

**Technical Indicator Descriptors (TIDs) 2017/18
Programme 5: Socio-Economic Partnerships^{v2}**

Performance Indicator 1:

Medium-term objectives, measure/indicator, outputs, and targets	Output Name Knowledge products ¹	Date 31 March 2018
1. Overview of the objective, output, measure / indicator and target to be reported on		
Programme #	Programme 5	
Programme's Strategic Objectives (as per the Strategic Plan and the annual Performance Plans)	Through knowledge, evidence and learning, to inform and influence how science and technology can be used to achieve inclusive development.	
Indicator title	Number of knowledge products on innovation for inclusive development published.	
Purpose of indicator	The purpose of the indicator is to provide the knowledge and evidence required by decision-makers in order to adopt a new technology-based approach	Type of indicator Output
Measure / Indicator Definition	Knowledge products include Case	Measure / Indicator Formula A=B+C+D+E+ Where

¹ Knowledge products refer to case studies, policy briefs, technology briefs and research reports. Different knowledge products may be required to provide the knowledge and evidence required by decision-makers in order to adopt a new technology-based approach. A policy brief is a document that outlines the rationale for selecting a particular policy alternative and aims to convince the target audience that an existing problem can be addressed by adopting an alternative policy alternative or alternative course of action. A case study is a detailed description and exploration of a particular project, with a specific focus on challenges, lessons, and success factors, and is usually targeted to people involved in implementation. A research report refers to a document that presents research undertaken to address a particular issue of concern. A technical brief refers to a range of knowledge products providing performance data, that deals with specifications or which deal with a specific technical challenge that can impact on the adoption of a particular technology. A single project or initiative can support the production of several of the knowledge products described above. Knowledge products can also be supported by a decision-support intervention. A knowledge product has to meet the needs of a particular user-community and therefore requires significant interaction to determine what would be of value

studies, policy briefs, technology briefs, research reports.

Different knowledge products may be required to provide the knowledge and evidence required by decision-makers in order to adopt a new technology-based approach. A policy brief is a document that outlines the rationale for selecting a particular policy alternative and aims to convince the target audience that an existing problem can be addressed by adopting an alternative policy alternative or alternative course of action. A case study is a detailed description and exploration of a particular project, with a specific focus on challenges, lessons, and success factors, and is usually targeted to people involved in implementation. A technical brief

A= total number of the Knowledge product

B= Policy briefs

C= Case Studies

D= Technology briefs

E= Research reports

	refers to a range of knowledge products providing performance data, that deals with specifications or which deal with a specific technical challenge that can impact on the adoption of a particular technology		
New Indicator	Continues without much change from the previous year	Desired performance	Higher performance
Measure / Indicator Owner	Chief Director: Innovation for Inclusive Development	Worked example	Total number of policy studies = 1 knowledge product
Target set for current year	<p>Annual: 6 knowledge products on innovation for inclusive development published by 31 March 2018</p> <p>Quarterly: Q1 –Through consultation and review, identify the topics and format of the 6 new knowledge products by 30 June 2017</p> <p>Q2 – First draft of the 6 identified policy briefs</p>	Target achieved	<p>Actual target achieved.</p> <p>Q1 –</p> <p>Q2 –</p> <p>Q3 –</p> <p>Q4 –</p> <p>YTD - :</p>

	<p>on innovation for inclusive development developed by 30 September 2017</p> <p>Q3 –Validation and engagement on the 6policy briefs concluded by 31 December 2017</p> <p>Q4 –6 knowledge products on innovation for inclusive development published.</p>	
Data limitations	None as yet	
Reasons for variances between the target set and actual achieved	None as yet	

2. Collection of source data to enable effective reporting on the adopted output measure / Indicator	
Source data	<ul style="list-style-type: none"> • Minutes of engagements on knowledge products • Draft copies of knowledge products identified • Contracts with implementing agencies • Submission to CD to approve publishing (at year end) • Approval for knowledge products for financial year
Collection Frequency of Source data	Quarterly.

Archiving of Source Data		Project folder on Alfresco or project file.	
Type of information to be extracted from the source data		Information from projects as required for the identified case studies.	
IT Systems/ Tools used to capture extracted data		Excel Spreadsheets / Word documents.	
Source Data Capturing Frequency		Quarterly.	
Individual(s) responsible for collecting the source data	DD: Sustainable Livelihoods DD: Sustainable Human Settlements	Individual(s) responsible for filing/archiving the collected source data	DD: Sustainable Livelihoods DD: Sustainable Human Settlements
Individual(s) responsible for extracting the required information from the source data	DD: Sustainable Livelihoods DD: Sustainable Human Settlements	Individual(s) responsible for verifying the accuracy and completeness of the extracted information	D: Sustainable Livelihoods D: Sustainable Human Settlements
Individual(s) responsible for capturing the extracted information onto the IT System	DD: Sustainable Livelihoods DD: Sustainable Human Settlements	Individual(s) responsible for verifying the accuracy and completeness of the captured information	D: Sustainable Livelihoods D: Sustainable Human Settlements

3. Quarterly and Annual Reporting of Collected/ Extracted Performance Information			
Performance Information Source		Project folder on Alfresco or project file and Excel Spreadsheets / Word documents..	
Type of performance information to be extracted/ used		Information from projects as required for the identified case studies./	
Calculations required on extracted information		The sum of the knowledge products published.	
Archiving of Extracted / Recalculated Information		Project folder on Alfresco or project file and Excel Spreadsheets / Word documents.	
Return Format		Excel Spreadsheets / Word documents.	
Reporting Frequency		Quarterly.	
Individual(s) responsible for extracting, calculating and consolidating the reported performance information	DD: SL DD: SHS	Individual(s) responsible for verifying the accuracy and completeness of the extracted	D: SL D: SHS



		performance information	
Individual(s) responsible for archiving the extracted/ recalculated performance information	DD: SL DD: SHS	Individual(s) responsible for sending the information in the required return format to the -----	D: SL D: SHS

Performance Indicator 2:

Medium-term objectives, measure/indicator, outputs, and targets	Output Name Decision-support interventions	Date 31 March 2018
1. Overview of the objective, output, measure / indicator and target to be reported on		
Programme #	Programme 5	
Programme's Strategic Objectives (as per the Strategic Plan and the annual Performance Plans)	Through knowledge, evidence and learning, to inform and influence how science and technology can be used to achieve inclusive development.	
Indicator title	Number of decision-support interventions introduced and maintained	
Purpose of indicator	To measure the number of decision support interventions introduced, maintained and improved to transform rural, peri-urban and socio-economic development	Type of indicator Output Indicator
Measure / Indicator Definition	Decision support interventions help people think about choices they face; they describe where and why choice exists; they provide information about options, including,	Measure / Indicator Formula A=B+C Where A= total number of decision interventions B= decision intervention introduced C=Decision intervention maintained or improved

	<p>where reasonable, the option of taking no action. These interventions aim to help people to deliberate, independently or in collaboration with others, about options by considering relevant attributes to help them forecast how they might feel about short, intermediate and long-term outcomes, which have relevant consequences. They support the process of constructing preferences and eventual evidence-informed decision making, appropriate to their individual situation.</p>		
New Indicator	No	Desired performance	Higher performance is desired
Measure / Indicator Owner	CD: Innovation for Inclusive Development.	Worked example	7 decision support interventions = 7 maintained
Target set for current year	<p>Annual: 8 decision-support systems introduced, maintained and improved by 31 March 2018</p> <p>Quarterly:</p>	Target achieved	<p>Actual target achieved.</p> <p>Q1 –</p> <p>Q2 –</p> <p>Q3 –</p> <p>Q4 –</p> <p>YTD - :</p>

Q1 - Monitor the implementation of the work plans for the 7 existing decision support systems and identify one additional decision-support system by 30 June 2017

Q2 - Monitor the implementation of the work plans for the 7 existing decision support systems and approval finalised for one additional decision support system by 30 September 2017

Q3 - Monitor the implementation of the work plans for the 7 existing decision support systems and contract finalised for one additional decision support system by 31 December 2017

	Q4 - 8 decision-support interventions introduced and maintained		
Data limitations	Identifies any limitation with the indicator data, including factors that might be beyond the department's control; Exception to evidence related to decision support tools that have been conceptualised and defined internally in the department. These would not have contracts and ToR.		
Reasons for variances between the target set and actual achieved	None at this stage		

2. Collection of source data to enable effective reporting on the adopted output measure / Indicator

Source data	<ul style="list-style-type: none"> Progress reports - Q1 Report, Half Year Report, Q3 Report, and Annual Reports from implementing agencies, including CSIR and HSRC these reports identify the ones that were introduced, maintained or improved Contracts with implementing agencies Approved TOR Proposals from the implementing agencies Presentations in project meetings Minutes of Bilateral meetings where applicable 		
Collection Frequency of Source data	Quarterly		
Archiving of Source Data	Alfresco.		
Type of information to be extracted from the source data	Decision support intervention information as per case study specification.		
IT Systems/ Tools used to capture extracted data	MS Word and MS Excel. PowerPoint		
Source Data Capturing Frequency	Quarterly		
Individual(s) responsible for collecting the source data	DD: Human Settlements	Individual(s) responsible for filing/archiving the collected source data	DD: Human Settlements
Individual(s) responsible for extracting the required	DD: Human Settlements	Individual(s) responsible for	D: Human Settlements

Information from the source data		verifying the accuracy and completeness of the extracted information	
Individual(s) responsible for capturing the extracted information onto the IT System	DD : Human Settlements	Individual(s) responsible for verifying the accuracy and completeness of the captured information	D: Human Settlements

3. Quarterly and Annual Reporting of Collected/ Extracted Performance Information			
Performance Information Source		Project folder on Alfresco or project file and Excel Spreadsheets / Word documents..	
Type of performance information to be extracted/ used		Information from projects as required for the identified case studies.	
Calculations required on extracted information		The sum of all decision interventions introduced, maintained and improved.	
Archiving of Extracted / Recalculated Information		The sum of all decision interventions introduced, maintained and improved.	
Return Format		Project folder on Alfresco or project file and Excel Spreadsheets / Word documents	
Reporting Frequency		quarterly	
Individual(s) responsible for extracting, calculating and consolidating the reported performance information	DD: : Human Settlements	Individual(s) responsible for verifying the accuracy and completeness of the extracted performance information	D: : Human Settlements
Individual(s) responsible for archiving the extracted/ recalculated performance information	DD: : Human Settlements	Individual(s) responsible for sending the information in the required return format to the -----	D: : Human Settlements

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Performance Indicator 3:

Medium-term objectives, measure/indicator, outputs, and targets		Output Name Learning interventions (seminars, lectures, learning forums) generated	Date 31 March 2018
1. Overview of the objective, output, measure / indicator and target to be reported on			
Programme #		Programme 5	
Programme's Strategic Objectives (as per the Strategic Plan and the annual Performance Plans)		Through knowledge, evidence and learning, to inform and influence how science and technology can be used to achieve inclusive development.	
Indicator title		Number of learning interventions (seminars briefs and policy papers) generated	
Purpose of indicator	To measure the number of learning interventions aimed at informing and influencing technology choices and how alternative technologies and scientific approaches can be used to advance inclusive development as defined in the multi-dimensional human development framework of the National Development Plan (NDP)	Type of indicator	Output
Measure / Indicator Definition	In this context a learning intervention refers to a event conceptualised and/ or	Measure / Indicator Formula	A=B+C+D+E Where A = Total number of learning interventions B = seminars C = lectures

resourced by the DST. The learning intervention can be organised and run by an implementing agency contracted by the DST or by the DST itself. The DST can also partner with other organisations in organising the event or in presenting an evidence-based position at an event.

