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GUIDELINE 5.1 OF 2019

GUIDANCE FOR DETERMINING THE FULL COST OF RESEARCH AND DEVELOPMENT AS PER THE INTELLECTUAL PROPERTY RIGHTS FROM PUBLICLY FINANCED RESEARCH AND DEVELOPMENT ACT

In this document a methodology for determining the full cost of research and development (R&D) conducted at publicly financed institutions, as required by the Intellectual Property Rights from Publicly Financed Research and Development Act, 2008 (No 51 of 2008; IPR Act), is set out, and for the submission of such determinations to the National Intellectual Property Management Office (NIPMO) for approval and certification.

The Full Costing Sub-Committee of the NIPMO Advisory Board (FCC) undertook a review of Practice Note 3.1 of 2017 based on inputs received from various institutions and their assessment of submissions received during the 2018/2019 submission period. The review was undertaken to simplify the calculations and provide additional guidance where certain concepts were being interpreted differently by institutions. Based on the outcome of the review of the Practice Note, NIPMO arrived at a conclusion that this document should be changed to a Guideline.

This document provides for a method best suitable for calculation of an Indirect Cost Recovery Rate (ICRR) at **Higher Education Institutions (Annexure B)** and well as **Schedule 1 Institutions (Annexure C)** (collectively known as institutions). Furthermore, this updated version will provide guidance on how to apply the NIPMO approved ICRR within an institution to determine the full cost of a R&D project.

NIPMO together with the FCC hosted two workshops to engage with institutions in order ensure the understanding of this document. During these workshops some aspects were raised for discussion and clarification. A summary of the workshop discussions is available separately.

Please do not hesitate to contact NIPMO (jetane.charsley@nipmo.org.za; 012 844 0228) should you have any questions with regards to any matter in this Guideline.

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HEAD NIPMO

DATE: 6 August 2019

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LIST OF ACRONYMS

| | |
|--------------------------------|--|
| DC | Direct costs |
| FCC | Full Costing Sub-Committee of the NIPMO Advisory Board |
| HEI | Higher education institutions as listed in Annexure A |
| ICRRs | Indirect cost recovery rates |
| Institutions | HEI and Schedule 1 institutions, please refer to Annexure A for a full list of institutions. |
| IP | Intellectual Property (see IPR Act and Guideline 1.3 of 2019 for the definition) |
| IPR Act | Intellectual Property Rights from Publicly Financed Research and Development Act, 2008 (No 51 of 2008) |
| NIPMO | National Intellectual Property Management Office |
| NSFAS | National Student Financial Aid Scheme |
| R&D | Research and development (see Guideline 1.3 of 2019 for the definition) |
| Schedule 1 institutions | Institutions which appear in Schedule 1 of the IPR Act and listed in Annexure A |

1. INTRODUCTION

The methods for determining the full cost of research and development (R&D) conducted at publicly financed institutions as required by the Intellectual Property Rights from Publicly Financed Research and Development Act, 2008 (No 51 of 2008; IPR Act) are set out in the document. Furthermore, the process for the submission of such determinations to the National Intellectual Property Management Office (NIPMO) for approval and certification is provided.

The institutions to whom this applies are listed in **Annexure A** under two categories: Higher education institutions (HEI) and Schedule 1 institutions as per the IPR Act. For both HEI's and Schedule 1 institutions this Guideline endeavours to provide the preferred methodology (set out in **Annexures B and C** respectively) to calculate an indirect cost recovery rate (ICRR) that must be submitted to NIPMO and, separately, guidance on how to use/apply the approved ICRR in practice to calculate the full cost of an R&D project.

Legislative provisions

The rationale for developing an approach towards determining the full cost of R&D of publicly financed institutions is set out in section 15(4)(a) and (b) of the IPR Act which states as follows:

- (a) *“Any research and development undertaken at an institution and funded by a private entity or organisation on a full cost basis shall not be deemed to be publicly financed research and development and the provisions of this Act shall not apply thereto.*
- (b) *For the purposes of paragraph (a), “full cost” means the full cost of undertaking research and development as determined in accordance with international financial reporting standards, and includes all applicable direct and indirect cost as may be prescribed.”*

Section 15(5) provides a definition for the term “*private entity or organisation*” to include “*a private sector company, a public entity, an international research organisation, an educational institution or an international funding or donor organisation*”.

