- 16. Please classify your R&D activities according to the most appropriate Research Fields (RF) code (please refer to Codes book) and indicate the percentage of R&D expenditure associated with each of these.
- The RF Codes are based on recognised academic disciplines and emerging area of study.
- More than one RF code may be provided, together with an associated percentage split.
- The classification of R&D using RF codes is a generally accepted convention internationally.

| RF Codes | Percentage | RF Codes | Percentage |
|----------|------------|----------|------------|
| RF       |            | RF       |            |
| RF       |            | RF       | 74-        |

- 17. Please classify your R&D activities according to Standard Industrial Classification (SIC) codes (please refer to Codes book) and indicate the associated R&D expenditure percentage split.
- The SIC classification provides an indication of the sector of the national economy which will be the main beneficiary of the R&D you are practising
- More than one SIC code may be provided, together with an associated percentage split.
- The classification of R&D using SIC codes is a generally accepted convention internationally.

|     | SIC Codes | Per | centage |     | SIC ( | Codes |  | Perce | entage |
|-----|-----------|-----|---------|-----|-------|-------|--|-------|--------|
| SIC |           |     |         | SIC |       |       |  |       |        |
| SIC |           |     |         | SIC |       |       |  |       | 1      |
| SIC |           |     |         | SIC |       |       |  |       |        |
| SIC | 5         |     |         | SIC | ī     |       |  |       |        |
| SIC |           |     |         | SIC |       |       |  |       |        |

- 18. Please classify your R&D expenditure according to the most appropriate group code of Socio-Economic Objective (SEO) (Please refer to Codes book) and indicate the associated percentage split.
- The SEO classification provides an indication of the sector of the national economy which will be the main beneficiary of the R&D you are practising
- More than one SEO code may be provided, together with an associated percentage split.
- The classification of R&D using SEO codes is a generally accepted convention internationally.

|   | SIC ( | Codes | S |  | Pe | rcenta | age |   | SIC ( | Codes | } |  | Perce | ntage |
|---|-------|-------|---|--|----|--------|-----|---|-------|-------|---|--|-------|-------|
| S |       |       |   |  |    |        |     | S |       |       |   |  |       | 9.4   |
| S |       |       |   |  |    |        | 15  | S |       |       |   |  |       |       |
| S |       |       |   |  |    |        |     | S |       |       |   |  |       |       |
| S |       |       |   |  |    |        |     | S |       |       |   |  |       |       |
| S |       |       | * |  |    |        |     | S |       |       |   |  |       |       |

19. Please indicate the **R&D** amounts (in **R'000** excl. **VAT**) that you spent in-house for the year prior to the one being reported on and the amounts you estimate spending in-house for the following two financial years.

| In-House R&D (Report in R'000 excluding VAT) |                                   |                                |                                |  |  |  |  |  |
|--|-----------------------------------|--------------------------------|--------------------------------|--|--|--|--|--|
| Previous financial year (actual)             | Financial year of survey (actual) | Next financial year (estimate) | Year following next (estimate) |  |  |  |  |  |
| 4  |                                   |                                |                                |  |  |  |  |  |

# PART 3: R&D OUTSOURCED / CONTRACTED OUT WITHIN SOUTH AFRICA (Excluding all in-house R&D expenditure)

R&D work on its behalf?

