

## Chapter 1

### GUIDELINES FOR UNDERTAKING CONTRACT RESEARCH

#### 1.1. DEFINITION AND SCOPE

Contract Research by C-MET shall comprise all R&D undertaken through specific contractual agreement agreed upon for the purpose. The projects to be undertaken should fall within the purview of approved research areas of C-MET. Contract research shall cover:

**Sponsored Projects:** Projects wholly funded by the client having specified R&D objectives, and well defined expected project output/results, generally culminating in generation of intellectual property. Exception to full funding by sponsor can be made, with the approval of the administrative ministry, for specific, nationally relevant projects related to Social Welfare and the like. Sponsored projects could be multi-client also, with the sponsors sharing the project funding and research results.

**Collaborative Projects:** Projects partially funded by the client, and supplemented by provision of inputs such as expert manpower, production/ fabrication of product in bulk for testing / trials, infrastructural facilities etc. Collaborative projects could be for up scaling / providing of C-MET level knowhow, technology development of generation of intellectual property etc. Like sponsored projects, the expected project output / results are well defined.

**Grant-in-aid Projects:** Projects involving grant by way of financial inputs, either in full or in part, assistance in kind e.g. equipment, training etc. to supplement C-MET's efforts in ongoing or new R&D projects or for creating new capabilities / facilities. Generally C-MET seeks or requests for grant-in-aid support / funding from government departments / agencies or international bodies. Thus grant-in-aid projects are normally for supporting basic or exploratory research, or for maintaining large / nationally important R&D groups, or testing and infrastructural facilities.

**Consultancy Projects:** Where C-MET would undertake a specific task such as Technology / Feasibility Study, Systems Study, supervision of a technology implementation, identification of sources, techno-commercial support or work of a similar nature etc.

**Technical Services:** C-MET provides sophisticated materials characterization and testing services for the industry. It can also provide other technical services like synthesis and supply of special materials and devices, leasing of equipment, fabrication of sophisticated equipments, energy audit, pollution audit, training of staff of the industry on special topics and supply of scientific and technical information.

#### APPROVALS

The competent authority for approving projects shall be as given hereunder:

<b>Competent Authority</b>	<b>Powers</b>
Executive Committee	Full Powers
Executive Director	Full powers for projects except with private agencies.

	Upto Rs 2 crore provided valued addition is more than 50% of project cost for projects with private parties
Administrative Ministry	All projects involving foreign clients

Note: Value addition would comprise 1.1. Cost of man-days of Scientific/ Technical Staff and 2. Intellectual fee forming part of project cost as explained at 4.1. below.

The project proposals shall be approved by the Competent Authority as above. The Competent Authority shall also have the powers to approve the terms and conditions of licensing the intellectual property resulting from contract research to the client upto the limits given above.

### 1.3. **AUTHORISED SIGNATORIES TO CONTRACTS**

Authorized signatories to all contracts / agreement shall be the Administrative Officer as the case may be and Finance Officer of the Laboratory shall be the countersigning authority and for multi-Laboratory projects, the signatories shall be the Registrar and the Chief Finance Officer as the countersigning authority.

### 1.4. **FINANCIAL ASPECTS**

#### 1.4.1. **Costing of contract research project**

The charges for contract research project shall include:

S No	Nature of expense	Amount
1.	Expenses	
1.1.	Cost of man-days of Scientific / Technical Staff to be deployed at approved rates	
1.2.	Cost of consumables / raw materials/ components with 10% towards procurement over heads	
1.3.	Cost of physical inputs/ services / utilities not separately charged since manpower rates include administrative overheads.	
1.4.	Charges for use of Equipment / software of C-MET (annual usage charge @ 30% of cost calculated at 50% utilization)	
1.5.	Cost of equipment / software procured specifically for the project, if any with 5% towards procurement over heads	
1.6.	External payment envisaged e.g. for hiring infrastructural facilities, experts, computer time, Information etc.	
1.7.	TA/DA	
1.8.	Contingencies (charges of 5 to 10% of total project costs are normal)	
	Total Expenses = Sum of 1.1. to 1.8.	
2.	<b>Intellectual fee:</b> To be decided by the Competent Authority (Minimum of 33.3% of total expenses)  <b>or</b> <b>Project Overhead:</b> To be decided by the Competent Authority for Grant-in-aid projects (maximum 20% of total expenses)	
	Project Cost = Total Expenses + intellectual	

fee i.e. 1 + 2
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**Note:** In case the contract research is to lead to generation of intellectual property, provision and charges for licensing the use of intellectual property to the client should be additionally (clearly) specified. In case of collaborative projects, since the funding by client may be partial, the licensing charges shall take into account the part of project costs expended/borne by C-MET.

1.4.2. **Explanation**

1.4.2.1. **Expenses**

1.4.2.1.1. **Man days costs:** Is the charge for time (in days) of S&T staff deployed on the contract research as per prescribed man day rates for different category of staff calculated as follows with an example: -

S No	Particulars	Amount
1.	Average Basic pay of an engineer/ <b>Scientist*</b>	12000.00
2.	DP at prevailing rate (say @50% of Basic Pay)	6000.00
3.	DA at prevailing rate (say @11% of Basic Pay+DP)	1980.00
4.	Total (1+2)	19980.00
5.	Add 65% of Basic Pay+DP towards overheads, i.e., HRA – 15%, CCA / Tpt Allce – 5%, CPF – 12%, Gratuity – 4%, Leave – 11%, Medical – 8%, others, LTC, CEA, Canteen, etc – 10%	12987.00
6.	Total	32967.00
7.	Add 35% towards administrative overheads (assumption – expenditure on support staff shall be 35% of the expenditure on S&T staff)	11538.45
8.	Total	44505.45
<b>Say Rs 45,000.00 per man month</b>		

\*- calculated as 0.5 x (minimum + maximum of the pay scale)

The Executive Director of C-MET shall finalise the manpower rates for each category of staff in the above manner and with the approval of the Executive Committee. The rates shall be re-worked out as on 1<sup>st</sup> January every year.