Section 15(4) is elaborated upon in Regulation 16(1) of the IPR Act which determines that:

- a) *“Each institution must every 2 years, submit to NIPMO for approval, formulae for calculation of its applicable direct costs and indirect costs of undertaking research and development and matrices substantially set out in Form IP9 or such other format as may be provided by NIPMO in guidelines, together with an explanation note in respect of how such factors have been arrived at.*
- b) *The formulae referred to in paragraph (a) must include applicable direct costs of undertaking research and development determined in terms of the institution’s financial and other policies and in accordance with generally accepted accounting practices.*
- c) *Where it is not feasible to determine the indirect costs accurately, the formulae will include a determination of a surcharge in the form of a percentage to be levied on the direct costs as a best estimate of the indirect cost of undertaking such research and development.*
- d) *The indirect cost percentage may vary between organisational units or faculties within an institution and the institution may justify any variations.*
- e) *The Advisory Board must constitute a committee of independent experts to whom NIPMO shall refer for consideration the formulae and matrices submitted by the institutions.*

- f) *NIPMO must within 60 days of receipt of the submission referred to in paragraph (a) approve or recommend amendments based on reasons provided by the committee referred to in paragraph (e), the formulae and matrices submitted by the institution.*
- g) *On approval of an institution's formula and matrices, NIPMO or such other agency accredited by NIPMO in terms of guidelines to be issued by NIPMO, must issue such institution with a certificate confirming NIPMO's acceptance of the institution's costing model."*

2. AIMS TOWARDS DETERMINING THE FULL COST OF R&D

The method set out in this document towards determining the full cost of R&D conducted at publicly financed institutions has the following aims:

- a) Compliance with the requirements regarding the determination of full cost of R&D of publicly financed institutions as provided for in the IPR Act and its regulations.
- b) Recognition of the following specific institutional characteristics of publicly financed R&D institutions, where applicable: institutional and operational autonomy, and institutional public accountability.
- c) While recognising the diversity of publicly financed R&D institutions in South Africa, nevertheless ensuring acceptable levels of consistency across the publicly financed R&D system.
- d) Strengthening institutional capacity (including financial and contract management) and institutional leverage in successfully concluding R&D agreements/contracts with external funders (including private entities or organisations as defined in section 15(5) of the IPR Act and set out above) as a means of advancing R&D outputs.

The aims in b) and c) above seek to achieve a careful balance between ensuring broad consistency across the publicly financed R&D system in determining the full cost of R&D while at the same time endeavouring not to require institutions to adopt a prescriptive and intrusively uniform approach in their individual formulae and bases for calculating the full cost of R&D.

3. GUIDING PRINCIPLES

Against the above described background the following framework of guiding principles apply:

- a) Institutions should endeavour to use the guiding principles, as set out in this document not only for compliance purposes but also for their strategic and managerial benefit in improving levels of strategic focus and levels of institutional effectiveness and efficiency, particularly in relation to their costing of R&D. This implies that institutions should analyse the outcomes of their full costing of institutional R&D from a strategic point of view as well as from an operational effectiveness and efficiency perspective.
- b) NIPMO's legal mandate and its responsibilities in terms of the IPR Act and the Regulations apply to the concept of full costing of R&D only and exclude all pricing considerations, as well as so-called contingency or risk provisions. The pricing strategy, and provisions for project risks or unforeseen events (contingencies) are regarded as outside of the legislative requirement of full costing of R&D at institutions and these

remain at the discretion of the institutions. No information on these factors should be included in the calculations.

