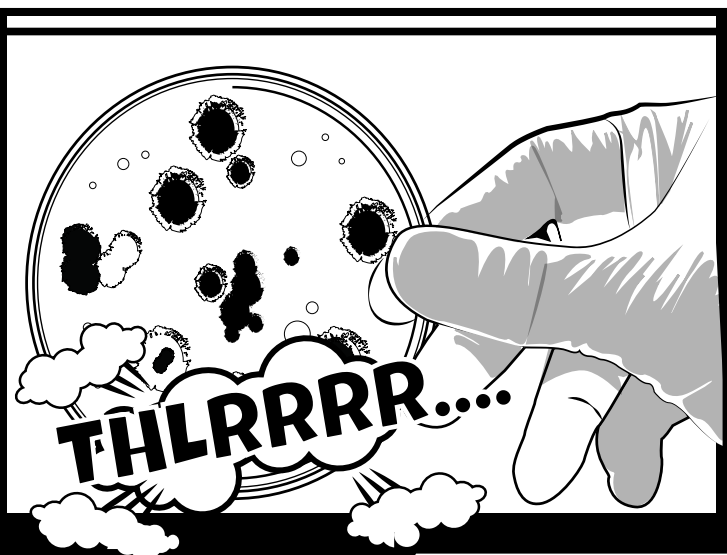

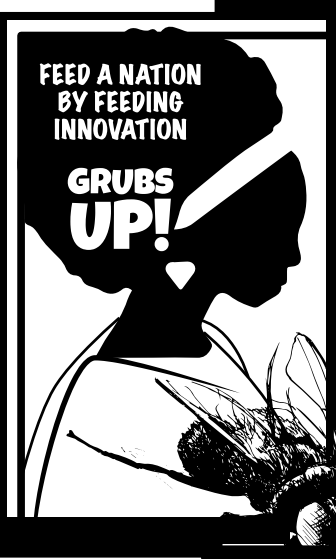

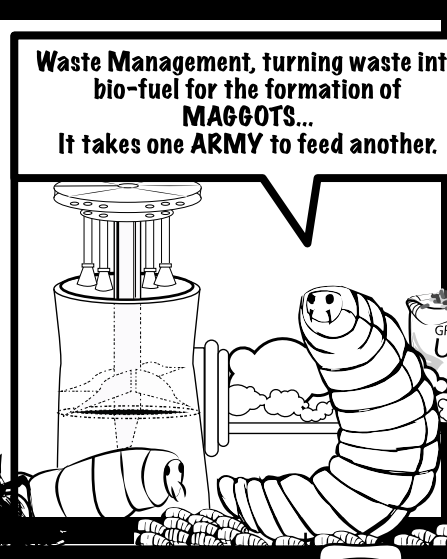

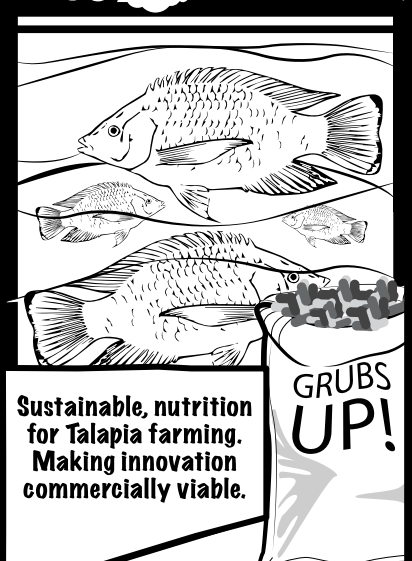

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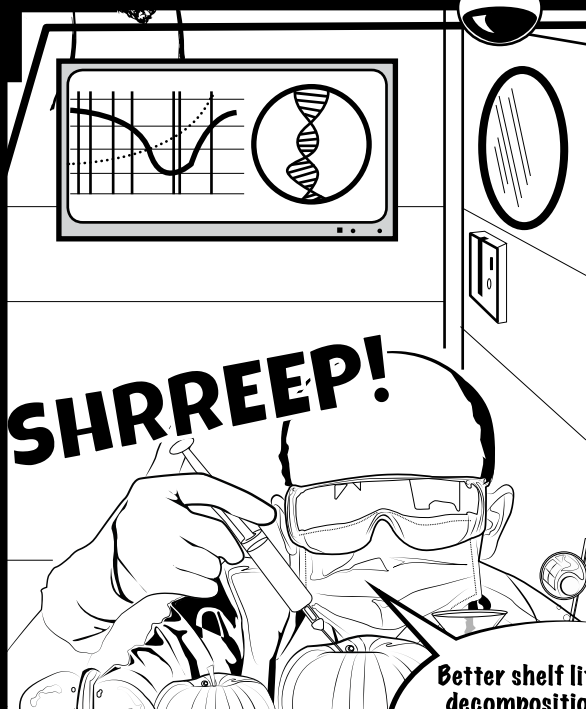

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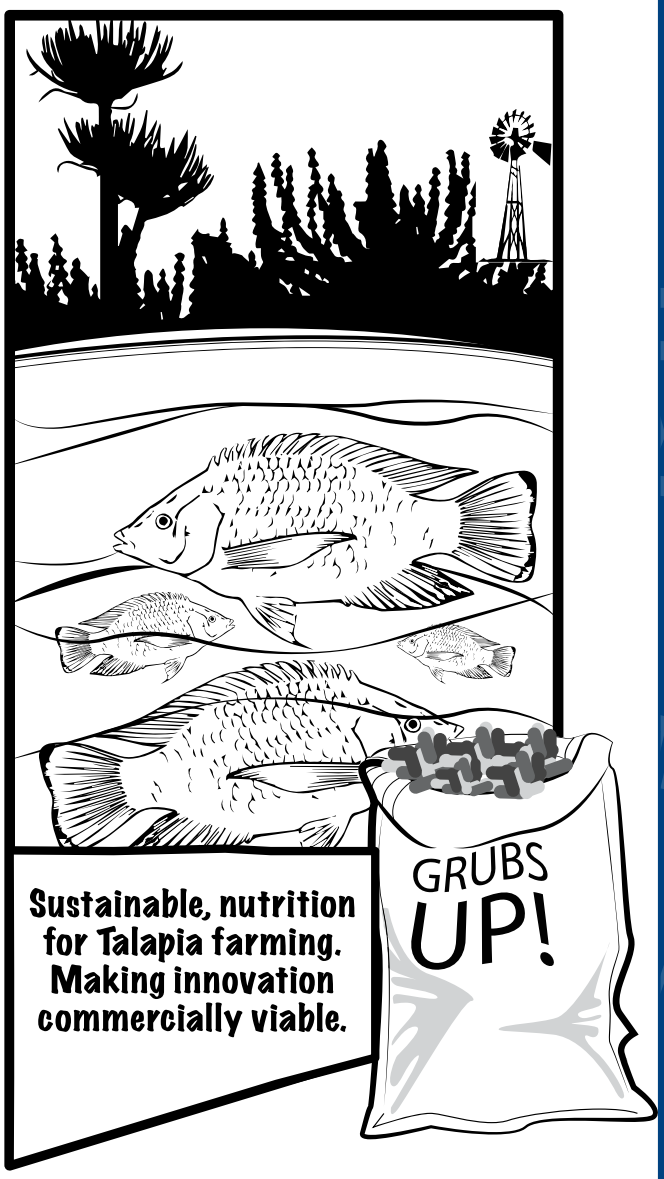

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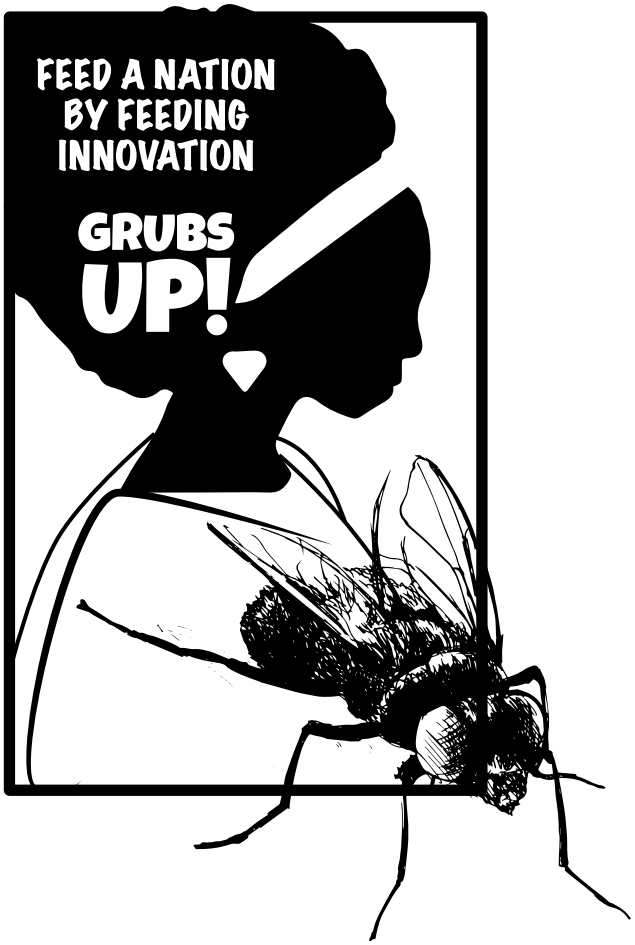


PREFACE

The Annual Report for the Financial Year (FY) 2016/17 has been structured to articulate the reflections of the Technology Innovation Agency's (TIA's) performance for the year by the Chairperson of the Board and the TIA Executive. Thereafter a detailed analysis is given of the year's performance as shown in the Strategic Programmes and Sub-programmes and how these have fared against TIA's working principles of Teamwork, Impact and Accountability. The latter part of the document provides the related governance reports from the Board, Audit and Risk Committee (ARC), as well as external auditors, including the Annual Financial Statements (AFS). Appendices are provided at the end of the document to provide additional information relating to TIA's alignment to the Medium-Term Strategic Framework (MTSF), contribution to the triple challenges, contribution to the Department of Science and Technology (DST) proxy indicators and year-on-year business performance.

HIGHLIGHTS

CUMULATIVE ORGANISATIONAL PERFORMANCE FROM FY2013/14 TO FY2016/17 [1]

TIA continues to build on its performance in realising its mandate, core to this being the development of knowledge outputs from universities, science councils, the private sector, public research institutions and innovations into sustainable commercial opportunities. To date, 205 new knowledge innovation products in the form of technology demonstrators and intellectual property have been developed. A total of R1.6 billion has been disbursed to support the development of new technological innovations, and over 8 550 small, medium and micro enterprises (SMMEs) have been supported. The technologies developed continue to be attractive to the market and 44 of these have been managed to successfully penetrate the market. This has resulted in an economic multiplier of 3.38 being achieved (this means that for every rand TIA spends, an equivalent of R3.38 of economic activity is achieved; this shows improvement from 2.87 realised in FY2010/11), a contribution of R4.8 billion in terms of Gross Domestic Product (GDP) to the national economy, and has led to 14 022 jobs being created. The overall cumulative performance is provided in table 1.

44
NUMBER OF PROJECTS TAKEN UP BY THE MARKET

3.38
ECONOMIC IMPACT - MULTIPLIER SCORE

205
NUMBER OF KNOWLEDGE PRODUCTS DEVELOPED

8 550
NUMBER OF SMMES SUPPORTED

R89M
ROYALTIES RECEIVED FROM PROJECTS SUPPORTED

1 Performance indicators were redefined following the implementation of the FY2012/13 Ministerial Review Recommendations in FY2013/14. The data available from FY2010/11 to FY2012/13 does not correlate to the revised performance indicators, hence its exclusion.

R63.8M

RECEIPTS FROM DISPOSAL/SALE OF MATURE TECHNOLOGY DEVELOPMENT PROJECTS

R12.8M

INTEREST ON LOANS FOR TECHNOLOGY DEVELOPMENT PROJECTS

R180.3M

LOANS - TOTAL AMOUNT BEFORE IMPAIRMENTS

R1.6B

GRANTS DISBURSED TO SUPPORT TECHNOLOGY DEVELOPMENT AND INFRASTRUCTURE

R272M

EQUITY - TOTAL AMOUNT BEFORE IMPAIRMENTS

AMABALENGWE

UKUSEBENZA KWENHLANGANO NGOKUQHUBEKAYO KUSUKA KU-FY2013/14 KUYAKU-FY2016/17[1]

I-TIA iqhubekela phambili ikhulisa umsebenzi wayo ukuze ifeze lokho ekuphathisiwe, futhi okuyinhloko ukuhlelwa kolwazi oluvela emanyuvhesi, imikhakha yezesayensi, izingxenye ezizimele, izikhungo zocwaningo zezwe nezindlela ezintsha ukuze kufinyelelwe amathuba ebhizinisi aqhuba kahle. Njengamanje, kunezici ezintsha zolwazi ezimisiwe ezingu-205 ezifaka phakathi ababonisi bezobuchwepheshe nokugcinwa kolwazi lobuhlakani. Kusetshenziswe imali efinyelela u-R1.6 bhiliyoni ukweseka ukumisa kwezindlela ezintsha zezobuchwepheshe, kanye namabhizinisi angu-8 550 amancane, amaphakathi nasafufusa (small, medium and micro enterprises (SMMEs)). Ezobuchwepheshe ezimisiwe ziqhubekela phambili zikhanga abathengi futhi ezingu-44 zithole ukuqondiswa okuhle zaze zafinyelela ingxenye enkulu yabathengi. Lokho kubenomthelela ekukhuleni kwezomnotho ngo-3.38 (lokho kusho ukuthi irandi ngalinye elisetshenziswa i-TIA, lifinyelelwa umphumela wezomntotho olingana ne-R3.38; lokho kusho intuthuko ukusuka ku-2.87 efinyelelwe ngo-FY2010/11), nokubamba iqhaza nge-R4.8 bhiliyoni ngeNgqikithi yoMkhiqizo Wezwe (Gross Domestic Product (GDP)) emnothweni wezwe, futhi kudale imisebenzi engu-14 022. Umbiko ohlangene womsebenzi wendlalwe etafuleni 1.

HOOGTEPUNTE

KUMULATIEWE ORGANISATORIESE PRESTASIE VIR FJ2013/14 TOT FJ2016/17 [1]

TIA bou steeds voort op sy prestasie in die realisering van sy mandaat, die kern daarvan synde die ontwikkeling van kennis-uitsette vanaf universiteite, wetenskapsrade, die privaatsektor, openbare navorsingsinstellings en innovasies tot volhoubare kommersiële geleenthede. Tot op hede is 205 nuwe kennis-innovasieprodukte ontwikkel in die vorm van tegnologie-demonstreerders en intellektuele eiendom. 'n Totaal van R1,6 biljoen is uitbetaal om die ontwikkeling van nuwe tegnologiese innovasies te ondersteun, en meer as 8 550 klein, medium en mikro-ondernemings (KMMO's) is ondersteun. Die tegnologieë wat ontwikkel is, bly steeds aantreklik vir die mark en 44 hiervan het daarin geslaag om die mark suksesvol te betree. Dit het gevolglik daartoe gelei dat 'n ekonomiese vermenigvuldiger van 3.38 bereik is (wat beteken dat vir elke rand wat TIA bestee, 'n ekwivalent van R3.38 ekonomiese aktiwiteit bereik word; dit toon verbetering van 2.87 gerealiseer in FJ2010/11), 'n bydrae van R4.8 biljoen in terme van Bruto Binnelandse Produk (BBP) tot die nasionale ekonomie, en het gelei tot die skepping van 14 022 werksgeleenthede. Die oorhoofse kumulatiewe prestasie word aangedui in tabel 1.

DIQAQISO/ DITLHAKISO

CUMULATIVE ORGANISATIONAL PERFORMANCE HO TLOHA SELEMONG SA DITJHELETE (SD) 2013/2014 HO ISA HO SD2016/17 [1]

TIA e tswela pele ho aha tshebetso ya yona ka ho elellwa thomo ya yona, motheong wa sena wa ho ba kgodiso ya tsebo ya diphetho ho tswa diyunivesithing, makgotleng a saense, ditheo tsa poraefete, ditsi le dintjhafatso tsa dipatlisiso tsa setjhaba ho ba menyetla ya kgwebo e tsharellang. Ho fihla jwale, dihlahiswa tsa ntjhafatso ya tsebo ka tsela ya ditshupiso tsa thekenoloji le thepa ya bohlale di se di hlabollotswe. Palohohle ya R1.6 bilione e se e sebedisitswe ho tshehetsa kgodiso ya dintjhafatso tsa thekenoloji tse ntjha, mme dikgwebopotlana (SMMEs) tse nyane,tse mahareng le tse kgolwane tse fetang 8 550 di se di tsheheditswe. Dithekenoloji tse hlabolotsweng di tswela pele ho kgahlisa mebaraka mme tse 44 tsa tsona di se di kgonne ho phunyeletsa mmaraka ka katleho. Sena se qeteletse e le katiso ya ikonomi e fihlelletsweng ya 3.38 (sena se bolela hore bakeng sa ranta e nngwe le e nngwe eo TIA e e sebedisang, tekano ya 3.38 ya mesebetsi ya ikonomi e a fihlellwa; sena se bontsha ntlafalo ho tswa ho 2.87 e bonweng ka SD2010/11, tshwaelo ya 4.8 bilione ho ya ka Sehlahiswa se Seholo sa Naha (Gross Domestic Product - GDP) ho ikonomi ya naha, mme sa etsa hore ho be le mesebetsi e 14 022 e hlahisitsweng. Tshebetso ya pokello e akaretsang e bontshitswe theiboleng/tafoleng ya 1.e

EZITJHUJILEKO

ITUTHUKO YOKUSEBENZA KWEHLANGANO KUSUKELA KU-FY2013/14 UKUYA KU-FY2016/17[1]

I-TIA iragela phambili nokuzakha ekusebenzeni kwayo ngokuzuza malungana nomnqopho wayo, njengombana lokhu kuyintatha yetuthuko yokuba nelwazi elivela emayunivesithi, kwabeluleka ngesayensi, iinhlangano zangeqadi, iindawo zomphakathi zokwenza irhubhululo kunye netuthuko eziqinisa amathuba wezamabhizinisi. Bekube kunamhlanjesi, sekwenziwe iinsetjenziswa eziyi-205 ezitja zetuthuko malungana nokuveza ukuhlakanipha kwetheknoloji. Kunikelwe nangemali ebalelwa ku-R1.6 bhiliyoni malungana nokusekela ituthuko yeensetjenziswa ezitjha zetheknoloji, begodu kusekelwe neenhlangano zetuthuko ezingaphezu kweziyi-8 550 ezincani kunye neziphakatjhana. Zetheknoloji ezenziwe lapho ziragela phambili zikara eemarageni begodu eziyi-44 zazo zenziwe kuhle khulu kangangobana zabe zafakwa emarageni. Lokhu kuwuthuthukisile nomnotho nge-3.38 etholakeleko (okutjho iranda ngalinye elikhitjhwa yi-TIA, kuzuzwa imali engange-R3.38; lokhu kuveza ituthuko kusukela ku-2.87 eyazuzwa nge-FY2010/11), umnikelo we-R4.8 bhiliyoni ngokomKhiqizo ongakaHlungwa womPhakathi (GDP) emnothweni wesitjhaba, okubangele nokuvuleka kwamthuba wemisebenzi eyi-14 022. Sewuwoke umsebenzi wetuthuko le utholakala ethebuleni 1.