20. For the financial year did your business fund other businesses/organisations in South Africa to perform

| No 21 Please cl  |  |  |  |   |           |                           |             |                       |
|--|--|--|--|---|-----------|---------------------------|-------------|-----------------------|
| 21 Please cl   |  | Please pro   | oceed to Question  | 23  |           |                           |             |                       |
| LI. I TOUSE C  | lassify y  | our outsourced   | d R&D by Research  | n Field (refer to                             | User G    | uide) and                 | d indicate  | the %                 |
|  |  | ciated with ea   |  |   |           |                           |             |                       |
| R  | F Code   |  | Percentage   |   | RF (      | Codes                     |             | Percentage            |
| RF   |  |  |  | RF  |           | Joues                     |             |                       |
|  |  |  |  |   |           |                           |             | -                     |
| RF   |  |  | -  | RF  |           |                           |             |                       |
| RF   |  |  |  | RF  |           |                           |             |                       |
| 22. Please sta   | ate the a  | mount spent o  | n outsourced R&D   | according to the                              | he follov | wing entit                | ties/sector | rs.                   |
| Outsource  | d to:  |  |  |   |           | R'(                       | 000 (exclu  | ding VAT)             |
| CONTRACTOR AND ADDRESS OF THE PARTY OF THE P |  | kons/Colleges  |  |   |           |                           |             |                       |
|  |  | incl. non-profit   | :)   |   |           |                           |             |                       |
| Science Co   | uncils   |  |  |   |           |                           |             |                       |
| Private Con  |  |  |  |   |           |                           |             |                       |
| Consultants  |  |  |  |   |           |                           |             |                       |
| Others (ple  | ase speci  | fy):   |  |   |           |                           |             |                       |
|  |  |  |  |   |           |                           |             |                       |
| TOTAL  |  |  |  |   |           |                           |             |                       |
| 23. For the fi   | nancial  |  |  |   |           |                           |             |                       |
|  | R&D wo   | Please ans   | business fund other lf?  wer Question 24 ar ceed to Question 2             | d onwards                                     | ganisatio | ons <b>outsi</b> e        | de South    | Africa to             |
| perform l<br>Yés<br>No   | R&D wo   | Please ans Please pro  | lf?<br>wer Question 24 ar  | nd onwards<br>26                              |           |                           | de South    | Africa to             |
| perform l<br>Yés<br>No<br>24. Please cla   | R&D wo   | Please ans Please pro ur outsourced  | If? wer Question 24 ar ceed to Question 2                                  | nd onwards<br>26                              | to User   |                           | de South    | Africa to  Percentage |
| perform l<br>Yés<br>No<br>24. Please cla   | R&D wo   | Please ans Please pro ur outsourced  | If? wer Question 24 ar ceed to Question 2 R&D to the Resea                 | nd onwards<br>26                              | to User   | Guide).                   | de South    |                       |
| perform l<br>Yés<br>No<br>24. Please cla   | R&D wo   | Please ans Please pro ur outsourced  | If? wer Question 24 ar ceed to Question 2 R&D to the Resea                 | nd onwards<br>26<br>rch Field (refer          | to User   | Guide).                   | de South    |                       |
| perform 1 Yés No 24. Please cla R RF   | R&D wo   | Please ans Please pro ur outsourced  | If? wer Question 24 ar ceed to Question 2 R&D to the Resea                 | ad onwards 26 rch Field (refer                | to User   | Guide).                   | de South    |                       |