- c) In terms of the IPR Act and the Regulations, the determination of the full cost of R&D must comply with generally accepted accounting practices. This implies that written confirmation must be provided that the most recent audited annual financial statements were used to perform the calculations (to include the year). Where amounts used in the calculation are derived from management accounts, these management accounts must be reconcilable with the audited financial statements.
- d) The methods for determining the full cost of R&D should not be made unduly complex and overly detailed and thus in effect contributing significantly towards increasing the cost of R&D.
- e) If needed, institutions can also present their calculations on the indirect cost recovery rate (ICRR) of R&D based on data and financial information pertaining to their different internal organisational structures such as academic faculties, technology stations or R&D units. It is, however, of the utmost importance that a consistent approach is followed throughout the entity and that variations in outcomes are only due to data reflecting valid and verifiable cost differences within the institution.
- f) The ICRR should be an absolute rate and not be presented as “approximate”, “at least”, “maximum” or any other non-definite value such as covering an ICRR range.
- g) Institutions must keep in mind that the ICRR applies to R&D undertaken at an institution on a full cost basis. This implies that the method applied for determining the full cost of R&D should enjoy a high level of internal institutional buy-in and, if needed, be defensible when interacting with potential external funding agencies.

4. METHOD AND MINIMUM REQUIREMENTS

The NIPMO endorsed Guideline to determining the ICRR of R&D is set out in **Annexure B** for HEI and **Annexure C** for Schedule 1 institutions.

The HEI approach (**Annexure B**) is based on an initial proposal by Higher Education South Africa (HESA), now Universities South Africa (USAF), and as amended by the FCC, a subcommittee of NIPMO Advisory Board. The Schedule 1 approach (**Annexure C**) is based on a general convergence of approaches followed by Schedule 1 institutions in their full cost calculations submitted to NIPMO.

Apart from these considerations regarding the methods, submissions on the full cost of R&D by all publicly funded R&D institutions have to comply with the following minimum requirements in order to be considered by the FCC for recommendation to NIPMO:

- a) **A methodology as provided** setting out of a **formula or structured approach** for determining the full cost of R&D including the rationale and method for determining an ICRR or ICRR(s). The methodology followed will be regarded as a Form IP9. Institutions are therefore no longer required to submit the IP9 Form as attached to the Regulations of the IPR Act as part of their submission to NIPMO.
- b) The provision of **motivating reasons and factors for deviating** from any of the determined steps of the approach to calculating the ICRR of R&D in cases where such deviations are provided for.
- c) An **accompanying statement signed by the institution's CFO** attesting to the accuracy of the calculations and confirming that:
 - No pricing factors or contingency provisions have been included in the calculations of the full cost of R&D.
 - The definitions of concepts and terminology contained in the respective institutions' Annexures have been incorporated and have been applied to the methods and calculations used in determining the full cost of R&D.
 - That the amounts used in the calculations are derived from and/or are reconcilable to the most recent audited annual financial statements. Institutions to further include the year of the annual financial statements used as part of the submission to NIPMO.

The full submission to NIPMO is to be accompanied by a letter from the institution, signed by its CEO or Vice Chancellor, as appropriate.

ANNEXURE A- LIST OF INSTITUTIONS REQUIRED TO MAKE A SUBMISSION

1. HIGHER EDUCATION INSTITUTIONS (HEIs)

| | |
|---|-------------------------------------|
| 1. Cape Peninsula University of Technology | 14. University of Johannesburg |
| 2. Central University of Technology | 15. University of KwaZulu-Natal |
| 3. Durban University of Technology | 16. University of Limpopo |
| 4. Mangosuthu University of Technology | 17. University of Mpumalanga |
| 5. Nelson Mandela University | 18. University of Pretoria |
| 6. North-West University | 19. University of South Africa |
| 7. Rhodes University | 20. University of the Free State |
| 8. Sefako Makgatho Health Sciences University | 21. University of the Western Cape |
| 9. Sol Plaatje University | 22. University of the Witwatersrand |
| 10. Stellenbosch University | 23. University of Venda |
| 11. Tshwane University of Technology | 24. University of Zululand |
| 12. University of Cape Town | 25. Vaal University of Technology |
| 13. University of Fort Hare | 26. Walter Sisulu University |

2. SCHEDULE 1 INSTITUTIONS

| | |
|---|--|
| 1. Agricultural Research Council | 7. National Research Foundation |
| 2. Council for Geoscience | 8. South African Bureau of Standards |
| 3. Council for Scientific and Industrial Research | 9. South African Medical Research Council |
| 4. Human Science Research Council | 10. South African Nuclear Energy Corporation |
| 5. Mintek | 11. Water Research Commission |
| 6. National Health Laboratory Service | |