1.4.2.1.2. **Consumables/ raw materials/ components:** Comprises stationery, raw materials, components, sub-systems, modules and packaged software and other stores required for the project and should be charged at 100% cost plus overheads @ 10% of the cost, towards purchase, storage, handling etc.

1.4.2.1.3. **Utilities/services:** These are not separately charged since the manpower rates include administrative overheads.

1.4.2.1.4. **Equipment / software usage**

1.4.2.1.4.1. Existing Equipment / software

Pro-rata charges for usage based on an annual usage charge @ 30% of cost of equipment and installation (14% towards ROI and the rest towards meeting depreciation partially) assuming 50% utilisation. In case of old equipment where its cost is not readily available this component of

costing could be decided by the Head of the Laboratory in consultation with Finance Officer .

1.4.2.1.4.2. New Equipment / software

The new equipment shall either be provided by the client at his cost as per the specifications given by C-MET or purchased by C-MET and charged to the client with an additional procurement and handling charges of 5% of the cost of equipment.

1.4.2.1.5. External payments: Comprise payments towards hiring by C-MET, of outside infrastructural facilities, experts, computer time, information etc. to supplement its expertise/facilities

1.4.2.1.6. TA/DA: Comprises payments on travel and daily allowances of C-MET staff visiting/ traveling for the work related to the contract research project. In this regard the following guidelines apply:

1.4.2.1.6.1. All employees of the same status should be treated equally in the matter of TA/DA, irrespective of the source of the funds. Thus, TA/DA at C-MET rates only shall apply.

1.4.2.1.6.2. Client's hospitality, wherever applicable, may be accepted by the employees at their discretion subject to the DA being limited to 25% in the event of both boarding and lodging being provided free, or 50% if only either boarding or lodging is provided free.

1.4.2.1.6.3. Air-travel may be allowed for non-entitled staff by the Head of the Laboratory on functional basis and if it is expedient to do so provided the project outlay permits the expenditure.

1.4.2.1.6.4. C-MET should recover from the client at least the actual expenditure incurred by it on TA/DA to its staff deputed for work relating to the contract research project.

1.4.2.1.7. Contingencies: Provide for any unforeseen expenditure likely to be incurred on the project for which no provision has been made in the cost of project. This would depend on the specific project. However, charges of 5 to 10% of total project costs are normal.

1.4.3. **Intellectual fee**

This reflects C-MET's investment in building up and sustaining the expertise and knowledgebase. Intellectual fee to be charged should therefore be commensurate with quantum and quality of C-MET's inputs and also the benefits to be derived by the client on implementation of the project results. There is variety of ways of estimating and linking the intellectual fees to project parameters, such as expenses or manpower inputs etc. Whatever be the method of estimating the intellectual fees these should in no case be less than 33.3% of the total expenses excluding the cost of equipment purchased at the cost to or provided by the client. The intellectual fee for grant-in-aid projects which do not lead to generation of commercialisable intellectual property, could however be waived, at the discretion of the Competent Authority.

In case of contract research undertaken by one Society of DIT / Laboratory for another and for grant in aid projects, such projects shall be treated as in-house projects and no intellectual fee shall be charged.

Intellectual fee shall however be charged on Govt. projects secured against open tenders.

1.4.4. **Terms of payment**

C-MET shall endeavor to obtain as advance on or before signing the agreement a maximum percentage of project charges, which in any case should not be less than 50%. The balance amount of payment could be in installments to be negotiated with the client having regard to the project schedule, with the final installment being payable before the submission of the project result/reports. All deferred installments of payment shall be backed by suitable bank guarantees; wherever necessary exception to this can be made for government departments / agencies, public sector enterprises etc. and projects secured against open tenders. In any case, a positive cash flow on the project shall be ensured throughout the duration of the project.

1.4.5. **Security Deposit**

In case the client's personnel are to make use of the library / computer / equipment in C-MET, a suitable interest free security deposit, to be fixed by the Head of the Laboratory/ Director / Executive Director of C-MET, should be collected from the client. On completion of the project this may be refunded to the client after deducting for any loss/ damage. The decision of the Head of the Laboratory/Director / Executive Director on the deductions, if any, shall be final and binding on the client.

1.4.6. **Negotiations**

In cases of competitive bidding, there could be further negotiations and the clients might insist to lower the project cost quoted. C-MET should make only proper estimations and the project cost quoted should always be fair and reasonable. C-MET should always remember that it can undertake sponsored projects only on a "no profit no loss" basis and the activities undertaken should not be taken as a source for profiteering by C-MET. The quantum of surplus should not exceed what a prudent public service institution may be expected to generate without sacrificing the interests it is expected to serve and without being obsessed by the pure profit motive of the private entrepreneur. The Societies should not allow its character as a public utility undertaking to be changed into that of a profit motivated private trading, or manufacturing house. Neither the charges for the services nor the resulting surplus may reach such heights as to lead to the inevitable conclusion that the Societies have shed its public utility character. It is therefore emphasized that the charges demanded should be reasonable and there should be no cause for a subsequent reduction. However the Head of the Laboratory/ Director / Executive Director may permit lowering of the initial cost quoted to a maximum of 10% and reductions given shall be reported to the Executive Committee explaining the circumstances therefore.

1.5. **RESEARCH OUTPUT**

1.5.1. **Publications**

The client shall be consulted prior to publishing any research results arising from the contract research work. The publications shall duly acknowledge the inputs of the client. The authors shall specifically state that the work has been done at C-MET assigning all the IPRs to C-MET.

