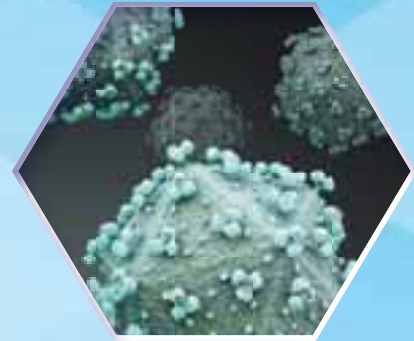


Private Sector Research and Development Tax Incentive Programme

Report to Parliament
2012/13



**science
& technology**

Department:
Science and Technology
REPUBLIC OF SOUTH AFRICA



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PREFACE

The Research and Development (R&D) Tax Incentive Programme is the South African government's principal instrument for encouraging private sector investment in scientific or technological R&D activities.

The Incentive was introduced in November 2006 in order to stimulate higher levels of private sector investment in scientific or technological R&D in line with the National Research and Development Strategy, and was refined on 1 October 2012.

The period under review (2012/13) saw an increased level of activity, with the newly introduced preapproval process being implemented alongside the traditional submission process, and a record number of applications being received by the Department of Science and Technology (DST). This seems to indicate that companies welcomed the changes and were pleased to engage in respect of new R&D efforts.

The increased number of applications, particularly under the new preapproval process, required the DST to put in an extra effort and implement measures to ensure that the programme provided a positive experience for companies in terms of improved certainty and strategic impact.

In the period under review, 224 companies were reported to be taking part in the Incentive for the first time since its introduction in 2006. The profile of participating companies remains the same as in previous reports, mirroring the national trend in business R&D performance.

There were initially concerns about the turnaround times for decisions, but feedback from participating companies shows that the Incentive is seen as useful in helping them plan the R&D necessary for the introduction of new and/or improved products, processes, etc., to the market in the long term. This is important for increased competitiveness and economic growth.

I am pleased to present this report on the R&D Tax Incentive Programme for the period 1 March 2012 to 28 February 2013 as required by section 11D(17) of the Income Tax Act, 1962.



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MRS GNM PANDOR, MP
MINISTER OF SCIENCE AND TECHNOLOGY

EXECUTIVE SUMMARY

This report presents information on the performance of the Research and Development (R&D) Tax Incentive Programme for the period March 2012 to February 2013. This period marked a transition from one administrative procedure to another, one procedure dealing with the retrospective submission of information for R&D undertaken prior to 1 October 2012 and the other dealing with the applications for preapproval of R&D activities undertaken on or after 1 October 2012.

In 2012/13 the number of submissions and preapproval applications reached an all-time high of 801 forms. Of these, 511 pertained to the period under review. The other 290 forms were retrospective forms made for R&D undertaken in previous years.

The 801 forms received in 2012/13 came from 458 companies, with R&D activities involving an estimated 12 913 R&D personnel. Of the 458 companies, 374 made retrospective submissions and/or applied for preapproval for R&D activities in the 2012/13 period.

In the five months between 1 October 2012, when the new amendments came into effect, and 28 February 2013, 133 companies participated in the programme for the first time, indicating that the changes helped to attract new participants to the incentive programme. This has increased the overall number of companies that participated in the R&D tax incentive between November 2006 and February 2013 to 701, with R22,9 billion in R&D expenditure supported in this period.

The tax revenue foregone due to the R&D Tax Incentive, which is reported in retrospect, is estimated to be R3,2 billion for the period 2005/06 to 2011/12, as indicated in the National Treasury Budget Review of February 2014. This amount represents the cost of the incentive to government, and forms an important basis for benchmarking the net benefit of the R&D Tax Incentive Programme, which will be estimated and explained in detail in future reports.

An analysis of the 374 companies that applied for 2012/13 highlights the following:

- Large companies (those that indicated a latest year turnover of R40 million and above) constitute 52,1% (195) of all the applicants, with small and medium enterprises (SMEs) making up 41,7% (156). The remaining 6,1% (23) did not disclose their turnover.
- The sectors that dominated the uptake were the Manufacturing Sector (with 42,2% of the applicants), and the Financial Intermediation, Real Estate and Business Services Sector (with 37,7% of applicants). Within the Manufacturing Sector, companies in chemicals, cosmetics, pharmaceuticals and plastics were dominant, with both large companies and SMEs making submissions. The Financial Intermediation, Real Estate and Business Services Sector is dominated by SMEs in software engineering and development.

The 2012/13 report presents a limited set of performance indicators for the R&D Tax Incentive Programme. Some important indicators have been omitted because, at the time of compiling this report, the process of reconciling relevant data between the two application processes in order to estimate performance in terms of specific indicators was still under way. A fuller set of indicators will be included in the 2013/14 report.





1. INTRODUCTION

1. INTRODUCTION

The Department of Science and Technology (DST) administers the Research and Development (R&D) Tax Incentive Programme under section 11D of the Income Tax Act, 1962 (Act No. 58 of 1962), with the aim of stimulating innovation through scientific and technological R&D in South Africa.

Section 11D requires the Minister of Science and Technology to report to Parliament on the direct benefits of the R&D activities encouraged by the incentive programme in contributing to economic growth, employment and other broader government objectives. This report is compiled in consultation with the National Treasury and the South African Revenue Service (SARS).

Enhancements to the tax incentive process (including the preapproval process effective from 1 October 2012) were made in the Taxation Laws Amendment Act, 2011 (Act No. 24 of 2011). The preapproval process affected the last two quarters of the 2012/13 period, as a result of which the DST had to run two administrative processes, as follows:

- Regarding R&D undertaken prior to 1 October 2012, the DST received information submitted by companies reporting their claim for the R&D tax incentive on a retrospective basis. Under this procedure, companies incurred expenditure and then claimed the R&D tax deductions from SARS at the end of their financial year. Eligible activities qualified for a deduction of 150% on R&D operational expenditure and an accelerated depreciation of R&D capital assets at a rate of 50:30:20 over three years. As companies submit information retrospectively, data regarding the uptake of the incentive is revised annually.
- Regarding R&D undertaken on or after 1 October 2012, companies are required to submit applications for approval of the R&D activities by the Minister of Science and Technology. Upon approval, a company can deduct the 150% of the R&D current expenditure to determine the taxable income. After October 2012, R&D assets depreciate in the same way as other capital expenditure in terms of section 12C(h)(i) of the Income Tax Act.

This report, therefore, presents information derived from these two application procedures. Where possible, data has been aggregated to show the overall performance of the incentive, e.g. the number of application forms received, and uptake by companies in terms of sector, size and R&D personnel. Where aggregation was not possible at the time of compiling this report, the information obtained from the two procedures is presented separately, e.g. R&D expenditure reported as incurred versus planned R&D expenditure. Obviously, it will take time to reconcile the different descriptions.



2. PERFORMANCE OF THE R&D TAX INCENTIVE PROGRAMME

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2.1 Applications received by the Department of Science and Technology

The period under review marked a transition from one administrative procedure to another. The DST ran two different administrative processes simultaneously: (1) Retrospective submissions of information for R&D undertaken prior to 1 October 2012; and (2) Applications for the preapproval of R&D activities undertaken on or after 1 October 2012.

From 1 March 2012 to 28 February 2013, the DST received a total of 801 forms from 458 companies. Of the forms, 495 forms (received from 318 companies) were retrospective submissions for R&D undertaken before October 2012; and 306 forms (received from 265 companies) were for preapproval. Eighty-four of the 458 companies submitted retrospective submissions for R&D activities undertaken prior 2012/13, and are therefore not relevant to the period under review.

Table 1 below summarises the uptake of the R&D Tax Incentive Programme for the 2012/13 period. It should be noted that, of the 495 retrospective submissions forms, only 205 pertained to 2012/13, while 290 were for R&D done in the previous year.

Table 1: Overall uptake of the incentive in 2012/13

(for both retrospective submissions and preapproval applications)

	Number of forms	Number of companies	Projects
Total of forms received and companies participating	801	458	2 125
Of which:			
Retrospective submissions	495	318	Not a requirement
Applications for preapproval	306	265	2 125

The 495 retrospective submissions received in the 2012/13 period reported a total eligible R&D expenditure of R10 billion supported through the incentive. On the other hand, 306 preapproval applications reported R10,1 billion in planned expenditure for the period under review.

2.2. Number of companies indicating R&D expenditure incurred and planned in the 2012/13 period

Figure 1 shows total number of companies that planned or undertook R&D activities in the period under review. The number of companies that reported R&D activities planned or undertaken (i.e. either retrospective submissions or preapproval applications) for the period 2012/13 period is 374. Of the 374 companies, 91 submitted forms under both processes. These companies had performed R&D prior to 1 October 2012, but also planned new R&D or had projects continuing beyond 1 October 2012. Such applications are closely scrutinised upon receipt to ensure that there is no duplication of figures. Regardless of how many applications or submissions a company makes, each company is counted only once.