The event is structured in terms of a number of formats (including but not limited to seminars, lectures, learning interventions, or a policy dialogue).

Notwithstanding the specific format used, the intention is to bring together a select group of knowledgeable researchers, policy analysts, experts, or practitioners to advance collective understanding on a specific theme aligned to the strategic

D = learning forums
E = Policy dialogue

	<p>objective.. Each learning intervention is unique with respect to the format used and the group of participants. (seminars, lectures, learning forums, and policy dialogues)</p>		
New Indicator	<p>Was in 2014/15 APP but was erroneously left out in 2015/16. Included once again in 2016/17</p>	Desired performance	<p>The desired performance is a combination of the number of learning interventions delivered as well as the contribution made by the learning intervention to enabling positive change in policy or practice. Due to the nature of policy and practice, the latter can only be effectively assessed over the medium term on a case-by-case basis.</p>
Measure / Indicator Owner	CD: IID	Worked example	<p>Total number of learning interventions (9) = Seminars (4) + lectures (1) + learning forums (2) + policy dialogues (2)</p>
Target set for current year	<p>Annual: 9 learning interventions (seminars) generated by 31 March 2018 generated by 31 March 2017</p> <p>Quarterly: Q1 – Conclusion of</p>	Target achieved	<p>Actual target achieved. Q1 – Q2 – Q3 – Q4 – YTD -:</p>

	<p>contract for coordination of the learning interventions by 30 June 2017</p> <p>Q2 – 2 learning interventions generated by 30 September 2017</p> <p>Q3 – 3 additional learning interventions bringing the total to five for the year</p> <p>Q4 – 4 additional learning interventions bringing the total to 9 for the year</p>	
Data limitations	No major data limitations	
Reasons for variances between the target set and actual achieved	None at this stage	

2. Collection of source data to enable effective reporting on the adopted output measure / indicator	
Source data	<p>Quarter 1 – signed contracts with implementing agencies for outsourced learning interventions</p> <p>Quarter 2 – 4 - Signed learning intervention report for each learning intervention compiled by the organiser (implementing agency or DST) that includes the following minimum information:-</p> <p>Organiser, date of learning intervention, format, venue, programme, participants, summary of issues raised</p>

Collection Frequency of Source data		Quarterly	
Archiving of Source Data		Project folder on Alfresco labelled IID learning interventions	
Type of information to be extracted from the source data		Summary information to be listed in a formal summary register using an Excel worksheet in the Strategic Objective 1 workbook (Alfresco document number – xxxx) that includes the following five columns:- organiser, date of learning intervention, format, venue, Alfresco number of the signed learning intervention report.	
IT Systems/ Tools used to capture extracted data		Word documents, Excel worksheets, Alfresco..	
Source Data Capturing Frequency		Quarterly.	
Individual(s) responsible for collecting the source data	DD: Sustainable Livelihoods DD: Sustainable Human Settlements DD: Environmental Services and Technologies DD: ICT	Individual(s) responsible for filling/ archiving the collected source data	DD: Sustainable Livelihoods DD: Sustainable Human Settlements
Individual(s) responsible for extracting the required information from the source data	DD: Sustainable Livelihoods DD: Sustainable Human Settlements DD: Environmental Services and Technologies DD: ICT	Individual(s) responsible for verifying the accuracy and completeness of the extracted information	D: Sustainable Livelihoods D: Sustainable Human Settlements D: Environmental Services and Technologies D: ICT
Individual(s) responsible for capturing the extracted information onto the IT System	DD: Sustainable Livelihoods DD: Sustainable Human Settlements	Individual(s) responsible for verifying the accuracy and completeness of the captured information	D: Sustainable Livelihoods D: Sustainable Human Settlements

	DD: Environmental Services and Technologies DD: ICT		D: Environmental Services and Technologies D: ICT
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3. Quarterly and Annual Reporting of Collected/ Extracted Performance Information			
Performance Information Source		Individual signed learning intervention reports	
Type of performance information to be extracted/ used		Organiser, date of learning intervention, venue, format, Alfresco number for signed learning intervention report	
Calculations required on extracted information		Total Number of learning interventions broken down by quarter and format	
Archiving of Extracted / Recalculated Information		Summary table in Programme 5 Strategic Objective 1 workbook	
Return Format		Excel Spreadsheets / Word documents.	
Reporting Frequency		Quarterly.	
Individual(s) responsible for extracting, calculating and consolidating the reported performance information	D: Office of the DDG	Individual(s) responsible for verifying the accuracy and completeness of the extracted performance information	CD: IID
Individual(s) responsible for archiving the extracted/ recalculated performance information	D: Office of the DDG		

Performance Indicator 4

Medium-term objectives, measure/indicator, outputs, and targets		Output Name High-level human capital developed in the dedicated niche areas that support the green economy and sustainable development	Date 31 March 2018
1. Overview of the objective, output, measure / indicator and target to be reported on			
Programme #		Programme 5	
Programme's Strategic Objectives (as per the Strategic Plan and the annual Performance Plans)		S&T for sustainable development and a green economy	
Statement and definition (also supported by Indicator Definitions)		To identify, grow and sustain niche high-potential STI capabilities for sustainable development and the greening of society and the economy.	
Indicator title		Number of honours, master's and doctoral students fully funded or co-funded in designated niche areas that support the greening of society and the economy and sustainable development by 31 March 2018.	
Purpose of indicator	To measure the output of the human capital development programmes of the EST and SLI units.	Type of indicator or	Output.
Measure / Indicator Definition	High-level human capital refers to Honours, Master's and Doctoral students funded or co-funded by the DST. The niche areas identified to support the green economy and sustainable development includes the water and waste sectors, the emerging environmental infrastructure sector as well as the sector	Measure / Indicator Formula	^{Honours} Masters' or Doctoral students refer to full-time or part-time students formally registered for a Masters or Doctoral degree at a University or a University of Technology. These registered can be co-funded (this is where DST only pays a portion of the students fees).

	innovation fund (SIF) and industrial innovation partnership (IIP).		<p>The indicator includes relevant students funded under the Industry Innovation Partnership (IIP) and the Sector Innovation Funds (SIF) in addition to all students funded within the programmes of the EST Directorate.</p> <p>The Indicator counts the total number of Masters and Doctoral students that receive DST funding, over the period of a financial year.</p>
New Indicator	No.	Desired performance	Higher performance is desired.
Measure / Indicator Owner	Chief Director: Sector Innovation and Green Economy (SIGE)	Worked example	<p>If 10 Masters and or Doctoral students are funded in Q1 and a student drops out during the course of the financial year, then the total number of supported students will still be 10, provided that student received funding or co-funding during that period.</p> <p>Alternatively, if Q1 reports 10 students funded/co-funded and Q2, Q3 and Q4 reports 9 students, the annual number of students (reflected in the annual report) will be maximum number of any quarter, resulting in 10 students being reported in the annual report.</p> <p>If a student who receives DST funding/co-funding completes his/her Masters qualification in Q3 and registers for a Doctoral qualification (and receives DST funding/co-funding) in Q4, it is counted as two students that are supported as the student is supported for two different qualifications.</p>
Target set for current year	Annual: 90 honours, master's and doctoral students fully funded or cofounded in designated	Target achieved	<p>Actual target achieved.</p> <p>Q1 –</p> <p>Q2 –</p> <p>Q3 –</p>

	<p>niche areas that support the green economy and sustainable development by 31 March 2018</p> <p>Quarterly:</p> <p>Q1 - Update and ongoing monitoring of students from the following initiatives by 30 June 2017: Waste RDI Roadmap Water RDI Roadmap Sector Innovation Fund Industrial Innovation Partnerships</p> <p>Q2 – Ongoing monitoring of the initiatives by 31 September 2017</p> <p>Q3 – Ongoing monitoring of the initiatives by 31 December 2017 Engage implementing agencies to ensure that the required new batch of students will be supported in the following academic year by 31 December 2017</p> <p>Q4 – 90 honours, master’s and doctoral students fully funded or co-funded in designated niche areas</p>	<p>Q4 – YTD - :</p>
<p>Data limitations</p>	<p>Proof of registration is often difficult to obtain in time for the quarter reporting cut-off (especially in Q1 and Q4), resulting in a lag of the reported students. We therefore only require the proof of registration for our annual audited number. During Quarter 1,2 and 3 the quarterly reports and/or letters to confirm students supported from the agencies are used for monitoring purposes</p>	
<p>Reasons for variances between the target set and actual achieved</p>	<p>The number of Honours, Masters and Doctoral students depends on suitable supervisors and the respective motivation of the students. Study at this level requires substantial commitment and personal effort to complete. Due to the fact that DST co-funded students are also counted, the number of students vary as DST funding are used to leverage other funds, resulting in more students that are funded – obviously a desirable state</p>	