| perform l Yés No 24. Please cla R RF RF  | assify yo  | Please ans Please pro ur outsourced  | of the Reseation 24 are recentage  | ad onwards 26  rch Field (reference) RF RF RF | r to User | Guide).                   |             |                       |
| perform 1 Yés No 24. Please cla R RF RF RF RF 25. State the a  | assify yo F Codes  | Please ans Please pro ur outsourced  | If? wer Question 24 ar ceed to Question 2 R&D to the Resea                 | ad onwards 26  rch Field (reference) RF RF RF | r to User | Guide).                   |             |                       |
| perform 1 Yés No 24. Please cla RF RF RF 25. State the a Outsource   | assify your F Codes amount sed to:                                     | Please ans Please pro ur outsourced s spent on outso                                 | of the Reseation 24 are recentage  | ad onwards 26  rch Field (reference) RF RF RF | r to User | Guide). Codes tities/sect | tors.       |                       |
| Perform 1 Yés No 24. Please cla R RF RF RF 25. State the a Outsourc Universiti   | assify your sed to:  | Please ans Please pro ur outsourced s spent on outso                                 | wer Question 24 ar<br>ceed to Question 2<br>R&D to the Resea<br>Percentage | ad onwards 26  rch Field (reference) RF RF RF | r to User | Guide). Codes tities/sect | tors.       | Percentage            |
| Perform 1 Yés No 24. Please cla R RF RF RF 25. State the a Outsource Universitie Research 1  | assify your seed to:   | Please ans Please pro our outsourced spent on outso ikons/Colleges (incl. non-profi  | wer Question 24 ar<br>ceed to Question 2<br>R&D to the Resea<br>Percentage | ad onwards 26  rch Field (reference) RF RF RF | r to User | Guide). Codes tities/sect | tors.       | Percentage            |
| Perform 1 Yés No 24. Please cla RF RF RF 25. State the a Outsource Universitie Research 1 Private Co   | assify your feet to: es/Technic institutes ompanies                    | Please ans Please pro our outsourced spent on outso ikons/Colleges (incl. non-profi  | wer Question 24 ar<br>ceed to Question 2<br>R&D to the Resea<br>Percentage | ad onwards 26  rch Field (reference) RF RF RF | r to User | Guide). Codes tities/sect | tors.       | Percentage            |
| Perform 1 Yés No 24. Please cla  R RF RF RF 25. State the a  Outsource Universiti Research 1 Private Co Consultan  | assify your F Codes  amount seed to: es/Technic Institutes ompanies ts | Please ans Please pro ur outsourced s spent on outso ikons/Colleges (incl. non-profi | wer Question 24 ar<br>ceed to Question 2<br>R&D to the Resea<br>Percentage | ad onwards 26  rch Field (reference) RF RF RF | r to User | Guide). Codes tities/sect | tors.       | Percentage            |
| Perform 1 Yés No 24. Please cla RF RF RF 25. State the a Outsource Universitie Research 1 Private Co   | assify your F Codes  amount seed to: es/Technic Institutes ompanies ts | Please ans Please pro ur outsourced s spent on outso ikons/Colleges (incl. non-profi | wer Question 24 ar<br>ceed to Question 2<br>R&D to the Resea<br>Percentage | ad onwards 26  rch Field (reference) RF RF RF | r to User | Guide). Codes tities/sect | tors.       | Percentage            |
| Perform 1 Yés No 24. Please cla  R RF RF RF 25. State the a  Outsource Universitie Research 1 Private Co Consultan Others (ple   | assify your F Codes  amount seed to: es/Technic Institutes ompanies ts | Please ans Please pro ur outsourced s spent on outso ikons/Colleges (incl. non-profi | wer Question 24 ar<br>ceed to Question 2<br>R&D to the Resea<br>Percentage | ad onwards 26  rch Field (reference) RF RF RF | r to User | Guide). Codes tities/sect | tors.       | Percentage            |
| Perform 1 Yés No 24. Please cla  R RF RF RF 25. State the a  Outsource Universiti Research 1 Private Co Consultan  | assify your F Codes  amount seed to: es/Technic Institutes ompanies ts | Please ans Please pro ur outsourced s spent on outso ikons/Colleges (incl. non-profi | wer Question 24 ar<br>ceed to Question 2<br>R&D to the Resea<br>Percentage | ad onwards 26  rch Field (reference) RF RF RF | r to User | Guide). Codes tities/sect | tors.       | Percentage            |