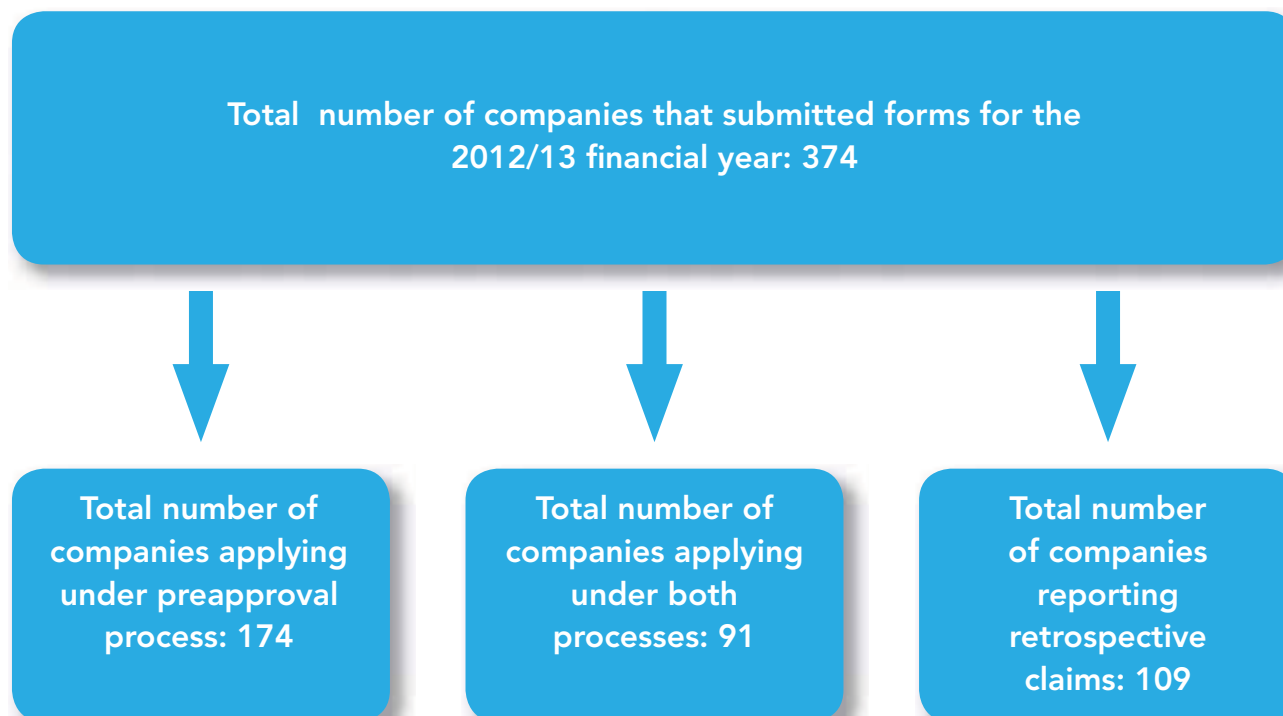


Figure 1: Number of companies reporting R&D expenditure for 2012/13 period

In the five months between 1 October 2012, when the new amendments came into effect, and 28 February 2013, 224 companies participated in the incentive for the first time. This shows that the October 2012 amendments to the incentive were able to attract new participants.

The surge in the number of submissions and applications is attributable to the introduction of the preapproval process, effective from 1 October 2012. In October 2012 alone, the DST received 182 applications (translating to 1 591 R&D projects) for the preapproval process.

2.3 Uptake in terms of industry sectors and size of company

This section gives an analysis of the 374 companies that made submissions for the 2012/13 period, reporting R&D expenditure incurred in this period, or asking for preapproval for R&D still to be undertaken.

(a) Participation by industry sector (SIC codes)¹

The R&D Tax Incentive Programme is aimed at supporting scientific and technological R&D in all sectors of the economy with a view to assisting companies become competitive through increased innovation activities, by introducing new products, services, processes, etc. and improving existing ones. Support for private sector R&D and innovation is crucial for South Africa to improve its global competitiveness.

Table 2 shows that, of the 374 companies that participated in the incentive in 2012/13, 42,2% were in the Manufacturing Sector, followed by 37,7% in the Financial Intermediation, Real Estate and Business Services Sector. These two sectors constitute nearly 80% of the uptake in terms of the number of companies. The Mining and Quarrying; Agriculture, Hunting, Forestry and Fishing; and Transport, Storage and Communication Sectors together made up a total of 14,7% of the uptake. The other four sectors, namely Electricity, Gas and Water Supply; Community, Social and Personal Services; Construction; and Wholesale and Retail Trade, constitute the remaining 5,4% of the uptake in terms of the number of companies.



¹ Annexure B describes the Standard Industrial Classification (SIC) codes and relevant subdivisions.

Table 2: Participation in terms of number of companies

SIC code and definition	Number of companies	% of total
10000 - Agriculture, Hunting, Forestry and Fishing	19	5,1
20000 – Mining and Quarrying	15	4,0
30000 - 39000 – Manufacturing	158	42,2
40000 – Electricity, Gas and Water Supply	8	2,1
50000 – Construction	1	0,3
60000 – Wholesale and Retail Trade	1	0,3
70000 – Transport, Storage and Communication	21	5,6
80000 – Financial Intermediation, Real Estate and Business Services	141	37,7
90000 – Community, Social and Personal Services	10	2,7
TOTAL	374	100

(b) Participation in terms of company size (turnover)

Table 3 below summarises the uptake in terms of company size (categorised according to the latest annual turnover disclosed by the company on the form). Of all the companies that participated in the incentive in 2012/13, 156 (41,7%) had a turnover of less than R40 million. These companies are referred to as SMEs in this report on the basis of the broad description contained in the National Small Business Act, 1996 (Act No. 102 of 1996).

Of the total uptake, there were 195 large companies, i.e. with an annual turnover of R40 million and above, which is 52,1% of the total. Within this category, 142 (38%) companies had a turnover of R100 million and above. The remaining 23 (6,1%) companies did not disclose their turnover.

Table 3: Participation in terms of company size

Annual turnover ranges (in R millions)	Number of companies	% of total
Turnover not indicated	23	6,1
10 and below	76	20,3
10 to 15	25	6,7
15-20	15	4,0
20-30	24	6,4
30-40	16	4,3
40-50	11	2,9
50-100	42	11,2
100 and above	142	38,0
Total	374	100

Closer examination of the data reveals important information about the participation by SMEs in sectors and specific industries that are dominant in the R&D Tax Incentive Programme, namely Manufacturing; Financial Intermediation, Real Estate and Business Services; and Mining and Quarrying. Within manufacturing, the top three industries are chemicals, cosmetics and pharmaceuticals; plastics and metals and electronics. The Financial Intermediation, Real Estate and Business Services Sector is dominated by software engineering and development. Metallurgy dominates the Mining and Quarrying Sector.





3. R&D EXPENDITURE

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The two different administrative procedures (one procedure dealing with the retrospective submission of information for R&D undertaken prior to 1 October 2012 and the other dealing with the applications for preapproval of R&D activities undertaken on or after 1 October 2012) required different descriptions for R&D expenditure. The first part of this section deals with the key indicators for R&D expenditure for the retrospective submissions (presented in Table 4); the second part deals with the key indicators under the preapproval process (presented in Table 5). The R&D expenditure supported by the incentive in the 2012/13 reporting period is estimated to be R5,9 billion under the retrospective process and R10,1 billion planned to be incurred in the period under review. The relevant details are provided below.

3.1 R&D expenditure reported in retrospective submissions

The retrospective submission process asks for estimates of actual R&D expenditure undertaken prior to October 2012. A distinction is made between total R&D expenditure (which the company would indicate as its overall R&D in a particular year) and eligible R&D expenditure (which is the amount a company would indicate to be eligible and therefore part of its claim for R&D tax deduction).

Table 4 provides a breakdown of the R&D expenditure reported based on the retrospective submission from companies. For the period 1 March 2012 to 28 February 2013, the total R&D expenditure reported on a retrospective basis was R5,1 billion, of which about R2 billion was reported as eligible R&D expenditure. These amounts are contained in the 205 (41,4%) forms that pertain to the R&D expenditure of the 2012/13 reporting period.

