tapes, computer outputs of various kinds).
Format:	Computer printout from cards
First breakdown:	Survey time
Cross indexing:	Discipline, map sheets
No. of entries:	500,000
Same material indexed by:	Marine geophysics (in part)
Material of interest to:	Marine geophysics, marine geology, regional gravity, regional structural studies subsections, Petroleum Exploration Branch, industry.

3.12

Index:	Earthquake data file
Maintained by:	Observatory section
Status:	Active
Coverage:	All events in region 0° to 90°S, 75°E to 165°E.
Format:	Computer based
First breakdown:	Events
Cross-indexing:	Time interval, area, magnitude, depth, etc. singly or in combination
No. of entries:	10,000 at present
Same material indexed by:	Other organisations in part
Material of interest to:	Observatory section, crustal studies group, engineering geology and geophysics groups, other earth science organisations, industry.

Note: This is a co-operative arrangement between BMR and other seismological networks in Australia. Data is also obtained from ESSA in the United States.

3.13

Index:	Sample data
Maintained by:	Gravity sub-section
Status:	Active
Coverage:	All incoming BMR samples at present; all samples eventually
Format:	Computer based
First breakdown:	Sample
Cross-indexing:	Locality, map sheet, formation, age, rock type, etc., singly or in combination
No. of entries:	2,500 at present; 100,000+ eventually
Same material indexed by:	None
Material of interest to:	Geological Branch, sedimentary basin study section, gravity sub-section.

3.14

Index:	Computer programs developed in BMR
Maintained by:	Airborne sub-section
Status:	Active
Coverage:	Programs written in BMR
Format:	Computer based
First breakdown:	Program name
Cross indexing:	Subject keywords
No. of entries:	400 at present
Same material indexed by:	None
Material of interest to:	All BMR, other organisations

4. MINERAL RESOURCES

4.1

Index:	Commodity information
Maintained by:	Mineral economics
Status:	Active
Coverage:	Press cuttings relevant to Australian mineral industry.
Format:	Foolscap folders
First breakdown:	Commodity, then roughly chronological
Cross indexing:	None
No. of entries:	?10,000+
Same material indexed by:	Mineral reports group (in part)
Material of interest to:	Mineral economics section, mineral reports group, library.

Note: In addition to these, individual mineral economists keep personal indexes to information relevant to the commodities they handle.

4.2

Index:	Petroleum exploration and development companies in Australia.
Maintained by:	Petroleum technology section
Status:	Active
Coverage:	All companies engaged in petroleum exploration and development in Australia and TPNG.
Format:	3" x 5" cards. Published as a booklet at irregular intervals
First breakdown:	Company name
Cross indexing:	None
No. of entries:	150+
Same material indexed by:	Subsidy section
Material of interest to:	All petroleum groups, industry.

4.3

Index:	Petroleum consultants, contractors etc.
Maintained by:	Petroleum technology section
Status:	Active
Coverage:	All relevant organisations in Australia and TPNG
Format:	3" x 5" cards. Published as a booklet at irregular intervals
First breakdown:	Type of service, then company.
Cross indexing:	Companies listed under all relevant types of service headings.
Same material indexed by:	None
Material of interest to:	All petroleum groups, industry.

4.4

Index:	Reports, etc on offshore tenements. (confidential)
Maintained by:	Petroleum technology
Status:	Active
Coverage:	All reports received under terms of Petroleum (Submerged Lands) Act on behalf of Commonwealth.
Format:	Visible index cards
First breakdown:	State then title number.
Cross indexing:	None
No. of entries:	100
Same material indexed by:	Subsidy (in part) and sedimentary basin study (in part) sections.
Material of interest to:	Petroleum technology, sedimentary basin study, subsidy, sedimentary marine sections, marine geology, marine geophysics groups, library (in part).

Note: Access to this material is imited because of its confidential nature.

4.5

Index:	Articles on petroleum technology
Maintained by:	Petroleum technology section
Status:	Dormant
Coverage:	Technical articles etc on subjects relevant to work of petroleum technology section.
Format:	3" x 5" cards
First breakdown:	Subject, using Uren decimal classification for petroleum industry.
Cross indexing:	Authors (incomplete).
No. of entries:	5000+
Same material indexed by:	Library in part
Material of interest to:	Petroleum technology section, library, industry.