DINTLHAKGOLO

GO ŠOMA MO GO OKETŠEGAGO GA MOKGATLO GO TLOGA KA FY2013/14 GO YA GO FY2016/17 [1]

TIA e tšwela pele e aga mokgwa wa yona wa go šoma ka ge e na le moeno, gomme se segologolo mo ke kgolo ya tsebo yeo e tšweletšwago ke diyunibesithi, makgotla a thutamahlale, magoro a ka sephiring, mekgatlo ya nyakišišo ya setšhaba le go hlongwa bakeng sa dibaka tša maleba tša kgwebo. Go fihla le lehono, go hlomilwe ditšweletšwa tše 205 tša tsebo e mpsha tša bašupi ba thekinolotši le thoto ya ditsebi. Go abilwe tekanyo ya dibiliyone tše R1.6 go thekga kgolo ya go hlongwa ga thekinolotši e mpsha gomme go thekgilwe dikgwebo tše dinyenyane tše di fetago 8 550, tša magareng le tše dikgolwanyane (di-SMME). Dithekinolotši tše di hlamilwego di tšwela pele di kgahla bareki gomme tše 44 di kgonne go fihla mo bareki ba ka di bonago gona. Se se okeditše ikonomi ya 3.38 (se se ra gore go ranta e nngwe le e nngwe yeo TIA e e dirišago, go fihlelelwa tekanyo ya R3.38 ya mošomo wa ikonomi; se se bontšha kaonefalo go tloga go 2.87 yeo e bilego gona ka FY2010/11), go tlaleletša ka dibiliyone tše R4.8 tabeng ya Setšweletšwa se Segolo sa ka Gae (GDP) go ya go ikonomi ya naga, gomme se dirile gore go hlangwe mešomo e 14 022. Kakaretšo ya seo se dirilwego e hlaloswa go tafola 1.

DINTLHAKGOLO

GO GOLA GA TIRO YA SETLAMO GO SIMOLOLA KA FY2013/14 GO FITLHA KA FY2016/17 [1]

TIA e tsweledisetsa pele tiro ya yone gore e fitlhelele mokgele wa yone, mme sa konokono mo go seno ke go tlhama dipholo tsa kitso go tswa kwa diyunibesiting, kwa makgotleng a saense, setlamo sa poraefete, ditheo tsa puso tsa patlisiso le tsa tlhamoseŝwa ya go dira gore go nne le ditšhono tsa kgwebo tse di kgonang go bulegela ruri. Go tla go fitlha gompieno jaana, go tlhamilwe dikumo di le 205 tse dintŝha tsa tlhamoseŝwa tsa kitso ka ditshupiso tsa thekenoloji le ditshwanelo tsa dfithoto. Go tlametswe ka bokana ka R1.6 bilione go tshegetsa go tlhamiwa ga ditlhamoseŝwa tsa thekenoloji, go tshegeditswe le dikgwebopotlana, dikgwebo tse di mo magareng le dikgwebo tse dipotlana thata (di SMME). Dithekenoloji tse di tlhamilweng di tswelela pele go ngokwa ke mmaraka mme tse 44 tsa tsone di ile tsa laolwa sentle moo di ileng tsa kgona go tsena mo mmarakeng. Seno se dirile gore go fitlhelelwe kgolo ya ikonomi ya 3.38 (seno se raya gore fa TIA e dirisa ranta nngwe le nngwe, go fitlhelela bokana ka R3.38 ya ditiro tsa ikonomi; seno se bontsha go tokafala ga dilo go tswa go 2.87 e e fitlheletsweng ka FY2010/11), e bile go tsenya bokana ka R4.8 bilione go Palogotlhe ya Lotseno lwa Dithoto lwa Naga (Gross Domestic Product [GDP]) lwa ikonomi ya naga yotlhe, mme seno se ne sa felela ka go tlhamiwa ga ditiro di le 14 022. Go gola ka kakaretso ga tiro go bontshiwa ke lenaanethalo 1

EZIPHUMA PHAMBILI

INDLELA ONYUKELA NGAYO UMBUTHO UKUSUKA KUNYAKA-FY2013/14 UKUYA KU- FY2016/17[1]

I-TIA iyaqhubeka ukukwakha indlela eyenza ngayo ukuze ifezekise oko ikunikiweyo., injongo yayo ukuphuhlisa ulwazi kwiiyunivesithi, iikhansile zesayensi, icandelo labucala, amaziko ophando oluntu, ukuveliswa kwezinto ezintsha kwiindawo zasekuhlaleni ukwakha amathuba oqoqosho azinzileyo. Namhlanje zingama- 205 iimveliso ezintsha eziluhlobo lokubonisa ubugcisa nobukrelekrele, ezithe zaphuhliswa. Isixa-mali esizizigidi-gidi zeeRandi ezingama 1,6 sikhutshiwe ukuxhasa uphuhliso lobugcisa bokuvelisa izinto ezintsha kwaye ngaphezu kwamashishini angama-8 550 amancinane, aphakathi namancinane kakhulu (SMMEs) athe axhaswa.. ubugcisa obuveziweyo buyaqhubeka ukuba nomtsalane ezimalikeni kwaye ezingama-44 kwezi zilawulwe kakuhle ukungena ezimalikeni. Oku kukhokelele ekubeni kuphinda-phindo loqoqosho kwe-3,38 oluthe lwafikelelwa [oku kuthetha ukuba ngerandi nganye esetyenziswe yiTIA, umsebenzi woqoqosho we-3,38 uyenziwa. Oku kubonisa ukuphucuka kwe 2,87 okuthe kwafunyanwa ku-FY2010/11), igalelo lezigi-gidi ezi-R4.8 ngokwe-GDP [Gross Domestic Product] kuqoqosho lwelizwe kwaye oku kukhokelele kwimisebenzi engama-14 022 ethe yenziwa. Le ndlela yokunyukela inikiwe kwiteyibhile yokuqala.

LOKUGCAMILE

KUSEBENTA LOKUPHELELE KWENHLANGANO KUSUKELA NGEMNYAKATIMALI-2013/14 KUYE KUNYAKATIMALI-2016/17 [1]

I-TIA iyachubeka nekwakhela ekusebenteni kwayo kute iphumelelise umsebenti lenikwe wona, insika yaloku yimiphumela yelwati levela kumanyuvesi, kumikhandlu yeseayensi, umkhakha lotimele, tikhungo telucwalingo tahulumende kanye nalokusha lokucanjiwe kutsi kube ngematfuba ekutsengisa lasimeme. Lamuhla, 2005 sekwakhiwe imikhicito yelwati lolusha lwekucamba lolusimo setinkhomba tetheknoloji nemisebenti yebuciko. Samba setigidzi leti-R1.6 sesikhokhiwe kute kwesekelwe kutfutfukiswa kwetintfo letinsha tebucwepheshe, futsi kuphindze kwesekelwa nemabhizinisi la-8 550 lamancane, lasemkhatsini nalamancane kakhulu (ema-SMME). Lobucwepheshe lobentiwe buyachubeka nekuheha imakethe futsi lobunge-44 babo bulawulwe ngemphumelele kutsi bungene emakethe. Loku sekuholele ekutsini kuzuzwe kuphindzaphindzeka kwemnotfo loku-3.38 (loku kusho kutsi lonkhe lirandi lelisetjentiswa yi-TIA, kuzuzwa umsebenti wemnotfo lolingana na-R3.38; loku kukhombisa buncono lobusuka ku-2.87 lobutfolwe ngemnyakatimali wa-2010/11), ligalelo letigidzigidzi le-R4.8 ngekuya kweSamba Semkhicito Walelive (i-GDP) kumnotfo wavelonkhe, futsi sekuholele ekutsini kwakheke imisebenti le-14 022. Samba lesiphelele sembuyiselo yekusebenta siniketwe kuthebuli-1

MANWELEDZO

NYALUWO YA KUSHUMELE KWA BINDU NGA ŃWAHA WA DZITSHELEDE WA 2013/14 U SWIKA NGA ŃWAHA WA DZITSHELEDE WA 2016/17 [1]

TIA i bvela phanḓa i tshi fhaṱa kushumele kwayo u tendelana na ndivho yayo, tshithu tsha ndeme kha yeneyo mvelaphanḓa ya nḓivho ndi thuso ine ya bva kha dziyunivesithi, dzikhantsele dza saintsi, sekithara dza phuraivethe, madzangano a ṱhoḓisiso a vhomuthumunzhi na tshanduko dzine dza itwa kha zwibuli zwa mabindu ane a nga kona u bvela phanḓa nga oṱhe. U swika zwino, ho no bveledzwa tshanduko kha zwishumiswa zwiswa zwa 205 zwine zwa kona u sumbedza thekinolodzhi na zwithu zwine zwa sumbedza vhuṱali. Ho no badelwa tshelede i linganaho R1,6 bilioni u itela u tikedza tshanduko ine ya khou itwa kha thekinolodzhi nahone mabindu maṱuku na a re vhukati na fhiraho 8 550 ane a vhidzwa SMME, o no tikedzwa. Thekinolodzhi ine ya khou bveledzwa i khou kunga vharengi nahone vha 44 vha vhenevha vharengi vho no kona u dzhena kha makete. Hezwi zwo ita uri ikonomi i ande nge ha swikelelwa tshivhalo tsha 3,38 (hezwi zwi amba uri kha rannda iṅwe na iṅwe ine ya shumiswa nga TIA, hu swikelelwa R3,38 kha ikonomi, hezwi zwi amba nyengedzeo ya 2,87 nga Ńwaha wa Dzitshelede wa 2010/11), thikhedzo ya R4,8 bilioni kha zwine zwa vhidzwa Gross Domestic Product (GDP) kha ikonomi ya lushaka, nahone zwo itwa uri hu sikwe mishumo i linganaho 14 022. Nḓila ye ha shumiwa ngayo yo sumbedzwa kha tshibogisi 1.

TINHLANKULU

MATIRHELO YA NHLANGANO HI NTLHANDLAMANO KU SUKA EKA FY2013/14 KU YA EKA FY2016/17 [1]

TIA yi hambeta yi hoxa xandla eka matirhelo ya yona hi ku ya hi pfhumba ra xiviri, ngopfungopfu nhluvukiso wo ava vutivi lebyi humaka etiyunivhesiti, swiyenge swa sayense, xiyenge xo tiyimela xoxe, swivandla swa ndzavisiso swa rixaka ni mianakanyo yintshwa eka tindlela to endla bindzu leti tirhaka kahle. Ku fikela sweswi, ku simekiwe swiyenge leswintshwa swa 205 swo ava vutivi hi ku tirhisa vakombisi va thekinoloji ni vuhlayisi bya vutlhari. Ku tirhisiwe ntsengo wa R1.6 biliyoni ku seketela nhluvukiso wa mianakanyo leyintshwa ya thekinoloji, naswona ku seketeriwe mabindzu lamatsongo, ya le xikarhi ni yo kulanyana (small, medium and micro enterprises (SMMEs)). Tithekinoloji leti simekiweke ti hambeta ti tsakisa vaxavi naswona 44 wa tona ti tameriwa khwatsi ti swi kota ku fikelela vaxavi. Sweswo swi endle leswaku ikhonomi yi ndlandlamuka hi 3.38 (sweswo swi vula leswaku eka rhandi yin'wana ni yin'wana leyi tirhisiwaka hi TIA, ku fikeleriwa vuyelo byo ringana R3.38 eka ikhonomi; sweswo swi komba nhluvuko ku suka eka 2.87 leyi fikeleriwekwe hi FY2010/11), ni ku hoxa xandla hi mpimo wa R4.8 biliyoni hi ku landza Ntsengo wa Swimakiwa swa Tiko (Gross Domestic Product (GDP)) eka ikhonomi ya tiko, naswona swi tswale mintirho ya 14 022. Nkatsakanyo wa matirhelo hinkwawo wu andlariwe eka tafula 1.

YEAR-ON-YEAR

YEAR-ON-YEAR ORGANISATIONAL PERFORMANCE FROM FY2013/14 TO FY2016/17

The focus areas for FY2016/17 at an organisational level were to develop strategic plans for Strategic Technology Areas and Innovation Programmes linked to national priorities in collaboration with the relevant NSI stakeholders to support development of SMMEs and youth participation; engagement with strategic stakeholders in the NSI to bolster the product offering to compliment national government priorities; embed the new structure to ensure greater organisational effectiveness through seamless functionality across the structure; and to build a strong culture of high performance. In the year under review, TIA could leverage R182.2m from third parties. This represented an increase of 86% in comparison with the previous year, demonstrating the attractiveness of TIA's project portfolio.

A total of 2 261 SMMEs received assistance, which is a minimal increase of 64 from the previous year. This reflects the continued role that the Technology Station Programme has in terms of supporting technology development. The programme has assisted black-owned SMMEs in particular, to better understand technology options and choices for competitiveness improvements. Over 55 enterprises confirmed to have secured contracts after intervention from the Technology Station Programme.

AMOUNT RECEIVED FOR THIRD PARTIES TO LEVERAGE ON TIA PROJECTS

13/14	14/15	15/16	16/17
R88,5m	R201m	R97,9m	R182,2m

NUMBER OF KNOWLEDGE INNOVATION PRODUCTS DEVELOPED

13/14	14/15	15/16	16/17
27	38	76	64

NUMBER OF SMMES ASSISTED AT THE TECHNOLOGY STATIONS

13/14	14/15	15/16	16/17
1 904	2 188	2 197	2 261

NUMBER OF SEED FUND PROJECTS DISBURSED

13/14	14/15	15/16	16/17
70	145	275	123

NUMBER OF PROJECTS REACHING THE MARKET

13/14	14/15	15/16	16/17
8	6	9	21

NUMBER OF YOUTH PROJECTS RECEIVING FUNDING

13/14	14/15	15/16	16/17
43	37	52	31

ECONOMIC IMPACT MULTIPLIER SCORE

13/14	14/15	15/16	16/17
2.80	2.83	2.87	3.38

KWAMINYAKA YONKE

UKUSEBENZA KWENHLANGANO KWAMINYAKA YONKE OKUSUKA KU-FY2013/14 KUYAKU-FY2016/17

Izingxenye ebezibhekiwe ku-FY2016/17 enhlanganweni beziphathelene nokumiswa kwamahlelo okusebenza ngokukhethekile Ezingxenyeni Zekhethelo Ngokwezobuchwephese neZinqubo zeZindlela Ezintsha okuhambisana nezinto eziza kuqala ezweni ngokubambisana nalabo abathintekayo kwi-NSI ukuze kwesekwe ama-SMME nokuhlanganyela kwentshwa; ukuxoxisana nabathintekayo ekuhleleni kwi-NSI ukuze kuqiniswe umkhiqizo wokwelekelela izinto eziza kuqala ezweni; ukugxiliswa kwendlela entsha emisiwe ukuze kufinyelelwe indlela yokusebenza ehamba ngokushelela kakhudlwana; nokumisa indlela inqubo yokusebenza kahle ngokuqinile. Kulonyaka oxoxelwayo, i-TIA ingase ifinyelele u-R182.2 miliyoni evela ezingxenyeni eziseceleni. Lokhu kusho ukwanda ngamaphesenti angu-86% lapho kuqhathaniswa nonyaka odlule, okubonisa ukuthandeka kwendlela i-TIA esebenza ngayo.

Ama-SMME angu-2 261 athole ukwesekwa, futhi lokho kuwukwanda okuncane kuka-64 ukusuka onyakeni odlule. Lokhu kubonisa ingxenye efezwa i-Technology Station Programme ukweseka ukuthuthukiswa kwezobuchwephese. Lenqubo ibe usizo kuma-SMME ikakhulukazi ukuqonda kangcono izinhlobo zezobuchwephese nokukhetha ukuze ahlale ethuthukisa ukusebenza kwawo. Amabhizinisi angaphezu kuka-55 aqinisekise ukuthi athole izinkontileka ngemuva ngokungenela kwe-Technology Station Programme.

JAAR-OP-JAAR

JAAR-OP-JAAR ORGANISATORIESE PRESTASIE VIR FJ2013/14 TOT FJ2016/17

Die fokus-areas vir FJ2016/17 op organisatoriese vlak was om strategiese planne te ontwikkel vir Strategiese Tegnologie-Areas en Innovasieprogramme gekoppel aan nasionale prioriteite in samewerking met die relevante NSI-belanghebbendes om ontwikkeling van KMMO's en jeugdeelname te ondersteun; wisselwerking met strategiese belanghebbendes in die NSI om die produk-aanbod 'n hupstoot te gee om nasionale regeringsprioriteit te komplementeer; om die nuwe struktuur vas te lê om groter organisatoriese doeltreffendheid te verseker deur soomlose funksionaliteit oor die hele struktuur heen; en om 'n sterk kultuur van hoë prestasie te bou. In die jaar onder oënskou kon TIA R182.2 vanaf derde partye trek. Dit verteenwoordig 'n toename van 86% vergeleke met die vorige jaar, wat die aantreklikheid van TIA se projekportefeulje demonstreer.