Table 4: Actual R&D expenditure incurred in 2012/13 (retrospective basis)

Sector	Total R&D expenditure		Amount indicated by companies as eligible R&D expenditure	
	(R'000)	% of total	(R'000)	% of total
Agriculture, Hunting, Forestry and Fishing	151 464	3,0	123 027	6,2
Mining and Quarrying	235 369	4,6	203 871	10,2
Manufacturing	3784 792	73,8	759 566	38,0
Electricity, Gas and Water Supply	475 822	9,3	475 822	23,8
Construction	3 507	0,1	3 507	0,2
Wholesale and Retail Trade	0	0,0	0	0,0
Transport, Storage and Communication	41 310	0,8	40 504	2,0
Financial Intermediation, Real Estate and Business Services	429 890	8,4	384 763	19,3
Community, Social and Personal Services	6 486	0,1	6 486	0,3
Total	5 128 639	100	1997 546	100

3.2 R&D expenditure reported in preapproval applications

The preapproval submission process asks for estimates of planned R&D expenditure (i.e. that is yet to be undertaken at the time the DST receives the application). Under this preapproval process, two categories of R&D expenditure are

distinguished, namely, estimates of annual R&D budget (which is the R&D expenditure budgeted for a particular financial year of the company) and the planned R&D budget (which is the overall R&D expenditure earmarked for specific R&D projects regardless of the years in which a project is to be carried out).

Table 5 indicates the annual budgeted R&D amounts for company applications. Companies will be reporting on the progress made on their approved R&D and will then be in a position to indicate the actual expenditure incurred and other benefits derived from participating in the programme.

Table 5: Annual R&D budget expenditure reported based on preapproval applications in 2012/13

Industry Sector	R&D expenditure budgeted for 2012/13	
	(R'000)	% of total
Agriculture, Hunting, Forestry and Fishing	182 516	1,8
Mining and Quarrying	2 302 387	22,6
Manufacturing	3 223 724	31,6
Electricity, Gas and Water Supply	73 140	0,7
Construction	50 000	0,5
Wholesale and Retail Trade	2 455	0,0
Transport, Storage and Communication	222 983	2,2
Financial Intermediation, Real Estate and Business Services	4 129 167	40,5
Community, Social and Personal Services	10 532	0,1
Total	10 196 905	100

The overriding goal of the Industrial Policy Action Plan (IPAP) is to prevent industrial decline and support the growth and diversification of South Africa's manufacturing sector.

The National Industrial Policy Framework, adopted by Government in 2007, provides the more general industrial policy framework for IPAP and the blueprint for government's collaborative engagement with its social partners from business, labour and civil society.

IPAP prioritises intervention in the following three clusters of industry sectors, which are meant to support the National Development Plan:

The sectors in the first cluster, which include Metal Fabrication, Capital and Transport Equipment, Green and Energy-Saving Industries and Agroprocessing, are qualitatively new areas of focus of the Action Plan.

In the second cluster, the upscaled IPAP builds on and broadens interventions in sectors identified in the first IPAP, namely Automotives and Components; Medium and Heavy Vehicles; Plastics, Pharmaceuticals and Chemicals; Clothing, Textiles, Footwear and Leather; Biofuels; Forestry, Paper, Pulp and Furniture; Creative and Cultural Industries; and Business Process Services.

The third cluster focuses on sectors in which South Africa has the potential to develop long-term advanced capabilities, namely, the Nuclear, Advanced Materials, Aerospace and Defence, and Electrotechnical and ICT Sectors.

In the 306 application forms received from 265 companies, a total of R10,1 billion was reported as R&D planned for the year 2012/13. It is possible that part of the budgeted amount could be for future years, largely because companies are sometimes unclear which figures to include in this field on the application form. At the time of compiling this report, validation work aimed at correcting any mistakes was still under way.

3.3 Contribution to specific IPAP priority areas, types of R&D and fields of science

With the retrospective submissions for the period 1 March 2012 to 28 February 2013, the total R&D expenditure and the eligible R&D expenditure within the sectors prioritised in terms of the Industrial Policy Action Plan (IPAP) was R4, 5 billion and R1,5 billion, respectively. The Automotive, Component, Medium and Heavy Commercial Vehicles IPAP Sector is dominant in terms of total R&D expenditure, with R3 billion, followed by the Electrotechnical and Information and Communication Technologies (ICT) IPAP Sector, with R496 million.

According to preapproval applications, the Electrotechnical and ICT Sector is dominant in terms of budgeted expenditure of R3,3 billion, followed by the IPAP Sector "Realising the potential of the metal fabrication, capital and transport equipment sectors, particularly arising from large public investment" with a budgeted expenditure of R738 million. The South African Electrotechnical and ICT Sector are well established and sophisticated. The largest and most advanced in Africa, the local IT industry is a leader, particularly in the field of mobile software and electronic banking services. The Pharmaceutical IPAP Sector plays a strategic role in the South African economy, most prominently in healthcare, science and tertiary education. Pharmaceutical manufacturing contributes 1,6% to South African GDP.



Table 6: Participation per IPAP cluster (March 2012 to Feb. 2013)

Clusters according to IPAP	Retrospective submissions		Preapproval applications
	R&D expenditure	Eligible R&D expenditure	R&D expenditure budgeted for 2013/14
	(R'000)		
Cluster 1 - Qualitatively new areas of focus			
1. Realising the potential of the Metal Fabrication, Capital and Transport Equipment Sectors, particularly arising from large public investment	165 993	165 943	738 462
2. Upstream oil and gas	423	423	1 300
3. Green and Energy-Saving Industries	3 663	15 145	0
4. Agroprocessing, linked to food security and food pricing imperatives	10 674	10 614	122 792
5. Boat Building	0	0	32 400
Totals for Cluster 1	180 753	192 126	894 954
Cluster 2 - Scale up and broaden interventions in existing IPAP sectors			
1. Automotives, Components, Medium and Heavy Commercial Vehicles	3 198 448	180 137	95 300
2. Chemicals, Cosmetics, Pharmaceuticals and Plastics	156 581	153 666	317 640
3. Clothing, Textiles, Footwear and Leather	347	347	2 300
4. Biofuels	0	0	0
5. Forestry, Paper, Pulp and Furniture	3 526	3 526	147 436
6. Creative and Cultural Industries	0	0	0
7. Business Process Services	467 551	467 551	25 200
Totals for Cluster 2	3 826 453	805 225	587 875
Cluster 3 - Sectors with potential for the development of long-term advanced capabilities			
1. Nuclear	0	0	0
2. Advanced Materials	0	0	0
3. Aerospace, Defence	1 511	1 511	100 887
4. Electrotechnical and ICT	496 375	462 145	3 312 818
Totals for Cluster 3	497 885	463 656	3 413 705
TOTAL	4 505 091	1 461 006	4 896 534

Table 7: R&D expenditure by type of research from March 2012 to Feb. 2013 (Retrospective basis)

Categories of research	Eligible R&D expenditure (R'000)
Basic research	81 170
Applied research	292 008
New product development	1 091 876
Product improvement	532 491
Total	1 997 546

Basic research is performed without thought of practical ends. It results in general knowledge and an understanding of nature and its laws. This general knowledge provides the means of answering a large number of important practical problems, though it may not give a complete or specific solution for any one of them. Basic research contributes 4,1% (R81 million) of eligible R&D expenditure and applied research contributes 14,6% (292 million). The function of applied research is to provide complete solutions. Of the eligible R&D expenditure, 26,7% (R532 million) comprised product improvement (certain standard conditions must be met in this regard). Lastly, new product development comprises the highest percentage of eligible R&D expenditure at 54,7% (R1 billion). Most of the private sector companies invested in R&D towards the development of a new product or service for the market.

Table 8 below shows the breakdown according Natural Scientific Professions Act, 2003 (Act No. 27 of 2003). In retrospective submissions, Industrial Science dominates, with 70% of R&D expenditure. In respect of preapproval applications, Mathematical Science dominates in terms of planned R&D expenditure for R&D projects with R4 billion (42,6%), followed by Metallurgical Science with R2 billion (20,2%).