## 1.5.2. **Intellectual Property**

### 1.5.2.1. Sponsored Research

The ownership of the intellectual property generated shall be of C-MET. Obtaining and maintaining the relevant intellectual property rights shall be the responsibility of and at cost to C-MET. The decision, whether or not an intellectual property right be obtained, shall be that of the approving authority of C-MET, which decision shall be final and binding on the sponsor.

### 1.5.2.2. Collaborative Research

Intellectual property generated through projects with technical contribution from the collaborator, shall be jointly owned. The expenses for obtaining and maintaining the intellectual property shall be borne equally by C-MET and the collaborator. The decision whether or not intellectual property rights be secured shall jointly be taken by the approving authority of C-MET and the collaborator.

### 1.5.2.3. Grant-in-aid

Intellectual property rights in case of government departments and agencies may be as per their standard terms and conditions. However, where the grantor has no standard conditions and for non-government agencies, ownership rights shall be that of C-MET.

## 1.5.3. **LICENSING OF INTELLECTUAL PROPERTY**

### 1.5.3.1. **Sponsored Research**

1.5.3.1.1. The rights of licensing intellectual property shall rest with C-MET. Realising that all application oriented R&D is commercially driven and highly prone to obsolescence, policy changes etc, the following guidelines are given. However the approving authority shall review the proposal on a case-to-case basis depending upon the product, technology, client and the environment for the product.

1.5.3.1.2. The sponsor shall be given the first right for commercial exploitation of intellectual property. However this right shall be exercised by a written communication to C-MET within a pre-specified period of time commencing from the receipt of final report. In the event the sponsor fails to exercise his option within the specified period, or having done so fails to commercially exploit the intellectual property within specified time-frame, C-MET shall be free to license the intellectual property to others and the money accruing there from shall be shared equally between C-MET and sponsor with a ceiling on the sponsor's share equal to the amount the sponsor had paid to C-MET as sponsorship charges.

1.5.3.1.3. Wherever feasible the sponsor shall be given a non-exclusive license failing which an exclusive license for a limited period of time, normally not exceeding 5 years, for commercial exploitation of the intellectual property.

1.5.3.1.4. For the license granted for commercial exploitation of the intellectual property to the sponsor, C-MET shall charge an adequate amount as fee. This could be a lump sum and/or recurring royalty.

- 1.5.3.1.5. C-MET shall have the right to license the intellectual property to any other party on the terms and conditions it may decide in the case where it has granted non-exclusive license or in case of exclusive license on the expiry of the exclusivity period. In such cases, if the licensing of intellectual property is only by C-MET without any further assistance of the sponsor, then the money realized should be shared on a 50:50 basis with a ceiling on the total amount receivable by the sponsor to the amount the sponsor has paid to C-MET as sponsorship charges. In case C-MET seeks assistance of the sponsor to license the intellectual property the sharing of the monies shall be specifically negotiated depending upon the inputs to be provided by the sponsor.
- 1.5.3.1.6. Notwithstanding the exclusive license granted to the sponsor, C-MET shall have the right to license the intellectual property during the period of license if there is a proposal before Government of India for import of the same / similar intellectual property as developed under the sponsored project;
- 1.5.3.1.6.1. C-MET and the collaborator.
- i) The collaborator shall have the first right for commercial exploitation of intellectual property. However the right shall be exercised by the collaborator by a written communication to C-MET within a pre specified period of time not generally exceeding six months, commencing from the receipt of final report. In such a case the intellectual property shall be licensed to the collaborator for exploitation, on terms to be mutually decided between C-MET and the collaborator.
  - ii) In the event the collaborator fails to exercise the option or fails to commercially exploit the intellectual property within the pre-specified period, C-MET shall have the right to license the intellectual property to others on terms to be mutually decided between collaborator & C-MET. In such a case the money accruing shall be shared with the collaborator, commensurate to his inputs in the project and in transfer of technology.
  - iii) Wherever feasible the collaborator shall be given a non-exclusive license, failing which, an exclusive license for a limited period of time, normally not exceeding 5 years, for commercial exploitation of the intellectual property.
  - iv) The intellectual property can be licensed to others by C-MET on terms and conditions to be mutually agreed to between C-MET and the collaborator in case of non-exclusive license granted and for exclusive license on expiry of the exclusivity period.
- 1.5.3.1.6.2. Notwithstanding the exclusive license granted to the collaborator, C-MET shall have the right to license the intellectual property, during the period of exclusivity if:
- there is a proposal for import of same/similar intellectual property as developed under the collaborative project.
  - Government of India desires C-MET to disclose the intellectual property for its own use.

1.5.3.1.7. The monies accruing shall be shared between C-MET and the collaborator commensurate with inputs provided by each party to the project and in technology transfer.

1.5.3.2. **Grant-in-aid Projects**

Licensing rights of intellectual property in case of government departments and agencies may be as per their standard terms and conditions. However cases where the grantor has no standard conditions and for non-government agencies, licensing rights shall be that of C-MET.

1.5.3.3. **Ownership of Prototype / Products**

The physical ownership of prototypes / products that may be procured during the sponsored work shall normally be the property of the sponsor and for collaborative and grant-in-aid projects the ownership shall be specifically agreed upon between C-MET and the collaborator/grantor and included in the agreement.

1.5.3.4. **International Contract Research Projects**

The terms and conditions and agreements for contract research with foreign clients shall be decided on a case-to-case basis.

1.6. **INTELLECTUAL PROPERTY**

1.6.1. **Definition**

Intellectual Property shall include patents, copyright, registered design, trademark know how for process/product/design and computer software.