'n Totaal van 2 261 KMMO's het ondersteuning ontvang, 'n minimale toename van 64 KMMO's vergeleke met die vorige jaar. Dit weerspieël die volgehou rol van die Tegnologiestasieprogram in terme van die ondersteuning van tegnologiese ontwikkeling. Die program het KMMO's in swart besit in besonder bygestaan om tegnologiese opsies en keuses vir verbetering van mededinging beter te verstaan. Meer as 55 ondernemings het bevestig dat hulle kontrakte gesluit het na intervensie van die Tegnologiestasieprogram.

SELEMO KA SELEMO

TSHEBETSO E BOLAODING YA SELEMO KA SELEMO HO TLOHA SD2013/14 HO ISA HO SD2016/17

Tsepamiso ditikolohong bakeng sa SD2016/2017 boemong ba bolaodi e ne e le ho hlabolla meralo ya mawa bakeng sa Ditikoloho tsa Mawa a Thekenoloji (Strategic Technology Areas) le Diprogramo tsa Ntjhafatso tse hokahantsweng ho ditlhoko tsa naha tshebedisanong le bathahaselli ba loketseng ba NSI ho tshehetsa kgodiso ya SMMEs le bonkakarolo ba batjha; tshebedisano le bathahaselli ba mawa ho NSI ho phahamisa ho fana ka sesebediswa ho tshwantsha le ditlhoko tsa mmuso tsa naha; ho theha sebopeho se setjha ho netefatsa katleho ya bolaodi e kgolwanyane ka tshebetso e telele ho potoloha le sebopeho; le ho aha setso se tiileng sa tshebetso e phahameng. Selemong se ka tlasa tekolobotjha, TIA e ka matlafala ka R182.2 milione ho tswa mekgatlo e meng (third parties) Sena se emetse 86% ha se bapiswa le selemo se fetileng, ho bontshang kgohelo ya potefolio ya projeke ya TIA.

Palohohle ya diSMME tse 2 261 di fumane thuso, eo e leng keketso e nyane ya 64 ho tswa selemong se fetileng. Sena se bontsha seabo se tswellang seo Programo ya Seteishene sa Thekenoloji (Technology Station Programme) e nang le sona ho ya ka ho tshehetsa kgodiso/ntshetsopele ya thekenoloji. Programo e thusitse SMMEs ka ho otloloha, tseo beng ba tsona e leng bathobatsho, hore ba utlwisise dikgetho tsa thekenoloji betere bakeng sa dintjahfatso tse mabapi le ditlhodisano. Dikgwebo tse fetang 55 di netefaditse hore di fumane dikonteraka ka mora bonamodi ho tswa ho Programo ya Seteishene sa Thekenoloji.

YONYAKA NONYAKA

INDLELA YOKUSEBENZA KWEHLANGANO YONYAKA NONYAKA KUSUKELA KU-FY2013/14 UKUYA KU-FY2016/17

Okuqalwe khulu ku-FY2016/17 ngokwezinga lehlangano bekukuthuthukisa amaplani waMano wezeTheknoloji namaHlelo weTuthuko ahlangene nezesitjhaba ezikhamba phambili ekusebenzisaneni namalunga afaneleko we-NSI ngokusekela ituthuko ye-SMME nokuhlanganyela kwelutjha; ukuzibandakanya namalunga wamano ku-NSI ekuqiniseni umkhiqizo onesandla ekusekeleni zakarhulumende wesitjhaba ezikhamba phambili; ukuhloma ikambiso etja ezokuqinisekisa ipumelelo yehlangano ngokusebenza ngebambiswano; kunye nokwakha ikambiso yokusebenza ngezinga eliphakemeko. Enyakeni wokubuyekeza, i-TIA ingazuza i-R182.2m kwababandakanyekileko. Lokhu kutjho ukwanda kwe-86% nakumadaniswa nekonyaka ogadungileko, okuveza ikariso ngejima lokusebenza kwe-TIA.

Kunenani eliyi-2 261 lama-SMME afumene isizo, okuyinzuzo ephasi ye-64 kusukela enyakeni ogadungileko. Lokhu kuveza iragelo phambili lendima edlalwa liHlelo lesiTetjhi seTheknoloji malungana nokusekela ituthuko yetheknoloji. Ihlelwelo lisize ama-SMME alawulwa ngabanzima ngokukhethekileko, ukuthi bazwisise abonkhethani abahlukahlukeneko betheknoloji malungana nephaliswano netuthuko. Kuneenhlangano ezingaphezu kweziyi-55 eziqinisekise bona zizokuba namakontraka avikelekileko ngemva kokusizwa liHlelo lesiTetjhi seTheknoloji.

NGWAGA KA NGWAGA

GO ŠOMA GA MOKGATLO NGWAGA KA NGWAGA GO TLOGA KA FY2013/14 GO YA GO FY2016/17

Dikarolo tše di lebeletšwego tša FY2016/17 ka tekanyo ya mokgatlo e be e le go hlama Mekgwa ya Dikarolo tša Thekinolotši le Mananeo a go Hloma ao a sepedišanago le dilo tše di etišwago pele nageng ka go dirišana le bakgathatema ba maleba ba NSI go thekga kgolo ya di-SMME le go kgatha tema ga bafsa; go dirišana le bakgathatema ka tsela ya maleba go NSI go thekga setšweletšwa gore go thekgwe dilo tše mmušo o di etišitšego pele; go thekga mokgwa o mofsa go kgonthiša gore mokgatlo o atlega kutšwanyana ka mekgwa yeo e sa lemogegego ya sebopego se; le go aga setšo se matla sa go šoma. Ngwageng wo re o hlahlobago, TIA e kgobokeditše dimilione tša diranta tše R182.2 go tšwa ka ntle. Se se bontšhitše koketšego ya 86% ge go bapetšwa le ngwaga o fetilego, gwa bontšhwa go kgahliša ga kagego ya mošomo wa TIA.

Palomoka ya di-SMME tše 2 261 e hweditše thušo, e lego koketšego ya tlasana ya 64 ge go bapetšwa le ngwagola. Se se bontšha gore Lenaneo la go Beakanywa ga Thekinolotši le tšwela pele gabotse ka go thekga kgolo ya thekinolotši. Lenaneo le le thušitše di-SMME tša bathobaso ka mo go kgethegilego, gore ba kwešiše dikgetho tša thekinolotši gore phadišano e kaonefale. Dikgwebo tše di fetago 55 di bontšhitše gore di na le ditumelelano ka morago ga go tsena ditaba gare go tšwa go Lenaneo la Peakanyo ya Thekinolotši.

NGWAGA LE NGWAGA

TIRO YA SETLAMO YA NGWAGA LE NGWAGA GO SIMOLOLA KA FY2013/14 GO FITLHA KA FY2016/17

Mokgele wa FY2016/17 o setlamo se neng se ipeetse one e ne e le go tlhama dithulaganyo tse di logetsweng maano mo Mafelong a Thekenoloji e e Logetsweng Maano le Mananeo a Tlhamoseŝwa a a golaganeng le dilo tse di etelediwang kwa pele tsa bosetšhaba ka go dirisana mmogo le baamegi ba ba tshwanelegang ba NSI go tshegetsa tlhabololo ya di SMME le go tsaya karolo ga baša; go dirisana le baamegi ba ditogamaano mo NSI go tokafatsa tsela ya go tlamela ka dikumo tse di tlhokegang tsa bosetšhaba tsa puso tse di etelediwang kwa pele; go tsenyeletsa thulaganyo e ntšha go tlhomamisa gore setlamo se atlega fela thata ka go dirisana mmogo mo thulaganyong eno yotlhe; le go tlhama mokgwa wa go dira ka natla mo tirong. Ka ngwaga o go begiwang madi a lotseno ka one, TIA e ne e ka bona bokana ka R182.2m go tswa go ditlamo tse dingwe. Seno se ne se emela koketsego ya 86% fa e bapisiwa le ya ngwaga o o fetileng, e leng se se supang gore photefolio ya porojeke ya TIA e a kgatlha.

Palogotlhe ya di SMME di le 2 261 e ne ya bona thuso, e leng koketsego-potlana ya 64 fa e bapisiwa le ya ngwaga o o fetileng. Seno se bontsha seabe se se tswelelang pele se Lenaneo la Seteišene sa Thekenoloji se nang le sone sa go tshegetsa tlhabololo ya thekenoloji. Lenaneo leno le thusitse segolobogolo di SMME tsa bantsho, gore di kgone go tlhaloganya diitlhophelwa tsa thekenoloji le ditlhopho tsa go tokafatsa mokgwa wa go tsenela kgaisano. Dikgwebo tse di fetang 55 di netefaditse gore di kgonne go saena dikonteraka morago ga tharabololo e e neng ya tlisiwa ke Lenaneo la Seteišene sa Thekenoloji.

UNYAKA NONYAKA

INDLELA UMBUTHO OWENZA NGAYO UNYAKA NONYAKA UKUSUKA NGO-FY2013/14 UKUYA KU-FY2016/17

Iindawo ezifuna ukuqwalaselwa kunyaka u-FY2016/17 kwinqanaba lombutho kukuphuhlisa iiplani zesicwangciso zeeNdawo zesiCwangciso sobuGcisa neeNkqubo zokuVelisa izinto ezintsha, kudityaniswe noko kuhamba phambili elizweni kunye nabo bachaphazelekayo beNSI ukuxhasa uphuhliso lwamashishini [SMMEs] nongenelelo lolutsha, ukuthatha inxaxheba kwabo bachaphazelekayo be-NSI ukukhawulezisa ukunikwa kwemveliso ukuze kuncediswane ngoko kubekwa phambili ngurhulumente welizwe. Kusetyenziswe nzulu esi sakhio sitsha ukuze kuqinisekiswe ukuba kusetyenzwa kakuhle embuthweni, ngokuthi kusetyenziswane kuhlelo lonke nokwakha inkcubeko ekuqilima yokusebenza kakuhle kakhulu. Kulo nyaka xa kuhlolwa kwakhona, i-TIA ingafumana ama-R182.2 ezigidi kwabezinye iinkonzo esebenza nabo. Oku kumele isongezo sama-86% xa kuthelekiswa nonyaka odlulileyo, oku kubonakalisa umtsalane kwiprojekthi ye-TIA.

Amashishini [SMMEs] angama-2261 ewonke afumene inkxaso, esi sesona songezo sincinane nesingama-64 ukusuka kunyaka odlulileyo. Oku kuveza indima yeNkqubo ye-Technology Statio eqhubekayo ukuxhasa uphuhliso lobugcisa. Inkqubo le incede amashishini abantu amamnyama [SMMEs] ukuqonda ngeentlobo zobugcisa ngcono nokukhetha ukuze akhuphisane ngempucuko. Zingaphezulu kwama-55 iinkampani eziqinisekisileyo ukuba zifumene iikontraka emva kokungenelela kweNkqubo yeTechnology Station.

LOKUGCAMILE

KUSEBENTA KWENHLANGANO KWEMNYAKA NGEMNYAKA KUSUKELA NGEMNYAKATIMALI-2013/14 KUYE KUNYAKATIMALI-2016/17

Tindzawo lebekugcilwe kuto ngemnyakatimali-2016/17 ezingeni lenhlangano bekukwenta tinhlelo letibalulekile teTindzawo Tebucwepheshe Letibalulekile kanye neTinhlelo Tekwenta Lokusha letichumene netintfo letibekwa embili tavelonkhe ngekubambisana nalabafanele labatsintsekako be-NSI kwesekela kutfutfukiswa kwema-SMME nekuhlanganyela kwelusha; kukhulumisana nalabatsintsakako lababalulekile ku-NSI kwesekela sicinise kuniketwa imikhicito kute sesekele tintfo letibekwa embili tahulumende wavelonkhe; kucinisa sakhiwo lesisha kucinisekisa kusebenta kwenhlangano kakhulu ngemphumelelo ngaphandle kwetihibe kuso sonkhe sakhiwo; kanye nekwakha lisiko lelicinile lekusebenta ngalokusezingeni lelisetulu. Kulomnyaka lobuyeketwako, I-TIA ingatfola tigidzi le-R182.2 kubantfu besitsatfu. Loku kuphindzaphindze kukhula nge-86% nakucatsaniswa nemnyaka lowendlulile, kukhombisa kuheha kwemsebenti wemklamo we-TIA.

Samba sema-SMME la-2 261 satfola lusito, loku kukhula lokulizingancane le-64 kusuka emnyakeni lowengcile. Loku kukhombisa indzima lechubekako ledlalwa Luhlelo Lwesiteshi Sebucwepheshe mayelana nekwesekela kutfutfuka kwebucwepheshe. Loluhlelo lusite ikakhulu ema-SMME ebantfu labamnyama, kutsi bavisise kancono imikhakha yebucwepheshe netintfo labangatikhetsa mayelana nekwenta kancono ekuncintisaneni. Tinkampani letingetulu kwaletinge-55 leticinisekise kutsi tatfola emakontileka ngemuva kwekungenelela kweLuhlelo Lwesiteshi Sebucwepheshe.

ṄWAHA MUṄWE NA MUṄWE

NḌILA YE DZANGANO ḽA SHUMA NGAYO ṄWAHA MUṄWE NA MUṄWE U BVA NGA ṄWAHA WA DZITSHELEDE WA 2013/14 U YA KHA ṄWAHA WA DZITSHELEDE WA 2016/17

He dzangano ḽa vha ḽo livhisa hone thogomelo nga Ṅwaha wa Dzitsheledê wa 2016/17 ndi kha u dzudzanya pulane dzo khwathaho dza Masia a Thekinolodzhi o Khwathaho na Mbekanyamushumo dza U Shandula Zwithu dzi tshimbidzanaho zwithu zwa lushaka zwine zwa ḓa u thoma u tendelana na vhathu vhane vha vha na mukovhe kha zwa mabindu vha NSI u itela u tikedza bveledziso ya madzangano ane a vhidzwa SMME na u shela mulenzhe ha vhaswa; u ambedzana na vhathu vha re na mukovhe kha zwa mabindu kha NSI u itela u khwathisa tshishumiswa tshine tsha khou ambelelwa na zwithu zwine zwa ḓa u thoma zwa muvhuso; enea maitele maswa a khwathisedza uri dzangano ḽi kone u bvelela nga nnḓa ha zwithithisi; na u ita uri mveledziso i vhe ya vhuimo ha ndha. Kha mvusuluso ine ya ḓo itwa musi nwaha u tshi fhela, TIA i nga swikelela tshivhalo tshi linganaho R182,2 milioni. Hezwi ndi nyengedzeo ya phesenthe dza 86 musi i tshi vhambedzwa na ya ṅwaha wo fhiraho, hezwi zwi sumbedza nḓila ine mushumo wa TIA wa kunga ngayo.

Ho thuswa mabindu maṱuku ane a vhidzwa SMME a linganaho 2 261, zwine zwa vha nyengedzeo ṱhukhu ya 64 kha ya ṅwaha wo fhiraho. Hezwi zwi sumbedza mushumo une wa khou bvela phanḓa u itwa nga Mbekanyamushumo ya Tshititshi tsha Thekinolodzhi u itela u tikedza mveledziso ya thekinolodzhi. Yeneyi mbekanyamushumo yo thusa nga maanḓa mabindu maṱuku a vharema ane a vhidzwa SMME, uri a pfesese zwine a nga zwi khetha kha sia ḽa thekinolodzhi na uri a bvelele. Mabindu a fhiraho 55 o khwathisedza uri o wana thandela nga murahu ha u ṋewa thuso nga Mbekanyamushumo ya Tshititshi tsha Thekinolodzhi.

Ndivho ya ḽeneḽi Dzangano ndi u ita uri ndivho ine ya vha hone kha zwiko zwa Afurika Tshipembe i shumiswe u itela u vhuyedza vhathu siani ḽa matshilele na ḽa ikonomi, hu tshi tevhelwa zwipikwa zwi tevhelaho: u ita uri zangano ḽa TIA ḽi vhe murangaphanḓa wa tshanduko ya zwa thekiḽonodzhi Afurika Tshipembe; u ṋea Afurika Tshipembe thikhedzo yo teaho na i shumaho u ya vhuimo ha nṱha siani ḽa matshilele na ḽa ikonomi; na u tikedza na u khwinisa tshanduko Afurika na kha maṅwe mashango nga tshumisaho.

LEMBE NI LEMBE

MATIRHELO YA NHLANGANO HI NTLHANDLAMANO LEMBE NI LEMBE KU SUKA EKA FY2013/14 KU YA EKA FY2016/17

Swiyenge leswi nga ta langutiwa eka FY2016/17 eka nhlangano a swi katsa ku simeketa tipulani ta vuhleri byo hlawuleka eka Swiyenge swa Thekinoloji ya Vuhleri byo Hlawuleka ni Minongonoko ya Mianakanyo Leyintshwa hi ku landza leswi rhangisiwaka emahlweni etikweni hi ku fambisana ni lava khumbekaka eka NSI ku seketela nhluvukiso wa wa ti-SMME ni ku hoxa xandla ka vantshwa; ku tirhisana ni lava khumbekaka eka vuhleri byo hlawuleka eka NSI ku tiyisa vukorhokeri lebyi nyikeriwaka hi ku fambisana ni leswi rhangisiwaka emahlweni hi hulumendhe; ku dzikisa maendlelo lamantshwa ku tiyisisa matirhelo lama hulumeleiaka kahle ya nhlangano hi matirhelo yo khuluka eka matirhelo hinkwawo; ni ku simeka ndlela yo tirha khwatsi. Eka lembe leri ku buriwaka ha rona, TIA yi nga ha fikelela R182.2 wa timiliyoni eka van'wana lava nga etlhelo. Sweswo swi vula ku andza hi 86% loko ku pimanisiwa ni n'wexemu, leswi kombaka ntikelo wa ndlela ya matirhelo ya TIA.

Ti-SMME ta 2 261 ti kuma mpfuno, ku nga ku andza lokutsongo ka 64 ku suka n'wexemu. Sweswo swi komba xiave lexi yelaka emahlweni xa Pfhumba ra ku Simekiwa ka Thekinoloji eku seketeleni nhluvukiso wa thekinoloji. Pfhumba leri ri pfune ngopfungopfu ti-SMME ta vantima, ku twisisa ku antswa swiyenge swa thekinoloji ni leswi nga hlawuriwa leswaku ku endliwa antswisiwa swilo. Mabindzu yo tlula 55 ma tiyisise leswaku ma kume tikontiraka endzhaku ka ku nghenelela ka Pfhumba ra Ku Simekiwa ka Thekinoloji.