Table 8: R&D expenditure supported per field of science (March 2012 to Feb. 2013)

Field of science	Retrospective submissions				Preapproval applications	
	R&D expenditure (R'000)	% of total	Eligible R&D expenditure (R'000)	% of total	Planned R&D expenditure (R'000)	% of total
Industrial Science	3588 571	70,0	567 060	28,4	1 646 818	16,2
Agricultural Science	145 315	2,8	116 878	5,9	182 516	1,8
Geographical Information System Science	13 663	0,3	12 867	0,6	101 239	1,0
Biological Science	6 263	0,1	6 263	0,3	0	0,0
Mathematical Science	208 564	4,1	208 077	10,4	4 345 891	42,6
Physical Science	127 878	2,5	127 843	6,4	393 991	3,9
Animal Science	2 461	0,0	2 461	0,1	0	0,0
Chemical Science	177 995	3,5	174 782	8,7	695 622	6,8
Geological Science	141 362	2,8	109 864	5,5	238 919	2,3
Metallurgical Science	194 401	3,8	149 344	7,5	2 064 093	20,2
Food Science	23 689	0,5	23 630	1,2	318 422	3,1
Materials Science	16 860	0,3	16 860	0,8	116 995	1,1
Environmental Science	475 199	9,3	475 199	23,8	0	0,0
Forestry Science	0	0,0	0	0,0	0	0,0
Soil Science	0	0,0	0	0,0	0	0,0
Earth Science	6 419	0,1	6 419	0,3	0	0,0
Water Care Science	0	0,0	0	0,0	60 000	0,6
Hydrological Science	0	0,0	0	0,0	0	0,0
Marine Science	0	0,0	0	0,0	32 400	0,3
Total	5 128 639	100	1 997 546	100	10 196 905	100





4. R&D PERSONNEL

4. R&D PERSONNEL

A total of 12 913 R&D personnel were directly involved in the R&D activities supported in 2012/13.² The numbers are an aggregation of what companies have indicated as the latest information available. Figure 1 below indicates that the R&D departments of companies are dominated by technical staff (26,1%) that directly support researchers, followed by engineers (20,8%) and technicians (16,1%).

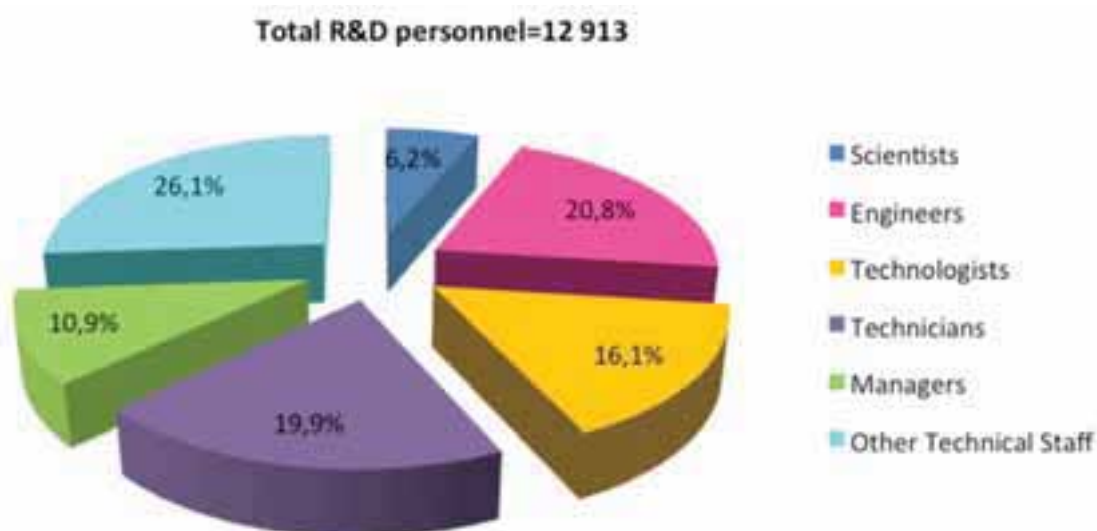
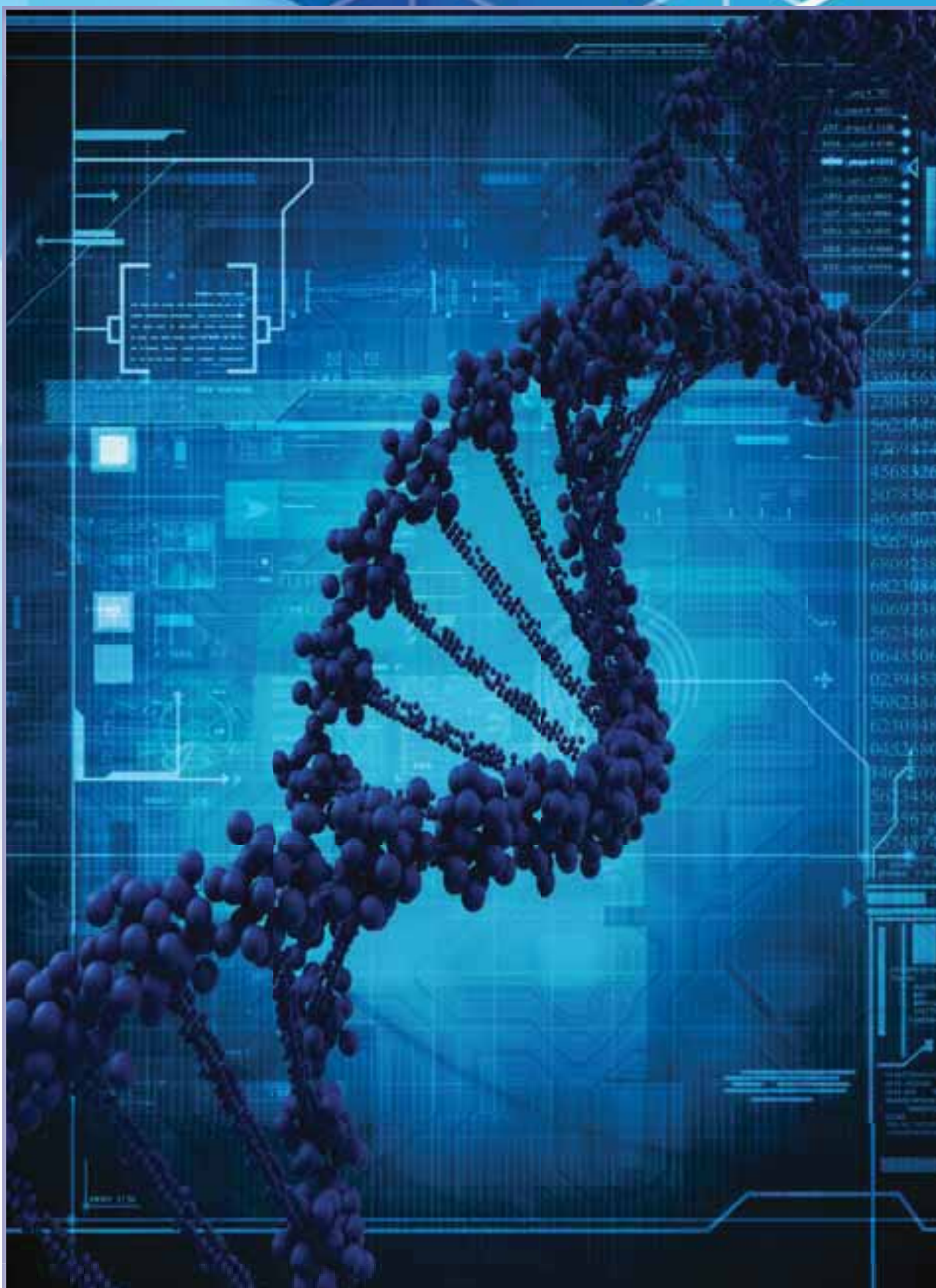


Figure 2: R&D personnel distribution from March 2012 to February 2013



² Categories of R&D personnel are explained in Annexure C.



5. CONTRIBUTION OF THE INCENTIVE FROM NOV. 2006 TO FEB. 2013

5. CONTRIBUTION OF THE INCENTIVE FROM NOV. 2006 TO FEB. 2013

5.1 Number of forms received from November 2006 to February 2013

Figure 3 shows that a total of 1 521 retrospective submission forms and 306 preapproval applications were received by the DST from November 2006 to February 2013. If the 306 applications for preapproval received in 2012/13 are added to the number of retrospective forms, this brings the total number of forms that were received by the DST for the incentive over the same period to 1 827. These forms were received from 701 companies.