1.6.2. **Types Of Intellectual Property**

Intellectual Property generated by C-MET is of two types:

1.6.2.1. Unencumbered

Developed through wholly in-house R&D programmes/projects - In such case ownership of intellectual property is solely that of C-MET and consequently the licensing rights are that of C-MET alone.

Intellectual property developed through contract research and subsequently rendered unencumbered as per the contractual arrangements with client - In such cases licensing of intellectual property by C-MET would be in accordance with the terms & conditions agreed upon with respect to third party licensing with the client.

1.6.2.2. Encumbered

Developed through contract research i.e. with total or partial financial support, and with/without technical inputs from users/clients. In such cases ownership and licensing of intellectual property for commercial utilization shall be governed by C-MET's obligations to client in the matter.



### 1.6.3. **Development of Intellectual Property – General Aspects**

1.6.3.1. Development of intellectual property shall be taken up preferably with user participation right from initial stages, to ensure commercial viability and successful utilization.

1.6.3.2. Wherever feasible and necessary the development should be taken to the stage of proving commercial viability. However as this would not be feasible for all C-MET projects, research results of projects, which at a particular period of development work may not find potential users, should be adequately protected and shelved till such time that a demand develops for them. However in case there is a demand for these research results per se, they could be leased, on non-exclusive and 'as – is – where – is' basis, in a documented (report) form only, without any guarantees or other liabilities related to technology licensing.

### 1.6.4. **Licensing of Intellectual Property**

#### 1.6.4.1. Definition

Licensing of intellectual property shall mean granting the licensee the right to utilize the intellectual property and sell or use the resulting product(s) either for commercial / captive purpose or as otherwise agreed to.

#### 1.6.4.2. Method of Licensing

Licensing of intellectual property involving transfer through formal means shall be through specific contractual agreements. For transfer of intellectual property through only one time demonstration or supply of only drawings, reports, software etc. licensing can be done through implied contractual agreement with no liabilities on C-MET.

#### 1.6.4.3. Channel of Licensing and associated ownership rights

C-MET would be free to choose the channel of licensing / commercial utilization of all unencumbered intellectual property generated, which could be directly by C-MET themselves, C-MET should clearly specify in the agreement their obligations and extent of commitments to the licensee(s) in each case.

Licensing of unencumbered intellectual property should be generally on non-exclusive basis. However where despite publicity and conscious efforts for the exploitation of such intellectual property, it has remained unlicensed for more than three years, it could thereafter if deemed necessary be offered on a limited 'exclusive basis' to make it more attractive to entrepreneurs.

Information on all intellectual property sought to be licensed should clearly indicate:

- Level of development and transfer (bench, pilot plant, semi commercial or prototype) of knowhow.
- Status of knowhow i.e. as-is-where-is basis with or without guarantee for technical or commercial viability.
- Assistance and documentation to be given to the licensee.

## 1.6.5. **Pre-Licensing Aspects**

### 1.6.5.1. Evaluation of Intellectual Property

A proper technical evaluation of any intellectual property sought to be licensed shall be undertaken, through a suitable mechanism to be decided by the Executive Director. The mechanism could be in-house to C-MET or external or a combination of both and could also differ from case to case. If the technical evaluation is satisfactory a feasibility report for the exploitation of the intellectual property should be prepared.

### 1.6.5.2. Legal Protection

The Executive Director may set up a suitable mechanism for examining the possibility of legally protecting the intellectual property generated. All protectable intellectual property shall be protected through appropriate legal instruments e.g. patents, copy right, registered design, trademark etc.

### 1.6.5.3. Documentation

In case of all intellectual property sought to be licensed, either directly or otherwise the detailed knowhow document on the process, technique, design, product, the method of its utilization, quality control aspects, safety and pollution control regulation and other parameters associated with the implementation must be prepared. This document should be available centrally either with the Executive Director or the technology marketing unit of C-MET. The services/assistance to be rendered by C-MET to the licensee for the exploitation of the intellectual property should be clearly specified.

## 1.6.6. **Post Licensing Aspects**

### 1.6.6.1. Review of Intellectual property licensed

Annual review of intellectual property licensed including follow-up with the licensee, shall be conducted by C-MET to assess its utilization status. Any technological modification/development necessitated and also change in terms/conditions of its licensing can then be considered.

### 1.6.6.2. Collection of monies

C-MET is responsible for prompt collection of monies accrued through licensing of intellectual property directly by them and through TTAs. It should evolve a proper mechanism for collecting and monitoring the accrual and realization of such monies.

## 1.6.7. **Financial Aspects**

### 1.6.7.1. Pricing

There is no rigid formula for determining the price of intellectual property and thus estimates vary from case to case. The price of knowhow / intellectual property normally ranges between 2% to 10% of either the plant & equipment cost or projected turnover of the Laboratory for a period of 5 year's production. However, the price would depend on the estimates of opportunity value and "what the market can bear". Besides the realization of price could be divided between lumpsum amount and

recurring royalty payments. Although it would be in the interest of C-MET to realize as much of the price as possible through a lumpsum payment the licensee's interest would be to pay the price only through recurring royalty based on production. Thus a balance has to be struck between these two components.

The estimates of following factors shall be placed for the consideration of the Competent Authority to arrive at the price of intellectual property:

- i. Cost of development.
- ii. Estimate of net benefit to be derived by the licensee.
- iii. Size and number of potential licensees.
- iv. Comparative cost of imported intellectual property, wherever applicable/available.
- v. Possibility of intellectual property being pirated.
- vi. Opportunity value.

Price decided for a specific intellectual property should be reviewed periodically, at least every three years of revision, if any required.

1.6.7.1.1. Explanation

1.6.7.1.2. Cost of Development derived as at 1.4.1 above + Cost of publicity.

1.6.7.1.3. Net benefit to be derived by the licensee

This can be calculated as the money to be saved by the licensee by productivity improvement such as saving in raw materials, energy, time, labour, capital etc. or the additional profit to be realized due to better quality of product or reduction in pollution etc. or the net profit from the exploitation of the intellectual property.