2. Collection of source data to enable effective reporting on the adopted output measure / indicator

Source data	<p>The respective contracting managers at DST (Deputy Directors or Directors) are to ensure that the implementing agency is formally notified (in the contract, or through a separate letter) of all the required source documentation that needs to be submitted to the DST.</p> <p>Statements (Annual Report, or quarterly report as specified in the specific contract) from implementing agencies (e.g. CSIR, WRC, etc.) should contain the following minimum information:</p> <ul style="list-style-type: none"> • Confirmation of a student's participation in the DST funding programme, including year to date funding received by the end of the applicable financial year. • Information to verify the profile of the student (e.g. ID number, race and gender); course and year of enrolment. This should be sent to the relevant official at the DST upon first registration of the student. <p>The implementing agencies are required to submit the following documents to the DST:</p> <ul style="list-style-type: none"> • Proof of registration at a tertiary education institution for Masters or Doctoral degree upon first registration. Thereafter an annual statement indicating academic progress and confirming that the student is still enrolled in the programme at the respective University or University of Technology. • Summary record/statement of the funds disbursed per student and the respective period, to be provided at the end of the financial year (Q4). • A letter indicating graduation or withdrawal from the degree, whichever is applicable, at the time the event occurs.
Collection Frequency of Source data	<p>Entities funding students will collect data continuously, in order to always have the actual data available in time for the quarterly update or upon request to the DST. This data will be collated into a single reporting spreadsheet/record per implementing agency.</p> <p>Quarterly updates or reports, or as stated in the respective contracts will be provided by the implementing agencies to the DST.</p>
Archiving of Source Data	<p>Alfresco and hard copies in paper files.</p>
Type of information to be extracted from the source data	<p>Student personal details (name, surname; student number; gender and race information), Implementing agency: no of students funded/co-funded, and period of funding, Total number of students funded/co-funded.</p>
IT Systems/ Tools used to capture extracted data	<p>PIMS and Alfresco – reports stored in PDF, MS Word and MS Excel Spreadsheets</p>
Source Data Capturing Frequency	<p>Quarterly, per implementing agency. DST will update a quarterly record, submitted in PIMS of the actual number of students funded per investment area (e.g. advanced manufacturing, ICT, etc.), per quarter.</p>

	At the end of the financial year, the quarterly records, will be interrogated and the actual, maximum number of students per quarter will be used to calculate the total number of students funded or co-funded per financial y/year.		
Individual(s) responsible for collecting the source data	DDs: Green Economy and DD: Local Innovation	Individual(s) responsible for filing/archiving the collected source data	DDs: Green Economy and DD: Local Innovation
Individual(s) responsible for extracting the required information from the source data	DDs: Green Economy and DD: Local Innovation	Individual(s) responsible for verifying the accuracy and completeness of the extracted information	DDs: Green Economy and DD: Local Innovation
Individual(s) responsible for capturing the extracted information onto the IT System	DDs: Green Economy and DD: Local Innovation	Individual(s) responsible for verifying the accuracy and completeness of the captured information	D: EST and D: SLI

3. Quarterly and Annual Reporting of Collected/ Extracted Performance Information			
Performance Information Source	PIMS		
Type of performance information to be extracted/ used	Data base.		
Calculations required on extracted information	<p>The quarterly record will reflect the actual number of Masters and Doctoral students funded, or co-funded by the DST. The calculation will be the addition of all the above mentioned students funded under the Industry Innovation Partnership (IIP) and the Sector Innovation Funds (SIF) in addition to all students funded within the programmes of the EST Directorate.</p> <p>At the end of the financial year, the quarterly records will be interrogated and the actual, maximum number of students per quarter will be used to calculate the total number of students funded or co-funded per financial y year.</p>		
Archiving of Extracted / Recalculated Information	Alfresco		
Return Format	PDF		
Reporting Frequency	Quarterly and annual to reflect the final number of Masters and Doctoral students funded/co-funded by the DST.		
Individual(s) responsible for extracting, calculating and consolidating the	DDs: Green Economy and DD: Local Innovation	Individual(s) responsible for verifying the accuracy and completeness of the	D: EST and D: SLI

reported performance information		extracted performance information	
Individual(s) responsible for archiving the extracted/ recalculated performance information	DDs: Green Economy and DD: Local Innovation	Individual(s) responsible for sending the information in the required return format to the -----	CD: SIGE. Annual report will be verified by the DDG:SIP

Performance Indicator 5

Medium-term objectives, measure/indicator, outputs, and targets	Output Name Number of knowledge and innovation products	Date 31 March 2018
1. Overview of the objective, output, measure / indicator and target to be reported on		
Programme #	Programme 5	
Programme's Strategic Objectives (as per the Strategic Plan and the annual Performance Plans)	S&T for sustainable development and a green economy	
Objective Statement and definition (also supported by Indicator Definitions)	To identify, grow and sustain niche high-potential STI capabilities for sustainable development and the greening of society and the economy	
Indicator title	Number of knowledge and innovation products (patents, prototypes, technology demonstrators or technology transfer packages) added to the IP portfolio through fully funded or co-funded research initiatives	
Purpose of indicator	To capture and reflect the intermediate and final events/milestones/outputs that occur during the process of developing and maturing knowledge and/or technology. The term 'knowledge and innovation products' is used to describe those outputs generated during the process of maturing technologies and/or products, in order to support R&D led transition to a greener economy.	Type of indicator
		Output indicator – it measures the number of knowledge and innovation products generated in the course of developing and maturing technologies.

Measure / Indicator Definition	Number: the number of knowledge and innovation products. Knowledge and innovation product: the output (intermediate or final) of knowledge or innovation (process, market, product or improved service delivery) that is quantifiable (e.g. invention disclosure; patent; prototype; technology (transfer) package; technology demonstrator, etc.). It should be noted that different technologies/processes have slightly different phases and/or designated conventions/names. Intellectual Property (IP) Portfolio: The collection of IP products funded/co-funded by DST. The IP products may be related or unrelated to the progress of maturing one specific technology. Funded: reflects where DST is funding, or co-funding a specific research/technology initiative. An initiative does not need to be 100% DST funded to be legible to be counted.	Measure / Indicator Formula	This includes all initiatives receiving funding from the EST Directorate as well as the Industry Innovation Partnership (IIP) fund that formally includes the Sector Innovation Fund (SIF) and other funds, and IP products funded under the IIP can be counted. The SIF also includes funding via the various areas of the Industry Innovation Programme (IIP) and therefore they also qualify to be counted. Number: refers to the number of outputs (e.g. types of IP products; or stages in the technology maturation process of a specific technology) and not the individual beneficiaries. It should therefore be noted that each new phase of a specific technology can be counted, for example in the maturation of a specific technology both the invention disclosure and patenting can be counted, irrespective of which financial year it has been achieved. Noting that technology maturation is not 100% the same in each technology domain, the following knowledge and innovation products/outputs serve as examples which qualify to be counted: 1) Invention disclosure: (a process within an entity) whereby the new knowledge/technology is declared. This declaration is then used to decide how further (if at all) the IP will be protected. 2) Patent: a formally established (a set of exclusive rights granted by a sovereign state to an inventor or assignee for a limited period of time in

			<p>exchange for detailed public disclosure of an invention.) Note that discrete events/milestones related to the patenting process (e.g. filing for a patent, receiving provisional patent, etc.) will also be accepted as valid knowledge/innovation products.</p> <p>3) Prototype: an early sample, model, or release of a product built to test a concept or process or to act as a thing to be replicated or learned from. There are different types of prototypes (e.g. proof-of-principle; visual; working; functional prototypes). It can also be market samples or similar concepts; depending on the nature of the industry.</p> <p>4) Technology demonstrator: an incomplete version of a complete or scaled down/subset of a product put together as a proof of concept with the primary aim of showcasing the possible applications, feasibility, and method of an idea for a new technology. Different sectors use different terms to describe a technology demonstrator, e.g. in the chemical/bio-chemical sector the term 'product' or market sample is used. These terms are acceptable and will be considered to be technology demonstrators</p> <p>5) Technology (transfer) package: technology is packaged in a tangible output (e.g. product/process/data pack/software). It is developed & packaged such that the recipient can use it without the requirements for any additional development work. The design and development of subsystems or production equipment</p>
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			<p>(e.g. molds for casting) can also be considered as a technology package. This can also include training packages /manuals/ training curricula.</p> <p>IP utilisation: converting the IP to commercial benefit can occur in many forms (depending on the specific sector), e.g. licencing the technology (for use by a third party), signing a royalty agreement, signing a joint venture. All these discrete agreements can be counted under this definition.</p>
New Indicator	No, but the description has been improved	Desired performance	<p>To exceed the target.</p> <p>The DST funded/co-funded research/technology initiatives vary in complexity, technology readiness levels, and therefore the achievement (and quantum) of the abovementioned milestones are desirable, but it is very difficult to linearly plan and achieve it as planned, due to the inherent risk of developing and maturing technology.</p>
Measure / Indicator Owner	CD: Sector Innovation and Green Economy.	Worked example	<p>DST provides funding/co-funding to an entity to perform R&D/R&T to improve the competitiveness of a firm, or to mature technology. During this process, new IP might be developed resulting in an increase of competitiveness; new products; and/or matured technology. The firm could document the new IP (invention disclosure) within the firm. Following the new knowledge disclosure, a decision on how to protect the IP (e.g. patent; trade secret; etc.) will be taken, as well as how to develop (or not) the IP further and how to transfer (e.g. technology package) and how to exploit/utilise the IP (e.g. license; sign royalty agreements).</p>

			<p>The process of maturing/scaling up/transferring technology can be described in different steps (e.g. Technology Readiness levels) which are characterised by discrete outputs (e.g. technology demonstrator, prototype, product/market samples). The terminology used, and the steps followed in maturing technology differs between industry sectors (e.g. manufacturing is different from chemical or bio-chemical sectors)</p>
<p>Target set for current year</p>	<p>Annual: 4 knowledge and innovation products (patents, prototypes, Technology demonstrators and technology transfer packages) added to the IP portfolio through fully funded or co-funded research by 31 March 2018</p> <p>Quarterly: Q1 - Interactions with various supported initiatives to define two new innovation products by 30 June 2017</p> <p>Q2 – Monitoring of progress against 2 new innovation products by 30 September 2017</p> <p>Q3 – Monitoring of progress against 2 new innovation products by 31 December 2017</p> <p>Q4 – 4 knowledge and innovation products (patents, prototypes,</p>	<p>Target achieved</p>	<p>Actual target achieved.</p> <p>Q1 – Q2 – Q3 – Q4 – YTD - :</p>