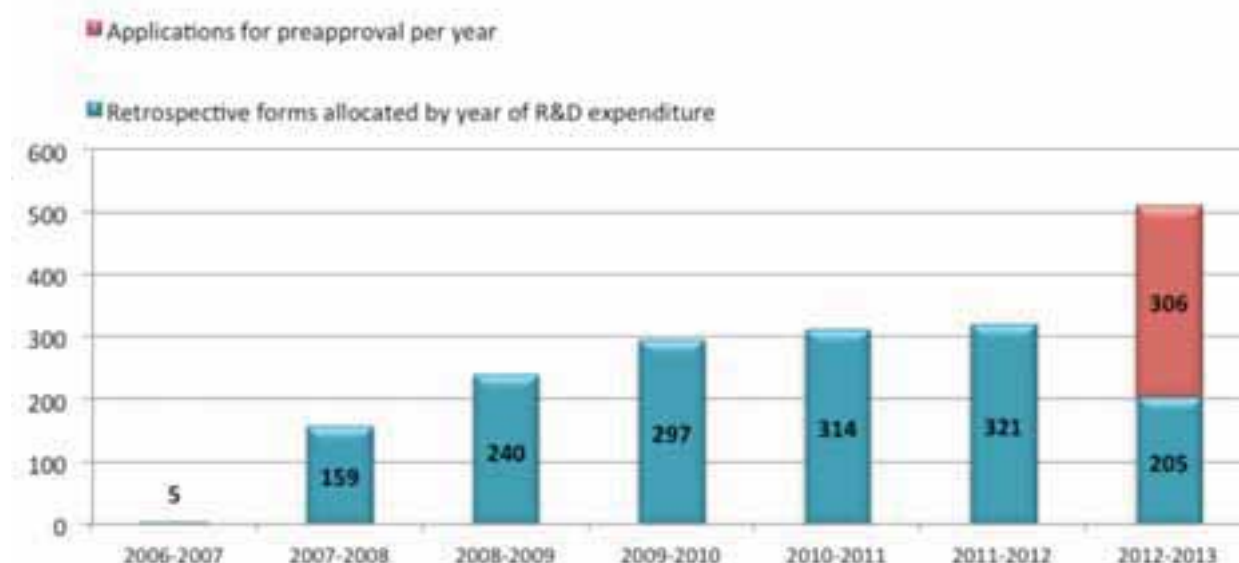


Figure 3: Number of forms and preapproval applications received by the DST per tax year

5.2 Number of companies participating in the incentive

Figure 4 shows the number of participating companies in accordance with their reporting periods. Between November 2006 and February 2013, a total of 701 companies participated in the incentive programme. The period of review shows the highest number, with 374 companies participating. This figure combines both the retrospective submissions and the preapproval applications. The peak recorded in 2012/13 appears to be linked to the changes in legislation.

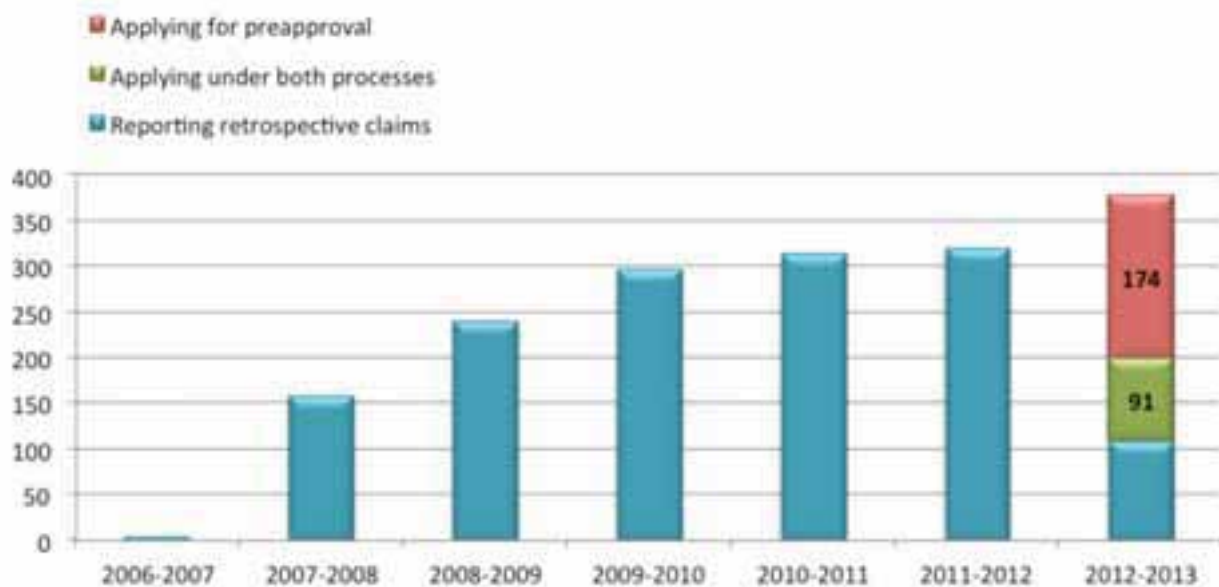


Figure 4: Number of companies participating in the R&D Tax Incentive Programme per tax year

5.3 R&D expenditure reported based on retrospective submissions

In terms of the previous legislative provisions, companies could only claim the R&D expenditure incurred prior to 1 October 2012 on a retrospective basis. Under the retrospective claims process, companies may claim the tax deduction on the R&D expenditure incurred from SARS as part of the normal tax return procedure and may submit forms to the DST reporting total R&D expenditure incurred, which will be used to claim a tax deduction from SARS. It is therefore possible that the amounts reported to the DST may not be the same as the amount that is ultimately accepted by SARS for the deduction.³

Table 9 below shows total R&D expenditure incurred between November 2006 and February 2013 as R22,9 billion, of which R16 billion is reported as eligible for the tax incentive.

Table 9: R&D expenditure based on retrospective submissions (March 2012 to Feb. 2013)

Reporting period	Total R&D expenditure incurred (R'000)	Amount indicated by companies as eligible R&D expenditure (R'000)
2006/07	27 627	9 226
2007/08	2 640 548	1 717 467
2008/09	3 445 910	2 652 010
2009/10	3 990 181	3 428 144
2010/11	2 897 459	2 499 893
2011/12	4 830 141	3 755 205
2012/13	5 128 639	1 997 546
Total	22 960 506	16 059 491

³ Only the amounts reported to the DST by companies are indicated in this report. For a correct estimation, it is necessary to reconcile the amounts indicated by companies when claiming the deduction and the amounts that are accepted and used by SARS when calculating the deduction. However, this exercise had not yet been carried out when this report was compiled.





6. TAX REVENUE FOREGONE

6. TAX REVENUE FOREGONE

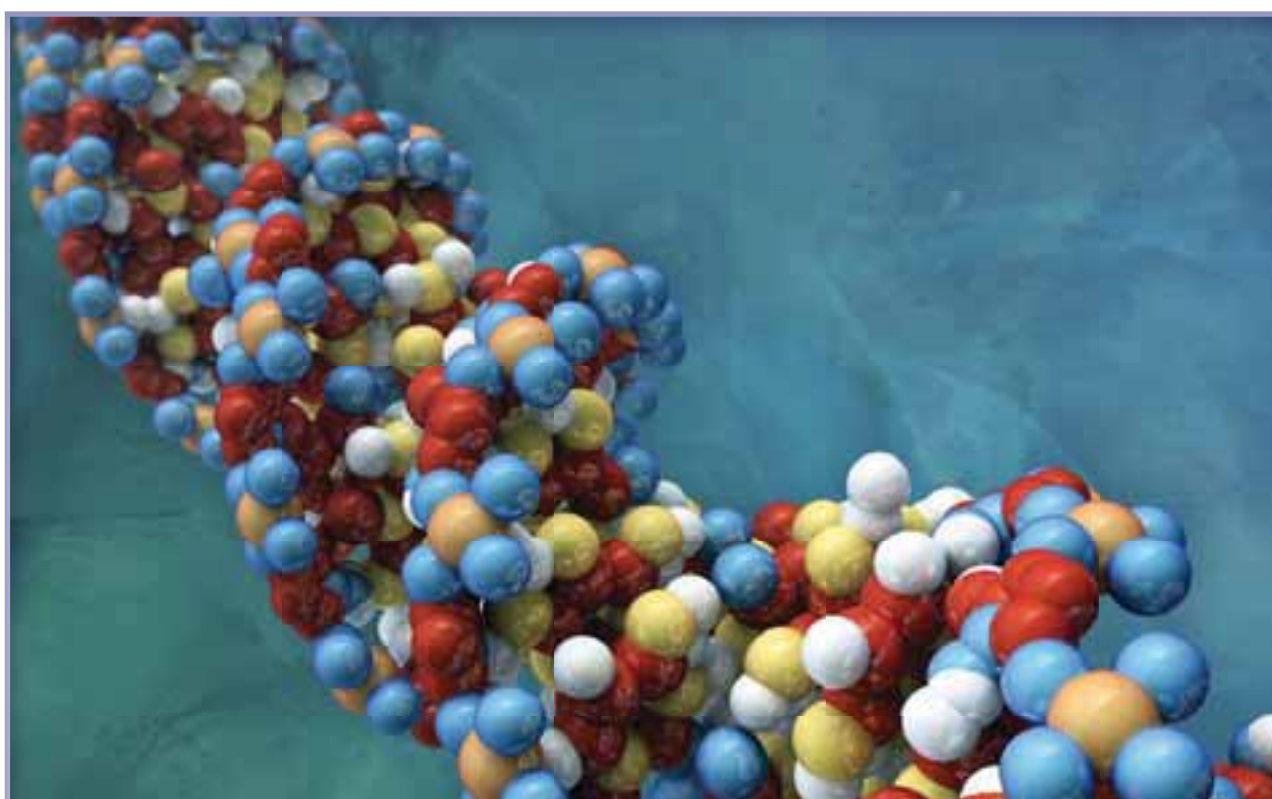
Table 10 below shows the estimated tax revenue forgone (cost of incentive to government) in the different financial years.