ANNEXURE B - DETERMINING THE FULL COST OF R&D AT HIGHER EDUCATION INSTITUTIONS (HEI)

1. INTRODUCTION

In this Annexure, the NIPMO endorsed approach to determine the **full cost of an R&D project** or activity at an HEI is set out. This approach is based on an initial proposal by Higher Education South Africa (HESA), now Universities South Africa (USAF), and as amended by the FCC, a subcommittee of NIPMO Advisory Board. The generally applicable definitions and terminology are set out at the end of this Annexure (and marked in bold throughout the Annexure).

2. DETERMINING THE FULL COST OF R&D USING THE EXPENDITURE APPORTIONMENT BASIS

The **Expenditure Apportionment Basis** is deemed the most appropriate HEI sector wide method to allocate **indirect costs** to **direct costs** to determine the **full cost of an R&D project** or activity in such an institution. **The full cost of an R&D project/activity** is determined using the following equations:

$$\begin{aligned} \text{Full Cost (FC)} &= \text{Direct costs (DC)} + \text{Indirect costs (IC)} \\ &= \text{Direct costs (DC)} + (\text{Indirect Cost Recovery Ratio (ICRR)} \times \text{Modified DC (Modified DC discussed in further detail later)}) \end{aligned}$$

Hence, an important step in the process is to determine the **Indirect Cost Recovery Rate (ICRR)** expressed as a percentage, for the institution as a whole or, where required, a division of the institution (such as a Faculty or Research Group). This is carried out using the methodology summarised in Table 1.

Table 1:

| Indirect Cost Recovery Ratio (ICRR) calculation, using the Expenditure Apportionment Basis | Calculation | Item | Source of expenditure amount |
|--|-------------|------|------------------------------|
| Recurrent Unrestricted expenditure excluding residences | | A | AFS* |
| Recurrent Restricted expenditure excluding residences | (B1 + B2) | B | AFS |
| - Research related costs | | B1 | MA* |
| - Non-research related costs | | B2 | MA |
| Total expenditure | A + B | C | |
| Indirect cost allocation ratio (ICAR) (%) | B/C or B1/C | D | |
| Determine expenditure from institutional support departments less exclusions/ modifications (to be motivated) | | E | MA |
| Indirect cost attributable to research | D X E | F | |
| Direct research support costs | | G | MA |
| Total indirect research cost | F + G | H | |
| The indirect cost recovery rate (ICRR)(%) | H/B or H/B1 | I | |

* Annual Financial Statements (AFS), Management Accounts (MA)

To determine the Indirect Cost Recovery Rate (ICRR), the methodology is applied as follows:

Recurrent Unrestricted Expenditure (A) and Recurrent Restricted Expenditure (B) excluding residences, are added together to calculate Total Expenditure (C). The Indirect Cost Allocation Ratio (ICAR) (D), is expressed as a ratio of Recurrent Restricted Expenditure (B) or research related expenditure (B1) to Total Expenditure (C). The Institutional Expenditure for Support Departments (E), less the Direct Research Support Costs (G) and/or other exclusions or modifications, where required, is then multiplied by the ICAR (D) to determine the Indirect Costs Attributable to Research (F). The sum of Direct Research Support Costs (G) And Indirect Costs Attributable to Research (F) is equal to the Total Indirect Research Costs (H). The ICRR (I) is expressed as a percentage of the Total Indirect Research Costs (H) to Recurrent Restricted Expenditure (B) or research related costs (B1) (where a split of B is possible).

The fourth column allows for the institution to give the source document of the amount given, for example, Annual Financial Statements (AFS), Management Accounts (MA) etc.

3. ASSUMPTIONS AND NOTES

Recurrent Unrestricted Expenditure excluding residences (A), reflects the direct costs of the teaching and learning mandate of an HEI. Modifications may be made where there are known indirect costs embedded within recurrent unrestricted expenditure (A).