4.6

Index:	Well data cards
Maintained by:	Petroleum technology section
Status:	Active
Coverage:	All petroleum wells drilled in Australia and New Guinea.
Format:	5" x 8" cards
First breakdown:	State, then operating company, then well name.
Cross indexing:	Cards for subsidised wells and for development wells are distinguished by coloured tags.
No. of entries:	2300+
Same material indexed by:	Core and cuttings laboratory (in part), subsidy (in part) and sedimentary sections (in part).
Material of interest to:	Petroleum technology, subsidy, sedimentary basin study, sedimentary sections, core and cuttings laboratory, industry.

Note: Information for current year is kept separate.

4.7

Index:	Tracers well cards
Maintained by:	Petroleum technology
Status:	Active but incomplete
Coverage:	Petroleum wells drilled in Australia and TPNG
Format:	3" x 8" cards
First breakdown:	Company then well name
Cross indexing:	None
No. of entries:	2000+
Same material indexed by:	Core and cuttings laboratory (in part), subsidy (in part) and sedimentary sections (in part).
Material of interest to:	Petroleum technology, subsidy, sedimentary basin study, sedimentary sections, core and cuttings laboratory, industry.

Note: These cards are obtained from a commercial company on a subscription basis.

4.8

Index:	Core analysis results
Maintained by:	Petroleum technology laboratory
Status:	Active
Coverage:	Cores analysed by BMR for porosity etc.
Format:	Foolscap folders
First breakdown:	Well name then core number
Cross indexing:	Copy put on technical files (1:250,000 sheet area) (see 2.1)
No. of entries:	1000+
Same material indexed by:	None
Material of interest to:	Petroleum technology, sedimentary basin study, sedimentary sections, (?)regional gravity groups, industry.

4.9

Index:	Formation fluid analyses (restricted)
Maintained by:	Registry
Status:	Active
Coverage:	Analyses of natural gas and formation water made by BMR.
Format:	Registry file (see note)
First breakdown:	Analysis (roughly chronological order)
Cross indexing:	None
No. of entries:	1000+
Same material indexed by:	None
Material of interest to:	Petroleum technology, sedimentary basin study, sedimentary sections, industry.

Note: Natural gas analyses by BMR, Mines Departments, and companies have been collected into a BMR Record, arranged by basin, then company, then well name. It is intended to issue supplementary Records at 6 or 12 months intervals. A similar Record listing analyses of formation waters is being prepared.

4.10

Index:	Tin deposits
Maintained by:	Mining engineering
Status:	Active
Coverage:	All significant Australian tin deposits
Format:	Computer based
First breakdown:	Deposit
Cross indexing:	Locality, operator, deposit type, mineralogy, etc., singly or in combination
No. of entries:	35 at present
Same material indexed by:	None
Material of interest to:	Mining engineering, mineral economics section, Geological Branch, industry

5. PETROLEUM EXPLORATION BRANCH

5.1

Index:	Basin study
Maintained by:	Sedimentary basin study section
Status:	Active
Coverage:	All geophysical and drilling operations relevant to petroleum search.
Format:	5" x 8" cards
First breakdown:	Drilling and geophysical, then year, then basin, then operation.
Cross indexing:	None
No. of entries:	2000+
Same material indexed by:	Subsidy, sedimentary, petroleum technology sections, seismic sub-section (in part), mineral reports group (in part)
Material of interest to:	Sedimentary basin study, subsidy, sedimentary, petroleum technology sections, geophysical branch.