Table 10: Estimates of tax revenue forgone from 2005/06 (inception) to 2011/12

Reporting period	Tax revenue forgone (R'000)
2005/06	183 000
2006/07	449 000
2007/08	358 000
2008/09	594 000
2009/10	727 000
2010/11	685 000
2011/12	241 000
Total	3 237 000

The tax revenue forgone due to the R&D Tax Incentive Programme is estimated at R3,2 billion for the period of 2005/06 to 2011/12. This figure includes claims that were made under the R&D Tax Incentive Programme that applied prior to November 2006 (under section 11B of the Income Tax Act). The figures for tax revenue forgone are published in the National Treasury Budget Review 2014 and represent deductions allowed by SARS on claims by companies for each particular tax year. These figures are revised annually as companies submit their claims.

The amount of tax revenue forgone represents the cost of the incentive to government, and is important for benchmarking the net benefit of the R&D tax incentive. More information is being collated to make appropriate estimations of the net benefit, and the findings will be presented in future reports.





7. CONCLUSION

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The R&D Tax Incentive Programme is implemented alongside other policy instruments to encourage private sector R&D investment in South Africa. National policies such as the National Research and Development Strategy, the Ten-Year Innovation Plan for South Africa (2008-2018) and the Industrial Policy Action Plan (IPAP) have all highlighted the role of increased private sector R&D investment in economic growth and competitiveness.

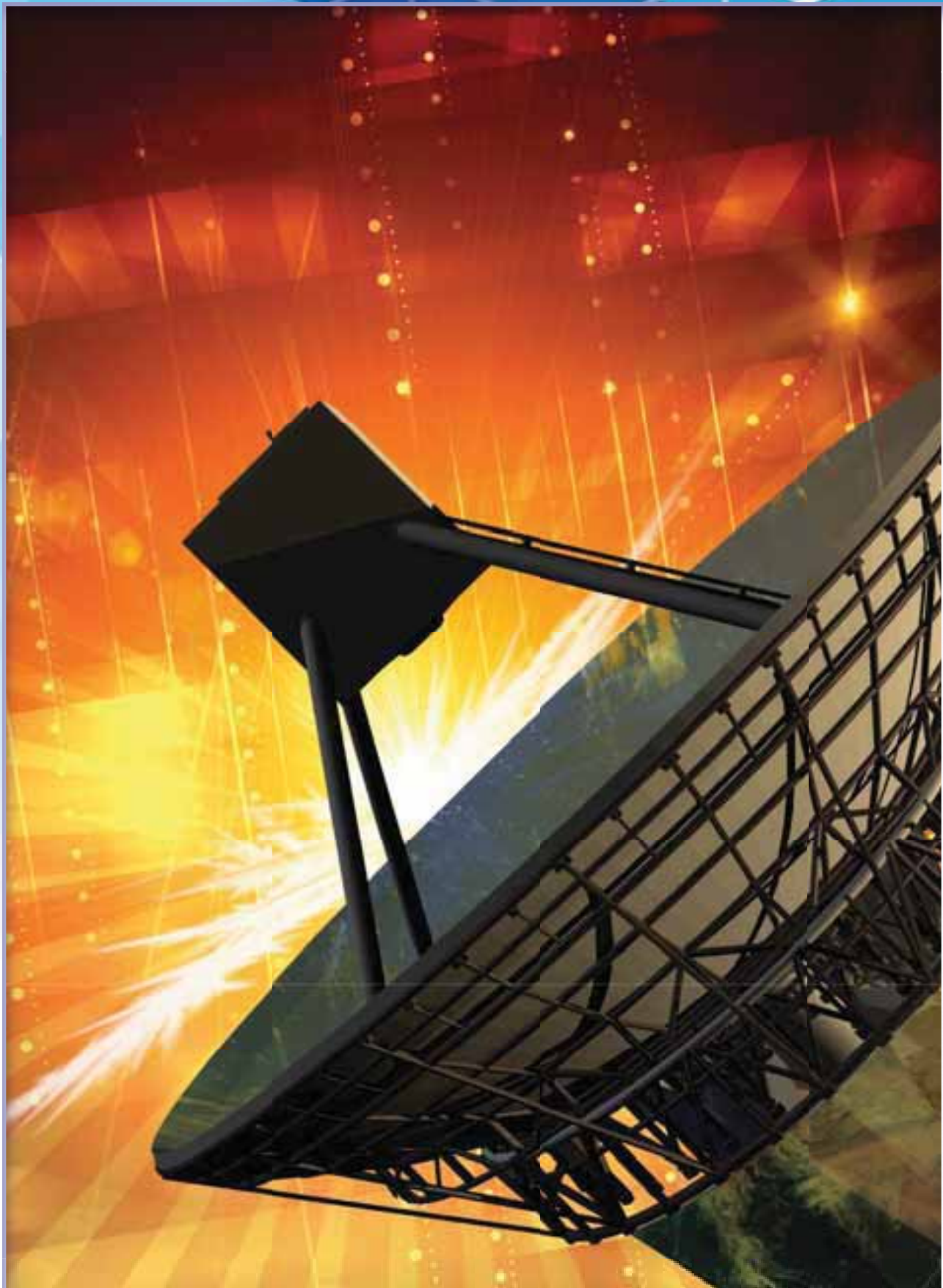
The number of applications has increased significantly compared to previous years, probably owing to the changes introduced in the administration of the incentive during the period under review, which seem to have been widely welcomed by the business sector and made the incentive attractive to new participants.

Including these new participants (i.e. the 224 companies that applied for the first time during 2012/13), the incentive has now seen participation from 701 companies. The overall total R&D supported in these companies from November 2006 to February 2013 is estimated at R22,9 billion, of which R833 million (3,6%) was reported by companies as additional R&D investment induced by the incentive.

The increased number of applications, particularly under the new preapproval process, required the DST to make an extra effort and implement measures to ensure a positive experience for companies in terms of turnaround times for decisions, certainty and strategic impact.

The adjudication process for applications received from October 2012 started in January 2013, but unfortunately moved at a slow pace. The process started gaining momentum in July 2013. It is anticipated that the DST will review the turnaround time considerably during 2014, to within 120 days from receipt of an application.





Annexures

Annexure A: Definitions of fields of science

Agricultural Science is a broad multidisciplinary field that encompasses parts of exact, natural, economic and social sciences that are used in the practice and understanding of agriculture.

Animal Science is a study of the biology of animals that are under the control of humankind.

Biological Science is a branch of science that is defined as the study of life. It provides the fundamental study for the biotechnology industry. Biological science has a great impact on our lives and stands to have an even bigger impact in the future.

Chemical Science consists of a diversity of disciplines in pharmaceuticals, polymers, paints and coatings, household and personal care products, etc.

Environmental Science is an interdisciplinary academic field that integrates physical and biological sciences (including ecology, physics, chemistry, biology, soil science, geology, atmospheric science and geography) into the study of the environment and finding solutions to environmental problems. Environmental science provides an integrated, quantitative and interdisciplinary approach to the study of environmental systems.

Food Science is a study concerned with all the technical aspects of food, beginning with harvesting or slaughtering and ending with cooking and consumption.

Forestry Science is the scientific management of forests for the production of lumber and other resources. It is the science of cultivating, maintaining and developing forests.

Geographical Information System Science includes the design of systems to capture, store, manipulate, analyse, manage and present all types of geographically referenced data.

Geological Science is the science comprising the study of the Earth, the rocks of which it is composed, and the processes by which it evolves. It is commercially important for mineral and hydrocarbon exploration and for evaluating water resources.

Industrial Science is made up of multidisciplinary fields, e.g. a combination of information technology, physical science and machine development that advances industries.

Materials Science is an interdisciplinary field that applies the properties of matter to various areas of science and engineering. It investigates the relationship between the structure of materials at atomic or molecular scale and their macroscopic properties. It incorporates elements of applied physics and chemistry.

Mathematical Science refers to disciplines that are mathematical in nature. It includes fields like computer science, computational science, statistics, theoretical physics and actuarial science.

Metallurgical Science refers to disciplines concerned with the science and technology of metals and alloys. It includes fields such as process metallurgy, physical metallurgy and mechanical metallurgy.

Physical Science is any of the sciences that analyse the nature and properties of energy and non-living matter, e.g. physics, chemistry, astronomy and geology.