1.6.7.2. Size and number of clients

Some estimate may be made of the potential market for the product, process, technique, software and the likely number of licensees for the intellectual property. Sometimes there may be alternative competing sources for the intellectual property. This should be taken into consideration while determining the likely number of licensees for C-MET's intellectual property.

1.6.7.3. Cost of imported intellectual property

In some cases the equivalent intellectual property may have been imported or sought to have been imported in the country. The price and level of such technology could be an indicator for fixing the price of intellectual property.

1.6.7.4. Piracy of intellectual property

Some intellectual property is highly innovative but difficult to prevent from being pirated by others. The price would need to give due recognition to the intellectual property protection that can be accorded to the licensees.

1.6.7.5. Opportunity Value

Opportunity value in terms of money shall be the amount that can be realized by cashing upon the circumstantial/contingent aspects prompting the utilization of the Intellectual Property by the licensee. For purpose of

calculations, opportunity value could be expressed either in absolute money value or as a percentage of profits anticipated or of a value addition envisaged.

1.6.7.6. Approvals

For licensing of unencumbered intellectual property the competent authority shall be the authority competent to approve development cost. In respect of agreements with foreign clients approval of the administrative ministry shall be obtained.

1.7. **ACCOUNTING PROCEDURES**

1.7.1. **Receipts & Payments**

Monies received and expended on account of contract research & consultancy projects, technical services and intellectual property, shall be properly accounted for under the heads of accounts as indicated below.

1.7.1.1. Receipts: all monies received on account of contract research, consultancy, technical services and other R&D activities shall be deposited under a specific project head with sub-heads for each component of the project cost.

1.7.1.2. Payments: the direct expenditure on such projects/activities shall be debited to the corresponding sub-head of the project head.

1.7.2. **Procedure**

1.7.2.1. Project wise receipt and payment account shall be maintained on account of contract research, consultancy, technical services and other R&D activities without exception. Once a project is received, the Finance Officer in consultation with the Project Leader shall issue a notification of the project in the following format: -

PROJECT COMMENCEMENT INTIMATION

Name of the project:  
 Date of commencement:  
 Date of completion (estimated) :  
 Names of Project Team : 1.  
 : 2.  
 : 3.  
 Project Code :

S No	Nature of expense	Amount
1.	Expenses	
1.1.	Cost of man-days of Scientific / Technical Staff to be deployed at approved rates	
1.2.	Cost of consumables / raw materials / components with 10% towards procurement over heads	
1.3.	Cost of physical inputs / services / utilities not separately charged since manpower rates include administrative overheads.	
1.4.	Charges for use of Equipment / software of C-MET (annual usage charge @ 30% of cost of equipment and installation calculated at 50% utilization)	
1.5.	Cost of equipment / software procured specifically	

	for the project, if any with 5% towards procurement over heads	
1.6.	External payment envisaged e.g. for hiring infrastructural facilities, experts, computer time, Information etc.	
1.7.	TA/DA	
1.8.	Contingencies (charges of 5 to 10% of total project costs are normal)	
	Total Expenses = Sum of 1.1. to 1.8.	
2.	<u>Intellectual fee:</u> To be decided by the Competent Authority (Minimum of 33.3% of total expenses)  <b>Or</b> <b>Project Overhead: To be decided by the Competent Authority for Grant-in-aid projects (maximum 20% of total expenses)</b>	
	Project Cost = Total Expenses + intellectual fee i.e. 1 + 2	

An amount of Rs ..... included in the project cost at 1.1. towards administrative overheads has been transferred to the respective head to meet administrative overheads of the Centre.

An amount of Rs ..... included in the project cost at 1.4. towards charges for use of Equipment / software of C-MET shall be transferred to the Corpus Fund.

Signature : .....  
Finance Officer : .....

Copies shall be forwarded to Project Leader concerned, Internal Audit, Administration, Head of Laboratory etc for record.

1.7.2.2. Similarly on financial closure of a project, the Finance Officer shall give a Financial Closure intimation to all concerned in the following format:

#### **FINANCIAL CLOSURE OF THE PROJECT INTIMATION**

Name of the project :  
Date of commencement :  
Date of completion (Actual) :  
Names of Project Team : 1.  
2.  
3.  
Project Code :

S No	Nature of expense	Original Outlay	Actual Expenditure	Savings / Excess
1.	Expenses			
1.1.	Cost of man-days of Scientific / Technical Staff to be deployed at approved rates			
1.2.	Cost of consumables / raw materials / components with 10% towards procurement over heads			
1.3.	Cost of physical inputs /			

	services / utilities not separately charged since manpower rates include administrative overheads.			
1.4.	Charges for use of Equipment / software of C-MET (annual usage charge @ 30% of cost calculated at 50% utilization)			
1.5.	Cost of equipment / software procured specifically for the project, if any with 5% towards procurement overheads			
1.6.	External payment envisaged e.g. for hiring infrastructural facilities, experts, computer time, Information etc.			
1.7.	TA/DA			
1.8.	Contingencies (charges of 5 to 10% of total project costs are normal)			
	Total Expenses = Sum of 1.1. to 1.8.			
2.	<u>Intellectual fee:</u> To be decided by the Competent Authority (Minimum of 33.3% of total expenses) <b>Or</b> <b>Project Overhead: To be decided by the Competent Authority for Grant-in-aid projects (maximum 20% of total expenses)</b>			
	Project Cost = Total Expenses + intellectual fee i.e. 1 + 2			

- a) An amount of Rs ..... included in the project cost at 1.1. towards administrative overheads has been transferred to the respective head to meet administrative overheads of the Centre.
- b) An amount of Rs ..... included in the project cost at 1.4. towards charges for use of Equipment / software of C-MET has been transferred to the Corpus Fund.
- c) Savings against 1.2, 1.3, 1.5-1.8 & 2 amounts to Rs ..... . 70% of this amount i.e. Rs ..... has been transferred to the Corpus Fund. 15% of the remaining is transferred to the relevant head for providing additional facilities and the balance 15% i.e. Rs ..... Is being used for disbursement under the Incentive Scheme.