	Technology demonstrators or technology transfer packages) added to the IP portfolio through fully funded or co-funded research initiatives	
Data limitations	Forecasting of technology maturity and IP is very difficult due to uncertainty of maturing the technology. IPs may be delayed.	
Reasons for variances between the target set and actual achieved	Predicting the outcomes of research and technology activities as knowledge and innovation outputs is very difficult, due to the fact there could be large differences in complexity, technology readiness, and effort across the portfolio of funded research and technology activities	

2. Collection of source data to enable effective reporting on the adopted output measure / indicator	
Source data	<p>A statement (letter or quarterly or annual report from the respective implementation agency or entity performing the R&T, which provides the following minimum information:</p> <ul style="list-style-type: none"> • Identification of IP product (name; inventors/owners; IP product description; etc.) • Type of knowledge/innovation IP product claimed (e.g. patent; technology transfer package, etc.) <p>Supporting evidence/Proof from the entity/firm to justify the type of knowledge and innovation IP product claimed</p>
Collection Frequency of Source data	Quarterly.
Archiving of Source Data	Alfresco
Type of Information to be extracted from the source data	<p>A new entry will be created in the IP product register containing the definition of the IP product (name; inventors/owners; IP product description; type of IP product, etc.)</p> <p>A SIGE or SO2 internal discussion will be held to verify the validity and status of the entity reported IP products</p> <p>The number of knowledge and innovation products will be calculated from the verified, base data and recorded in the IP product register.</p> <p>It should be noted that the internal validation process might result in fewer IP products claimed, than what is claimed in the reports (and stored) in Alfresco.</p>
IT Systems/ Tools used to capture extracted data	Spreadsheets and Alfresco.
Source Data Capturing Frequency	Quarterly.

Individual(s) responsible for collecting the source data	DDs: Green Economy and DD: Local Innovation	Individual(s) responsible for filing/ archiving the collected source data	DD's: Green Economy and DD: Local Innovation
Individual(s) responsible for extracting the required information from the source data	DDs: Green Economy and DD: Local Innovation	Individual(s) responsible for verifying the accuracy and completeness of the extracted information	D: Environmental Services and Technologies
Individual(s) responsible for capturing the extracted information onto the IT System	DD: Environmental Services and Technologies	Individual(s) responsible for verifying the accuracy and completeness of the captured information	CD: SIGE

3. Quarterly and Annual Reporting of Collected/ Extracted Performance Information			
Performance Information Source		IP register for SO2 in MSEXcel format in Alfresco.	
Type of performance information to be extracted/ used		Descriptive information on the knowledge and innovation products;	
Calculations required on extracted information		Calculate the total number of knowledge and innovation products	
Archiving of Extracted / Recalculated Information		Filed: Alfresco Archived: Alfresco	
Return Format		Report of information will be in PIMS	
Reporting Frequency		Quarterly	
Individual(s) responsible for extracting, calculating and consolidating the reported performance information	CD: SIGE	Individual(s) responsible for verifying the accuracy and completeness of the extracted performance information	CD: SIGE
Individual(s) responsible for archiving the extracted/ recalculated performance information	CD: SIGE	Individual(s) responsible for sending the information in the required return format to the -----	DDG: SIP



Performance Indicator 6

Medium-term objectives, measure/indicator, outputs, and targets	Output Name High level human capital development for competitiveness and new industry development built	Date 31 March 2018
1. Overview of the objective, output, measure / indicator and target to be reported on		
Programme #	Programme 5	
Programme's Strategic Objectives (as per the Strategic Plan and the annual Performance Plans)	To identify, grow and sustain niche high-potential STI capabilities that improves the competitiveness of existing and emerging economic sectors and that facilitates the development of new targeted industries with growth potential in aerospace, advanced manufacturing, chemicals mining, advanced metals, ICTs and sector Innovation funds.	
Indicator title	Number of high-level research graduates (Master's and Doctoral students) fully funded or co-funded in designated niche areas (advanced manufacturing, aerospace, chemicals, mining, advanced metals, ICTs and SIFs).	
Purpose of indicator	To measure the high level human capital development (in this case, research Masters and Doctoral students) in designated niche areas of advanced manufacturing, aerospace, chemicals, mining, advanced metals, ICTs and SIFs	Type of indicator Input indicator
Measure / Indicator Definition	High level human capital refers to students who are enrolled at universities or Universities of Technology for a Masters or Doctoral qualification. Co-funded is where the DST only pays a portion of the student's fees.	Measure / Indicator Formula Masters or Doctoral students refers to a student (full-time or part time) who is formally registered for a Masters of Doctoral degree, at a university/University of Technology. Co-funded is where the DST only pays a portion of the student's fees. The Industry Innovation Partnership (IIP) fund formally includes the Sector Innovation Fund (SIF) and other funds, and students funded under the IIP can be counted. The SIF also includes funding via the various areas of the Industry Innovation Programme (IIP) and therefore they also qualify to be counted. The indicator counts the total number of Masters and Doctoral students that receive DST funding, over the period of a financial year.

	No	Desired performance	Higher performance is desired.
Measure / Indicator Owner	CD: TLBAM and CD: SIGC.	Worked example	<p>If 10 Masters/Doctoral students are fully funded in quarter 1, and one student drop out after six months, the total number of supported students will still be 10, provided that the student who had dropped out, had received DST funding/co-funding for that period.</p> <p>Alternatively, if Q1 reports 10 students funded/co-funded and Q2, Q3 and Q4 reports 9 students, the annual number of students (reflected in the annual report) will be maximum number of any quarter, resulting in 10 students being reported in the annual report.</p> <p>If a student who receives DST funding/co-funding completes his Masters qualification in Q3 and registers for a Doctoral qualification (and receives DST funding/co-funding) in Q4, it is counted as two students that are supported as the student is supported for two different qualifications.</p>
Target set for current year	<p>Annual: 288 Master's and Doctoral students fully funded or co-funded in designated niche areas (advanced manufacturing, aerospace, chemicals, mining, advanced metals and ICTs) by 31 March 2019.</p> <p>Quarterly:</p> <p>Q1 - 248 Master's and Doctoral students fully funded or co-funded in designated niche areas by 30 June 2017</p> <p>Q2 - No new Master's or Doctoral students funded or co-funded</p> <p>Q3 - No new Master's or Doctoral students funded or co-funded</p> <p>Q4 - Additional 40 Master's and Doctoral students fully funded or co-funded in designated niche areas (advanced manufacturing, aerospace, chemicals, mining, advanced metals, ICTs and SIFs) by 31 March 2019 taking the total for the financial year to 288 students.</p>	Target achieved	Actual target achieved. Q1 – Q2 – Q3 – Q4 – YTD - :
Data limitations	Proof of registration is often difficult to obtain in time for the quarter reporting cut-off (especially in Q1 and Q4), resulting in a lag of the reported students.		

Reasons for variances between the target set and actual achieved

The number of Masters and Doctoral students depends on suitable supervisors and the respective motivation of the students. Study at this level requires substantial commitment and personal effort to complete.
 Due to the fact that DST co-funded students are also counted, the number of students vary as DST funding are used to leverage other funds, resulting in more students that are funded – obviously a desirable state.

2. Collection of source data to enable effective reporting on the adopted output measure / indicator

<p>Source data</p>	<p>The respective contracting managers at DST (Deputy Directors or Directors) are to ensure that the implementing agency is formally notified (in the contract, or through a separate letter) of all the required source documentation that needs to be submitted to the DST.</p> <p>Statements (Quarterly or annual report) from implementing agencies (e.g. Mintek, Pelchem, CSIR, etc.) should contain the following minimum information:</p> <ul style="list-style-type: none"> • Confirmation of a student’s participation in the DST funding programme, including when the funding started and ended • Information to verify the profile of the student (e.g. ID number, race and gender); course, academic progress and year of enrolment. This could be captured in the raw student record, which is provided by the entity. <p>The implementing agencies are required to submit the following documents to the DST:</p> <ul style="list-style-type: none"> • Proof of registration at a tertiary education institution for Masters or Doctoral degree. • Summary record/statement of the funds disbursed per student and the respective period, to be provided at the end of the financial year (Q4)
<p>Collection Frequency of Source data</p>	<p>Entities funding students will collect data continuously, in order to always have the actual data available in time for the quarterly update/report to DST. This data will be collated into a single reporting spreadsheet/record per implementing agency.</p> <p>Quarterly updates or reports, and as stated in the respective contracts will be provided by the implementing agencies to the DST</p>
<p>Archiving of Source Data</p>	<p>Alfresco</p>
<p>Type of information to be extracted from the source data</p>	<p>Student personal details (name, surname; student number; gender and race information), Implementing agency: no of students funded/co-funded, and period of funding, Total number of students funded/co-funded.</p>
<p>IT Systems/ Tools used to capture extracted data</p>	<p>Spreadsheet and Word documents</p>

Source Data Capturing Frequency	<p>Quarterly, per implementing agency. DST will update a quarterly record, submitted in PIMS of the actual number of students funded per investment area (e.g. advanced manufacturing, ICT, etc.), per quarter.</p> <p>At the end of the financial year, the quarterly records, will be interrogated and the actual, maximum number of students per quarter will be used to calculate the total number of students funded or co-funded per financial y year.</p>		
Individual(s) responsible for collecting the source data	DDs from the units of Advanced Manufacturing; Chemical Related Industries; Mining and Minerals Beneficiation; Technology Localisation; Local Innovation and ICT.	Individual(s) responsible for filing/ archiving the collected source data	DDs from the units of Advanced Manufacturing; Chemical Related Industries; Mining and Minerals Beneficiation; Technology Localisation; local Innovation and ICT.
Individual(s) responsible for extracting the required information from the source data	DDs from the units of Advanced Manufacturing; Chemical Related Industries; Mining and Minerals Beneficiation; Technology Localisation; Local Innovation and ICT.	Individual(s) responsible for verifying the accuracy and completeness of the extracted information	DDs from the units of Advanced Manufacturing; Chemical Related Industries; Mining and Minerals Beneficiation; Technology Localisation; local innovation and ICT.
Individual(s) responsible for capturing the extracted information onto the IT System	DDs from the units of Advanced Manufacturing; Chemical Related Industries; Mining and Minerals Beneficiation; Technology Localisation; Local innovation and ICT.	Individual(s) responsible for verifying the accuracy and completeness of the captured information	Directors from the units of Advanced Manufacturing; Chemical Related Industries; Mining and Minerals Beneficiation; Technology Localisation; Local innovation and ICT.