ADRESSING THE TRIPLE CHALLENGES

ORGANISATIONAL CONTRIBUTION TO TRIPLE CHALLENGES: FY2015/16 AND FY2016/17

South Africa's economy is to advance along the trajectory set out in the National Development Plan, 2030 (NDP) to reduce poverty. It will require a strong, coherent and effective National System of Innovation (NSI), working in a coordinated manner to achieve national priorities. In particular, the NSI should help improve global competitiveness by leading the creation and application of new knowledge. The NDP acknowledges the role that Science Technology and Innovation (STI) can play in addressing poverty, unemployment and inequality. Internationally, STI and related discoveries are recognised as future sources of economic growth with the potential to create new types of jobs, as well as new solutions to challenges like poverty, poor health and water shortages. TIA has identified initiatives that demonstrate the potential of the NSI to help address poverty, unemployment and inequality. Further detail on STI's direct and indirect contribution to addressing these challenges is set out in the table below.

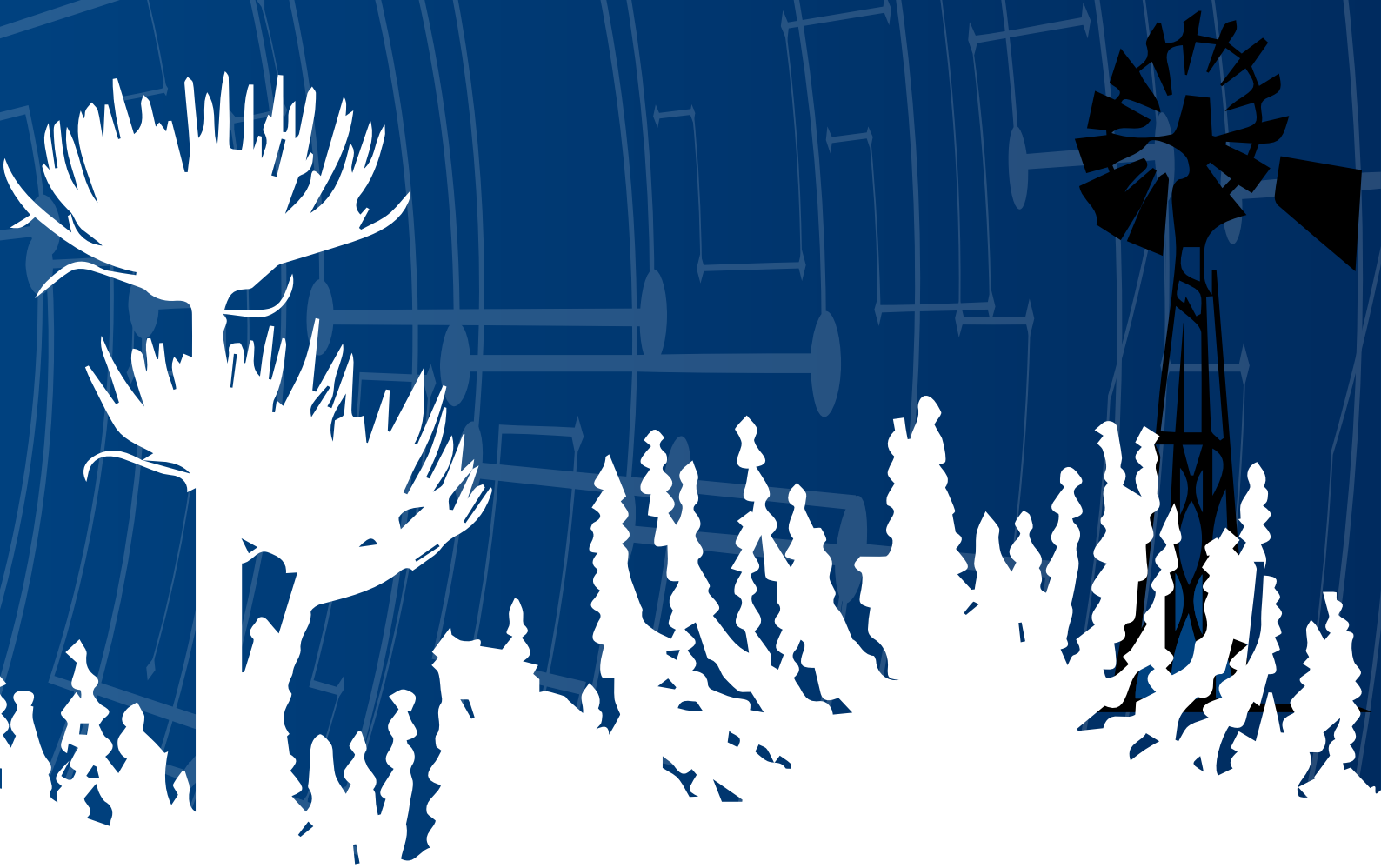
	15/16
Number of internships (local and international)	219
Number of SMMEs supported	2 197
Number of youth supported in technology development	1 003
Transformation – number of PDIs receiving support	1 347
Transformation – number of people with disabilities receiving support	24
Number of women supported in technology development	664
Economic Impact Assessment Multiplier	2.87

	16/17
Number of internships (local and international)	684
Number of SMMEs supported	2 261
Number of youth supported in technology development	1 167
Transformation – number of PDIs receiving support	1 458
Transformation – number of people with disabilities receiving support	103
Number of women supported in technology development	619
Economic Impact Assessment Multiplier	3.38

INTRODUCTION

The Technology Innovation Agency (TIA) was established in terms of Act No. 26 of 2008, with the objective of stimulating and intensifying technological innovation to improve economic growth and the quality of life of all South Africans. This is achieved by developing and exploiting technological innovations.

The mission of the Agency is to facilitate the translation of South Africa's knowledge resource into sustainable socio-economic opportunities, with the following strategic goals: to position TIA as a thought leader in technological innovation in South Africa; to provide South Africa with appropriate and effective support for innovation with high social and economic impact; and to support and enhance technological innovation in Africa and globally through partnership initiatives.



FOREWORD BY THE OUTGOING CHAIRPERSON

Ms. K Njobe

It is my pleasure as Chairperson, one final time, to present TIA's 2016/2017 Annual Report. The past financial year marked the end of this Board's term. On reflection, I am pleased that TIA has made a tremendous transition during the Board's term, resulting in a clearly focused entity, geared to deliver on its mandate.

The growth and development of TIA over the last four years are commensurate with the level of maturity in the National System of Innovation. The strategic framework for the period 2015 to 2020 is clear and relevant, proving the direction for continued support to commercialise technology innovations whilst assisting to strengthen the ecosystem.

TIA has aligned its investment policy to its mandate and service delivery plan to the expectations of the Department of Science and Technology, which represents the shareholder. TIA will continue to play a pivotal role in supporting technology development, the products of which will address the triple challenges of inequality, poverty alleviation and unemployment. Our efforts also seek to encourage a knowledge economy as we attempt to support resource beneficiation and localisation.

In the past year, the organisation has become more customer-centric. Its continued mission to contribute to the socio-economic development of the country and to engage with the international and local private sector will certainly support the creation of critically needed jobs as well as unlock economic potential.

The period under review sees TIA's continued efforts to improve transparency and promote accountability with a highly-strengthened control environment. As we resolve to do things differently and to make an impact, proactive participation is clearly visible. The organisation can act in the best interests of all South Africans. During the FY2016/17, every R1.00 spend by TIA, either through its operations or investment, had a total multiplying effect on the national economy of R3.38. The weighted average multiplying effect of all sectors in the national economy is 3.60, which means that TIA is just below the average national norm, thus TIA's 3.38 may seem high, but compared to the rest of the economy, it appears to be in line. Therefore, it may be concluded that TIA is well into achieving its mandated goals, where it stimulates economic development through its activities that enhance products, services, and processes, in addition to increasing production and income, as well as creating job opportunities.

In the area of strong governance, I am immensely proud that TIA has received a clean audit. This is truly remarkable. All metrics around its core business have also improved significantly. This bodes well for the NSI and the country, as an effective and efficient TIA is important to advancing the economy.

The outgoing Board has supported the Chief Executive Officer and his Management Team in bringing about organisational stability as they enhanced the policy, operational systems and process environment, yielding immense benefits. I am confident that this stability will be sustained into the future.

''TIA IS COMMITTED AND FOCUSSED ON DELIVERING ON THE CORPORATE PLAN OBJECTIVES AND BUSINESS STRATEGIES GOING FORWARD, WHILST ADDRESSING THE TRIPLE CHALLENGES FACING OUR COUNTRY.''

TIA is committed and focussed on delivering on the Corporate Plan objectives and business strategies going forward, whilst addressing the triple challenges facing our country.

As I reflect on my tenure with TIA, I have a great degree of pride in the recovery of the organisation, its contribution during the transformation over the past years, and its clear potential to contribute impactfully. One is always challenged to leave something in a better state than when you received it, for myself and my fellow outgoing Board members, I feel this was accomplished. I am comfortable that we are handing over an organisation that is evolving and holds immense promise for the incoming Board.

I trust the organisation ultimately takes its rightful place at the epicentre of the NSI and wish the new incoming Board all the best as they continue with the journey of TIA and a better South Africa for all.

ACKNOWLEDGEMENTS

The Board is very grateful for the invaluable support from the Honourable Minister, Ms Naledi Pandor. I wish to thank the Minister for entrusting the Board with the responsibility of leading TIA to this important juncture. As we bid farewell to TIA's Board members; we renew our commitment to the National System of Innovation.

To my fellow Board members, it has been a pleasure to serve with you. As I take on other responsibilities, may I wish you well in your future endeavours. I would be remiss if I did not specifically mention your unwavering commitment to TIA, your resolve and clarity of purpose during tough discussions; all encompassed with your high degree of professionalism and uncompromising ethical standards.

I extend our appreciation to the Chief Executive Officer and the Executives who continue to carry its vision forward. We acknowledge the vast improvements made and the intent to steer the organisation to greater heights through the philosophy of Teamwork – Impact – Accountability.

We thank the TIA staff for your assistance in achieving the results contained in this report. Thank you for embracing the new strategy and operating model of the organisation.

I remain humbled for this opportunity.

Ms. K Njobe
Chairperson of the TIA Board (2013 – 2017)

EXECUTIVE COMMITTEE

MR BARLOW MANILAL
CHIEF EXECUTIVE OFFICER

MR WERNER VAN DER MERWE
CHIEF FINANCIAL OFFICER

MS BERENICE MARAIS
EXECUTIVE: INNOVATION ENABLING AND SUPPORT

MS FEMKE PIENAAR
EXECUTIVE: PEOPLE, SYSTEMS AND FACILITIES

DR BETHUEL SEHLAPELO
EXECUTIVE: INNOVATION FUNDING AND PRE-COMMERCIALISATION SUPPORT

A WORD FROM THE CHIEF EXECUTIVE OFFICER

Mr. Barlow Manilal

The 2016/17 financial year commenced with great anticipation of accelerating the many gains achieved during the previous financial year. In an organisation that is undergoing a transformative process, one's expectations is inevitably tempered with the pace and effectiveness of change against the organisation's delivery imperatives.

Reflecting on the original business case for TIA, its strategic purpose was to use South Africa's science and technology base to develop new industries, create sustainable jobs and help diversify the economy away from commodity exports towards knowledge-based industries to address modern global challenges. This remains a very relevant strategic consideration for TIA within the context of numerous challenges to ensure collaboration, coordination and need for synergies within the National System of Innovation (NSI) and other national government departments and agencies.

At the time of writing this report, Statistics South Africa reported that we have a "technical recession", with our unemployment rate at a 14-year high of 27.7%. Our economy is shrinking, yet the population is growing. This places more strain on the national fiscus. Over the past century innovation has had a positive influence in driving broad-based economic growth and improving the quality of life. Within this context, the role of TIA becomes both critical and strategic, as TIA shares the collective responsibility to respond positively to the current situation. Investing and supporting innovation has had a proven track record in stimulating the economy. We need to undertake this in the most efficient and effective manner, in support of our mandate, ultimately targeting enhanced value creation.

Completing my second year at TIA, comes with a degree of introspection, the opportunity to refocus. Several very important processes commenced, among them was the development of the draft White Paper on Science Technology on Innovation, the Institutional Review of all Agencies of the Department of Science and Technology (DST) and the Performance Analysis of the National System of Innovation, which was commissioned by the National Advisory Council on Innovation (NACI). The TIA Board which had been appointed on 1 May 2013, commenced their final year, their term ending on 30 April 2017. This heralded a change of guard for TIA, as well as potential changes within our operating landscape and policy environment. Notwithstanding the new developments over the past two years, TIA had gained momentum in optimising its systems, processes, programmes and approach to executing its mandate. Whilst it is largely a work-in-progress, improvements are evident and have been validated through stakeholder feedback. During my commencement with TIA, we embarked on a high-level plan to achieve some key milestones:

- Operational stability
- Agility and organisational resilience
- Robust control environment with unqualified (clean audits) as a minimum standard
- Gravitate towards being an employer of choice in the country

"OUR FOCUS REMAINS MOVING INTO A HIGH-PERFORMANCE CULTURE, POSITIONING THE ORGANISATION AS A CENTRAL HUB FOR INNOVATION AND TECHNOLOGY DEVELOPMENT NATIONALLY"

- Set the foundations to transition as benchmark in the development funding and SMME support arena
- Process and systems maturity
- Fully exploiting synergies and seeking high-yield collaborative relationships
- Improve staff engagement and develop a culture of excellence
- Value creation that will lead to delighting our stakeholders
- More pronounced organisational positioning within the NSI

To further advance our efforts in transitioning TIA, greater effort has been placed in embracing the ethos from the previous year, the TIA (Teamwork / Impact / Accountability) philosophy, that has begun to manifest itself within the organisation. To enhance our strategic orientation and value creation; significant effort has gone towards upsizing our programmes (Scale), reducing operational turnaround times (Pace) and focusing on deepening our commitment to be more accommodative and transparent when engaging with innovators, stakeholders and suppliers, i.e. creating a more conducive Space.

To ensure that good intentions translate to good initiatives and good initiatives deliver the anticipated outcomes far greater accountability was placed on the team to deliver. During the year under review, we obtained a clean audit with no matters of emphasis. This was its best audit report since TIA's establishment. Furthermore, we reached the highest ever disbursement target with no roll-overs and achieved the lowest cash bank balance amount. Overall, we achieved 86% of our total annual performance targets under difficult market conditions. We achieved a disbursement target of R465m against the previous year's R378m. All these positive developments were attained for the very first time. The economic impact assessment (EIA) results of TIA also demonstrated a healthy multiplier of 3.38, which simplistically equates to R3.38 worth of value created in the South African economy for every R1.00 spent. This was a remarkable improvement from the 2.87 multiplier achieved during the previous year.

Taking into account the tough economic climate, the various initiatives that are still underway and the law of diminishing returns, I am very aware of the tough year ahead, but remain buoyed by the great opportunities that still exist to make a meaningful contribution to a better South Africa.

As we forge ahead, our focus remains moving into a high-performance culture, positioning the organisation as a central hub for innovation and technology development nationally – in accordance with its mandate - and radically improving our engagement with all value chain partners within the NSI. I thank our Minister, Naledi Pandor, the Director-General, Dr Phil Mjwara, all our Programme 2 colleagues and various other DST officials who have championed our cause and graciously provided support. My deep gratitude goes to the outgoing TIA Board under the leadership of Ms. Khungeka Njobe for their guidance, commitment and unwavering dedication to TIA, demonstrating trust in my judgement and allowing me to lead the implementation of the strategy in a creative manner.

To the TIA EXCO team, another tough year has elapsed. I acknowledge your diligence, hard work and passion, and appreciate it sincerely. I thank you for your counsel and friendship. I welcome the new TIA Board under the leadership of Prof. Edward Kieswetter. We look forward to your fresh perspectives and remain confident that our ambitions will be fueled by the new energy that you bring.

Finally, my sincere gratitude to all our staff. We are steadily on our way to realising our goals through your hard work. Your loyalty to the organisation and commitment to moving forward have created the momentum that we need. Let's remain steadfast towards a revitalised TIA as we "make excellence an attitude".

Mr. Barlow Manilal
Chief Executive Officer

''WE ARE PROUD TO ANNOUNCE THAT TIA RECEIVED AN UNQUALIFIED, CLEAN AUDIT OPINION FOR THE THIRD CONSECUTIVE YEAR.''

OVERVIEW BY THE CHIEF FINANCIAL OFFICER

Mr. Werner van der Merwe

TIA concluded the year well, despite operational challenges and a further reduction in the grant allocated for FY2016/17. For the year under review, the administrative costs were reduced to their lowest level since the inception of TIA. Whilst this results in savings, it does bring a certain degree of resource constraint which must be diligently managed. The "efficiency ratio" was introduced to control budget allocations against administration and servicing the core mandate through project disbursements.

The approved ratio required 70% of the budget allocation to be focused on servicing the core mandate and 30% to administration. During the year under review, TIA reached a record level of 78% allocated towards its core mandate and 22% towards administration. Sustaining this achievement into the future will be difficult, given the extensive operational enhancements that are required to reach operational excellence.

On the other hand, the investment expenditure increased when compared to previous years, this being the highest ever recorded disbursements since establishment.

We are proud to announce that TIA received an unqualified, clean audit opinion for the third consecutive year. Achieving this audit outcome with no matters of emphasis is a particularly satisfying result. An annual overview since the inception of TIA is included at the end of this report.

REVENUE

PARLIAMENTARY GRANT AND SPECIFIC CONTRACTED AMOUNTS FROM THE DST

The Parliamentary grant decreased slightly to R382m (FY2015/16: R385m), a decrease of R3m. TIA's budget is structured to include the regular MTEF allocations as well as specifically contracted allocations which are targeted funds for specific areas of focus or projects. The specific contracted agreements recognised as income in FY2016/17 amounted to R83m, an increase of 89% from the previous year's amount of R44m. The Technology Stations Programme and Seed Fund were the main beneficiaries of this increase in specific contracted income.