Recurrent Restricted Expenditure excluding residences (B), reflects the direct R&D expenditure of an HEI. However, some HEI's have stated that only a portion of this expenditure is R&D related and have divided B into two components for the purposes of the calculation of the ICRR, namely B1: research related costs, and B2: non-research related costs. If B2 is material and the split can be done without causing an administrative burden to the institution, it is the preferred approach.

Bursaries form part of the expenditure of (A) and (B) above, but NSFAS grants are excluded from the calculation.

The expenditure for the support departments (E) is deemed to be the **indirect cost** of an institution and should be calculated from the management accounts of the HEI. These costs are typically central administration, maintenance, security and other such costs excluding **Direct research support costs**, which are reflected separately in Item (G). These **Direct research support costs** include but are not limited to the DVC responsible for research, the personnel and running costs of the Research Office, researcher training costs and other direct research support specific costs. If possible, the costs of Faculty research support personnel and the operating costs thereof should also be included in the **Direct research support costs** (G).

Any further exclusions to the expenditure of the support departments need to be itemised and motivated in the submission to NIPMO as teaching specific exclusions.

4. APPLICATION OF THE ICRR TO THE CALCULATION OF FULL COST OF AN R&D PROJECT

The first point to be made is that, if in the equation:

$$\text{Full Cost (FC)} = \text{Direct costs (DC)} + \text{Indirect costs (IC)},$$

both the **Direct costs** and the **Indirect costs** can be accurately calculated for a research project/activity, and fully justified, then this approach would be acceptable to NIPMO for the determination of the **full costs of an R&D project**.

However, the accurate determination of the **Indirect costs** is likely to be challenging, and the alternate method outlined in the following equation should be used:

$$\text{Full Cost (FC)} = \text{Direct costs (DC)} + (\text{Indirect Cost Recovery Ratio (ICRR)} \times \text{modified DC})$$

as given in Table 2:

Table 2.

| | |
|---|---|
| Direct Cost modifications/exclusions for purposes of calculating Indirect Cost recovery for a research project, using the NIPMO approved ICRR | |
| <i>When calculating the indirect cost recovery for a research project/activity, the following deductions should be made from the direct costs before applying the ICRR.</i> | |
| • Bursaries – all bursaries included in the direct costs | M |
| • Major equipment | N |
| • Subcontractors | O |
| Full Cost calculation: | |
| ▪ Direct cost of a project/activity | J |
| ▪ Indirect Cost recovery: Apply ICRR to direct cost of activity, with certain exclusions: I x (J-M-N-O) | K |
| Full Cost = J + K | L |

For the calculation of the **Indirect costs**, a factor, **modified DC**, is used. This **modified DC** is the DC value less the following amounts:

- 1 As the funder of the research project is already funding directly the bursaries applicable for the project, the **indirect cost recovery rate (ICRR)** should not be applied to this amount (denoted M).
- 2 Applying the ICRR to very expensive pieces of equipment would bias the indirect costs of a project, as it is realised that the indirect costs of purchasing equipment are relatively constant irrespective of the amount. Hence, obtaining an indirect cost for the purchase of an expensive piece of equipment is most easily achieved by applying professional judgement to the amount for which the ICRR should be applied. The over-riding principle in allocating indirect costs to the purchase of research equipment is to ensure that under-recovery is avoided. (denoted N).

- 3 Likewise, the indirect costs associated with sub-contractors does not warrant the application of the ICRR to the full amount, as these overhead costs are deemed to be lower than those applicable to the other direct costs such as direct staff and labour. Again, professional judgement should be applied to determine the amount of the sub-contractor cost to which the ICRR should be applied. Again, the same over riding principle applies to ensure that under-recovery is avoided.