3. Quarterly and Annual Reporting of Collected/ Extracted Performance Information	
Performance Information Source	PIMS
Type of performance information to be extracted/ used	Data base.
Calculations required on extracted information	<p>The quarterly record will reflect the actual number of Masters and Doctoral students funded, or co-funded by the DST. The calculation will be the addition of all the above mentioned students in the areas of ICT, Mining and Minerals Beneficiation, ICT, Aerospace, Chemical Related Industries, Technology Localisation, Industry Innovation Partnerships (incl SIFs).</p> <p>At the end of the financial year, the quarterly records, will be interrogated and the actual, maximum number of students per quarter will be used to calculate the total number of students funded or co-funded per financial y year.</p>
Archiving of Extracted / Recalculated Information	Alfresco
Return Format	PDF

Reporting Frequency		Quarterly and annual to reflect the final number of Masters and Doctoral students funded/co-funded by the DST.	
Individual(s) responsible for extracting, calculating and consolidating the reported performance information	DDs from the units of Advanced Manufacturing; Chemical Related Industries; Mining and Minerals Beneficiation; Technology Localisation, Local Innovation and ICT	Individual(s) responsible for verifying the accuracy and completeness of the extracted performance information	Directors from the units of Advanced Manufacturing; Chemical Related Industries; Mining and Minerals Beneficiation; Technology Localisation, Local Innovation and ICT.
Individual(s) responsible for archiving the extracted/ recalculated performance information	DDs from the units of Advanced Manufacturing; Chemical Related Industries; Mining and Minerals Beneficiation; Technology Localisation, Local Innovation and ICT	Individual(s) responsible for sending the information in the required return format to the -----	CDs of Technology Localisation, Beneficiation and Advanced Manufacturing and of Sector Innovation and Global change. Annual report will be verified by the DDG:SEIP

Performance Indicator 7

Medium-term objectives, measure/indicator, outputs, and targets		Output Name Number of knowledge and innovation products	Date 31 March 2018
1. Overview of the objective, output, measure / indicator and target to be reported on			
Programme #		Programme 5	
Programme's Strategic Objectives (as per the Strategic Plan and the annual Performance Plans)		To identify, grow and sustain niche high-potential STI capabilities that improves the competitiveness of existing and emerging economic sectors and that facilitates the development of new targeted industries with growth potential in aerospace, advanced manufacturing, chemicals, mining, advanced metals, ICTs and Sector Innovation Funds (SIFs).	
Indicator title		Number of knowledge and innovation products added to the IP portfolio through fully funded or co-funded research initiatives	
Purpose of indicator	To capture and reflect the intermediate and final events/milestones/outputs that occur during the process of developing and maturing knowledge and/or technology. The term 'knowledge and innovation products' is used to describe these outputs fine the generated during the process of maturing technology/products, in order to support R&D led industry development.	Type of indicator	Output Indicator - it measures the number of knowledge and innovation products generated in the course of developing and/or maturing technology.

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<p>Measure / Indicator Definition</p>	<p>Number: the number of knowledge and innovation products. Number of knowledge and innovation products</p> <p>Knowledge and innovation product: the output (intermediate or final) of knowledge or innovation (process, market, product or improved service delivery) that is quantifiable (e.g. invention disclosure; patent; prototype; technology (transfer) package; technology demonstrator, etc.). It should be noted that different technologies/processes have slightly different phases and/or designated conventions/names.</p> <p>Intellectual Property (IP) Portfolio: The collection of IP products funded/co-funded by DST. The IP products may be related or unrelated to the progress of maturing one specific technology.</p> <p>Funded: reflects where DST is funding, or co-funding a specific research/technology initiative. An initiative does not need to be 100% DST funded to be legible to be counted.</p>	<p>Measure / Indicator Formula</p> <p>The Industry Innovation Partnership (IIP) fund formally includes the Sector Innovation Fund (SIF) and other funds, and IP products funded under the IIP can be counted.</p> <p>The SIF also includes funding via the various areas of the Industry Innovation Programme (IIP) and therefore they also qualify to be counted.</p> <p>Number: refers to the number of outputs (e.g. types of IP products; or stages in the technology maturation process of a specific technology) and not the individual beneficiaries. It should therefore be noted each new phase of a specific technology can be counted, for example in the maturation of a specific technology both the invention disclosure and patenting can be counted, irrespective of which financial year it has been achieved.</p> <p>Noting that technology maturation is not 100% the same in each technology domain, the following knowledge and innovation products/outputs serve as examples which qualify to be counted:</p> <ul style="list-style-type: none"> 6) Invention disclosure: (a process within an entity) whereby the new knowledge/technology is declared. This declaration is then used to decide how further (if at all) the IP will be protected. 7) Patent: a formally established (a set of exclusive rights granted by a sovereign state to an inventor or assignee for a limited period of time in exchange for detailed public disclosure of an invention.) Note that discrete events/milestones related to the patenting process (e.g. filing for a patent, receiving provisional patent, etc.) will also be accepted as valid knowledge/innovation products. 8) Prototype: an early sample, model, or release of a product built to test a concept or process or to act as a thing to be replicated or learned from. There are different types of prototypes (e.g. proof-of-principle; visual; working; functional prototypes). It can also be market samples or similar concepts; depending on the nature of the industry. 9) Technology demonstrator: an incomplete version of a complete or scaled down/subset of a product put together as a proof of concept with the primary aim of showcasing the possible applications, feasibility, and method of an idea for a new technology. Different sectors use different terms to describe a technology demonstrator, e.g. in
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			<p>the chemical/bio-chemical sector the term 'product' or market sample is used. These terms are acceptable and will be considered to be technology demonstrators</p> <p>10) Technology (transfer) package: technology is packaged in a tangible output (e.g. product/process/data pack/software). It is developed & packaged such that the recipient can use it without the requirements for any additional development work. The design and development of subsystems or production equipment (e.g. molds for casting) can also be considered as a technology package. This can also include training packages /manuals/ training curricula.</p> <p>11) IP utilisation: converting the IP to commercial benefit can occur in many forms (depending on the specific sector), e.g. licencing the technology (for use by a third party), signing a royalty agreement, signing a joint venture. All these discrete agreements can be counted under this definition.</p>
New Indicator	No, but the description has been improved	Desired performance	<p>To exceed the target.</p> <p>The DST funded/co-funded research/technology initiatives vary in complexity, technology readiness levels, and therefore the achievement (and quantum) of the abovementioned milestones are desirable, but it is very difficult to linearly plan and achieve it as planned, due to the inherent risk of developing and maturing technology.</p>

<p>Measure / Indicator Owner</p>	<p>Two Chief Directors – from Technology Localisation, Beneficiation and Advanced Manufacturing' (TLBAM) and 'Sector Innovation and Green Economy' (SIGE) respectively.</p>	<p>Worked example</p>	<p>DST provides funding/co-funding to an entity to perform R&D/R&T to improve the competitiveness of a firm, or to mature technology. During this process, new IP might be developed resulting in an increase of competitiveness; new products; and/or matured technology. The firm could document the new IP (invention disclosure) within the firm. Following the new knowledge disclosure, a decision on how to protect the IP (e.g. patent; trade secret; etc.) will be taken, as well as how to develop (or not) the IP further and how to transfer (e.g. technology package) and how to exploit/utilise the IP (e.g. license; sign royalty agreements).</p> <p>The process of maturing/scalin up/transferring technology can be described in different steps (e.g. Technology Readiness levels) which are characterised by discrete outputs (e.g. technology demonstrator, prototype, product/market samples). The terminology used, and the steps followed in maturing technology differs between industry sectors (e.g. manufacturing is different from chemical or bio-chemical sectors</p>
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<p>Target set for current year</p>	<p>Annual: 17 knowledge and innovation products added to the IP portfolio by 31 March 2018.</p> <p>Quarterly:</p> <p>Q1 – Begin negotiations with implementation agencies on proposed knowledge and innovation products to be added to the innovation product portfolio by 30 June 2017</p> <p>Q2 – Finalise negotiations with implementation agencies on proposed knowledge and innovation products to be added to the innovation product portfolio by 30 September 2017</p> <p>Q3 – 5 knowledge and innovation products (patents, prototypes, technology demonstrators or technology transfer packages) added to the innovation product portfolio through fully funded or co-funded research initiatives</p> <p>Q4 – 10 knowledge and innovation products (patents, prototypes, technology demonstrators or technology transfer packages) added to the innovation product portfolio through fully funded or co-funded Research initiatives.</p>	<p>Target achieved</p>	<p>Actual target achieved.</p> <p>Q1 –</p> <p>Q2 –</p> <p>Q3 –</p> <p>Q4 –</p> <p>YTD - :</p>
<p>Data limitations</p>	<p>Not all the firms (especially SMEs) have a formalised process of capturing/reflecting their knowledge and innovation products, resulting in an under-reporting.</p>		

Reasons for variances between the target set and actual achieved

Predicting the outcomes of research and technology activities as knowledge and innovation outputs is very difficult, due to the fact there could be large differences in complexity, technology readiness, and effort across the portfolio of funded research and technology activities.

In addition, there has been a substantial effort in sensitising and educating the implementing agencies and centres, such as the Technology Stations Programme (TSP). This is resulting in an increased level of reporting, which is highly desirable.