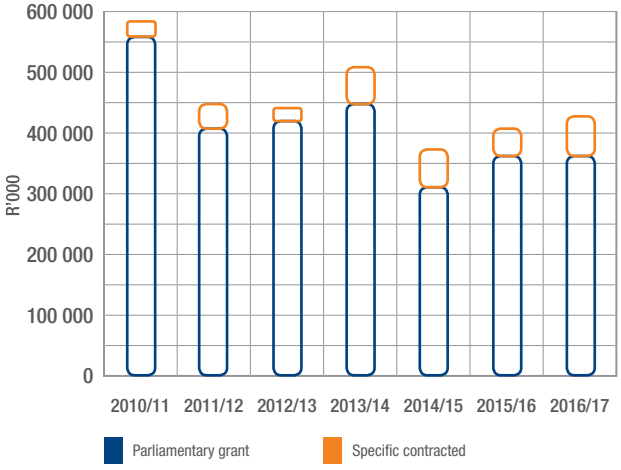


Figure 1: Parliamentary grant and specific contracted amount from FY2010/11 to FY2016/17

OTHER INCOME

Other income is the revenue secured in addition to the MTEF allocation, and this decreased by 25% to R27m for FY2016/17. This is due to an amount of R12m recognised in FY2015/16 for the sale of an equity investment in an associate company. Royalty income of R2m was received from five investments spread across various sectors such as ICT, Health and Natural Resources. All revenue recognised as other income is used to fund investments and projects, i.e. allocated to servicing the core mandate.

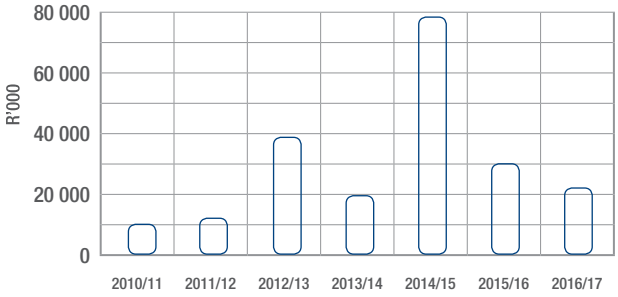


Figure 2: Other income received from FY2010/11 to FY2016/17

ADMINISTRATIVE AND EMPLOYEE COSTS

The lack of significant growth in the parliamentary grant allocation caused TIA to continually explore creative ways to optimise its operations and prudently manage its operating costs. This required a conservative approach to both administrative and employee costs, with administrative costs reaching its lowest level, and employee costs reaching the second lowest level since establishment. Administrative expenditure was reduced by 2% in FY2016/17 to R46m (FY2015/16: R47m), and this was achieved by reducing expenditure in the areas of consulting fees, Information Technology (IT), rental expenses and depreciation.

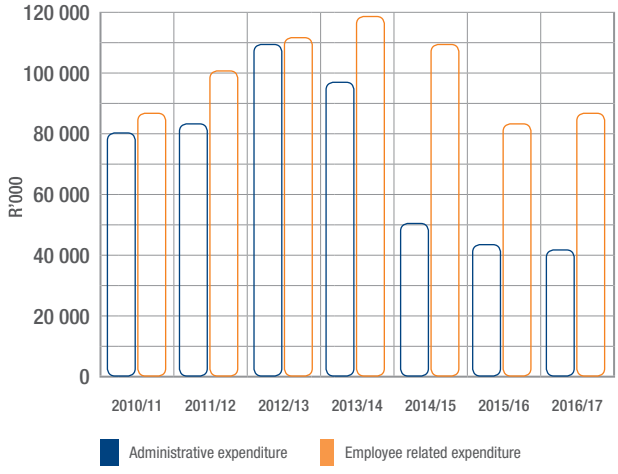


Figure 3: Administration and employee-related expenditure from FY2010/11 to FY2016/17

INVESTMENT AND PROJECT FUNDING

Although TIA operated under fiscal constraints, the contribution level of funding projects to improve the quality of life for all South Africans was maintained in FY2016/17. Project funding amounted to a record high of R451m for the year under review in comparison to the R335m that was disbursed in the previous financial year.

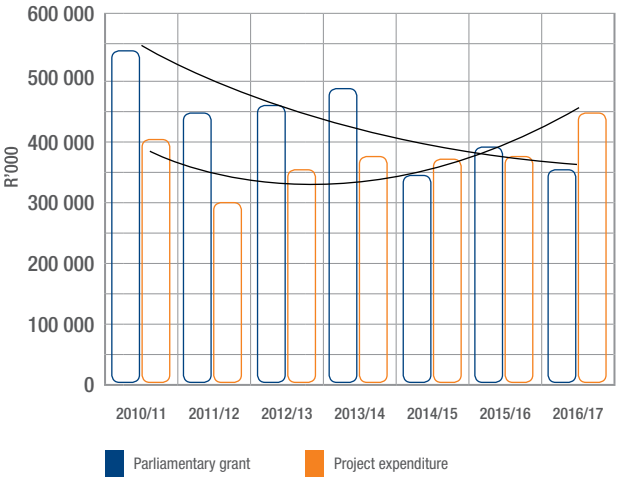


Figure 4: Comparison of Parliamentary Grant against project expenditure from FY2010/11 to FY2016/17

EFFICIENCY RATIO

To enhance operational efficiency and ensure maximum budget allocation to projects, the Board set specific targets to regulate the ratio of administration costs as a percentage of the total budget. This is demonstrated by the efficiency ratio. The significantly improved ratio of 22% for FY2016/17 indicated that, for every rand received from the fiscus, R0.78 is utilised for investment and project funding, and R0.22 utilised for administrative and salary costs. Maintaining and improving on this ratio will remain a challenge as organisational growth and development initiatives must always be balanced against the efficiency ratio. Our target efficiency ratio remains 30/70.

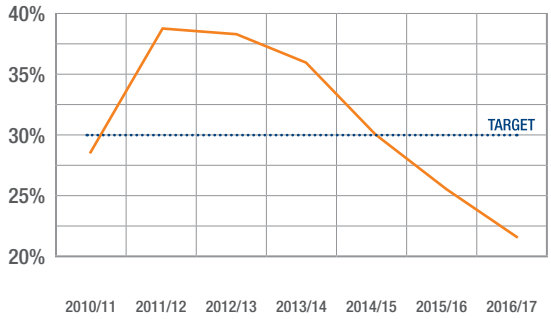


Figure 5: Line graph representing the operational efficiency ratio from FY2010/11 to FY2016/17

SURPLUS / (DEFICIT)

For the fourth consecutive year TIA realised a deficit, demonstrating its ability to effectively utilise allocated funds. The deficit for FY2016/2017 amounted to R107m, the highest deficit to date, while the deficit for FY2015/16 was R46m. The deficit was funded by cash surpluses at the start of FY2016/17.

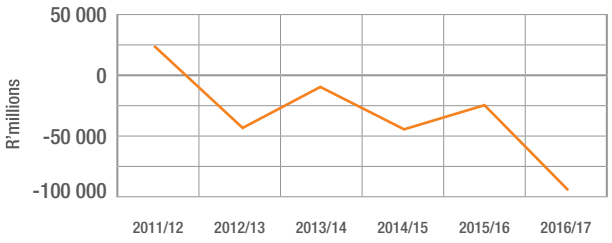


Figure 6: Line graph representing the surplus and deficit from FY2010/111 to FY2016/17

UTILISATION OF ALLOCATION RECEIVED THROUGH PARLIAMENTARY GRANT AND SPECIFIC CONTRACTED AMOUNTS

The Department of Science and Technology provides annual, broad strategic targets to guide the allocation of funds made available. In FY2016/17, the total amount of funds received from the Department amounted to R464m. Included in this amount were ring-fenced categories and a baseline allocation. The ring-fenced allocations related to projects within the Bio-economy Workplan and the Technology Stations Programme, the total amounting to R382m.

The balance of the amount received was for Specific Contracted Programmes. TIA distributed an amount of R599m, exceeding the target by an amount of R134m, 29% higher than the grant funding amount received. The additional funding was made available by utilising cash generated from the sale of an equity investment and excess cash carried over from FY2015/16.

An amount of R162m was earmarked towards the bio-economy initiatives and this target was also exceeded by disbursing an amount of R212m, 31% higher than the planned amount. The Technology Station Programme received an allocation of R34m through the ring-fenced amount with a further R63m received for specific contracted initiatives, totalling R97m.

The Technology Station Programme could distribute R123m to the Higher Educational Institutes, exceeding the plan by R26m. The balance of the allocation, amounting to R205m, was reserved for baseline expenditure, which included the Innovation Funding Projects (direct technology funding), Innovation Enabling Programmes (support to the ecosystem) and Administrative Expenditure.

The final disbursements made towards baseline expenditure amounted to R264m, exceeding the plan with R59m or 29%. A detailed summary of the Project Funding expenditure is disclosed under note 19 to the Annual Financial Statements. The table below provides the breakdown of the grant allocation received from the Department of Science and Technology:

Table 1: Utilisation of Parliamentary Grant in FY2016/17

	RING-FENCED AMOUNT THROUGH THE ALLOCATION LETTER R' MILLIONS	RECEIVED THROUGH SPECIFIC CONTRACTED AMOUNTS R' MILLIONS	TOTAL RECEIVED R' MILLIONS	ACTUAL ACHIEVED R' MILLIONS
Baseline	195	10	205	264
Bio-economy	153	9	162	212
Technology Station Programme	34	63	97	123
Total	382	82	464	599

TECHNOLOGY INNOVATION AGENCY: SEVEN-YEAR OVERVIEW

STATEMENT OF FINANCIAL PERFORMANCE	2010/11 R' 000	2011/12 R' 000	2012/13 R' 000	2013/14 R' 000	2014/15 R' 000	2015/16 R' 000	2016/17 R' 000
Total revenue	**610 604**	**503 799**	**522 106**	**568 725**	**472 698**	**462 929**	**492 455**
Parliamentary grant	544 189	442 688	456 350	481 081	338 386	385 188	382 364
Spesific contracted income	50 677	44 246	24 062	61 992	50 984	44 122	83 413
Other Income	15 738	16 865	41 694	25 652	83 328	33 619	26 678
Total expenditure	**572 882**	**478 340**	**575 844**	**585 595**	**534 945**	**509 227**	**599 381**
Employee costs	85 202	101 107	110 865	117 571	110 512	83 557	88 674
Project funding disbursements	409 003	294 465	356 604	374 406	373 482	378 757	465 140
Administration costs	78 677	82 768	108 375	93 618	50 951	46 913	45 567
Surplus/(Deficit)	**37 722**	**25 459**	**(53 738)**	**(16 870)**	**(62 247)**	**(46 298)**	**(106 926)**
STATEMENT OF FINANCIAL POSITION							
Total assets	**332 617**	**387 901**	**330 007**	**281 540**	**244 307**	**210 336**	**121 796**
Property and equipment	28 878	24 156	23 746	22 560	13 640	13 346	15 892
Investment and funding assets	96 922	72 260	73 179	88 090	100 347	48 539	32 765
Cash and cash equivalents	201 822	287 789	228 712	162 194	66 281	132 333	64 567
Receivables	4 995	3 696	4 370	8 696	64 039	16 118	8 572
Total Liabilities	**84 833**	**64 150**	**59 994**	**28 398**	**53 148**	**65 471**	**83 891**
Committed conditional grants	29 170	44 310	27 274	9 387	16 222	44 086	54 443
Current liabilities	55 663	19 840	32 720	19 011	36 926	21 385	29 448
Net assets	**247 784**	**323 751**	**270 013**	**253 142**	**191 159**	**144 865**	**37 905**
Employee costs as % of total expenditure	15%	21%	19%	20%	21%	16%	15%
Administration costs as % of total expenditure	14%	17%	19%	16%	10%	9%	8%
Project funding as % of total expenditure	71%	62%	62%	64%	70%	74%	78%
Other income as % of total income	3%	3%	8%	5%	18%	7%	5%
Efficiency ratio	29%	38%	38%	36%	30%	26%	22%

Mr. Werner van der Merwe
Chief Financial Officer

PART B
STRATEGIC OVERVIEW

STRATEGIC OVERVIEW

MANDATE

The mandate of the TIA is derived from the provisions of the Technology Innovation Act (Act No. 26 of 2008), which establishes TIA as an Agency to promote the development and exploitation, in the public interest, of discoveries, inventions, innovations and improvements. The provisions of the Act require TIA to support the State in stimulating and intensifying technological innovation to improve economic growth and the quality of life of all South Africans by developing and exploiting technological innovations.

To meet its mandate, TIA will provide and mobilise financial and non-financial support across broad technology areas in various sectors of the economy through –

- appropriately structured financial and non-financial interventions for the commercialisation of Research and Development (R&D) results;
- the development and maintenance of advanced human capacity for innovation as opposed to just R&D human capital;
- building a culture of innovation in the South African economy; and
- leveraging local and international partnerships to facilitate in-bound technology transfer, build local technological competencies, and encourage foreign direct investment for the commercialisation of technologies in South Africa.

The ultimate goal of TIA is to use South Africa's science and technology base to develop new industries, create sustainable jobs, and help diversify the economy away from commodity exports towards knowledge-based industries equipped to address modern global challenges.

In this regard, TIA plays four key strategic roles as follows:

- **Connector:** Catalysing partnerships between SMMEs, industries, universities and science councils to develop an enabled environment supporting sector-specific innovations for global competitiveness. Through its nascent Technology Innovation Programme, TIA has successfully launched four collaborative innovation partnerships in animal health, electric vehicle mobility, beef and dairy genomics, all of which have seen 14 new technology initiatives supported.
- **Funder:** Providing risk funding and support for innovators to progress ideas towards market entry and commercialisation. In this role, TIA has successfully supported the progression of 116 innovations closer to market, with 21 of these fully commercialised.
- **Facilitator:** Attracting and facilitating late-stage funding for the commercialisation of market-ready technologies from companies, venture capital firms, and development finance institutions. TIA's investment portfolio attracted a total of R182m in follow-on funding from different strategic partners and investors, both local and international.
- **Enabler:** Reducing barriers of access to expensive high-end skills and equipment for innovators through our Technology Stations and Technology Platforms services. Through its network of Technology Stations, TIA has supported 508 SMMEs with competitive improvement services, enabling 55 of these to secure contracts that integrated them into corporate supply chains. The Technology Platforms saw a total of 119 new projects supported in FY2016/17, with three of these securing full patents.

POLICY ENVIRONMENT

The current economic and social landscape in South Africa highlights the need for an increase in the rate of economic growth that is underpinned by diversification and competitiveness to address the triple challenges of unemployment, poverty and inequality. In response to these, TIA's mandate is influenced by several key national policies and specific priorities as outlined in the Department of Science and Technology's strategy documents.

NATIONAL POLICIES

NATIONAL DEVELOPMENT PLAN (NDP) 2030

The NDP notes that the development in Science, Technology and Innovation (STI) fundamentally alters the way people live, communicate and transact with profound effects on socio-economic growth and development. The NDP highlights that STI is key to equitable growth and underpins economic advances, improvement in health systems, education and infrastructure. TIA's technology and innovations programmes directly support several of the key outcomes as addressed in the NDP.

NEW GROWTH PATH (NGP) 2020

The NGP advocates that, to drive economic growth, new jobs would need to be created through "seizing the potential of new economies by growing the knowledge economy". The NGP emphasises that this would be achieved through capacitating knowledge institutions to diffuse new technologies to SMMEs and households in a bid to reduce costs and enhance competitiveness.

INDUSTRIAL POLICY ACTION PLAN (IPAP) 2016/17 – 2018/19

The IPAP highlights the need to leverage STI for industrial growth and development. The plan outlines that this would be achieved through improving linkages between knowledge production, utilisation and innovation for industrial growth; supporting the development of large Research and Development (R&D) programmes in knowledge-intensive areas; the development of a technology commercialisation strategy; and the harmonisation of innovation support programmes. TIA's technology and innovation programmes are directly aligned with the industrial growths objectives of IPAP.

SCIENCE AND TECHNOLOGY POLICIES AND STRATEGIES

NATIONAL RESEARCH AND DEVELOPMENT STRATEGY (NRDS)

The strategy identifies specific priority areas that need to be capacitated to enable economic growth to be underpinned by Science, Technology and Innovation (STI). This is to be achieved through targeted innovation skill development interventions that empower innovators from HEIs and science councils to be entrepreneurial and knowledgeable on how to protect and exploit their intellectual property.

TEN-YEAR INNOVATION PLAN (TYIP) 2008-2018

The plan aims to help drive South Africa's transformation towards a knowledge-based economy in which the production and dissemination of knowledge leads to socio-economic benefits. The NSI holds immense potential to increase the rate and pace of innovation, thereby accelerating the process of start-up creation, economic growth and contributing to job creation. TIA's technology and innovation support focus underpins the above aims.

VISION

To be a world-class leading technology innovation agency that stimulaates and supports technological innovation to improve the quality of life for all South Africans.

MISSION

To facilitate the translation of South Africa's knowledge resource into sustainable socio-economic opportunities.

MANDATE

TIA's mandate is derived from the Technology Innovation Act (Act 26 of 2008) which aims to promote the development and exploitation, in the public interest, of discoveries, inventions, innovations and improvements.

GOALS

To place TIA as a thought front-runner in technological innovation in South Africa.

To provide South Africa with support in innovation that will yield high social and economic impact.

OBJECTIVES

To support the commercialisation of technology innovations.

To develop an enabling environment for technological innovation and commercialisation in South Africa.

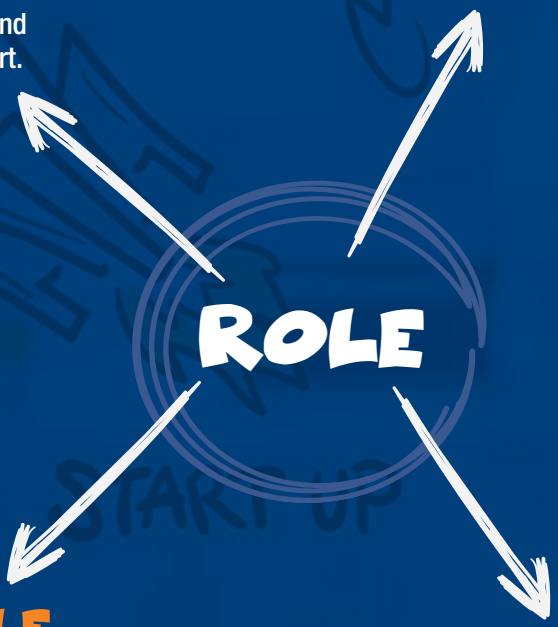
To develop an enabling internal environment within the TIA to successfully execute its strategy.