| GLOSSARY | | |
|--|--|---|
| CONCEPT | DESCRIPTION | GUIDELINE FOR CALCULATION |
| Expenditure apportionment basis | Allocation of total support costs between R&D and non-R&D activities by using either the institution's total expenses per major activity or by applying an institution-specific formula | |
| Full Cost (of an R&D project) | The sum of direct R&D costs for a particular project plus the Indirect cost recovery for a particular project as calculated specifically or using the approved ICCR of the institution or a division of it. | Calculation occurs according to applicable NIPMO endorsed approach set out above |
| Direct costs | All costs (including direct staff and labour costs) directly attributable to, or incurred as a result of, the goods or services produced, or to be produced, as part of the R&D, project, or in fulfilling a contract; including all direct capital R&D cost and direct recurrent R&D cost | Includes any expenditure incurred specifically for a R&D activity, project or contract, and includes direct staff and labour costs , bursary costs, consumable costs, the costs of equipment purchased for the specific project, rental costs or depreciation costs for other equipment used, direct research support costs (if applicable), the costs of sub-contractors, travel, reporting costs, and any direct administration costs. |
| Modified DC | This is a modified direct cost used in the calculation of a research project or activity in an HEI. It is the direct costs less the bursary cost (M), the cost of equipment above an approved threshold (N) and the cost of sub-contractors above an approved threshold (O). | |
| Indirect cost (of an R&D project) | Sum of all indirect costs attributable to R&D carried out at an institution, or in a research project. | |
| Indirect cost recovery rate (ICRR) | The rate as approved by the NIPMO to calculate the Indirect Cost recovery to be added to the Direct Cost of a R&D project to give a particular entity the full cost of that R&D project | A single ICCR for the entire institution and/or divisional ICCRs may be calculated |

| GLOSSARY | | |
|---|--|--|
| CONCEPT | DESCRIPTION | GUIDELINE FOR CALCULATION |
| Recurrent unrestricted expenditure, excluding residences | Unrestrictive expenditure that forms part of the operational teaching and learning mandate and which excludes: (a) abnormal items or cost anomalies that are not part of maintainable operational expenditure; (b) student accommodation costs | (Source – Audited Annual Financial Statements) |
| Recurrent restricted cost, excluding residences | Expenditure that forms part of the R&D mandate and are restrictive, excluding: (a) abnormal items or cost anomalies that are not part of maintainable restricted expenditure; (b) student accommodation costs | It is assumed that all restricted funds pertain to R&D. If the non-R&D component is material then the university should exclude it. Source – Audited Annual Financial Statements) |
| Staff and labour cost | Cost of personnel directly involved in a research project. | Costing on basis of “full cost to company” of person and estimated productive time spent on project. |
| Direct research support cost | Sum of direct R&D support costs and costs incurred within the institution in support of R&D, primarily personnel and operating costs of the Research Office | These costs include but are not limited to the DVC responsible for research, the personnel and running costs of the Research Office, researcher training costs and other direct research support specific costs). If possible, the costs of Faculty research support personnel and operating costs thereof should also be included in the Direct Research support costs. |
| Bursaries | All student bursaries (under- and postgraduate) and research bursaries related to the execution of a project should be included in the direct costs of the project. | |

ANNEXURE C - DETERMINING THE FULL COST OF R&D AT SCHEDULE 1 INSTITUTIONS

1. INTRODUCTION

In this Annexure, the NIPMO approach to determine the **full cost of R&D** for Schedule 1 institutions is set out. This approach is based on a general convergence of approaches followed by Schedule 1 institutions in their full cost calculations submitted to NIPMO. The generally applicable definitions and terminology are set out at the end of this Annexure (and marked in bold throughout the Annexure).

2. DETERMINING THE FULL COST OF AN R&D PROJECT OR ACTIVITY

The **full cost of an R&D project** is typically determined using the following equation:

$$\text{Full Cost (FC)} = \text{Direct costs (DC)} + \text{Indirect costs (IC)}$$

As not all **indirect costs** can be specifically allocated to a project/activity level, these **indirect costs** are often grouped together and allocated to a project/ activity based on an **indirect cost recovery rate (ICRR)**.

Hence an important step in the process is to determine the **Indirect Cost Recovery Rate (ICRR)**, for the institution as a whole or, where required, a division of the institution (such as a Unit, Division or Research Group).

Indirect costs (IC) should therefore be calculated as follows:

$$\text{IC} = \text{indirect operating costs} + \text{indirect manpower costs} + \text{other allocated indirect costs}^1$$

After determining the **indirect costs**, one should determine the relevant cost driver. This is the basis on which the institution would look to recover their **indirect costs**. Typically, **direct costs** or **attributable manpower cost** is used as the **relevant cost driver** (however other bases may be used). Institutions may also choose to use different **relevant cost drivers** to allocate different groupings of **indirect costs**.