Signature

Finance Officer

Copies shall be forwarded to Project Leader concerned, Internal Audit, Administration, Head of Laboratory etc for record.

1.8. **EARNINGS**

1.8.1. The net earnings of the Laboratory for a specific year shall be the sum of all the projects received

1.8.2. Royalty, premia etc

1.8.3. Institutional consultancy

1.8.4. High end training

1.8.5. Priced S&T publications

1.8.6. **Miscellaneous services.**

1.8.7. **The proposal for a CONTRACT RESEARCH PROJECT** shall be given in the following format:

S No	Nomenclature	Details
1.	Project	
2.	Type	Sponsored/Collaborative/Grant-in-aid
3.	Client/Customer Name and address	
4.	Client / Customer Category	Govt. Dept. / Voluntary/ Cooperative Agency, Research Organisation, Foreign Firm/ Agency, Public /Private Sector, Large/ Medium/Small/ Cottage Unit
5.	Objective, Scope and duration of the project	
6.	Present state of Knowledge	
7.	Programme of work with phasing, milestones and S&T inputs of client	
8.	Project Team (S&T Staff)	
9.	Benefits to client on : a) Utilization of research results b) Vesting of Intellectual property rights	
10.	Financial aspects	
11.	Development cost (attach separate sheet of calculations)	
12.	Payments to be received as follows (Indicate for the installments the amount, mode, time and bank guarantees)	
13.	Deliverables	
14.	Utilization of Intellectual property generated  Licensing: Exclusive / Non-Exclusive, Period, Fee / Charges  i. Lumpsum (installments, amount, Time, mode, guarantees)	

	ii. Recurring royalty (Period and basis)	
	Remarks	

Project Leader  
(Signature)

#### DECISION OF COMPETENT AUTHORITY

Head of the Laboratory/ Director / Executive Director of C-MET

Signature

#### 1.9. **CONSULTANCY**

Besides regular research activities, C-MET may take up Consultancy project works. Such projects will be governed by the following norms.

##### 1.9.1. **Norms**

1.9.1.1. Consultancy projects are any work or service undertaken by C-MET at the instance of any outside agency, which will result ordinarily in some net income to C-MET. *Consultancy Project* defined in this way shall not include In-C-MET Training Programmes and other Govt. Sponsored Training Programmes.

1.9.1.2. Consultancy projects should contribute towards better development policy and to broaden the vision of the scientific staff. Consultancy work should normally fall within the purview of the research work of C-MET and the staff members.

1.9.1.3. All consultancy projects shall be undertaken only in the name of C-MET.

1.9.1.4. Individual Consultancy by staff of C-MET is not permitted including work done on any holidays.

1.9.2. The cost of consultancy to be recovered from the client organisation as total value of the project shall be the sum of the following.

1.9.2.1. Manpower charges. 1/22 of manpower charges arrived at 1.4.2.1.1. above.

1.9.2.2. Intellectual fee at least 2.5 times of manpower charges above.

1.9.2.3. All direct expenses like TA/DA, Transport Charges, Paper/Stationery, hire charges of in-house and outside computing and other equipment use charges etc.

1.9.2.4. Cost of Secretarial Assistance and other facilities to be incurred by C-MET.

1.9.2.5. Budgets for all consultancy projects shall be routed through the Finance.

#### 1.10. **CLEARANCE OF PROJECTS INVOLVING FOREIGNERS / FOREIGN COLLABORATION IN ANY FORM FROM SECURITY/SENSITIVITY ANGLE.**



- 1.10.1. The authority for negotiating, finalizing and approving projects/ contracts with foreign clients shall be decided by the Executive Director of C-MET.
- 1.10.2. The Government of India considering diverse R&D issues has issued guidelines / Instructions for clearance of study research schemes involving foreigners / foreign collaboration from security / sensitivity angles by the concerned Ministry for clearance by the Secretary of the concerned Ministry / Department or a high level Committee (HLC) of the Govt. of India depending upon the nature of the project.
- 1.10.3. Accordingly guidelines as given hereunder shall be followed:
  - 1.10.3.1. All proposals for undertaking any and all projects involving Foreigners /foreign collaboration by any of the Laboratories of C-MET shall be referred to the administrative ministry for obtaining clearance of the Competent Authority, from security and sensitivity angles after due diligence of scrutiny at C-MET level.
  - 1.10.3.2. At C-MET level, the proposal shall be scrutinized by the Executive Director with respect to the following guidelines namely that:
    - 1.10.3.2.1. The project is related to national / C-MET's research priorities and interests;
    - 1.10.3.2.2. There is need for foreign collaboration in the specific field/subject;
    - 1.10.3.2.3. The foreign collaboration is expected to add value or bring benefits to C-MET and the nation;
    - 1.10.3.2.4. The field / subject of the project does not have a bearing on sensitive matters – political, regional, religious. Communal, social, tribal and/or on security, including industrial and technological and on the country's commercial interests, either proximately or remotely;
    - 1.10.3.2.5. The project would not allow access by foreigners to sensitive information or data or material;
    - 1.10.3.2.6. The end-use of the results of the study do not impinge on areas of national security or on the areas which are 'sensitive', particularly through custody and control over data and its dissemination/publication to the detriment of national security or interest, now or in the foreseeable future;
    - 1.10.3.2.7. Appropriate measures to ensure necessary security have been/ will be put in place in case of visits by foreigners to sensitive areas or institutions;
    - 1.10.3.2.8. For projects involving cruise of foreign vessels in Indian EEZ and/or flight of foreign aircraft over Indian territory clearance of appropriate inter-ministerial group(s)/ Ministries/ Departments has been obtained and specifically mentioned thereto.
- 1.10.4. The proposal after due diligence of scrutiny at C-MET level will be then referred to the administrative ministry specifically giving information as follows:
  - (i) Title and short description of the project.