ENABLER ROLE

Enable access to high-end skills and equipment for innovators by providing funding and expert support to host academic and research institutions that provide innovation service offerings to progress ideas across the various TRLs up to pre-commercialisation. TIA currently offers three risk funds over and above the programmes aimed at creating and supporting an enabling technology innovation environment to support progression of innovation towards market readiness.

FACILITATOR ROLE

Assist innovators to secure funding (from companies, Venture Capital (VC) firms and development finance institutions) for the commercialisation of products, services and processes developed through TIA's support.



CONNECTOR ROLE

Catalyse the progression of ideas across the different technology readiness levels through partnerships with private industries, universities and science councils in order to create an environment for supporting sector-specific innovations that enable global competitiveness.

ACTIVE FUNDER ROLE

Provide funding and expert support to innovators in order to advance ideas towards market entry and to de-risk commercialisation.

PERFORMANCE IN REALISING STRATEGIC OUTCOME-ORIENTED GOALS

In order to achieve TIA's overall strategic objectives, the organisation has three strategic outcome-oriented goals, set out in the 2015-2020 TIA Strategic Plan, that guide all its actions over this five-year period. These are as follows:

GOAL 1: Support commercialisation of technological innovations.

GOAL STATEMENT: Continue to accelerate the development and deployment of technologies into the market to increase economic competitiveness and socio-economic transformation.

GOAL 2: Increase infrastructure access for technology development.

GOAL STATEMENT: Broaden access to advanced technology infrastructure that would enable knowledge and skills transfer to support innovation.

GOAL 3: Stimulate an agile and responsive National System of Innovation.

GOAL STATEMENT: Encourage synergistic local and international partnerships that connect ideas, resources and funding to individuals, industries, SMMEs and knowledge institutions.

GOAL 1: Support commercialisation of technological innovations.
GOAL STATEMENT: Continue to accelerate the development and deployment of technologies into the market to increase economic competitiveness and socio-economic transformation.

The key objective of TIA is to develop ideas and research outputs from proof of concept through to demonstration and pre-commercialisation. For this purpose, TIA invested more than R465m for various technology development projects. In supporting the commercialisation of its funded technologies, TIA also raised additional income of R110m, which was R43m less than the previous year. On the other hand, TIA facilitated the commercialisation of 21 innovations compared to nine in FY2015/16. This represents a 130% increase, demonstrating the relevance of projects that TIA invests in. This has led to the creation of new jobs and the creation of companies producing products and services that are contributing to the economy.

Of TIA's total portfolio funded in FY2016/17, 31 projects advanced by two or more Technology Readiness Levels (TRL) with some reaching the demonstration stage. This marks an improvement of four above the 27 projects realised in FY2015/16 with the Seed Fund Programme being the key contributor to this result. The remaining MTEF period (FY2017/18 to FY2019/20) will see much focus on improving the quality of the portfolio through strengthened internal processes that support the progression of ideas.

GOAL 2: Increase infrastructure access for technology development.

GOAL STATEMENT: Broaden access to advanced technology infrastructure that would enable knowledge and skills transfer to support innovation.

TIA provides infrastructure services for technology development through its network of 18 Technology Stations and eight Technology Platforms. These facilities provide technical engineering and scientific support to innovators, entrepreneurs, SMMEs and large industry companies that require research, analytical and testing services to either validate or progress their technologies though the value chain. FY2016/17, saw 64 technologies and knowledge-innovation products such as prototypes, patents, technology demonstrators and technology transfer packages supported from these facilities. Through the Centre for Proteomic and Genomic Research (CPGR), Biosafety and Bioprocess facilities, the Technology Platforms Programme (TPP) contributed to most of the performance. Each of these supported a range of projects to develop technology demonstrators in various scientific and technological disciplines.

The Technology Station Programme (TSP) has continued to deliver effective technology support services to SMMEs, particularly with regards to product and process improvements, prototype development and technology absorption services. The programme has achieved a slight increase in the number of SMMEs accessing technology infrastructure to 2 261 of which 1 458 were previously disadvantaged individuals. The performance from these programmes highlight the continued demand for such services. TIA has thus commissioned studies to evaluate the impact of these programmes to inform how they may be scaled up and repositioned to contribute to technology localisation, unlock economic development and inclusive growth.

GOAL 3: Stimulate an agile and responsive National System of Innovation.

GOAL STATEMENT: Encourage synergistic local and international partnerships that connect ideas, resources and funding to individuals, industries, SMMEs and knowledge institutions.

TIA made concerted efforts in FY2016/17 to entwine itself with key partners in the NSI. Much progress has been made to date with respect to embedding its positioning and role within the NSI through multiple engagements with the main and sub-actors within the eco-system. Key among these is the knowledge generating community of higher education institutions, science councils and industry partners that support early-stage technology innovation activities. TIA has worked closely with the National Intellectual Property Management Office (NIPMO), National Advisory Council for Innovation (NACI), Centre for Public Sector Innovation (CPSI), and Small Enterprise Development Agency (SEDA) in formulating initiatives that lead to unlocking TIA's value proposition.

TIA's portfolio also continued to attract interest from third parties who have invested a total of R182m, representing an 86% increase from the previous financial year's R97.9m, leveraged to support commercialisation of promising technologies. In addition to funding, TIA continued with various thought leadership initiatives to inform the national discourse on innovation. Over 56 strategic engagements were undertaken in comparison to 27 in the previous financial year. This increase is attributed to the current macro-economic conditions and fluid nature of the technological landscape, which has necessitated increased engagements with key stakeholders in the public and private sector to ensure that both are informed to make decisions to support TIA in its efforts.

PART C
PROGRAMMES AND ORGANISATIONAL PERFORMANCE

OVERALL BUSINESS PERFORMANCE AGAINST STRATEGIC OBJECTIVES

TIA implements its strategic roles through two core divisions, the Innovation Funding and Pre-commercialisation Support (IFPCS) Division and the Innovation Enabling and Support (IES). Collectively, these Divisions' functions, provide risk funding to new innovations and underpinning support to progress these technologies to market.

Delivering on its planned annual performance, TIA achieved a target of 86% across all 14 Key Performance Indicators (KPIs). Whilst 12 of these were exceeded, the shortfall was largely attributed to the failure to achieve a target of R124m set under KPI 1.4, realising only R111m with a shortfall of R13m.

However, core to its mandate TIA realised significant improvements in supporting the progression of 31 innovations within its portfolio towards higher levels of technology readiness. This saw 21 of these fully commercialised. The Seed Fund Programme once again, demonstrated its value as one of the most strategic interventions in the technology funding landscape, unlocking the potential of many of the research outputs from the higher education institutions (HEIs) and science councils (SCs) to successfully enter TIA's mainstream funding instruments and attracting other investors.

To increase its role of "facilitator", TIA continued to identify new sources of additional funding for its projects through partnerships with institutional funders and private investors. Through these efforts, FY2016/17, saw many local and international investors taking keen interest in the range of innovations and technologies supported by TIA. In total, 43 projects attracted R189m, far exceeding the target of R59m planned for the year. This represents a 94% increase from the value realised in FY2015/16.

STRATEGIC OBJECTIVE 1: TO PROVIDE TECHNOLOGY DEVELOPMENT FUNDING AND SUPPORT IN HIGH IMPACT AREAS

Table 5: Strategic Objective 1: To provide technology development funding and support in high impact areas

KEY PERFORMANCE INDICATOR (KPI)		TARGET	ACHIEVED	DEVIATION	COMMENTS
1.1	Number of technologies, processes or services advancing by two or more TRL levels.	12	31	+19	The over-achievement is due to the significant contribution of the Seed Fund Programme (SFP) that saw two new implementation partners (SAVANT Technology Incubator and NECSA) contracted to increase support to SMMEs.
1.2	Number of innovation project outputs taken up in the market.	14	21	+7	The over-achievement is due to the significant contribution of the Seed Fund Programme (SFP). The projects relating to the IFPCS Programme are as follows: - Advanced Manufacturing - two projects: ArcAqua and Weldcore; - Agriculture - three projects: AgriProtein Technologies - Signed agreement with Christof Group for sale of shares to the amount of USD10m; Xsit (Pty) Ltd sold for R12m; and Mabu Casing Soils (Pty) Ltd has generated sales of the product since 2016 and has been invoiced by TIA for royalty payments; - Energy - one project: Balancell (Pty) Ltd in commercialisation phase; - ICT - one project: Contactable (Pty) Ltd successfully completed TRL7; - Health - three projects: Enzyme Technologies (Pty) Ltd generated sales of the technology; Food and Cosmetics Technologies CC was linked with EgoliBio to initiate commercialisation efforts; Smart Crutch linked with EgoliBio to initiate commercialisation efforts; - Natural Resources – three projects: Green Iron Technologies (Pty) Ltd, Zargun, CMTI Consulting (Pty) Ltd has received an order for six products from Sibanye Gold and Settech Mining and Industrial Solutions (Pty) Ltd has sold one product to Black Mountain Mine in Aggeneys in the Northern Cape.

KEY PERFORMANCE INDICATOR (KPI)		TARGET	ACHIEVED	DEVIATION	COMMENTS
1.3	Amount of additional funding attracted into TIA's portfolio.	+R59m	+R182m	+R123m	IFPCS attracted third party funding of R170m towards its projects as follows: - Advanced Manufacturing - R12m; - Agriculture – R129.5m (Agriprotein Technologies (Pty) Ltd received R127m from the Christof Group and R2.5m from a German investor); - Energy – R2m (Balancell (Pty) Ltd received an investment of R2m; - Health - R26.8m (The Strategic Health Innovation Partnerships (SHIP) programme of the Medical Research Council provided R7.7m in funding to the University of Cape Town's (UCT) Anti-malarial project, the Chemical Process Technologies Pharma (Pty) Ltd (CPT Pharma project) received R9m in funding from the Industrial Development Corporation (IDC), while the Pheroid Technologies project received R10m from the Department of Trade and Industry.
1.4	Amount of income received.	R124m	R111m	-R13m	A few key initiatives that were targeted for fund-raising did not materialise.

STRATEGIC OBJECTIVE 2: TO PROVIDE AN ENABLING ENVIRONMENT AND LEADERSHIP FOR TECHNOLOGY INNOVATION IN COLLABORATION WITH ROLE-PLAYERS

Table 6: Strategic Objective 2: To provide an enabling environment and leadership for technology innovation in collaboration with role-players

KEY PERFORMANCE INDICATOR (KPI)		TARGET	ACHIEVED	DEVIATION	COMMENTS
2.1	Number of knowledge innovation products produced (prototypes developed, patents registered, technology demonstrators and technology transfer packages) as a result of TIA funding and support programmes.	46	64	+18	The over-achievement of set targets was due to the contribution of knowledge-based prototypes produced within the TIPS, SFP and YTIP programmes. The TRL progression shown in KPI 2.1 led to an increased number of patents and prototypes disclosed by HEIs for SFP. The YTIP increase is due to the maturity of the project portfolio which resulted in an increased number of prototypes completed. TIPs reported for the first time on knowledge innovation products and contributed the Genomics Biobank and Databank. TIPS also contributed two technology packages from the Animal Health Cluster.
2.2	Number of knowledge innovation products produced by TIA supported programmes, receiving third party funding.	25	25	0	
2.3	Number of Small, Medium and Micro Enterprises (SMMEs) receiving technology support.	2 200	2261	+61	The DST availed an amount of R37m that was utilised to scale up the activities of the technology stations and was largely devoted to supporting underserved municipalities.

KEY PERFORMANCE INDICATOR (KPI)		TARGET	ACHIEVED	DEVIATION	COMMENTS
2.4	Number of SMMEs owned by previously disadvantaged individuals (PDI) assisted as a percentage of total projects supported, receiving funding, support and/or technology services from TIA.	63%	64.4%	+1.4%	The DST availed an amount of R37m that was utilised to scale up the activities of the technology stations and was largely devoted to supporting underserved municipalities.
2.5	Number of technology innovation initiatives (conference papers, presentations, policy recommendations, panel discussions, position papers, publications, think tanks; and keynote addresses) undertaken by TIA.	10	56	+46	TIA's participation in the various activities exceeded expectation due to its own increased focus on playing the role of thought leadership in the country and beyond. Emphasis was given to the Africa Initiative and interaction with HEIs and SCs. The TIPS and TPP programmes made significant expert level contributions in the areas of BioSafety, Beef and Diary Genomics, and e-Mobility. YTIP held youth panel discussions in several provinces across the country. ISDP facilitated several international innovations skills engagements in which local economic development representatives, HEIs, policymakers, innovators and entrepreneurs participated.

STRATEGIC OBJECTIVE 3: TO DEVELOP AN EFFECTIVE AND EFFICIENT INTERNAL ENVIRONMENT TO SUCCESSFULLY EXECUTE THE STRATEGY

Table 7: Strategic Objective 3: To develop an effective and efficient internal environment to successfully execute the strategy

KEY PERFORMANCE INDICATOR (KPI)		TARGET	ACHIEVED	DEVIATION	COMMENTS
3.1	Average investment approval turnaround time on calls.	Four months	Three months and two days	<4 weeks	The turnaround time for investment calls was reduced due to the focus by the Seed Fund Programme (SFP) on improving on service delivery. All associated processes were optimised, including a review and improvement of the Grant Management System (GMS).
3.2	Improved adequacy and effectiveness of the control environment.	Clean audit	Clean audit	Nil	The clean audit was achieved with nil matters of emphasis resulting in the best audit results since TIA's establishment.
3.3	Amount of funds utilised for projects and programmes as a percentage of the total actual expenditure.	69%	77%	+8%	The investment spent exceeded the target due to cost savings and operational optimisation programmes. Savings realised from operational expenditure were reallocated to the investment portfolio.
3.4	Functional organisational structure as measured by vacancy rate.	Below 8%	9.59%	+1.59%	A review of the organogram was conducted and critical vacancies were prioritised over administrative functions. By the end of quarter four the vacancy rate dropped to just below 6%.
3.5	Effective implementation of talent management strategy resulting in an improved employee engagement ratio.	3.5	3.85	+0.35	Several staff engagement initiatives have been implemented in accordance with the HR Talent Management Strategy. These have resulted in higher levels of staff engagement.

PROGRAMME PERFORMANCE

INNOVATION FUNDING AND PRE-COMMERCIALISATION SUPPORT

The Innovation Funding and Pre-Commercialisation Support (IFPCS) Division supports the development and exploitation of technology innovations by enabling and facilitating the conversion of technology ideas into enterprises. This is done by funding the development of technology and the preparation of the technologies developed for commercialisation or use.

The programmes strive to de-risk technological innovations as they mature through the Technology Readiness Levels (TRL) scale. Once the concept for a technology idea has been proven and the application assessed and approved, the IFPCS Division provides financial support to the technology development using the Technology Development Fund (TDF) for further development or the Commercialisation Support Fund (CSF) for projects that have been demonstrated and are now ready to enter and participate in the market.

All funded projects are monitored during and after development while providing other non-financial support which varies from project to project. Non-financial support may include linking TIA funded companies with other funders such as the IDC to fully commercialise their technologies.

AGRICULTURE

This sub-programme aims to build a portfolio of agriculture technologies with potential for commercialisation. These are primarily technologies that contribute towards competitive, sustainable and inclusive agriculture and agri-business value chains with a particular focus on breeding and reproductive technologies; animal health and nutrition; plant health and nutrition; and post-harvest technologies. Under these, TIA funds opportunities with the objective to:

- Support the creation of an enabling environment for agricultural technology innovation;
- Support the development and demonstration of attractive agricultural technology innovations;
- Facilitate commercialisation of de-risked technologies; and
- Improve the diffusion of appropriate agricultural technologies to small-scale and emerging farmers.

PROGRAMME PERFORMANCE

Table 8: Agriculture sub-programme project portfolio performance FY2016/17

Table 8: Agriculture sub-programme project portfolio performance FY2016/17

PORTFOLIO SUMMARY	
Total number of projects	31
Portfolio exposure	R223.9m
Active disbursements	11
Ongoing - until 2019/20	R75m
FY2016/17 commitment:	R15m
PORTFOLIO SUMMARY	
• Two new investments were contracted with a total value of R23.9m • Total monies disbursed for the year: R23.9m • Three projects have reached the market: Mabu Casing Soils is generating a turnover of approximately R2.5m per month through the production of seedling/compost materials for mushrooms, i.e. mushroom substrate. Xsit was sold for R12m and Agriprotein secured additional funding.	

PROJECT HIGHLIGHTS

AGRIPROTEIN TECHNOLOGIES (PTY) LTD

AgriProtein Technologies (Pty) Ltd (AgriProtein) is a technology start-up company located in Philippi, one of the economically depressed areas in Cape Town. Since 2009, the company has successfully developed and piloted a nutrient recycling technology (converting organic waste to animal feed protein) as part of their strategy to commercialise an insect-based protein feed in the animal feed industry. This is in response to an unmet market need in the animal feed and livestock industries, namely to bring to market sustainable and affordable alternatives to fishmeal and soymeal.

AgriProtein had utilised its own funds of R11.9m to develop the technology. In 2013, TIA invested a matched amount of R11.9m to support the demonstration, market testing and validation of the technology. The company recently secured USD10m from Austrian-based engineering group Christof Industries to build up to 25 fly farms a year. Together with Christof Industries, AgriProtein has developed a standard 250 ton per day plant. To date, the project has created 30 direct jobs. As a secondary outcome, one start-up company was created for an ex-employee to run a canteen at the AgriProtein facility.

FUTURE FYNBOS AYOBA

Future Fynbos is a Cape Town-based breeding initiative, focusing on the selection and breeding of various cut flower and pot plant fynbos types. Breeding is the key focus of this company as this will allow them to release unique varieties on an ongoing basis which can be registered for Plant Breeders Rights (PBR) and Plant Variety Rights (PVR).