The ICRR is calculated as: $\text{ICRR} = \text{IC} / \text{relevant cost driver}$.

The amounts used in the calculation must be derived from and/or be reconcilable to the most recent audited annual financial statements.

¹ Should a Schedule 1 entity calculate separate ICRR's at divisional level, the calculation needs to include allocated indirect costs. These costs typically represent a cost recovery charge from centralised cost centres elsewhere within the institution or from costs centres within the division.

The full cost of R&D is not accurately calculated in cases where:

- central cost centres are allocated Medium Term Expenditure Framework Funding to reduce the net costs to be recovered at a divisional level or
- the central cost centres' costs are not wholly allocated to divisional levels.

In the two aforementioned scenarios the calculation must make allowance for the total indirect costs to be included in the divisional calculation and not a "subsidised" or reduced amount.

3. APPLICATION OF THE ICRR TO THE CALCULATION OF FULL COST OF A RESEARCH PROJECT

The first point to be made is that, if in the equation:

Full Cost (FC) = **Direct costs** (DC) + **Indirect costs** (IC),

Where both the **Direct costs** and the **Indirect costs** can be accurately determined (or extracted from the audited annual financial statements) for a research project, and fully justified, then this approach would be acceptable to NIPMO for the determination of the **full costs of an R&D project**.

However, the accurate determination of the **Indirect costs** is likely to be challenging, and the alternate method outlined in the following equation should be used:

Full Cost (FC) = **Direct costs** (DC) + (**Indirect Cost Recovery Ratio** (ICRR) x **relevant cost driver**).

| GLOSSARY | | |
|--|--|--|
| CONCEPT | DESCRIPTION | GUIDELINE FOR CALCULATION |
| Full Cost of a R&D project (FC) | The sum of direct costs plus the indirect cost for a particular project/activity as calculated specifically or using the approved ICCR of the institution or a division thereof. | Calculation as per NIPMO guideline set out above. |
| Direct costs (DC) | All costs (including direct staff and labour costs) directly attributable to, or incurred as a result of, the goods or services produced, or to be produced, as part of the R&D project. | Includes any expenditure incurred specifically for a R&D activity, project or contract, including but not limited to items such as components and materials, use of professional services or sub-contractors, import and export related costs. |
| Indirect cost (IC) | Sum of all indirect costs attributable to R&D carried out at an institution, or in a research project. | |
| Indirect operating costs | Operating costs not allocated on a direct basis to or specifically incurred as a result of, the goods or services produced, or to be produced, as part of the R&D, project. | These costs are not allocated directly to R&D projects and includes costs such as depreciation, rent paid, bank charges, interest paid, security costs, audit fees, finance support costs, HR support costs, legal costs, electricity, municipal rates, etc. |
| Indirect manpower costs | Manpower costs not allocated on a direct basis to or specifically incurred as a result of, the goods or services | These includes costs such as management salaries, cost of leave, unallocated staff costs and administrative staff costs. |

| GLOSSARY | | |
|---|--|--|
| CONCEPT | DESCRIPTION | GUIDELINE FOR CALCULATION |
| | produced, or to be produced, as part of the R&D, project. | |
| Attributable manpower cost | Manpower costs directly deployed on a R&D project (aka direct manpower cost). | A timesheet system needs to be in place in order to obtain an accurate attributable manpower amount. |
| Other allocated indirect costs | Should you calculate separate ICRR at a divisional level, these costs may be applicable and represent a cost recovery charge from centralised cost centres elsewhere within the institution or from costs centres within the division. | These costs are allocated to cover centralised management and support costs. |
| Relevant cost driver | Most applicable basis on which an institution wishes to recover their indirect costs | Typically direct costs or attributable manpower is used. However other basis may be more applicable. |
| Indirect cost recovery rate (ICRR) | The rate as approved by NIPMO to calculate the Indirect Cost recovery to be added to the Direct Cost of a R&D project to give a particular entity the full cost of the R&D project. | A single ICCR for the entire institution and/or divisional ICCRs may be calculated. |

[END]