2. Collection of source data to enable effective reporting on the adopted output measure / Indicator

Source data	<p>A statement (letter or quarterly or annual report from the respective implementation agency or entity performing the R&T, which provides the following minimum information:</p> <ul style="list-style-type: none"> • Identification of IP product (name; inventors/owners; IP product description; etc.) • Type of knowledge/innovation IP product claimed (e.g. patent; technology transfer package, etc.) • Supporting evidence/Proof from the entity/firm to justify the type of knowledge and innovation IP product claimed 		
Collection Frequency of Source data	At least quarterly		
Archiving of Source Data	Alfresco		
Type of information to be extracted from the source data	<p>A new entry will be created in the IP product record containing the definition of the IP product (name; inventors/owners; IP product description; type of IP product, etc.)</p> <p>A TLBAM or SO3 internal discussion will be held to verify the validity and status of the entity reported IP products</p> <p>The number of knowledge and innovation products will be calculated from the verified, base data and recorded in the IP product record.</p> <p>It should be noted that the internal validation process might result in fewer IP products claimed, that the reported (and stored) in Alfresco.</p>		
IT Systems/ Tools used to capture extracted data	Word and Excel files, stored in Alfresco		
Source Data Capturing Frequency	Quarterly updates		
Individual(s) responsible for collecting the source data	Deputy Directors in TLBAM and SIGC	Individual(s) responsible for filing/ archiving the collected source data	Deputy Directors in TLBAM and SIGC

Individual(s) responsible for extracting the required information from the source data	Deputy Directors in TLBAM and SIGC	Individual(s) responsible for verifying the accuracy and completeness of the extracted information	Directors in TLBAM and SIGC
Individual(s) responsible for capturing the extracted information onto the IT System	Directors in TLBAM and SIGC	Individual(s) responsible for verifying the accuracy and completeness of the captured information	CD: TLBAM

3. Quarterly and Annual Reporting of Collected/ Extracted Performance Information			
Performance Information Source		Filename: Funding Instruments Register.xlsx Stored in Alfresco.	
Type of performance information to be extracted/ used		Descriptive information on the knowledge and innovation products;	
Calculations required on extracted information		Calculate the total number of knowledge and innovation products	
Archiving of Extracted / Recalculated Information		Filed: Alfresco Archived: Alfresco	
Return Format		Report of information will be in PIMS	
Reporting Frequency		Quarterly	
Individual(s) responsible for extracting, calculating and consolidating the reported performance information	CD: TLBAM	Individual(s) responsible for verifying the accuracy and completeness of the extracted performance information	CD: TLBAM
Individual(s) responsible for archiving the extracted/ recalculated performance information	CD: TLBAM	Individual(s) responsible for sending the information in the required return format to the -----	DDG: SEIP

Performance Indicator 8

Medium-term objectives, measure/indicator, outputs, and targets	Output Name	Date
	High level human capital development for competitiveness and new industry development built	31 March 2018
1. Overview of the objective, output, measure / indicator and target to be reported on		
Programme #	Programme 5	
Programme's Strategic Objectives (as per the Strategic Plan and the annual Performance Plans	To identify, grow and sustain niche high-potential STI capabilities that improves the competitiveness of existing and emerging economic sectors and that facilitates the development of new targeted industries with growth potential in aerospace, advanced manufacturing, chemicals, mining, advanced metals, ICTs and Sector Innovation Funds (SIFs).	
Indicator title	Number of interns fully funded or co-funded in R&D of design, manufacturing and product development	

Purpose of indicator	To measure the number of interns funded under the R&D led industry development strategic objective	Type of indicator	Input indicator
Measure / Indicator Definition	<p>Intern – A person who has completed, or nearly completed the academic programme, which requires practical experience in order to obtain their qualifications (ranging from Diploma, B-Tech and D-Tech), or to obtain work exposure prior to permanent employment</p> <p>'R&D of Design, manufacturing and product development' is the originally defined focus areas for interns under 'R&D led industry development' strategic objective. This description is intended to cover all the focus areas under this strategic objective.</p>	Measure / Indicator Formula	<p>Fully funded is where an intern receives only DST funding for a period up to a year.</p> <p>Co-funded is where the DST only pays for a portion of the internship fees. This could either be due to a reduced funding period or for a reduced amount per month/year.</p> <p>The indicator counts the total number of interns that receive DST funding/co-funding through one of the implementing entities, regardless of the duration or amount of funding to the intern.</p> <p>R&D of Design, manufacturing and product development' includes mining, ICT, red meat, manufacturing, sugar, pulp and paper, etc.</p>
New Indicator	No	Desired performance	Higher performance is desirable.
Measure / Indicator Owner	CD: TLBAM.	Worked example	If 100 interns are funded by TIA, but after 5 months 10 interns leave the programme (e.g. due to finding full-time employment), and TIA manages to find another 10 interns for the remainder of the year, 110 interns were funded/co-funded through the financial year.
Target set for current year	<p>Annual: 100 interns fully funded or co-funded in R&D related to design, manufacturing and product development by 31 March 2018</p> <p>Quarterly:</p> <p>Q1 - 100 interns fully funded or co-funded in R&D related to design, manufacturing and product development</p> <p>Q2 - No target</p> <p>Q3 - No target</p> <p>Q4 - No target</p>	Target achieved	<p>Actual target achieved.</p> <p>Q1 –</p> <p>Q2 –</p> <p>Q3 –</p> <p>Q4 –</p> <p>YTD - :</p>

Data limitations	There are three implementing entities (TIA, Mintek and the Technology Localisation Implementation Unit {TLU} and 8 SIFs) that need to maintain records and track the funding/co-funding of interns. The DST will audit the associated processes and verification data, but problems can occur at the implementation agencies or tertiary institutes.
Reasons for variances between the target set and actual achieved	The TLP funding for the internship programme is being reduced in order to increase support to firms. There might be a lag in the system, resulting from the previous higher funding levels that can result in the target being exceeded. In addition, as awareness of the internship programme increases, there are increased support/appetite from industry to accommodate interns, resulting in the target being exceeded.

2. Collection of source data to enable effective reporting on the adopted output measure / indicator

Source data	<p>The respective contracting managers at DST (Deputy Directors or Directors) are to ensure that the implementing agency is formally notified (in the contract, or through a separate letter) of all the required source documentation that needs to be submitted to the DST.</p> <p>Reports/statements from implementing agencies (e.g. Mintek, Pelchem, CSIR, etc.) should contain the following minimum information:</p> <ul style="list-style-type: none"> • Information to verify the profile of the intern (e.g. ID number, race and gender); course, academic progress and year of enrolment. This could be captured in the raw intern record which is provided by the entity. • Information from the implementing agency of the intern's participation in the DST funding programme, including start and exit information <p>Summary record/statement of the funds disbursed per intern, to be provided at the end of the financial year (Q4)</p>
Collection Frequency of Source data	<p>Entities funding interns will collect data continuously, in order to always have the actual data available. This data will be collated into a single reporting spreadsheet per implementing agency.</p> <p>Quarterly updates or reports, and as stated in the contracts will be provided by the implementing agencies to the DST</p>
Archiving of Source Data	Alfresco and project files
Type of information to be extracted from the source data	<p>Intern's personal details (name, surname; gender and race information),</p> <p>Implementing agency: no of interns funded/co-funded, and respective duration amount and duration of funding per intern,</p> <p>Total number of interns funded/co-funded</p>
IT Systems/ Tools used to capture extracted data	Spreadsheet and Word documents.
Source Data Capturing Frequency	Annually



Individual(s) responsible for collecting the source data	DDs of the units that fund/co-fund interns, e.g. Technology Localisation; Sector and Local Innovation	Individual(s) responsible for filing/ archiving the collected source data	DDs of the units that fund/co-fund interns, e.g. Technology Localisation; Sector and Local Innovation
Individual(s) responsible for extracting the required information from the source data	DDs of the units that fund/co-fund interns, e.g. Technology Localisation; Sector and Local Innovation	Individual(s) responsible for verifying the accuracy and completeness of the extracted information	Ds of the units that fund/co-fund interns, e.g. Technology Localisation; Sector and Local Innovation
Individual(s) responsible for capturing the extracted information onto the IT System	DDs of the units that fund/co-fund interns, e.g. Technology Localisation; Sector and Local Innovation	Individual(s) responsible for verifying the accuracy and completeness of the captured information	Ds of the units that fund/co-fund interns, e.g. Technology Localisation; Sector and Local Innovation

3. Quarterly and Annual Reporting of Collected/ Extracted Performance Information

Performance Information Source		Alfresco with Word documents and Excel Spreadsheets	
Type of performance information to be extracted/ used		Number of Interns funded/co-funded	
Calculations required on extracted information		The total number of interns funded/co-funded across all the funding instruments/contracts.	
Archiving of Extracted / Recalculated Information		Alfresco with Word documents and Excel Spreadsheets	
Return Format		Word documents and Excel Spreadsheets in PIMS	
Reporting Frequency		Annually	
Individual(s) responsible for extracting, calculating and consolidating the reported performance information	DDs of the units that fund/co-fund interns, e.g. Technology Localisation; Sector and Local Innovation	Individual(s) responsible for verifying the accuracy and completeness of the extracted performance information	Ds of the units that fund/co-fund interns, e.g. Technology Localisation; Sector and Local Innovation
Individual(s) responsible for archiving the extracted/ recalculated performance information	DDs of the units that fund/co-fund interns, e.g. Technology Localisation; Sector and Local Innovation	Individual(s) responsible for sending the information in the required return format to the -----	CD: Technology Localisation, Beneficiation & Advanced Manufacturing

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Performance Indicator 9

<p>Medium-term objectives, measure/indicator, outputs, and targets</p>	<p>Output Name</p> <p>Innovation support interventions funded or co-funded that strengthen provincial or rural innovation systems</p>	<p>Date</p> <p>31 March 2018</p>
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1. Overview of the objective, output, measure / indicator and target to be reported on

<p>Programme #</p>	<p>Programme 5</p>
<p>Programme’s Strategic Objectives (as per the Strategic Plan and the annual Performance Plans)</p>	<p>Support provincial and rural innovation</p>
<p>Objective Statement and definition (also supported by Indicator Definitions)</p>	<p>To strengthen provincial and rural innovation and production systems through analysis and catalytic interventions.</p>
<p>Indicator title</p>	<p>Number of innovation support interventions funded or co-funded that strengthen provincial or rural innovation systems.</p>