# PART 5: R&D PERSONNEL (IN-HOUSE ONLY)

- Please report for all personnel for whom this business pays payroll tax.
- The group classification in the tables below accords with the principles of employment equity legislation.

The following notes should be used to determine the allocation of personnel:

#### Researchers

- Personnel working on the conception and/or creation of new knowledge/products.
- Executives and directors involved in the planning or management of scientific and technical aspects of R&Dprojects.

#### Excluding

• Managers and directors concerned primarily with budgets and human resources, rather than project content.

### Technicians directly supporting R&D

- Persons doing technical tasks in support of R&D, normally under the direction and supervision of a researcher.
- Typical activities include preparation for experiments, taking records, preparation of charts and graphs and coding data.

# Other personnel directly supporting R&D

- Skilled and unskilled craftspersons.
- Secretarial, administrative and clerical personnel working on, or directly associated with, R&D activity.
- Executives and directors concerned primarily with budgets and human resources, rather than project content.
- Personnel working in, or supporting, library and information services.
- 16. Please report headcount and % time spent on R&D for South Africans involved in R&D for the financial year according to the categories below. This includes personnel born in South Africa, naturalised citizens and those with South African residency status.

| Head                                    | lcount | t of So   | outh A | frica    | n Per | sonne     | l    |           |     |          |                  |            |
|---|--------|-----------|--------|----------|-------|-----------|------|-----------|-----|----------|------------------|------------|
| Qualifications and Personnel Categories | Afr    | ican<br>F | Ind    | ian<br>F | Colo  | ured<br>F | WI   | nite<br>F | TO' | TAL<br>F | % t<br>on R<br>M | ime<br>R&D |
| Researchers                             |        |           |        |          | 111   |           | 114  |           | 111 |          | 141              |            |
| Doctoral degree or equivalent           |        |           |        |          |       |           |      |           |     |          |                  |            |
| Masters degree or equivalent            |        |           |        |          |       |           |      |           |     |          |                  |            |
| Honours/Bachelors degree or equivalent  |        | 8         |        |          |       |           |      |           |     |          |                  |            |
| Diplomas and Higher Diplomas            |        |           |        |          |       |           |      |           | 2   |          |                  |            |
| Non-degree/Non-formal qualifications    |        |           |        |          |       |           |      |           |     |          |                  |            |
| TOTAL HEAI                              | COU    | NT A      | ND %   | 6 TII    | ME SI | ENT       | ON F | R&D       |     |          |                  |            |
| Technicians directly supporting R&      | D      |           |        |          |       |           |      |           |     |          |                  |            |
| All degree qualifications               |        |           |        |          |       | -         | y    |           |     |          |                  |            |
| Higher Diplomas                         | 1.0    |           |        |          |       |           | E E  | -         |     |          |                  |            |
| Diplomas                                |        |           |        |          |       |           |      |           |     | -        |                  |            |
| Other qualifications (incl. Non-formal) |        |           |        |          |       |           |      |           |     |          |                  |            |
| TOTAL HEAI                              | OCOU   | INT A     | ND %   | 6 TII    | ME SI | ENT       | ON F | R&D       |     |          |                  |            |
| Other personnel directly supporting     | R&D    |           |        |          |       |           |      |           |     |          |                  |            |
| All degree qualifications               |        |           |        |          |       |           |      |           |     |          |                  |            |
| Diploma/Secondary qualifications        |        |           |        |          |       |           |      |           |     |          |                  |            |
| Other qualifications (incl. Non-formal) |        |           |        |          |       |           |      |           |     |          |                  |            |
| TOTAL HEAD                              | ocou   | INT A     | ND %   | 6 TII    | ME SI | PENT      | ON F | R&D       |     |          |                  |            |

27. Please report headcount and % time spent on R&D for Non-South Africans involved in R&D for the financial year according to the categories below. This includes personnel with visa status and/or permanent and temporary work permits.

#### Headcount of non-South African Personnel North Oceania African Europe America Elsewhere % time **Qualifications and Personnel** TOTAL (Australia, Countries (incl. UK) (USA, (Asia, etc.) on R&D NZ, etc.) Categories Canada) M M M M M M Researchers Doctoral degree or equivalent Masters degree or equivalent Honours/Bachelors degree or equivalent Diplomas and Higher Diplomas Non-degree/Non-formal qualifications TOTAL HEADCOUNT AND % TIME SPENT ON R&D Technicians directly supporting R&D All degree qualifications Higher Diplomas **Diplomas** Other qualifications (incl. Non-formal) TOTAL HEADCOUNT AND % TIME SPENT ON R&D Other personnel directly supporting R&D All degree qualifications Diploma/Secondary qualifications Other qualifications (incl. Non-formal)

28. Please provide headcount of **all R&D personnel** according to the categories below. The total personnel for South Africans must be equal to that in Question 26, while the total personnel for non-South Africans must equal that in Question 27.