Annexure B: Description of Standard Industrial Classification (SIC) codes

Major division	Division	Description
10000	10000	Agriculture, Hunting, Forestry and Fishing
	11000	Agriculture, hunting and related services
	12000	Forestry, logging and related services
	13000	Fishing, operation of fish hatcheries and fish farms
20000	20000	Mining and Quarrying
	21000	Mining of coal (hard) and lignite (brown coal)
	22000	Extraction of crude petroleum oils and natural gas; service activities incidental to oil and gas extraction, excluding surveying
	23000	Mining of gold and uranium ore
	24000	Mining of metal ores, except gold and uranium ore
	25000	Other mining and quarrying
	29000	Service activities incidental to mining of minerals
30000	30000	Manufacturing
	30000	Manufacture of food products, beverages and tobacco products
	31000	Manufacture of textiles, clothing and leather goods
	32000	Manufacture of wood and of products of wood and cork, (except furniture); manufacture of articles of straw and plaiting materials; manufacture of paper and paper products; manufacture of publishing, printing and reproduction of recorded material
	33000	Manufacture of coke, refined petroleum products and nuclear fuel; manufacture of chemicals and chemical products; manufacture of rubber and plastic products
	34000	Manufacture of non-metallic mineral products
	35000	Manufacture of basic metals, fabricated metal products, machinery and equipment, and office, accounting and computing machinery
	36000	Manufacture of electrical machinery and apparatus not elsewhere classified
	37000	Manufacture of radio, television and communication equipment and apparatus, medical, precision and optical instruments, watches and clocks
	38000	Manufacture of transport equipment
	39000	Manufacture of furniture; manufacturing not elsewhere classified; recycling
	40000	Electricity, Gas and Water Supply
	41000	Electricity, gas, steam and hot water supply
	42000	Collection, purification and distribution of water
50000	50000	Construction
	50000	Construction
60000	60000	Wholesale and Retail Trade; Repair of Motor Vehicles, Motorcycles and Personal and Household Goods; Hotels and Restaurants

	61000	Wholesale and commission trade, except of motor vehicles and motorcycles
	62000	Retail trade, except of motor vehicles and motorcycles; repair of personal household goods
	63000	Sale, maintenance and repair of motor vehicles and motorcycles; retail trade in automotive fuel
	64000	Hotels and restaurants
70000	70000	Transport, Storage and Communication
	71000	Land transport; transport via pipelines
	72000	Water transport
	73000	Air transport
	74000	Supporting and auxiliary transport activities; activities of travel agencies
	75000	Post and telecommunication
80000	80000	Financial Intermediation, Insurance, Real Estate and Business Services
	81000	Financial intermediation, except insurance and pension funding
	82000	Insurance and pension funding, except compulsory social security
	83000	Activities auxiliary to financial intermediation
	84000	Real estate activities
	85000	Renting of machinery and equipment, without operator, and of personal and household goods
	86000	Computer and related activities
	87000	Research and experimental development
	88000	Other business activities
90000	90000	Community, Social and Personal Services
	91000	Public administration, compulsory social security and defence activities
	92000	Education
	93000	Health and social work
	94000	Sewage and refuse disposal, sanitation and similar activities
	95000	Activities of membership organisations not elsewhere classified
	96000	Recreational, cultural and sporting activities
	99000	Other service activities

Annexure C: Categories of R&D personnel

Scientists and researchers are professionals engaged in the conception or creation of new knowledge, products, processes, methods and systems, as well as the management of the projects concerned. They typically hold a basic university degree or a postgraduate degree, with some holding a PhD.

Technicians and technologists are people whose main tasks require technical knowledge and experience in one or more fields of engineering, physical and life sciences. They participate in R&D by performing scientific and technical tasks involving the application of concepts and operational methods, usually under the supervision of researchers.

Managers are involved in the planning and management of scientific and technical aspects of the researchers' work. Their rank is usually equal or superior to those of the researchers and they are often former or part-time researchers.

Directly supporting technical staff includes associate professionals in physical and engineering sciences whose tasks include –

- carrying out bibliographic searches and selecting relevant material from archives and libraries;
- preparing computer programs;
- carrying out experiments, tests and analyses;
- preparing materials and equipment for experiments, tests and analyses;
- recording measurements, doing calculations and preparing charts and graphs; and
- carrying out statistical surveys and interviews.

Annexure D: Summary of R&D Tax Incentive Programme (Nov. 2006 to Feb. 2013)

Table 11: Total forms received by DST (Nov. 2006 to Feb. 2013)

Reporting year	Retrospective submission forms	Applications for preapproval	Total number of forms received by DST
2006-2007	0		0
2007-2008/2008-2009	80		80
2009-2010	332		332
2010-2011	303		303
2011-2012	311		311
2012/13	495	306	801
TOTAL	1 521	306	1 827

Table 12: Number of companies per SIC code (Nov. 2006 to Feb. 2013)

Industry Sector (SIC code and description)	Number of companies	% of total
10000 - Agriculture, Hunting, Forestry and Fishing	60	8,6
20000 - Mining and Quarrying	184	26,2
30000 to 39 000 - Manufacturing	50	7,1
40000 - Electricity, Gas and Water Supply	27	3,9
50000 - Construction	42	6,0
60000 - Wholesale and Retail Trade	23	3,3
70000 - Transport, Storage and Communication	20	2,9
80000 - Financial Intermediation, Real Estate and Business Services	64	9,1
90000 - Community, Social and Personal Services	231	33,0
TOTAL	701	100

Table 13: Number of companies by turnover size (Nov. 2006 to Feb. 2013)

Annual turnover range (in R'million)	Number of companies	% of total
Turnover not indicated	35	5,0
10 and below	31	4,4
10 to 15	423	60,3
15-20	12	1,7
20-30	6	0,9
30-40	4	0,6
40-50	32	4,6
50-100	259	36,9
100 and above	8	1,1
TOTAL	701	100

Table 14: Reported R&D expenditure supported by the R&D tax incentive (Nov. 2006 to Feb. 2013)

Reporting period	R&D expenditure based on retrospective submissions		R&D budget based on preapproval process
	Total R&D expenditure incurred (R'000)	Amount indicated by companies as eligible R&D expenditure (R'000)	Estimates of R&D budgets on preapproval applications (R'000)
2006/07	27 627	9 226	n/a
2007/08	2 640 548	1 717 467	n/a
2008/09	3 445 910	2 652 010	n/a
2009/10	3 990 181	3 428 144	n/a
2010/11	2 897 459	2 499 893	n/a
2011/12	4 830 141	3 755 205	n/a
2012/13	5 128 639	1 997 546	9 021 159
Total	22 960 506	16 059 491	9 021 159

Table 15: R&D expenditure by type of research Nov. 2006 to Feb. 2013 (retrospective basis)

Categories of Research	Eligible R&D expenditure (R' 000)
Basic Research	436 603
Applied Research	2 734 471
New Product Development	9 038 068
Product Improvement	3 850 348
Total	16 059 491

Table 16: Overall R&D expenditure per industry sector (Nov. 2006 to Feb. 2013)

Industry sector (SIC code and description)	Retrospective submissions		Preapproval applications	
	R&D expenditure (R'000)	% of total	R&D expenditure planned (R'000)	% of total
10000 - Agriculture, Hunting, Forestry and Fishing	1 047 873	4,6	253 500	2,8
20000 – Mining and Quarrying	1 370 264	6,0	2 364 864	26,2
30000 to 39000 – Manufacturing	15 164 083	66,0	2 423 013	26,9
40000 – Electricity, Gas and Water Supply	924 830	4,0	64 250	0,7
50000 – Construction	76 264	0,3	500	0,006
60000 – Wholesale and Retail Trade	84 061	0,4	2 455	0,003
70000 – Transport, Storage and Communication	1 140 872	5,0	592 532	6,6
80000 – Financial Intermediation, Real Estate and Business Services	3 080 474	13,4	3 310 631	36,7
90000 - Community, Social and Personal Services	71 785	0,3	9 413	0,1
TOTALS	22 960 506	100	9 021 159	100

Table 17: R&D expenditure supported per field of science (Nov. 2006 to Feb. 2013)

