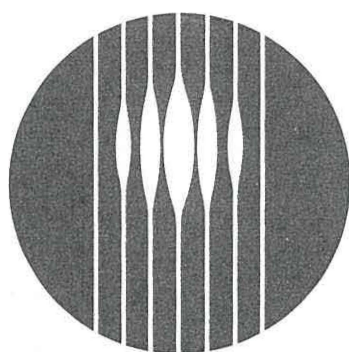


COMMERCIAL RELATIONSHIPS WITH CSIRO



CSIRO
AUSTRALIA

CSIRO'S COMMERCIALISATION POLICY

CSIRO is Australia's largest research agency, and provides a major driving force in the generation of technologies of importance to Australian industry. This key activity lies within CSIRO's main task of conducting strategic and applied research in support of national economic, social and environmental objectives.

Commercialisation — the translation of technology into profitable industrial products or processes — is a vital part of CSIRO's activities. The Organisation's commercialisation mission is:

- **to achieve commercialisation of CSIRO's intellectual property and research skills through arrangements which maximise benefits for Australia.**

Three expectations underlie CSIRO's approach to this mission:

- **broad benefit to Australia;**
- **an optimum return to CSIRO for its investment of resources and skills; and**
- **reasonable compensation by industry on commercial terms for access to CSIRO's technology and services.**

Responsibility for initiating CSIRO's commercialisation business arrangements lies with Chiefs of Divisions. All arrangements made must have the approval of the appropriate Institute Director. Larger scale agreements and certain others require endorsement by CSIRO's Chief Executive and approval by the Minister responsible for CSIRO.

Sirotech Limited, CSIRO's specialist technology transfer arm, is a source of comprehensive commercial advice to CSIRO on the structuring of transactions, and can also act as agent in commercialisation matters.



Flexible commercialisation strategies are designed to maximise industrial impact and national benefit.

Commercialisation relationships

CSIRO's emphasis is on flexibility in packaging its resources and technology so that their impact on a commercial partner's business and on Australia's national industrial performance is maximised. The strategy chosen to support a particular industrially oriented CSIRO research project can be tailored to these ends and, for example, could be any one of:

- *a research contract, consultancy agreement or technical services agreement, where a sponsor pays in full for CSIRO to do work in pursuit of defined objectives. Fees are negotiated on a fully commercial basis. The sponsor would normally have exclusive rights to use any resulting intellectual property pertinent to the objectives;*
- *a collaborative R&D arrangement directed towards generating defined products or processes, where both contributions to the research and the benefits from it are shared between CSIRO and a sponsor. Ownership of intellectual property is negotiated on a fully commercial basis;*
- *an umbrella arrangement for companies to support research across an area of strategic business interest, where specific research objectives are progressively defined in the light of technical and/or commercial progress. Such arrangements include precompetitive research in prospective areas of science and technology; or*
- *a project fully funded from CSIRO's Appropriation budget from the Government, with commercialisation arrangements being sought relatively late in the R&D process.*

The return from commercialisation ventures constitutes an important part of the financial base for CSIRO's whole research portfolio which ranges from major longer term research projects to smaller problem-solving consultancies.

The commercialisation arrangements are embodied in a suitable legal agreement setting out the contributions to the project by each party, and defining the interests of CSIRO and the sponsor in pre-existing and resulting technology. These agreements generally enable the sponsor to take advantage of relevant Government incentives, notably the 150% tax concession for industrial R&D expenditure. (Some research sponsorship agreements, however, already incorporate Government funds and may preclude the sponsor from being eligible for the tax concession.) Other incentives offered as part of the Government's industry-development package can also assist companies working with CSIRO.

Commercialisation arrangements include:

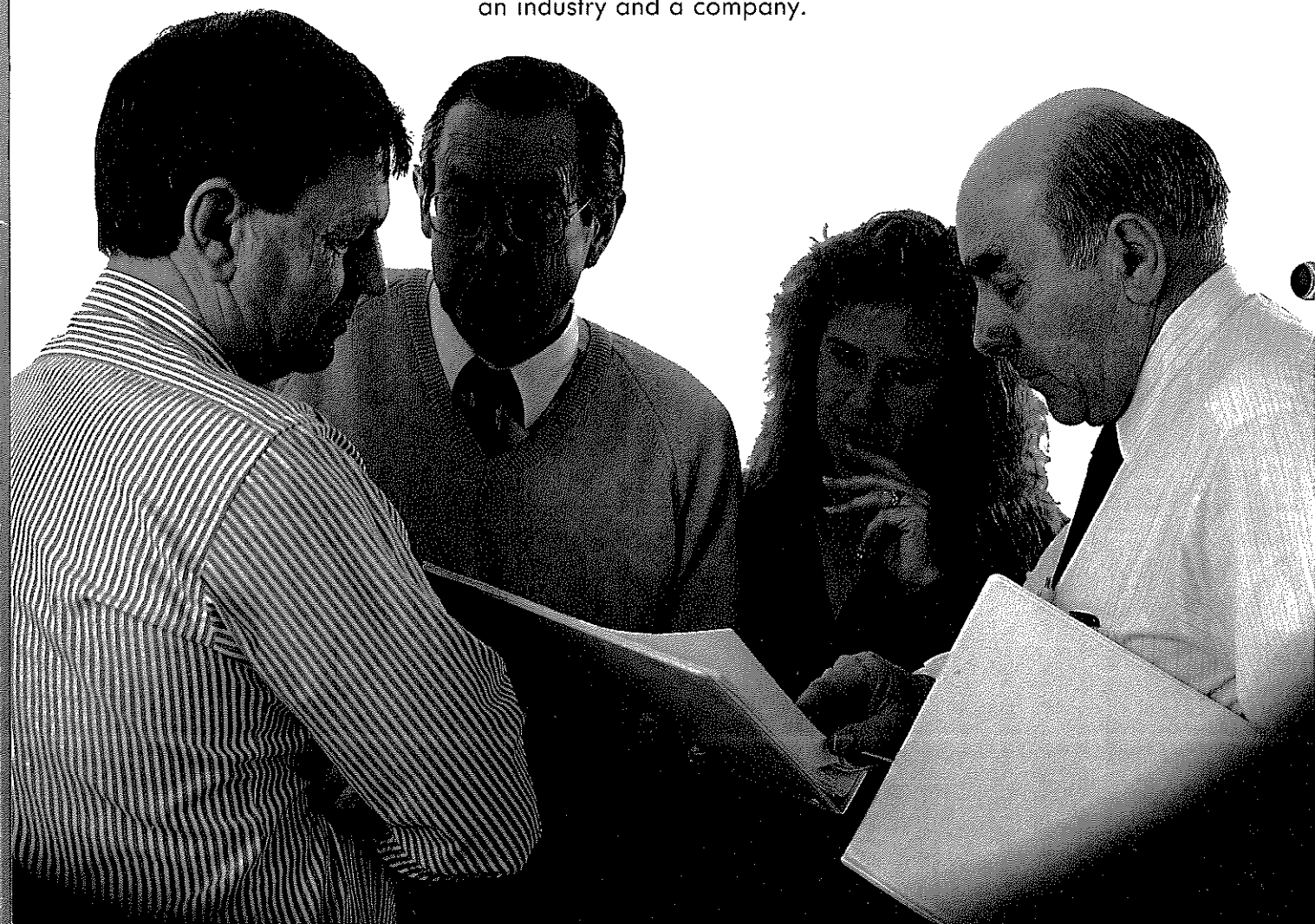
- research sponsorship;
- licences;
- equity holdings;
- start-up companies.

Agreements also identify other important ingredients for industry's exploitation of CSIRO-generated technology, such as:

- protection of intellectual property and commercial information;
- licensing/royalty payments;
- a position of equity or shareholding for CSIRO — for example in a joint venture company or in our commercial partner itself;
- the appointment of CSIRO or Sirotech managers as directors of joint venture companies, thereby ensuring CSIRO's long-term commitment to the venture;
- the involvement of venture capital funds and other "third party" investors.

CSIRO's commercialisation strategy also includes the formation of "start-up" companies, sometimes involving CSIRO staff.

The fundamental aim is to tailor a package to the specific needs of an industry and a company.



Partnership expectations and obligations

Collaborative research between CSIRO and companies often provides the maximum returns from CSIRO's effort.

CSIRO prefers its industrial partners to become involved as early as possible in research projects, perhaps even before specific research has begun. Later-stage investors in CSIRO technology may have to pay a premium to become involved.

The strongest bonds between CSIRO and its partners and the maximum benefit from CSIRO's efforts usually come from collaborative research arrangements. These enable a maximum commitment from CSIRO's project groups to the expectations of the company.

CSIRO's financial, personnel and other approaches and procedures are geared to working closely with companies and delivering the service they require. These procedures:

- protect intellectual property and commercially confidential information;
- respect commercial deadlines by employing modern project management techniques;
- provide for timely reporting of R&D results; and
- defer publication where necessary to avoid jeopardising commercial prospects.