TOTAL HEADCOUNT AND % TIME SPENT ON R&D

| R&D Personnel Categories                |        |       | - A   | ge Categ | ories |        |       |
|---|--------|-------|-------|----------|-------|--------|-------|
| R&D I ersonner Categories               | < 25 ' | 25-34 | 35-44 | 45-54    | 55-64 | >64    | TOTAL |
| South African R&D Personnel             |        |       |       |          |       |        |       |
| Researchers                             |        |       |       |          |       |        |       |
| Technicians directly supporting R&D     |        | W.    |       | 5        |       |        |       |
| Other personnel directly supporting R&D | W 2    |       |       | 2 =      |       | e e ** |       |
| Non-South African R&D Personnel         |        |       |       |          |       |        |       |
| Researchers                             |        | (4    |       |          |       |        |       |
| Technicians directly supporting R&D     | 2)     |       |       |          |       |        |       |
| Other personnel directly supporting R&D |        |       |       |          |       |        |       |

## PART 6: R&D STAFF TURNOVER

- Please provide data for hiring and departure only for the financial year 2001/2002.
- The reference for Questions 29 and 30 are the personnel reported in PART 5 (Question 26 Question 27).
- 29. Please indicate the turnover (headcount) of your **South African** R&D personnel in terms of staff appointed and staff who departed the financial year.

| South A                                 | frican R&D Staff                          |   |
|---|---|---|
| Researchers                             | New Staff                                 | Staff Who Departed  |
| Doctoral degree                         |   | ga en en la companya de la companya |
| Masters degree or equivalent            | 20  |   |
| Honours/Bachelors degree or equivalent  | ,   |   |
| Diplomas and Higher Diplomas            | je se | 9 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   |
| Non-degree/Non-formal qualifications    | *   |   |
| Technicians directly supporting R&D     |   |   |
| All degree qualifications               |   |   |
| Higher Diplomas                         |   | -70., 75.50   |
| Diplomas                                |   |   |
| Other qualifications (incl. Non-formal) |   | e 700 df 201  |
| Other staff directly supporting R&D     |   |   |
| All degree qualifications               |   |   |
| Diplomas/Secondary qualifications       |   |   |
| Other qualifications (incl. Non-formal) | 4   |   |
| TOTAL FOR ALL ABOVE CATEGORIES          |   |   |
|   |   |   |

30. Please indicate the turnover (headcount) of your **Non-South African** R&D personnel in terms of staff appointed and staff who departed in the financial year.

| appointed and start who departed in the imand |                   |                      |
|---|-------------------|----------------------|
| Non-South                                     | African R&D Staff |                      |
| Researchers                                   | New Staff         | Staff Who Departed . |
| Doctoral degree                               |                   |                      |
| Masters degree or equivalent                  |                   |                      |
| Honours/Bachelors degree or equivalent        |                   | 4 7 2 1              |
| Diplomas and Higher Diplomas                  | V 1               |                      |
| Non-degree/Non-formal qualifications          |                   |                      |
| Technicians directly supporting R&D           |                   |                      |
| All degree qualifications                     |                   | <u>.</u>             |
| Higher Diplomas                               |                   |                      |
| Diplomas                                      |                   | 1                    |
| Other qualifications (incl. Non-formal)       | al'               |                      |
| Other staff directly supporting R&D           |                   |                      |
| All degree qualifications                     |                   | * **                 |
| Diplomas/Secondary qualifications             |                   |                      |
| Other qualifications (incl. Non-formal)       |                   |                      |
| TOTAL FOR ALL ABOVE CATEGORIES                |                   |                      |

31. Please indicate the destinations for **Staff Who Departed** during the financial year as reported in the totals in Question 29 and Question 30.