Field of science	Retrospective submissions				Preapproval applications			
	R&D expenditure (R'000)	% of total	Eligible R&D expenditure (R'000)	% of total	Planned R&D expenditure (R'000)	% of total	Budgeted R&D expenditure to complete projects (R'000)	% of total
Industrial Science	7 430 495	32,4	3 987 134	24,8	1 646 818	16,2	1 502 126	16,7
Agricultural Science	1 010 347	4,4	830 323	5,2	182 516	1,8	253 500	2,8
Geographical Information System Science	270 888	1,2	269 974	1,7	101 239	1,0	14 239	0,2
Biological Science	243 587	1,1	215 278	1,3	0	0,0	0	0,0
Mathematical Science	2 032 862	8,9	1 935 216	12,1	4 345 891	42,6	3 863 605	42,8
Physical Science	1 649 903	7,2	1 494 386	9,3	393 991	3,9	380 911	4,2
Animal Science	27 999	0,1	27 990	0,2	0	0,0	0	0,0
Chemical Science	6 586 371	28,7	4 395 246	27,2	695 622	6,8	319 690	3,5
Geological Science	224 743	0,9	180 613	1,1	238 919	2,3	1 303 679	14,5
Metallurgical Science	1 801 152	7,8	1 522 581	9,5	2 064 093	20,2	1 100 723	12,2
Food Science	759 797	3,3	330 618	2,1	318 422	3,1	122 792	1,4
Materials Science	379 264	1,7	328 652	2,1	116 995	1,1	67 495	0,7
Environmental Science	516 919	2,3	515 655	3,2	0	0,0	0	0,0
Forestry Science	1 578	0,01	1 228	0,01	0	0,0	0	0,0
Soil Science	420	0,002	420	0,003	0	0,0	0	0,0
Earth Science	18 851	0,08	18 851	0,1	0	0,0	0	0,0
Water Care Science	4 395	0,02	4 395	0,03	60 000	0,6	60 000	0,7
Hydrological Science	933	0,004	933	0,01	0	0,0	0	0,0
Marine Science	0	0,00	0	0,00	32 400	0,3	32 400	0,4
Total	22 960 506	100	16 059 491	100	10 196 905	100	9 021 159	100

Table 18: contribution to IPAP priority areas (Nov. 2006 To Feb. 2013)

Clusters according to IPAP	Retrospective submissions		Preapproval applications	
	R&D expenditure (R'000)	Eligible R&D expenditure (R'000)	Planned expenditure (R '000)	Annual R&D budget (R '000)
Cluster 1 - Qualitatively new areas of focus				
1. Realising the potential of the Metal Fabrication, Capital and Transport Equipment Sectors, particularly arising from large public investment	1 208 223	1 204 902	317 797	738 462
2. Upstream Oil and Gas	2 598 843	2 099 259	1 300	1 300
3. Green' and Energy-saving Industries	35 057	23 173	0	0
4. Agroprocessing, linked to food security and food pricing imperatives	379 436	180 889	318 422	122 792
5. Boat Building	0	0	32 400	32 400
Totals for Cluster 1	4 221 559	3 508 223	669 919	894 954
Cluster 2 - Scale up and broaden interventions in existing IPAP sectors				
1. Automotives, Components, Medium and Heavy Commercial Vehicles	3 321 901	303 589	386 787	95 300
2. Chemicals, Cosmetics, Pharmaceuticals and Plastics	3 879 517	2 238 099	692 822	317 640
3. Clothing, Textiles, Footwear and Leather	355	355	1 700	2 300
4. Biofuels	0	0	0	0
5. Forestry, Paper, Pulp and Furniture	256 300	238 639	14 254	147 436
6. Creative and Cultural Industries	0	0	0	0
7. Business Process Services	1 172 476	1 166 134	25 200	25 200
Totals for Cluster 2	8 630 548	3 946 816	1 120 763	587 875
Cluster 3 - Sectors with potential for the development of long-term advanced capabilities				
1. Nuclear	62 516	62 516	0	0
2. Advanced Materials	243 761	243 730	0	0
3. Aerospace, Defence	464 729	341 746	181 500	100 887
4. Electrotechnical and ICT	3 678 988	2 993 322	4 135 510	3 312 818
Totals for Cluster 3	4 449 994	3 641 315	4 317 010	3 413 705
TOTAL	17 302 101	11 096 353	6 107 692	4 896 534

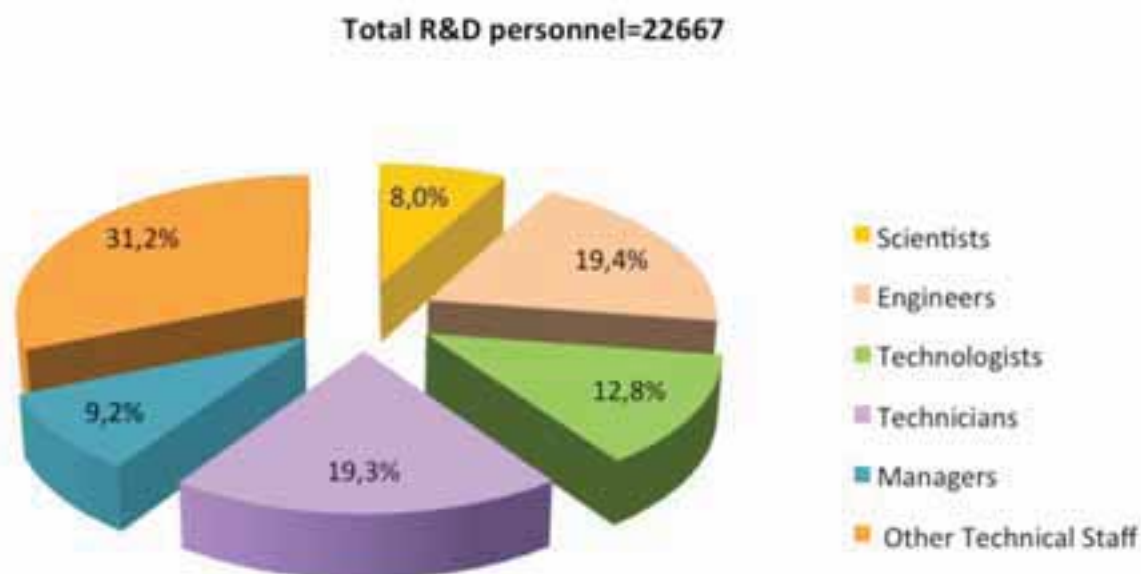


Figure 5: R&D personnel distribution (Nov. 2006 to Feb. 2013)

Annexure E: Methodology

This report is based on submissions and applications received by the DST from companies that reported their claims and their applications for approval in terms of the R&D Tax Incentive Programme under section 11D of the Income Tax Act, 1962, for the period 1 March 2012 to 28 February 2013.

Data is collected in accordance with the requirements of section 11D(11) of the Income Tax Act using a form prescribed by the DST. In the retrospective process, the taxpayer completed the form manually and returned it to the DST within six months of its financial year-end. Since the changes to the legislation, companies apply for preapproval on a different form. Data is captured in the R&D Tax Incentive Programme database at the DST. At the very least, the forms collect information on the following:

- Particulars of the taxpayer, including the industrial activity in which they are involved.
- A summary of projects and R&D activities, indicating the nature of R&D and its classification in terms of fields of science, with supporting information such as R&D documentation, publications and registered patents.
- R&D expenditure and which components of R&D activities are contracted out.
- Information on sources of funds for R&D activities, the nature of government grants received, and the personnel involved in the R&D projects.

The data on R&D expenditure distinguishes between the R&D expenditure that is eligible under this programme and the overall R&D expenditure incurred by the company. This distinction is important because not all the R&D-related expenditure incurred by companies is eligible under the R&D Tax Incentive Programme.

For the applications companies have to report on their annual R&D budget and the estimated R&D budget, which in many companies spans a period of two to three years. Data on tax revenue foregone due to the R&D Tax Incentive Programme is estimated by SARS on the basis of deductions made against the claims for the R&D tax incentive. These figures are published by the National Treasury in its annual budget review as part of the estimates for tax expenditure. Available figures are for the years 2005/06 to 2011/12, and include deductions in terms of both section 11D and section 11B. Annual figures are revised from time to time on the basis of retrospective claims.

Annual data stated in the report represents the totals that were available at the time of compiling the report. This data is revised from time to time as claims for previous years are included. The primary reason for this is that companies are allowed to submit their forms years later than their claiming period. Their data will have to be captured appropriately to reflect the years in which the R&D expenditure was incurred.

The Income Tax Act requires that the information be presented in an aggregated and anonymous form. Care is therefore taken to ensure that the tables and graphs in the report do not unintentionally reveal the details of individual companies and their R&D activities.

It is also important to note that in 2013 many companies participated in both administrative processes. Regardless of how many applications or submissions a company has sent to the DST, each company is counted only once for the 2012/13 review period.

The R&D Tax Incentive database is arranged in a manner that enables reporting according to the SIC codes published by Statistics South Africa and the scientific areas of research as defined in the South African Council for Natural Scientific Professions Act, 2003. These levels of categorisation enable an analysis of the performance of the R&D Tax Incentive Programme in terms of the number of companies benefiting from the incentive, the R&D expenditure supported and the contribution to different areas of impact, for instance the different sectors and industries – including IPAP focus areas – the nature of R&D supported and the research fields, as well as companies' perceptions of how the R&D Tax Incentive Programme is influencing their R&D investment behaviour.