- (ii) Name, address, nature of organization and the activities of foreign collaborator /sponsor and more especially of the direct collaborator;
- (iii) Details of past collaborations, if any, by the collaborator/ sponsor with C-MET / other Indian Institution(s);
- (iv) Details if any, available on R&D projects of sensitive and national security, taken up and/or funded by the sponsor/ collaborator in the past in its own country or any other country;
- (v) Genesis to the origin of the project.
- (vi) Total cost (in Rs. and Foreign Exchange) and duration of the project.
- (vii) Foreign support/collaboration (details):
  - (a) Financial support (Rs. & Foreign Exchange)
  - (b) Equipment support.
  - (c) Technical support.
  - (d) Manpower training/exchange (Indian / Foreign)
  - (e) Data / informational support.
  - (f) Miscellaneous/others (use of facilities, ship, computers etc.)
- (viii) Justification / need for foreign sponsorship / collaboration and likely benefits (Scientific, economic, societal, strategic etc.) for C-MET and the country.
- (ix) The project involves (give details):
  - (a) Referring to or sourcing of strategic / sensitive material / information;
  - (b) Visits if any, by the personnel of foreign collaborators / sponsor to India; if so, the places / institutions to be visited and likely duration;
  - (c) Ethical issues in conducting the project;

If answer to any of the points in (ix) is 'yes', the investigator / proposer to give undertaking to abide by relevant and extant regulations and guidelines on the subject.

Or

The project involves issues of national security and/or sensitivity (specify) and due diligence has been exercised by C-MET and measures (specify) put in place to adequately safeguard the security and sensitivity issues.

1.10.5. The project proposal will then be examined and processed by the administrative ministry as follows:

- (i) Those not involving any security and sensitivity issues will be put Upto Secretary of the Administrative Ministry for his approval on behalf of High Level Committee (HLC) of the Government and C-MET informed accordingly within 2 weeks of receipt of full details;
- (ii) Those involving security and/or sensitivity aspects will be submitted by correspondence for approval to other relevant

Ministries / Departments / State Governments and processed as follows:

(iii)

- (a) In case the proposal is cleared by all relevant agencies;  
Or  
(b) In case no response is obtained from above referred agencies within 6 weeks;

The proposal will be put Upto Secretary, of the administrative ministry for approval/ clearance on behalf of the HLC and C-MET informed accordingly within 8 weeks of receipt of full details.

- (c) In case an agency, prior to the expiry of 6 weeks seeks more time for examination then the proposal would be kept pending for that time and thereafter processed appropriately. The laboratory will be kept informed of the position within 8 weeks of the receipt of full details;
- (d) In case proposal is not cleared by any of the concerned agencies, it will be submitted to Secretary of administrative ministry for decision. C-MET will be informed of non-clearance of the proposal by any agency within 8 weeks of receipt of the full information.

The above procedure for approvals of any and all projects involving foreigners/foreign collaboration shall be followed by C-MET.

#### 1.11. **ENGAGEMENT OF CONSULTANTS FOR BUSINESS DEVELOPMENT**

Recognising specialized markets and global competition, and consequently the need to enlarge marketing network of C-MET to supplement the in-house efforts, C-MET shall introduce a scheme of engagement of consultant(s) for business development and marketing on following terms & conditions.

##### 1.11.1. **Eligible Consultant(s)**

The consultant(s) could be any legal entity, individual(s) / group of specialists / experts, corporate entities such as firms / companies / societies/ trusts etc. Individuals, who are regular employees of Government / Semi-Government/ Public Sector organization(s) to be engaged as consultants, could be taken on deputation / Foreign Service basis, as applicable.

##### 1.11.2. **Scope**

Scope of consultant's services could inter-alia cover assistance to C-MET in:

- Evolving of business plans and strategies;
- Forecasting of technology;
- Carrying out market/demand surveys;
- Evaluation and up scaling of technology;
- Tying up with design engineering consultants/companies, financial institutions and other agencies for packaging the knowledgebase of C-MET;

- Identifying and developing market(s) / client(s) for the knowledgebase;
- Negotiations and contracting of the knowledgebase;
- International marketing of knowledgebase;
- Designing and developing publicity material/ campaigns for knowledgebase;
- Any other function to be assigned by C-MET as the case may be.

Note: Consultant(s) cannot be engaged for seeking and securing contracts/ sponsored R&D and funds from Govt. Departments / Agencies, UN and other International Aid Agencies, Public Sector Undertakings/Enterprises.

### 1.11.3. **Selection of Consultant(s)**

The selection of consultant(s) is to be done by a Committee comprising Executive Director of C-MET, Chairman of Steering Committee and an expert in the area to be nominated by the Executive Director. In case of urgency, the decision of the members of the Committee can be obtained by circulation of the proposal by the Executive Director.

### 1.11.4. **Terms of Consultancy**

#### 1.11.4.1. General terms

- The consultant(s) shall be engaged for a specific job assignment;
- The roles, rights and responsibilities of consultant(s) will be well defined;
- The maximum age limit for an individual consultant, including those retiring / retired S&T personnel from Govt. Departments / Ministries / Govt. institutions shall be 65 years; and
- The period of engagement of consultant could be upto one year only; any extension shall be reviewed and approved by the Executive Committee upto a maximum of another one year.