|   |                                |  | Reasons                                    | for R&D                               | Staff Depar   | ture   |   |                    |       |
|---|--------------------------------|--|--|---------------------------------------|---|--|---|--------------------|-------|
| Staff   | Death /<br>Medical<br>Boarding | Retirement<br>from<br>Labour-<br>force | Internal<br>Movement to<br>non-R&D<br>Work | Movement to other R&D positions in SA | Movement to<br>other R&D<br>positions<br>outside SA | Movement<br>to non-R&D<br>positions in<br>SA | Movement to<br>non-R&D<br>positions<br>outside SA | Other /<br>Unknown | TOTAL |
| South Africa  | n R&D S                        | Staff                                  |  |                                       |   |  |   |                    |       |
| African   |                                |  |  |                                       |   |  |   |                    |       |
| Indian  |                                | **                                     |  |                                       |   |  |   |                    |       |
| Coloured  |                                |  |  |                                       |   |  |   |                    |       |
| White   |                                |  |  |                                       |   |  | 122   |                    |       |
| TOTAL FOR   | RALLA                          | BOVE C                                 | ATEGORI                                    | ES (to corr                           | espond with   | question .                                   | 29)   |                    |       |
| Non-South A   | frican R                       | &D Staff                               |  |                                       |   |  |   |                    |       |
| African countries                                     |                                |  |  |                                       |   |  |   |                    |       |
| Europe<br>(incl.UK)                                   |                                |  | a .  |                                       |   |  |   |                    |       |
| Oceania (Australia, NZ, etc.)                         |                                | 14.                                    | *  |                                       |   |  |   |                    |       |
| North America (USA, Canada)                           |                                |  |  |                                       |   |  |   |                    |       |
| Elsewhere   |                                |  |  | -                                     |   |  |   |                    |       |
| (Asia, etc.) TOTAL FOR                                | ATT. A                         | BOVE C                                 | ATECORI                                    | FS (to core                           | espond with   | auestion                                     | 20)   |                    |       |
| TOTALION  | ALLA                           | DOVE                                   | ATEGOIG                                    | ES (10 COLL                           | еѕрони мин  | question.                                    | ) <i>(</i>  |                    |       |
| 32. Was the sho                                       |                                | financial y                            | ear?                                       |                                       | D staff a <b>sig</b>                                | nificant co                                  | oncern/issue                                      | for your           |       |
| No  |                                |  | roceed to Q                                |                                       |   |  |   |                    |       |
| Yes   |                                | Please ar                              | nswer Ques                                 | stion 33                              |   |  |   |                    |       |
| 33. Please rate t                                     | he measi                       | ures used                              | to address t                               | hese shorta                           | ges/deficienc                                       | cies of R&                                   | D skills.   |                    |       |
| <ul><li>Please indica</li><li>Measures that</li></ul> | ate if the r                   | neasure was                            | as not used, on<br>the rated as fo         | or the appropolic the approp          | riate number :<br>EAST IMPOR                        | for the ratin<br>RTANT; 5 - V                | gs.<br>/ <b>ERY IMPOR</b>                         | TANT.              |       |
| Measures to   | Accomr                         | nodate R                               | &D Skill                                   | Not used                              |   |  | Rating  |                    |       |

| Measures to Accommodate R&D Skill<br>Shortages/Deficiencies | Not used | Rating 1 - LEAST IMPORTANT V | ERY IMPORTANT - 5 |
|---|----------|------------------------------|-------------------|
|   |          |                              |                   |
|   |          |                              |                   |
|   |          |                              | - 19              |
|   |          |                              | 24                |
|   |          |                              |                   |
|   |          |                              |                   |
|   |          |                              |                   |
|   |          | у                            |                   |
|   |          |                              |                   |

## PART 7: YOUR COMMENTS

34. Please provide an estimate of the time taken to complete this form.

| <b>Ainutes</b> |
|----------------|
|                |
|                |

## Including:

- Time actually spent reading the instructions, working on the questions and obtaining information.
- Time spent by all employees in collecting and providing this information.
- 35. Please report in the space below reasons for any significant changes in your business's R&D activity over the previous year.

## Including:

- Large increases or decreases in annual expenditure.
- Changes in your accounting period and/or company restructuring.

36. Please provide comment...

- on any of the information you have supplied on this form;
- on any question(s) which caused problems;
- if you would like to suggest improvements to this form.

(Kindly attach additional pages should you require further space.)

THANK YOU FOR YOUR TIME & EFFORT. IT IS SINCERELY APPRECIATED. Please return the completed form to the HSRC in the enclosed reply-paid envelope.