<p>Purpose of indicator</p>	<p>The Indicator measures the outputs derived from the DST investment in interventions that seek to foster innovation-driven provincial/regional and Local Economic Development. These include the extent to which DST interventions aimed at supporting innovation policy, strategy and/or plans at a sub-national level (regional & local levels) contribute to the growth of the provincial or rural innovation or production systems]</p>	<p>Type of indicator</p>	<p>Input</p>
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<p>Measure / Indicator Definition</p>	<p>Interventions is a broad term referring to both analytical and interventionist programmes that seek to deepen understanding of provincial and local innovation and production systems and/or promote socio-economic development at both levels [Provincial and rural and production system = the system of innovation at provincial, regional, local levels, including those linked to rural and the informal economic activities.</p> <p>Analysis – means any form of study or strategy development that can assist provincial and local governments with their planning, decision making and implementation of innovation programmes</p> <p>Catalytic Interventions = DST supported initiatives or projects that help stimulate growth of existing innovation initiatives. These include establishment of Regional Innovation Forums (RIFs), funding for</p>	<p>Measure / Indicator Formula</p>	<p>Number of interventions would be the sum of the interventions from the Sector and Local Innovation Directorate, and the interventions from the Sustainable Livelihoods Directorate</p>
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	feasibility studies or business plan development for innovation enabling infrastructure.		
New Indicator	Continuation	Desired performance	State is higher or lower than performance is whether actual performance desirable
Measure / Indicator Owner	[Chief Director: Sector Innovation and Green Economy (SIGE) and Chief Director: Innovation for Inclusive Development]	Worked example	[A report on analysis of innovation capacity and initiatives in Gauteng Province + 1 New RIF established and supported in North West Province]
Target set for current year	<p>Annual: 2 innovation-support interventions funded or co-funded that strengthen provincial or rural innovation systems by 31 March 2018</p> <p>Quarterly: Q1 – Through consultation identify the support interventions to be implemented by 30 June 2017</p> <p>Q2 – Project proposal and contracting finalised by 30 September 2017</p> <p>Q3 – Implementation to commence by 31 December 2017</p> <p>Q4 – 2 innovation-support interventions</p>	Target achieved	<p>Actual target achieved.</p> <p>Q1 –</p> <p>Q2 –</p> <p>Q3 –</p> <p>Q4 –</p> <p>YTD - :</p>

	funded or co-funded that strengthen provincial or rural innovation systems		
Data limitations	Availability of accurate, up to date, and reliable quantitative and qualitative data for the analysis of provincial innovation systems		
Reasons for variances between the target set and actual achieved	Will be captured when required during reporting		

2. Collection of source data to enable effective reporting on the adopted output measure / indicator

Source data	Contracts with implementing agencies including, but not limited to <ul style="list-style-type: none"> • HSRC • Nelson Mandela Metropolitan University • Western Cape Economic Development Partnerships Approved quarterly and/or annual reports from Implementing Agent		
Collection Frequency of Source data	Quarterly and Annually		
Archiving of Source Data	DST Computer data storage systems and hard copies filed in locked Cabinets		
Type of information to be extracted from the source data	Progress and status reports, third party agreements		
IT Systems/ Tools used to capture extracted data	Alfresco – reports stored in PDF, MS Word and Excel Spreadsheets		
Source Data Capturing Frequency	Quarterly		
Individual(s) responsible for collecting the source data	DD: Local Innovation and DD: Sustainable Livelihoods	Individual(s) responsible for filing/ archiving the collected source data	DD: Local Innovation and DD: SL
Individual(s) responsible for extracting the required information from the source data	DD: Local Innovation and DD: Sustainable Livelihoods	Individual(s) responsible for verifying the accuracy and completeness of the extracted information	D: SL and D: SLI

Individual(s) responsible for capturing the extracted information onto the IT System	DD: Local Innovation and DD: Sustainable Livelihoods	Individual(s) responsible for verifying the accuracy and completeness of the captured information	D: SL and D: SLI
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3. Quarterly and Annual Reporting of Collected/ Extracted Performance Information			
Performance Information Source		Quarterly and annual reports of implementing agents. Alfresco	
Type of performance information to be extracted/ used		Quantitative information on the number of programmes and impact thereof Reports on RIFs progress and Analysis	
Calculations required on extracted information		N/A	
Archiving of Extracted / Recalculated Information		Filed: Alfresco	
Return Format		PDF, MS Word and Excel Spreadsheets	
Reporting Frequency		Quarterly	
Individual(s) responsible for extracting, calculating and consolidating the reported performance information	DD: LI and DD: SL	Individual(s) responsible for verifying the accuracy and completeness of the extracted performance information	D: SL and D: SLI
Individual(s) responsible for archiving the extracted/ recalculated performance information	DD: LI and DD: SL	Individual(s) responsible for sending the information in the required return format to the -----	[DD: LI and DD: SL

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Performance Indicator 10

Medium-term objectives, measure/indicator, outputs, and targets		Output Name Number of Instruments funded	Date 31 March 2018
1. Overview of the objective, output, measure / indicator and target to be reported on			
Programme #		Programme 5	
Programme's Strategic Objectives (as per the Strategic Plan and the annual Performance Plans)		To identify, grow and sustain niche high-potential STI capabilities that improves the competitiveness of existing and emerging economic sectors and that facilitates the development of new targeted industries with growth potential in aerospace, advanced manufacturing, chemicals, mining, advanced metals, ICTs and sector innovation funds.	
Indicator title		Number of instruments funded in support of increased localisation, competitiveness and R&D led industry development.	
Purpose of indicator	To capture and reflect the funding investments made in instruments that support R&D led industry development.	Type of indicator	Input indicator, as it measures the number (and not the amounts) of instruments funded or co-funded, and not the outputs of the instruments.

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Measure / Indicator Definition	Number: the number of instruments (e.g. programmes) and not the individual beneficiaries. Instrument: a formally established (by contract) entity (also virtual) that is used in support of R&D-led industry development. R&D led industry development: This includes R&D performed in the defined areas of aerospace; advanced manufacturing; mining; minerals beneficiation; chemical related industries, ICTs and sector innovation funds. Funded: reflects where DST is funding, or co-funding a specific instrument. An instrument does not need to be 100% funded to be legible to be considered as an instrument funded by DST.	Measure / Indicator Formula	<p>The Industry Innovation Partnership (IIP) fund formally includes the Sector Innovation Fund (SIF) and other funds, and instruments funded under the IIP can be counted.</p> <p>The SIF also includes funding via the various areas of the Industry Innovation Programme (IIP) and therefore they also qualify to be counted.</p> <p>Number: refers to the number of instruments (e.g. programmes) and not the individual beneficiaries.</p> <p>The following instruments currently qualify to be counted:</p> <ol style="list-style-type: none"> 12) Technology Stations Programme (TSP), incorporating the Institutes of Advanced Tooling (IATs) consisting of 18 entities, but they count as one funding instrument 13) Centres of Competence (Titanium and any other) count as one 14) Incubators (1 exist for ICT) 15) Technology Development Grant scheme 16) Sector wide technology assistance packages (SWTAPs) 17) Firm level Technology Assistance Packages (FTAPs) 18) Science, Engineering and Technology Industry Internship Programme (SETIIP) 19) Collaborative R&D networks (e.g. the Collaborative Carbon Fibre RDI Programme) where the R&D agenda is almost exclusively defined by Industry. This also includes the Sector Innovation Funds, where the R&D agenda is defined by the respective industry association/body, representing the R&D needs of the respective sector. 20) R&D networks led by science councils and /or Universities, where the R&D agenda is determined primarily from the R&D stakeholders. This includes R&D programmes that is aimed at unlocking new opportunities based on local knowledge and/or IP. <p>Instrument: a defined support mechanism, as described above.</p> <p>The indicator (funding instrument) will be formally referred to in a contract and be described by supporting, DST internal document defining the objective, procedures, scope and evaluation parameters.</p>
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New Indicator	Yes, it will replace the indicator 'Number of SMEs supported by the Technology Stations'.	Desired performance	On target. The aim of the indicator is not to drive the funding/establishment of new funding instruments, but rather to capture the number of instruments that are actually supported. New funding instruments will be identified from time to time, but the objective is to have an effective number of funding instruments, where the funding allocation increases (more focus) rather than covering a broader scope.
Measure / Indicator Owner	Two Chief Directors – from Technology Localisation, Beneficiation and Advanced Manufacturing' and 'Sector Innovation and Green Economy' respectively.	Worked example	If the unit in Mining and Minerals Beneficiation funds the CSIR for the activities of the titanium Centre of Competence, through a contract, one funding instrument would be supported. If the Advanced Manufacturing Technologies Unit funds another CoC, there is still one instrument funded – namely a Centre of competence.

<p>Target set for current year</p>	<p>Annual: 6 instruments funded in support of increased localisation, competitiveness and R&D led industry development by 31 March 2018 .</p> <p>Quarterly:</p> <p>Q1 - 6 instruments funded in support of Increased localisation, competitiveness and R&D led industry development by 30 June 2015.</p> <p>Q2: 6 instruments funded in support of increased localisation, competitiveness and R&D-led industry development in aerospace, advanced manufacturing, chemicals, mining, advanced metals and ICTs.</p> <p>Q3 - 6 instruments funded in support of increased localisation, competitiveness and R&D-led industry development in aerospace, advanced manufacturing, chemicals, mining, advanced metals and ICTs</p> <p>Q4 - 6 instruments funded in support of increased localisation, competitiveness and R&D-led industry development in aerospace, advanced manufacturing, chemicals, mining, advanced metals and ICTs</p>	<p>Target achieved</p>	<p>Actual target achieved.</p> <p>Q1 –</p> <p>Q2 –</p> <p>Q3 –</p> <p>Q4 –</p> <p>YTD - :</p>
<p>Data limitations</p>	<p>Some of the funding instruments (e.g. TAPs, SWTAPs and SETIIP) are not separately contracted as the implementing agency is the same.</p>		
<p>Reasons for variances between the target set and actual achieved</p>	<p>To be recorded during reporting, if applicable</p>		