5.2

Index:	Intercompany agreements relating to oil exploration.
Maintained by:	Subsidy section
Status:	Active
Coverage:	All intercompany agreements relevant to petroleum subsidy
Format:	4" x 6" cards
First breakdown:	Company names
Cross indexing:	Under all companies involved
No. of entries:	150
Same material indexed by:	None
Material of interest to:	Subsidy section

5.3

Index:	Subsidized drilling
Maintained by:	Subsidy
Status:	Active
Coverage:	All subsidized drilling operations
Format:	5" x 8" cards
First breakdown:	Company name, then category of operation, then operation.
Cross indexing:	None (see note)
No. of entries:	500+
Same material indexed by:	Sedimentary section, core and cuttings laboratory, petroleum technology section (in part)
Material of interest to:	Subsidy, sedimentary basin study, petroleum technology, (?)sedimentary sections

Note: To some extent indexes 5.3, 5.4 and 5.9 can be regarded as being mutually cross-referencing, but the approach is slightly different in each index.

5.4

Index:	Subsidised oil search operations
Maintained by:	Subsidy section
Status:	Active
Coverage:	All subsidized operations
Format:	5" x 8" cards
First breakdown:	Drilling then well name; and geophysical then type of geophysical operation, then operation name.
Cross indexing:	None (see note to 5.3)
No. of entries:	1370+
Same material indexed by:	Sedimentary, petroleum technology (in part) sections
Material of interest to:	Subsidy, sedimentary basin study, sedimentary, petroleum technology sections, geophysical branch.

5.5

Index:	Engineering aspects and logs of subsidized drilling
Maintained by:	Subsidy section
Status:	Active
Coverage:	All subsidized drilling operations
Format:	5" x 8" cards
First breakdown:	Well name
Cross indexing:	Nil
No. of entries:	550+
Same material indexed by:	Petroleum technology section (in part)
Material of interest to:	Subsidy, sedimentary basin study, sedimentary, petroleum technology sections.

5.6

Index:	Subsidized geophysical surveys (restricted)
Maintained by:	Subsidy section
Status:	Active
Coverage:	Subsidized geophysical operations
Format:	5" x 8" cards
First breakdown:	Name of operation
Cross index:	Operator's name
No. of entries:	700+
Same material indexed by:	Subsidy section, geological branch
Material of interest:	Subsidy, sedimentary basin study sections, geophysical, geological branches.

5.7

Index:	Geophysical surveys (restricted)
Maintained by:	Subsidy section
Status:	In progress (20% complete)
Coverage:	All geophysical operations referring to petroleum search
Format:	5" x 8" cards
First breakdown:	1:250,000 sheet
Cross indexing:	None
No. of entries:	3000+
Same material indexed by:	Seismic sub-section
Material of interest to:	Subsidy, sedimentary basin study sections, geophysical, geological branches.

5.8

Index:	Summary of subsidized geophysical operations (restricted)
Maintained by:	Subsidy section
Status:	Current
Coverage:	All subsidized geophysical operations
Format:	Folders
First breakdown:	Year then type of operation
Cross indexing:	None
No. of entries:	700+
Same material indexed by:	Geological Branch
Material of interest to:	Subsidy, sedimentary basin study sections, geophysical and geological branches.

5.9

Index:	Subsidized petroleum wells (stratigraphy and locality data) (restricted)
Maintained by:	Subsidy section
Status:	Active
Coverage:	All subsidized wells
Format:	5" x 8" cards
First breakdown:	Well name
Cross indexing:	None (see note to 5.3)
No. of entries:	500+
Same material indexed by:	Subsidy (in part), sedimentary (in part), sedimentary basin study sections.
Material of interest to:	Sedimentary basin study, sedimentary sections.

5.10

Other lists and registers in subsidy section

- a. Well costs (listed by file no.)
- b. Company addresses and personnel (also kept by petroleum technology)
- c. Technical qualifications of company personnel.
- d. Register of all subsidized operations (in order of receipt of fully executed agreements).
- e. Register of all subsidized operations (in order of ministerial approval)
- f. Register of applications for subsidy (listing file numbers)
- g. Subsidized drilling operations (by file number)
- h. Rig activity.

5.11

Index:	Basin bibliography
Maintained by:	Sedimentary basin study section
Status:	Active
Coverage:	All available reports. Some basins only.
Format:	6" x 8" cards
First breakdown:	Basin then author
Cross indexing:	None
No. of entries:	3000+
Same material indexed by:	Subsidiary section, mineral reports group, library (in part)
Material of interest to:	Sedimentary basin study, subsidiary, sedimentary sections, mineral reports group, library, industry.