Where CSIRO has generated technology or developed skills in the absence of a complementary commercial relationship with a particular company, the Organisation ensures that companies with the necessary resources have the opportunity to be considered as a partner.

CSIRO and its commercial partners share rights to intellectual property.

CSIRO's commercial partners acquire rights to intellectual property generated through sponsored research. The nature and extent of those rights are negotiated at the outset on a fully commercial basis taking into account the relative inventive, technological, financial and other inputs to the R&D, from CSIRO, its industrial partners and any other sponsors.

CSIRO uses its own resources to make major investments in research, both before and after entering commercialisation arrangements. The Organisation therefore has a very significant stake in products and processes based on CSIRO research, and expects a commensurate share of income from commercialisation ventures.

CSIRO expects its commercial partners to be capable of, and committed to:

- managing development of the technology concerned, including establishing mutually acceptable project management arrangements;
- providing or arranging for the financial resources required; and
- providing access to, or developing, a high national and international marketing effort.

CSIRO's commercial partners should provide or arrange the necessary management, financial, marketing and technical skills and resources.

CSIRO's acceptance of a commercialisation venture may also depend on the partner's ability to:

- make the necessary arrangements with foreign companies;
- acquire the necessary complementary technology;
- commit sufficient physical resources to commercialisation of the product or process; and
- achieve significant Australian manufacture *or* significant Australian involvement in, and benefit from, the company's worldwide business.

CSIRO's partners should also be prepared to publicly acknowledge the Organisation's contribution to their product.

To ensure maximum benefit from commercialisation of CSIRO technology, CSIRO's commercial agreements contain clauses covering the partner's performance against the objectives listed and protecting confidential technology. For the same reason, CSIRO's approval is required for the transfer of rights acquired under such agreements.

CSIRO makes a long-term commitment to its commercial partners.

CSIRO will assist, normally on a commercial basis, by conducting further research, and by committing its considerable resources and expertise on a long-term basis to support its commercial partners in the field concerned. CSIRO also tries to structure licence fees, payments for sponsored research and other financial arrangements in a way that maximises the chances of commercial viability.

CSIRO prefers partnerships that maximise benefits to Australia.

CSIRO gives preference to companies with a long-term commitment to operating in, and exporting from, Australia, and which conform to the requirements listed above. This most effectively enables CSIRO to contribute to achieving the Government's objective of developing or sustaining internationally competitive Australian industries.

If the skills, resources and market access necessary for effective commercialisation point to the selection of a foreign company as CSIRO's commercial partner, a commercial arrangement may be entered into subject to adequate protection of Australia's interests. Such agreements typically promote:

- the company's maintaining or establishing the highest practicable level of local manufacture for the widest range of markets, and an assured role for the CSIRO-based product or process in the company's worldwide business;
- CSIRO's sharing on a fully commercial basis in the rewards gained from worldwide use of the product or process;
- possibly some suitable relationship between the company and one or more Australian companies; and
- linkages with the company's in-house or other research resources.

CSIRO also actively seeks and performs contract research for international agencies and overseas firms on a commercial basis. Such arrangements are often attractive because of CSIRO's advanced research capability in many fields and Australia's competitive position in terms of R&D costs. Care is taken to ensure that such business arrangements are consistent with Australia's interests.

Further contact with CSIRO

Commercialisation possibilities may be discussed with the Director of the relevant Institute:

Institute of Animal Production
and Processing
PO Box 93
NORTH RYDE NSW 2113
(telephone: (02) 887 8250)

Institute of Industrial
Technologies
Private Bag 28
CLAYTON VIC 3168
(telephone: (03) 542 2897)

Institute of Information and
Communications Technologies
PO Box 93
NORTH RYDE NSW 2113
(telephone: (02) 887 8220)

Institute of Minerals, Energy
and Construction
PO Box 93
NORTH RYDE NSW 2113
(telephone: (02) 887 8241)

Institute of Natural Resources
and Environment
PO Box 225
DICKSON ACT 2602
(telephone: (062) 48 4614)

Institute of Plant Production
and Processing
PO Box 225
DICKSON ACT 2602
(telephone: (062) 48 4613)

Detailed discussions would normally follow with the Chiefs of the constituent Divisions of an Institute, or with the relevant Project Director in either Sirotech office:

580 Church Street
RICHMOND VIC 3121
(telephone: (03) 428 0466)

Level 7, 92 Pitt Street
SYDNEY NSW 2000
(telephone: (02) 235 1855)

Questions on this booklet can be directed to:

Corporate Services Department
CSIRO
PO Box 225
DICKSON ACT 2602
(telephone: (062) 48 4537)