2. Collection of source data to enable effective reporting on the adopted output measure / indicator			
Source data		<ul style="list-style-type: none"> • DST allocation letters to entities, • Contracts with implementing entities, • Payment transfers/ stub 	
Collection Frequency of Source data		Quarterly	
Archiving of Source Data		Alfresco	
Type of Information to be extracted from the source data		<p>The type of the instrument (CoC, incubator, etc.). The origin of the proof (allocation letter, MoA, Contract, etc.).</p> <p>The number of instruments will be captured in a reference document that will be updated as changes occur.</p>	
IT Systems/ Tools used to capture extracted data		Word and Excel files, stored in Alfresco	
Source Data Capturing Frequency		Quarterly updates	
Individual(s) responsible for collecting the source data	Deputy Directors in TLBAM and SIGE	Individual(s) responsible for filing/ archiving the collected source data	Deputy Directors in TLBAM and SIGE
Individual(s) responsible for extracting the required information from the source data	Deputy Directors in TLBAM and SIGE	Individual(s) responsible for verifying the accuracy and completeness of the extracted information	Directors in TLBAM and SIGE
Individual(s) responsible for capturing the extracted information onto the IT System	Directors in TLBAM and SIGE	Individual(s) responsible for verifying the accuracy and completeness of the captured information	CD: TLBAM

3. Quarterly and Annual Reporting of Collected/ Extracted Performance Information	
Performance Information Source	Filename: Funding Instruments Register.xlsx Stored in Alfresco.
Type of performance information to be extracted/ used	Type of funding instrument; Method of formalisation (contract; MoA, etc.)
Calculations required on extracted information	Add the total number of the type of funding instruments.
Archiving of Extracted / Recalculated Information	Filed: Alfresco
Return Format	Report of information will be in PIMS

Reporting Frequency		Quarterly	
Individual(s) responsible for extracting, calculating and consolidating the reported performance information	CD: TLBAM	Individual(s) responsible for verifying the accuracy and completeness of the extracted performance information	CD: TLBAM
Individual(s) responsible for archiving the extracted/ recalculated performance information	CD: TLBAM	Individual(s) responsible for sending the information in the required return format to the -----	DDG: SEIP

Performance Indicator 11

Medium-term objectives, measure/indicator, outputs, and targets	Output Name Statistical reports and policy briefs submitted to Cabinet	Date 31 March 2018
1. Overview of the objective, output, measure / indicator and target to be reported on		
Programme #	Programme Socio-economic Partnerships	
Programme's Strategic Objectives (as per the Strategic Plan \)	Facilitate the provision of data on the NSI's performance	
Objective Statement and definition (also supported by Indicator Definitions)	To enhance understanding and analysis that support improvements in the functioning and performance of the NSI	
Indicator title	Number of statistical reports and policy briefs submitted to Cabinet	
Purpose of indicator	To measure the number of reports and policy briefings produced that supports improvements in the functioning and performance of the NSI	Type of indicator Output indicator
Measure / Indicator Definition	A policy briefing in this context refers to a communication tool	Measure / Indicator Formula Total sum of policy briefings on the innovation



	<p>produced by policy analysts, in the form of either a Cabinet memorandum or evidence-based report or strategy which serves as an impetus for action for the policy audience such as Cabinet, Parliament and Portfolio Committee, the Minister of Science and Technology, provincial government, or another Minister of government department. The briefing or report may also be used to support broader advocacy initiatives targeting a wide but knowledgeable audience e.g. Economic Services and Infrastructure Cluster, decision-makers, researchers, and administrators.</p> <p>No all 6 policy briefs will be tabled at Cabinet.</p>		<p>system and innovation policy by the end of the financial year</p>
New Indicator	Continues without change from the previous year	Desired performance	Higher performance is desired
Measure / Indicator Owner	CD: Science and Technology Investment	Worked example	Total sum of reports / policy briefings on the innovation system and innovation policy by the end of the financial year = 1 policy briefing generated on the performance of the R&D tax incentive programme + 1 policy briefing generated on the R&D survey + 1 policy brief on the innovation survey + 1 policy brief on Government funding for STAs + 2 policy briefs addressing a priority issue on STI as identified for the financial year

Target set for current year	<p>Annually 6 statistical reports and policy briefs submitted to Cabinet by 31 March 2018</p> <p>Quarter 1: Gather data/ evidence from project implementation activities Identify and prioritise topics for policy briefs for the financial year</p> <p>Quarter 2: Produce drafts and gather inputs from/ validate with relevant stakeholders per policy brief.</p> <p>Quarter 3: Table drafts of each policy brief at Exco/ MMM for approval</p> <p>Quarter 4: Publish and disseminate the policy briefs; hold user consultations; review lessons; and plan for the next round of policy briefs.</p> <p>.</p>	Target achieved	Actual target achieved. Q1 – Q2 – Q3 – Q4 – YTD - :
Data limitations	The collection of data is done by the implementing agency and the process not in the control of the DST. However, the DST has the opportunity to interrogate the data presented to them.		
Reasons for variances between the target set and actual achieved	Unplanned reports or policy briefings emanating from DST work		

2. Collection of source data to enable effective reporting on the adopted output measure / Indicator

Source data				<ul style="list-style-type: none"> • Approved Progress reports from HSRC CeSTII on the production of national surveys • Approved Quarterly reports on R&D Tax Incentives from DST staff. • Exco or Minister Approved report or policy briefing (Annual verification) • Quarterly reports on APP targets and Operational targets
Collection Frequency of Source data				Quarterly
Archiving of Source Data				Alfresco and project files.
Type of information to be extracted from the source data				Current status of the report readiness for publication by the target date.
IT Systems/ Tools used to capture extracted data				Excel Spreadsheet / Word documents.
Source Data Capturing Frequency				Quarterly
Individual(s) responsible for collecting the source data	DD: Tax Incentives ASD: Sector R&D Planning DD: S&T Indicators Senior Policy Analyst	Individual(s) responsible for filing/archiving the collected source data	DD: Tax Incentives DD: Sector R&D Planning DD: S&T Indicators Senior Policy Analyst	
Individual(s) responsible for extracting the required information from the source data	DD: Tax Incentives DD: Sector R&D Planning DD: S&T Indicators Senior Policy Analyst	Individual(s) responsible for verifying the accuracy and completeness of the extracted information	D: R&D Tax Incentives D: Sector R&D Planning D: S&T Indicators Senior Policy Analyst	
Individual(s) responsible for capturing the extracted information onto the IT System	DD: Tax Incentives DD: Sector R&D Planning DD: S&T Indicators Senior Policy Analyst	Individual(s) responsible for verifying the accuracy and completeness of the captured information	D: R&D Tax Incentives D: Sector R&D Planning D: S&T Indicators Senior Policy Analyst	

Performance Indicator 12

Medium-term objectives, measure/indicator, outputs, and targets		Output Name companies accessing the R&D tax incentive	Date 31 March 2018
1. Overview of the objective, output, measure / indicator and target to be reported on			
Programme #		Programme 5	
Programme's Strategic Objectives (as per the Strategic Plan and the annual Performance Plans)		Increased private-sector investment in research and development	
Objective Statement and definition (also supported by Indicator Definitions)		To introduce and manage interventions and incentive programmes that increases the level of private sector investment in research and development.	
Indicator title		Turnaround time in providing pre-approval decisions on applications for the R&D tax Incentive.	
Purpose of indicator	To measure the turnaround time for the DST in providing pre-approval decisions on applications for the R&D Tax Incentives	Type of indicator	Output Indicator
Measure / Indicator Definition	Turn-around time refers to the number of days from date of receipt of application to the date of providing pre-approval decisions on applications for the R&D Tax Incentive. An efficiency objective is to reduce the average	Measure / Indicator Formula	Turn-round time = from date of application received by the DST to the final decision communicated by the Minister of Science and Technology The average number of days taken for providing decisions on applications for a given period compared with previous period.

	number of days of turnaround compared to previous periods.		
New Indicator	No	Desired performance	Actual performance desirable
Measure / Indicator Owner	CD: Science and Technology Investment	Worked example	<p>Date of decision letter less Date of DST receiving an application.</p> <p>Number of days taken in providing decisions to applications received in year X <i>divided by</i> Total number of applications received in year X</p>
Target set for current year	<p>Annual: Preapproval decisions provided within 90 days of date of receipt of application for the R&D tax incentive by 31 March 2018</p> <p>Quarterly: Q1: Preapproval decisions provided within 90 days Q2: Preapproval decisions provided within 90 days Q3: Preapproval decisions provided within 90 days</p>	Target achieved	<p>Actual target achieved.</p> <p>Q1 – Q2 – Q3 – Q4 – YTD - :</p>

	Q4: Preapproval decisions provided within 90 days		
Data limitations	The source data is confidential and only accessible to the R&D Tax Incentive staff processing the applications and those DST staff with special clearance		
Reasons for variances between the target set and actual achieved	Possible lag on applications received in the last two months of the reporting period and considerable time required on the more complex applications. Specifics will be captured when required during reporting.		

2. Collection of source data to enable effective reporting on the adopted output measure / indicator			
Source data		DST quarterly report compiled by R&D Tax Incentive Unit. This report summarises the data drawn from the Excel Datasheets on Application Processing, which has the following information: Date of receipt of application (as per date stamp Date of allocating application to evaluator/external expert; Date of adjudication by committee; date of decision by Minister.	
Collection Frequency of Source data		Quarterly	
Archiving of Source Data		Alfresco – Quarterly reports Unit's Shared Hard Drive (R&D Tax Incentive Applications file) - Excel Datasheets on Applications Processing	
Type of information to be extracted from the source data		Date and Number of applications per stage in the process: received, adjudicated; received decision; or referred back. Number of applications per decision taken: approved; or not approved.	
IT Systems/ Tools used to capture extracted data		Excel Spreadsheet / Word documents.	
Source Data Capturing Frequency		Monthly	
Individual(s) responsible for collecting the source data	DD: R& D Tax Incentives	Individual(s) responsible for filing/archiving the collected source data	D: R& D Tax Incentives
Individual(s) responsible for extracting the required	DD: R& D Tax Incentives	Individual(s) responsible for verifying the accuracy and completeness of	D: R& D Tax Incentives

Information from the source data		the extracted information	
Individual(s) responsible for capturing the extracted information onto the IT System	DD: R& D Tax Incentives	Individual(s) responsible for verifying the accuracy and completeness of the captured information	D: R& D Tax Incentives