#### 1.11.4.2. Payment terms

The payment / fees and details thereof shall be decided by the Committee at Para 1.11.3 above; however any payment above Rs.20 lakhs per year would need the approval of Governing Council.

### 1.11.5. **Agreement**

#### 1.11.5.1. Terms and conditions of the agreement.

The agreement with consultant(s) should inter-alia specify:

- Details of the job assignments to be undertaken by the consultant(s) along with deliverables to C-MET
- Details of facilities, assistance data etc. if any, to be provided by the laboratory;

- Details of expenditure to be reimbursed, fees to be paid and mode of payment indicating the value, periodicity, linkages to stages of performance etc.;
- Duration of the assignments;
- Secrecy/confidentiality to be maintained by consultant(s) and their staff of the information disclosed by the laboratory and or acquired during the course of consultancy by the consultant(s).
- Disclaimer by the consultant(s) on claims/rights in:
  - Any intellectual property/information/data/prototype resulting in or acquired during consultancy and
  - Any money receipts accruing or received during or consequent to utilization/commercialization of the said intellectual property, information, data, prototype etc.;
  - Mechanism for resolution of disputes between the consultant(s) and C-MET.

1.11.5.2. Approval of Agreement

Executive Director of C-MET shall be the competent authority for approval of the agreement(s) with Indian consultant(s). For agreement(s) with foreign consultant(s), prior approval of administrative ministry will be necessary.

1.11.5.3. Any conditionalities on use of project results for strategic and/or national security uses;

1.11.5.4. Any other relevant information not covered above; and

1.11.5.5. Endorsement and specific recommendations of the Executive Director of C-MET. That the project does not involve any national security and/ or sensitivity angles either proximately or remotely now or in the foreseeable future.

1.12. **GUIDELINES FOR C-MET TO ESTABLISH COMMERCIAL ARMS TO MARKET THEIR TECHNOLOGIES, SERVICES AND HIGH-TECH PRODUCTS.**

1.12.1. Preamble

C-MET shall work on highly knowledge based products having significant potential and market demand. Also, a few of the Laboratories might have world-class facilities as well as skill base. The marketing of these could bring in significant revenue to C-MET. It is essential that an appropriate mechanism is in place so that it is possible for the Societies to exploit these commercially. The Societies are permitted to set up Business & Marketing Entities subject to terms and conditions mentioned hereinafter.

1.12.2. Terms and Conditions

C-MET shall be permitted to establish a legally distinct non-profit entity such as a Section 25 Company (hereinafter referred to as ENTITY) inter alia to exploit / market its knowledgebase, products, databases etc. The

eligibility conditions are that C-MET over the immediate past three years period has:

- 1.12.2.1. External cash flow through contract R&D and consultancy averaging to more than 50% of the total annual expenditure.
- 1.12.2.2. 50% of this external cash flow is derived from sources other than the government, and
- 1.12.2.3. Generated Corpus Fund of at least Rs. 25.00 crore derived from sources other than the government.
- 1.12.2.4. The setting up of such ENTITY is further subject to the following conditions:
  - 1.12.2.4.1. Government grant is not used to invest in the corpus/ equity funds etc. of the ENTITY. The ENTITY may obtain corpus / equity funds by way of donations, grants, loans, venture capital etc.;
  - 1.12.2.4.2. No budgetary support is provided by C-MET to run/ for the ENTITY;
  - 1.12.2.4.3. No liabilities, direct / implied, are created against C-MET / administrative ministry by the ENTITY.
  - 1.12.2.4.4. All transactions/arrangements of C-MET with the ENTITY shall be through formal contractual instruments as required between two legal entities; CSIR Model Agreement may be referred to in this regard.
- 1.12.2.5. Competent Authority for Approval

The Competent Authority for permitting of setting up of such ENTITIES by C-MET shall be the administrative ministry. All such proposals should be forwarded to the administrative ministry with the recommendations of the Governing Council.

### 1.13. **ROLES & RESPONSIBILITIES OF PROGRAMME COORDINATOR**

In the framework of the Organizational structure of C-MET, the Programme Coordinator has a key role to play in the success of activities of C-MET in general, and more specifically with respect to the areas and responsibilities allocated to him/her.

He/She will be the functional head of the Programme and be responsible for its overall functioning. He/She will report to the Executive Director and be responsible for the overall execution and performance of the activities under his/her charge. His/Her responsibilities will include:

- 1.13.1. Setting the targets for various activities under the Programme in consonance with the vision and Mission of C-MET.
- 1.13.2. Managing and monitoring the activities of the Groups under the Programme so as to ensure that various technical, business and financial targets are met.
- 1.13.3. Arrange periodic reviews by the 'Steering Committee', and ensure submission of a report to his/her reporting officer covering the status and the progress of the activities under the programme.

- 1.13.4. Carry out necessary studies to keep abreast with the latest development in technologies or in business areas to the Programme. As part of this,
  - 1.13.4.1. Carry out a study of the competing technologies or businesses and prepare a detailed comparison report, along with his/her suggestions. This may be done routinely every 6 months, but at any time, in case of any major development.
  - 1.13.4.2. Providing inputs to the “Steering Committee” with regard to latest development relevant /significant to the Programme on a regular (at least half-yearly) basis.
  - 1.13.4.3. Prepare Annual Plans and Budget for the Programme at the beginning of each fiscal year and submit to reporting officer for consideration. This plan should include details of resources (manpower, infrastructure, financial etc.) required for the completion of activities of the Programme for the ensuing year.
  - 1.13.4.4. Initiate proposals for future activities that may be taken up by the Groups under the Programme. These proposals will be submitted through the Directorate/Executive Director for consideration by the Executive Committee/Steering Committee/Governing Council.

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