As a result, Future Fynbos has registered the “Ayoba” trademark for use with the cut flower and pot plant products in South Africa and the European Union. New varieties with improved characteristics are essential for the sustainability of the Fynbos industry. It is also important that production is matched to market demand. To date, TIA has invested R482 116, which assisted in the application of nine South African PBRs and six EU PVRs. Three of the South African PBRs have been granted and six are pending registration with the Department of Agriculture. Provisional protection has been granted to these varieties. Six PVRs were applied for in the European Union. Four of these have been granted and two are still pending final examination. Commercialisation of the products that have shown potential has started with approximately 30 hectares having been planted in South Africa by the end of 2016. These products are gaining interest internationally and there are plans to increase plant yields in the future.

ADVANCED MANUFACTURING

The Advanced Manufacturing sub-programme is an important "cog" in the wider South African manufacturing value chain. It provides support to innovations that increase the knowledge and/or technology intensity of the manufacturing sector in South Africa. This area focuses on high-tech advanced manufacturing technology projects, as well as technology development in line with it, namely the DST's Advanced Manufacturing Roadmap Initiative and other strategic national programmes. The main focus areas include advanced electronics, aero structures, photonics and smart automation and other national initiatives.

PROGRAMME PERFORMANCE

For FY2016/17, the Advanced Manufacturing sub-programme continued to support TIA's vision by building a quality portfolio of projects in Advanced Manufacturing that contributes to transforming South Africa's manufacturing industry into a competitive, high-tech and high value creation industry. It focused on creating value in its historical portfolio in focus areas of chemicals, production technologies, lightweight and electronics.

Some projects continued to face fundamental scientific and engineering challenges that slowed down their expected progression through the innovation value chain. Thus, it has been necessary to undertake rescoping exercises on these to plot a new path to success. However, despite these challenges, three other projects such as Weldcore, Varibox and FibreLux managed to reach demonstration stage and the unit made a few new investments in alignment to the department's expanded focus in the areas of additive manufacturing, automation, advanced electronics, photonics and aero-structures.

Table 9: Advanced manufacturing sub-programme project portfolio performance FY2016/17

PORTFOLIO SUMMARY	
Total number of innovations	38
Portfolio exposure	R316m
Active disbursements	10
Ongoing - until 2019/20	R36m
FY2016/17 commitment:	R12.7m

PORTFOLIO SUMMARY
• One new investment contracted with a total value of R16m • Co-funding of R12.6 m secured • Additional funds attracted to TIA of R2m • Total amount disbursed for the year: R13m • Two projects progressing by two technology readiness levels or reaching demonstration • Two projects achieving early stage market uptake

''TIA HAS APPROVED AN AMOUNT OF R6.3M FOR TECHNOLOGY DEVELOPMENT AND COMMERCIALISATION OF THE PROJECT.''

PROJECT HIGHLIGHTS

RUBBER NANO PRODUCTS (PTY) LTD

Rubber Nano Products (Pty) Ltd (Rubber Nano Products) is a manufacturer of co-activators for rubber manufacturing. The company identified an opportunity to expand its product range into the tyre industry. Currently, the tyre manufacturing process makes use of zinc oxide as an activator additive in the manufacturing of rubber compound. Zinc oxide is effective in its function, but it has the disadvantage of having detrimental effects on the environment. Its use is restricted and may be phased out in future. Rubber Nano has developed the ZR6/Actiwax as an alternative to zinc oxide for tyre manufacturing. This will result in a more environmentally-friendly tyre product.

TIA has approved an amount of R6.3m for technology development and commercialisation of the project. Rubber Nano is optimistic that once they receive approval from the tyre industry, it will change the scale of operation of their business, thus becoming a revenue generating model. It has created three jobs during FY2016/17. This project is well-aligned with the outcomes articulated in the advanced manufacturing chapter of the Industrial Policy Action Plan (IPAP) and the needs of the South African automotive sector.

"We have been the recipient of TIA Seed Funds for two projects: one for the development of a latex-based product and the second for a graphene-based product. The first project was completed a year ago and we have recently received very good market interest from Europe. The second project is still ongoing. I can confidently say that without TIA's support, we would have had to close down the company." Ms Jacqueline Barnett, Director: Rubber Nano Products and Director: Innovation Office, Nelson Mandela University

ARCAQUA FOOD SANITISER

ArcAqua (Pty) Limited (AA) is a technology-based start-up company located in Cape Town. The company develops disinfectants and sanitisers that are based on ozone technology rather than chemicals, primarily for the healthcare, food and beverage processing industries. The AA sanitising system converts ordinary cold tap water into a sanitising agent that kills 99.9% of all known bacteria. It has already developed and commercialised a wall-mounted Ozone-based sanitiser system (patented). AA's current customers include food retailers, food processing plants and manufacturers, commercial kitchens, restaurants and hotels.

With an investment of R9.7m, TIA has enabled AA to improve its products, create additional applications from AA's core technology and develop an industrialised gantry system to provide chemical-free sanitisation to the fruit packing industry. During 2016, Citrus Research International Symposium (CRI), the research arm of the Citrus Growers Association endorsed AA's system. This has led to a nationwide adoption of the technology within the citrus industry.

"With the assistance of TIA, ArcAqua was able to develop an industrialised gantry system using ArcAqua's existing patented technology to provide chemical-free sanitisation to the fruit packing industry. With TIA's ongoing support, ArcAqua aims to achieve an additional 30% market penetration within the South African citrus market and is currently pursuing leads into the USA and Israel." Paul O'Linn, Chief Executive Officer, ArcAqua (Pty) Ltd

HEALTH

Through this sub-programme, TIA aims to enhance South Africa's global competitiveness, delivering socio-economic value through innovation in healthcare products and services, as well as addressing the prevention, diagnosis, and/or treatment of priority disease. The priority diseases that have been identified as having the greatest effect on public health and quality of life in South Africa and Sub-Saharan Africa, include HIV/AIDS, tuberculosis, malaria, respiratory diseases, cancer and non-communicable diseases such as, diabetes and cardiovascular disease. TIA is therefore positioned to support the development and commercialisation of products and services which address the healthcare needs of South Africa. The priority investment areas for TIA's health sector include indigenous knowledge systems and complementary medicine; medical devices and diagnostics; as well as pharmaceuticals and bio-pharmaceuticals, including vaccines and biologics.

PROGRAMME PERFORMANCE

Table 10: Health sub-programme project portfolio performance FY2016/17

PORTFOLIO SUMMARY	
Total number of projects	69
Portfolio exposure	R703m
Active disbursements	9
Ongoing - until 2019/20	R47m
FY2016/17 commitment:	R22.5 m

PORTFOLIO SUMMARY
• Two new investments contracted with a total value of R34.8m • Third party funding of R26.8m secured • Follow-on funding of R17.7m • Co-funding (active investments) R9.1m • Co-funding from TIA clients of R5.3m • Additional TIA funding approved for active investments of R5.9m • Total monies disbursed for the year: R15.2m • Health - three projects: Enzyme Technologies (Pty) Ltd generated sales of the technology; Food and Cosmetics Technologies CC was linked with EgoliBio to initiate commercialisation efforts; and Smart Crutch linked with EgoliBio to initiate commercialisation efforts

PROJECT HIGHLIGHTS

Industrialising new skin tone actives for cosmetics market

The aim of the project is to upscale and optimise the process for extracting skin tone actives for the cosmetics market using a South African indigenous plant. South Africa's plant diversity is the third largest in the world and presents a green goldmine for the global cosmetics industry, yet it has been largely underutilised. The project's objectives are to develop quality standards and assess their seasonal variation; establish infrastructure at a site in the community of Mamelodi in Tshwane; upscale propagation of the plant, design and construct the pilot facility; upscale, optimise and validate the skin tone extract process and carry out techno-economic analysis; test the product and carry out market validation studies. Through this project, a manufacturing facility will be established in Mamelodi to produce extracts that will be sold to cosmeceutical companies to be included in formulations as a skin even toner. The facility will employ locals, thus creating jobs and reducing poverty. TIA has approved total funding of R14.7m towards the project.

INFORMATION AND COMMUNICATIONS TECHNOLOGY

This sub-programme pursues inventions in information and communications technology (ICT), focusing on, among others, the following:

- Electronics – software and hardware for the retail industry.
- Internet space - artificial intelligence, protection of currently unvalued digital assets (e.g. logos); identity management and customer management (e.g. KYC); broadband, actual development of software.

This sub-programme focuses on providing support for the development and exploitation of inventions, discoveries and improvements to technologies that provide functions of processing, transmitting and displaying information. Support is also provided for creative new ideas of applying ICT in detecting, measuring or recording physical and social phenomena.

PROGRAMME PERFORMANCE

During the FY2015/16, the unit paid particular attention to aligning its work with the Department of Science and Technology's ICT Research, Development and Innovation Roadmap, 2023. This saw two new projects, in the fields of broadband networks (including manufacturing of network equipment) and software development which were approved for funding. The broadband project, RIOT is to be executed by a startup company, RIOT Network (Pty) Ltd, based in Gauteng. The software development, 'Spacedecode' will also be developed by a Gauteng-based startup company, Lepsta (Pty) Ltd. The projects are to be executed over a period of two to three years, with total funding of just over R24m.

Table 11: ICT sub-programme project portfolio performance FY2016/17

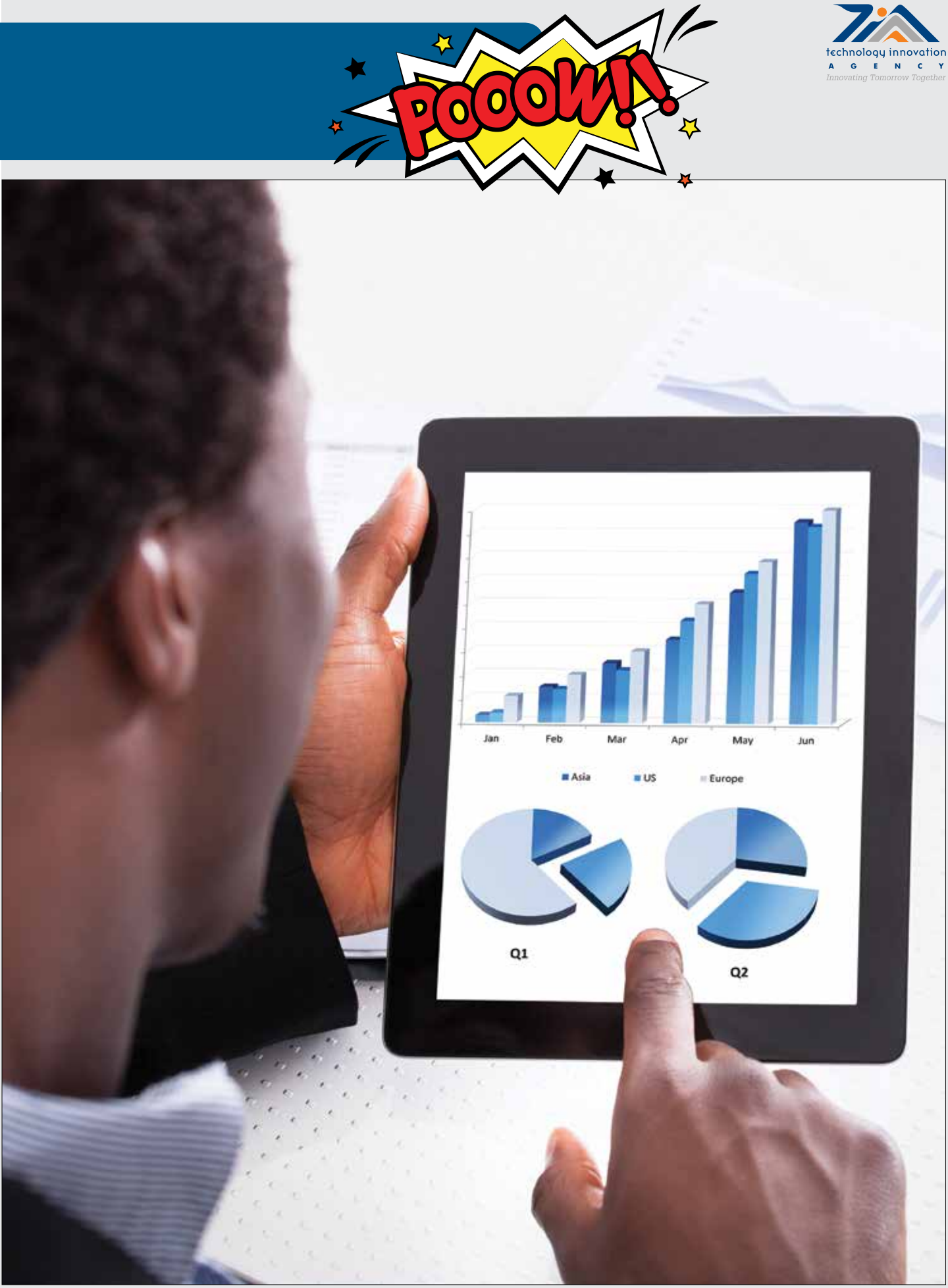
PORTFOLIO SUMMARY	
Total number of projects	9
Portfolio exposure	R99m
Active disbursements	7
Ongoing - until 2019/20	R26.5m
FY2016/17 commitment:	R21m
PORTFOLIO SUMMARY	
• Two new projects contracted to the amount of R24.9m • One project had technology demonstrated in the environment of a potential customer • Total amount of R21m disbursed to contracted projects	

PROJECT HIGHLIGHTS

Artificial Mind Engine

Cognitive Systems (Pty) Ltd (Cognitive Systems) is a Cape Town-based company, specialising in cognitive computing that is based on Marvin Minsky's "Society of Mind" theory. According to this theory, human intelligence arises from the interactions of simple parts called agents, which are themselves mindless. The company has developed the Artificial Mind Engine (AME), a software platform that focuses on extracting insights from structured and unstructured Big Data from various industry sectors or application domains.

The aim of the project is to develop a generic AME that can be used in the Internet of Things (IoT) and the Big Data environments. The AME project is designed to address the challenge of synthesising intelligence from a very large stream of data and provide new insight from such data within a limited period. The technology relies on average business and personal computing infrastructure, rather than specialised high performance supercomputers. This approach ensures that the technology is affordable. With an investment of R11.8m, TIA has enabled the company to develop the AME project. The project is currently at Technology Readiness Level 5, where it is being tested by a potential client in the security industry. In this application, the technology will analyse video stream and pre-empt security breaches before they occur. The technology will contribute to South Africa's competitiveness in the ICT infrastructure sector.


POOOW!!
Jan
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NATURAL RESOURCES

The natural resources sector encompasses existing, if not mature, economic sectors. In this sub-programme, TIA focuses on water resource management, environmental and waste management, and mining and minerals. In these areas, TIA aims to improve the competitiveness of the existing economic sectors through supporting technology innovation to early stage commercialisation. Through its range of interventions, TIA aims to support the development of new cutting-edge and knowledge intensive economic sectors and firms. As a case in point, the mining sector has demonstrated to be a good catalyst for new industries, such as capital equipment, both locally and globally.

PROGRAMME PERFORMANCE

This sub-programme focuses on the following:

a) Efficient, safe and competitive production: Use advanced technologies to sustainably improve process efficiencies in the extraction and exploitation of natural resources and reduce worker exposure to hazards, as well as maintain a competitive natural resources sector.

b) Environmental and health management: Support the development of technologies to minimise the impact from natural resources extraction and exploitation on the workforce, the environment and the community.

c) Natural resources upgrading and value addition: Support the upgrading and value addition of South Africa's natural resources by encouraging local manufacturing and production.

d) Lateral migration: Exploiting the knowledge and capacity in the natural resources sector to create new high-value economic sectors.

Table 11: Natural resources sub-programme project portfolio performance FY2016/17

PORTFOLIO SUMMARY	
Total number of projects	11
Portfolio exposure	R180.3m
Active disbursements	5
Ongoing - until 2019/20	R86.6m
FY2016/17 commitment:	R 38.1m
PORTFOLIO SUMMARY	
• One new investment contracted with a total value of R19m. • Total monies disbursed for the year: R15.1m. • Four projects commercialised: Green Iron Technologies (Pty) Ltd, Zargun, CMTI Consulting (Pty) Ltd has received an order for six products from Sibanye Gold and Settech Mining and Industrial Solutions (Pty) Ltd has sold one product to Black Mountain Mine in Aggeneys in the Northern Cape.	

PROJECT HIGHLIGHTS

Settled Bed Detector Probe (SBD)

In South Africa alone, about 150m tons of gold and platinum ore mine tailings material is pumped in slurry form to nearby dams every year. To avoid settlement of the tailings during hydraulic transportation, the pipelines are operated with a safety margin above the critical deposition velocity, hence the development of an energy optimiser which this project is based on.

Settech Mining and Industrial Solutions (Pty) Limited (Settech) developed the Settled Bed Detector Probe (SBD), an energy optimiser technology designed to minimise or eliminate blockages in slurry pipelines. The main objective of this technology is to detect slurry settlement in pipes and electronically relay a message to inform the pump control system to vary the pump speed, thus help avoid and prevent possible pipe blockages from occurring.

During the fourth quarter of FY2016/17, Settech sold its first unit to Black Mountain Mine in the Northern Cape.

This transaction marks the beginning of the commercialisation phase of the SBD project. Settech is currently seeking funding to set up the facilities for full production, marketing and sales of the SBD units.

ENERGY

South Africa is faced with global environmental pressures to reduce carbon dioxide emissions, local energy constraints and the need to grow the economy. The country must look for innovative, environmentally-friendly ways to resolve its energy challenges. In line with the Integrated Resource Plan (IRP) and the National Development Plan (NDP), TIA is constantly searching for opportunities to invest in various technology innovations in the energy sector. Under this sub-programme, TIA focuses mainly on opportunities in the bio-energy, renewables, energy management and clean-coal technologies.

PROGRAMME PERFORMANCE

Table 12 Energy sub-programme project portfolio performance FY2016/17

PORTFOLIO SUMMARY	
Total number of projects	18
Portfolio exposure	R201m
Active disbursements	5
On-going - until 2019/20	R40m
FY2016/17 commitment:	R8.6m

PORTFOLIO SUMMARY
• Two new investments contracted with a total value of R36m • A total of R14m was disbursed for FY2016/17 (new and existing investments) • PST Sensors (Pty) Ltd (PST Sensors) has been commercialised. The company has entered an agreement with Procter and Gamble for the commercial exploitation of its technology in Canada.