Note: The bibliography on each basin is issued as a Record, and is later published.

5.12

Index:	Station cards (restricted)
Maintained by:	Sedimentary basin study section
Status:	In progress
Coverage:	All locality information (Canning Basin only at present)
Format:	Edge punch cards
First breakdown:	Locality
Cross indexing:	Age, environment, formation, 1:250,000 sheet, State, etc.
No. of entries:	Hundreds per basin
Same material indexed by:	Sedimentary section in part, core and cuttings laboratory.
Material of interest to:	Sedimentary basin study and sedimentary sections, industry.

5.13

Index:	Coal bores
Maintained by:	Sedimentary basin study section. basin bibliography
Status:	Inactive Sedimentary basin study section
Coverage:	Bore holes in coalfield areas of N.S.W. Active
Format:	Cards and maps All available reports. Some basins only.
First breakdown:	Borehole 5" x 8" cards
Cross indexing:	Entry to areas by map.
No. of entries:	10,000+
Same material indexed by:	None
Material of interest to:	Sedimentary basin study, sedimentary sections, industry.

Note: Material for this index was supplied by the Joint Coal Board. The index is no longer up to date.

5.14

Index:	Well data cards
Maintained by:	Core and cuttings laboratory
Status:	Active
Coverage:	All wells in Australia and TPNG, including water wells (these now very incomplete) and some metalliferous bores.
Format:	Foolscap sized cards
First breakdown:	1:250,000 sheet area, then well name (see note)
Cross indexing:	Well name (well data summary card), area (entry by map), sample accession (see note).
No. of entries:	7000+
Same material indexed by:	Subsidy (in part), petroleum technology, sedimentary basin study, sedimentary sections.
Material of interest to:	Core and cuttings laboratory, subsidy, sedimentary basin study, petroleum technology, sedimentary sections, industry.

Note: The well data cards are arranged in order of 1:250,000 sheet areas, and show if samples from the well are held by the core and cuttings laboratory (see 5.16). A visible index also lists wells by 1:250,000 sheet area, shows the number used for the well on a wall map, and shows the accession number of that well if samples from it are held.

5.15

Index:	Well information file (restricted in part)
Maintained by:	Core and cuttings laboratory
Status:	Active but incomplete
Coverage:	Reports on laboratory studies of specimens held by core and cuttings laboratory.
Format:	Folders
First breakdown:	Well name
Cross indexing:	1:250,000 sheet area, and well sample accession number via visible index (see note to 5.14).
No. of entries:	1400+
Same material indexed by:	Mineral reports group (technical files), petroleum technology laboratory, library (in part), palaeontology (in part), subsidy (in part), sedimentary basin study (in part) sections.
Material of interest to:	All groups connected with petroleum, library, mineral reports group (technical files), industry.

5.16

Index:	Core and cuttings accession
Maintained by:	Core and cuttings laboratory
Status:	Active
Coverage:	All subsurface material received by core and cuttings laboratory
Format:	Quarto cards
First breakdown:	Well accession number (a consecutive series allotted as samples are received).
Cross indexing:	Well name (via bound register and well data summary card), 1:250,000 sheet (via well data card and visible index)
No. of entries:	1400+
Same material indexed by:	None
Material of interest to:	Core and cuttings laboratory, petroleum technology laboratory, sedimentary basin study and sedimentary sections, geological museum, gravity group.

Note: The geological museum also handles geological samples.

5.17

Index:	Well data including samples
Maintained by:	Proposed by sedimentary basin study group
Status:	Firm proposal
Coverage:	(?)Petroleum and stratigraphic wells
Format:	Computer based
First breakdown:	Well name
Cross indexing:	Various locality, operator, engineering, and result headings
No. of entries:	Several thousand
Same material indexed by:	Petroleum technology (in part), sedimentary (in part) sections
Material of interest to:	Core and cuttings laboratory, subsidy, sedimentary basin study, petroleum technology, sedimentary sections, (?)gravity group, industry.

Note: Proposal is being circulated to other branches for comment. This system would supersede 5.14, 5.15, and 5.16.