PROJECT HIGHLIGHTS

HySA Catalysis

HySA Catalysis is a Centre of Competency under the Hydrogen South Africa (HySA) programme, co-hosted by the University of Cape Town and the Council for Mineral Technology (Mintek). Phase 1 of the project was completed in 2016 and successfully achieved its objectives of developing and demonstrating a membrane electrode assembly (MEA) which is based on a platinum catalyst. The MEA is a crucial component of fuel cells, an energy converter that converts chemically stored energy into electricity. This project has led to five invention disclosures, three patent applications and a software licensing.

The success of the HySA Catalysis programme has also resulted in the establishment of a spin-off company, HyPlat (Pty) Ltd (HyPlat), to ensure the uptake of the technology in the market. The project has received total funding of R9.9m during Phase 1, with an additional R28m to fund HyPlat for further development and commercialisation of the MEA technology. The development of the MEA technology has progressed from a semi-integrated system in TRL 4 to a verified prototype in TRL 5.

PROGRAMME PERFORMANCE

INNOVATION ENABLING AND SUPPORT

The Innovation Enabling and Support (IES) Division mainly provides an enabling local environment for technology innovation and thought leadership in collaboration with other NSI players. This is achieved through the following functions of the division:

a) Enabling and stimulating a culture of innovation in South Africa;
b) Facilitating access to key infrastructure and expertise for technology innovation; and
c) Lowering the barriers for others to participate in technology innovation.

The key outcomes of the Division are:

- Increasing the number of innovation products developed, as well as the number of innovation products progressing along the technology readiness levels towards commercialisation;
- Increasing investments in TIA funded/supported projects;
- Increasing sustainability of technology focused SMMEs as a result of technology and business support from TIA;
- Increasing participation of SMMEs owned by previously disadvantaged individuals (PDI) and their sustainability; and
- Enabling an integrated technology innovation system.

SEED FUND PROGRAMME

A common challenge experienced by researchers, innovators and entrepreneurs is access to early stage funding and business support, as well as advisory services that enable them to establish proof-of-concept of their research outputs. This allows innovators to demonstrate their intended product and services' innovation, commercial value propositions and build a business or investment case for follow on funding, and attract other innovators who could contribute to the next phase of development and its commercialisation.

TIA established the Seed Fund Programme specifically to de-risk research output from higher education institutions (HEIs) and technology innovation activities undertaken by SMMEs to advance these ideas to prototypes, proof of concept and business cases that could be used for further development. The SFP, which offers a conditional grant with a limit guide of R650 000 per application, is managed and implemented in partnership with HEIs, science councils (SC), the provincial regional development agencies and incubators.

The Higher Education Seed Fund

The HEI Seed Fund is executed in partnership with a network of 23 universities across the country that manage the Call for Proposals. During FY2016/17, TIA invested a total of R47.8m in 101 projects. Figure 9 below shows the percentage distribution of funds per province, with Gauteng and Western Cape-based universities accounting for a larger share of 41% and 22%, respectively. Figure 10 shows the performance of the investment portfolio by recipient institutions.

HEI SEED FUND INVESTMENT PORTFOLIO

R47.8 million invested in 101 funded applications in FY 2016/17

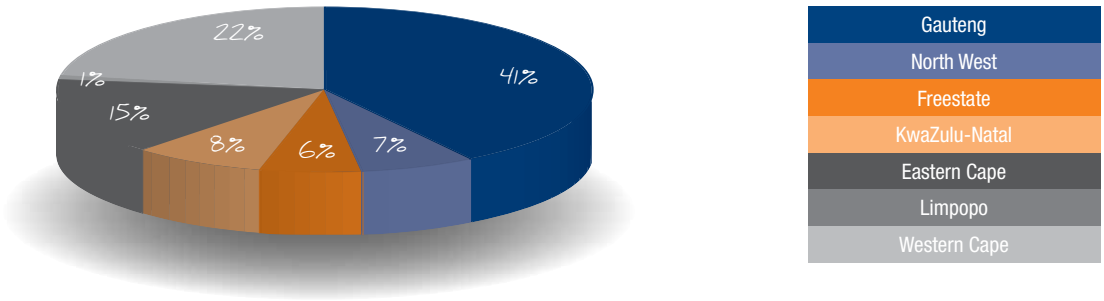


Figure 9: HEI Seed Investment Portfolio per region

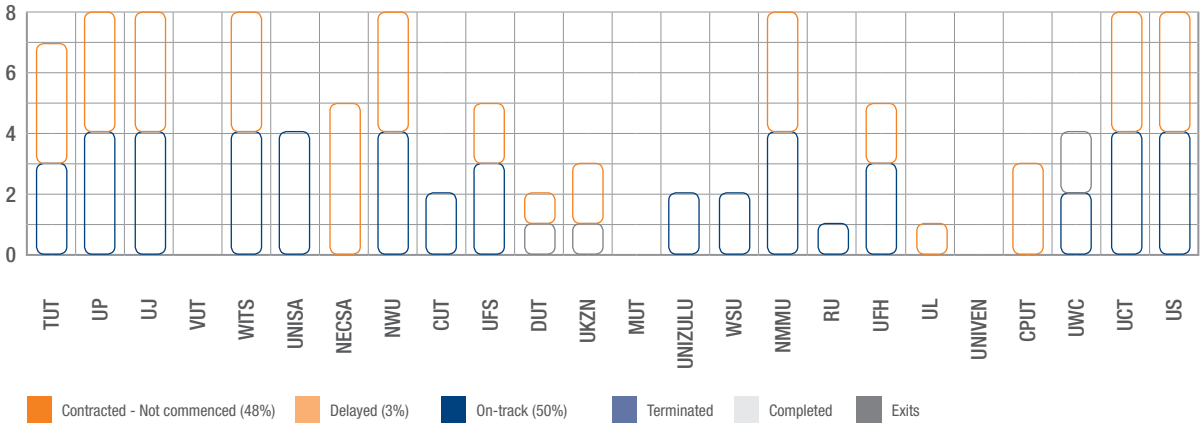


Figure 10: HEI Seed Investment Portfolio stage gate

THE SMME SEED FUND

TIA implements the SMME Seed Fund through its network of partnerships with Regional Development Agencies and selected incubators whose activities are closely aligned to its mandate of technology innovation. In this way, TIA takes advantage of the agility of the Seed Fund partners, while ensuring that governance aspects are maintained, meeting the intended impact of the fund. In FY2016/17, it leveraged its close partnership with the Small Business Development Agency (SEDA), by expanding its reach to many entrepreneurs through on-boarding of two new incubators, SAVANT Technology Incubator and EgoliBio.

Figure 11 shows that, TIA invested in FY2016/17, R25m in 32 new innovations with Gauteng and Western Cape still accounting for a larger share of the innovation activity. Figure 12 shows the health and overall performance of the Seed Fund Portfolio under management by the various partner institutions.

R26.5m invested in 32 Innovations

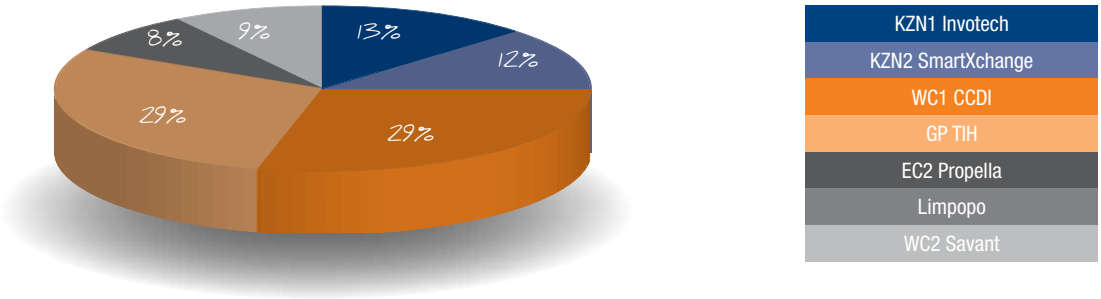


Figure 11: SMME Seed Investment Portfolio per region in FY2016/17

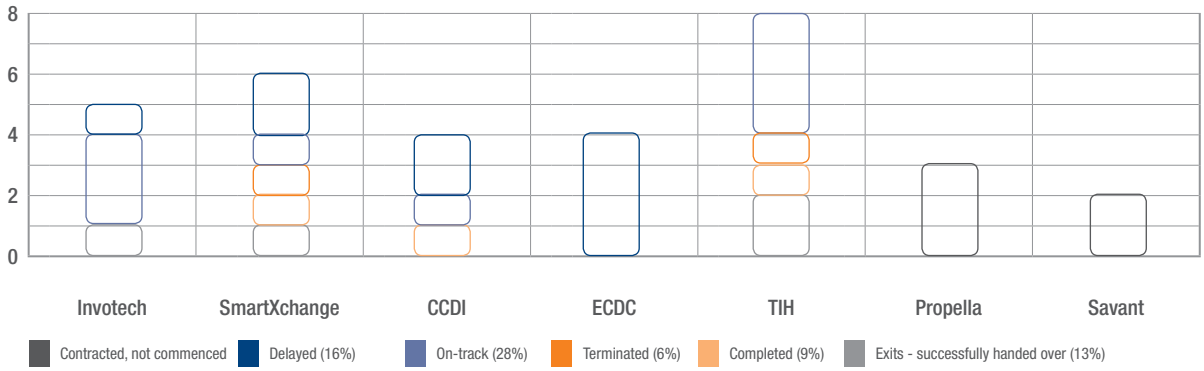


Figure 12: SMME Seed Investment Portfolio per stage of completion

PROJECT HIGHLIGHTS

UNIVERSITY OF KWAZULU-NATAL - POWER LINES INSPECTION ROBOTS

Funded Activities: Prototype development and testing, IP registration, field trials

Deliverables: Developed a fully-functioning inspection robot vehicle for transporting inspection sensors along power lines. The robot reduces the risk of flying helicopters near the lines, but can operate at a fraction of the cost, and provide unprecedented inspection detail if damage is detected earlier, ensuring quicker repairs.

Application Sectors: Energy, Electronics

Status: Completed, in discussions with commercial partners

UNIVERSITY OF JOHANNESBURG - MINERAL PET

Funded Activities: Prototype development and testing, IP registration, field trials, scale up, business plan development

Deliverables: Fully-developed diamond detecting technology that is ready for commercialisation.

Application Sectors: Mining

Status: Completed and ready to be commercialised, project team in discussions with commercial partners

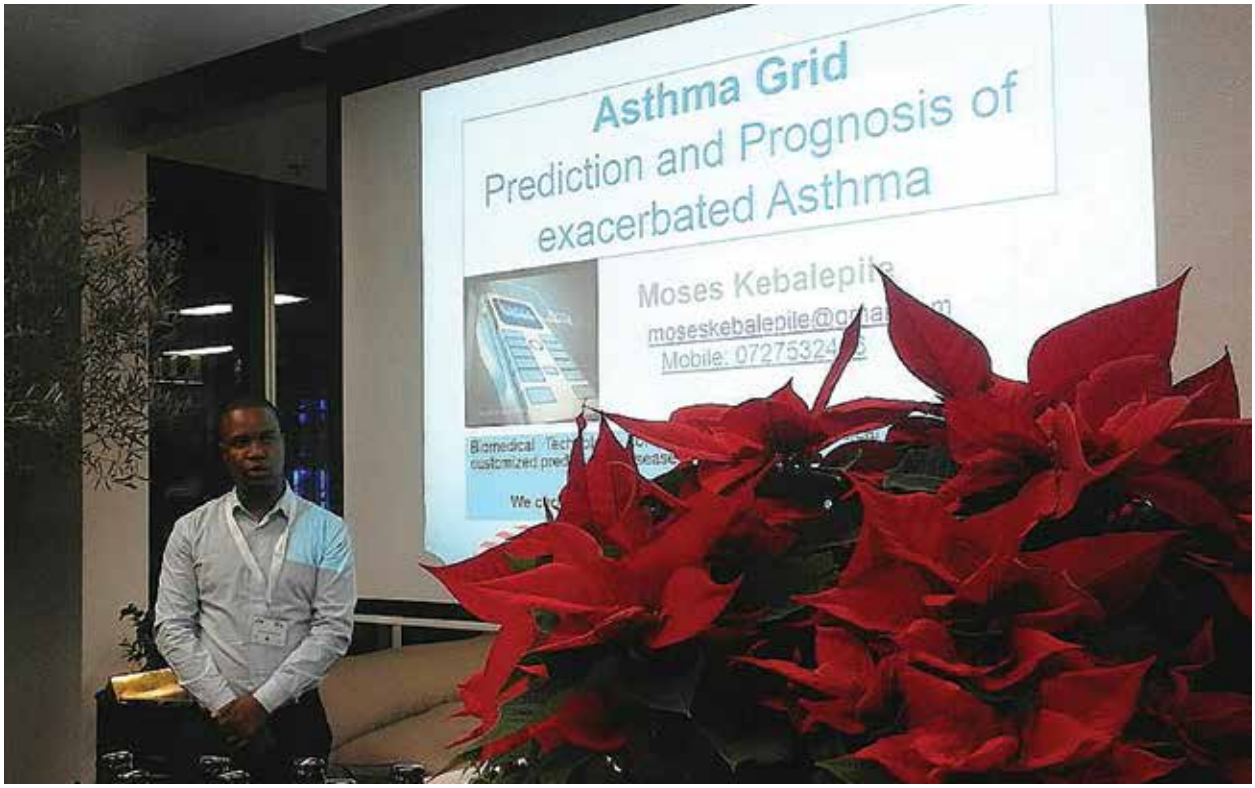
INNOVATION SKILLS DEVELOPMENT PROGRAMME

The ISDP performs a support function to the activities of TIA. It is responsible for strengthening critical thinking capabilities within the NSI to facilitate the smooth progression of technologies from proof of concept stage through to pre-commercialisation (i.e. TRL 3-8). The work of the ISDP is premised on three pillars, namely:

The first, Future 500, is aimed at developing South Africa's top 500 young minds in innovation who need not necessarily be entrepreneurs but may be innovation leaders in competency and practice and who can work in industry in managing and driving innovation. Under this programme, 309 candidates received critical thinking skills level 3 training. The top 20 ICT candidates participated in an international study tour to Hong Kong in partnership with the City of Joburg Educating Digital Interns (COJEDI). A new cohort of ten CHUMA (Masters level) candidates were recruited and placed at various technology transfer offices on specialised internship programmes, aimed at strengthening technology transfer capacity in South Africa.

The second, NextGen 100, aims to encourage the establishment of technology start-ups. It targets South Africa's top 100 minds in science, technology, engineering, mathematics and innovation who will develop next generation technology start-ups. It is designed specifically to develop the capacity of TIA-supported companies and entrepreneurs to take their innovations to market through start-up formation. The programme is implemented through a partnership model that includes the Swiss South African Joint Research Programme, the Swiss University of Basel, the Institute for Young Entrepreneurs, The Innovation Hub (TIH), eGoliBio incubator and the Royal Academy of Engineering under the Newton Fund Programme.


SSAJRP
Swiss – South African
venture leaders
International Pitchbattle
Wednesday, December 14th 2016
startup space, Zurich


Asthma Grid
Prediction and Prognosis of
exacerbated Asthma
Moses Kebalepile

GLOBAL CLEANTECH INNOVATION PROGRAMME

The GCIP is an international development-funded programme, implemented by the United Nations Industry Development Organisation (UNIDO) with funding from the Global Environment Facility (GEF). TIA is the executing partner and hosting institution for the GCIP in South Africa, while US-based Cleantech Open serves as the main knowledge partner of the global programme.

The sub-programme is aimed at developing innovative clean technology SMMEs in South Africa with a specific focus on energy efficiency, renewable energy, water efficiency, waste beneficiation and green buildings. It operates as a business accelerator and offers a competition-based approach to identify suitable local SMMEs. The sub-programme has been piloted in South Africa since 2014, followed by sister projects in seven other countries, i.e. Armenia, India, Malaysia, Pakistan, Thailand, Turkey and Morocco.

PROGRAMME PERFORMANCE

The GCIP-SA runs an annual competition to select high-potential cleantech entrepreneurs to participate in its business accelerator programme, where they are continuously trained, mentored and assessed on their business models, investor pitches, communication and financial skills for the development of a more marketable and investor-attractive product and business. Participating entrepreneurs also have the opportunity to connect with potential partners, clients and investors, and participate in showcasing events. In addition to a cash prize, the winner and two runners-up also get a fully-funded trip to San Francisco to compete with the best cleantech innovators from the seven other GCIP countries.

221 applicants registered for the 2016 programme, with 88 applications fully completed and submitted. The table below shows the regional distribution and growth in applications since the introduction of the programme in its current form in 2014.

Table 13: Regional distribution of applications from 2014 to 2016

PROVINCES	REGISTRATIONS			COMPLETED APPLICATIONS		
	2014	2015	2016	2014	2015	2016
Eastern Cape	4	8	22	2	5	7
Free State	2	4	7	1	3	3
Gauteng	30	61	96	19	24	37
KZN	10	18	21	9	11	12
Limpopo	2	4	6	1	2	3
Mpumalanga	2	1	11	0	1	5
North West	0	3	9	0	1	2
Northern Cape	2	2	12	1	1	6
Western Cape	16	19	37	12	12	13
Total	**68**	**120**	**221**	**45**	**60**	**88**

Table 13: GCIP regional distribution of applications from 2014 to 2016

The 2016 finalists with Minister Pandor

PROJECT HIGHLIGHTS

Baoberry (Pty) Ltd

Baoberry is a multi-disciplinary environmental, social and ecological services company specialising in ecological engineering innovations and services responsible for developing “a Wetland in a box” concept, called a “aWetbox”, which is a cost-effective, nature-based grey water treatment system that eliminates 99% of disease-causing micro-organisms and improves water quality for household use by up to 80%. aWetbox is patented and is available as an easy-to-assemble kit. It is suitable for use by municipalities, residential developments, holiday resorts, corporate environments, and various other uses.

The Hot Spot

Amahlathi Eco-Tech (AET) is an Eastern Cape-based company with expertise and experience in innovation and research of new products. An average geyser can take up to three hours to reach its optimal temperature, and can contribute to as much as 40% of a household’s total monthly electricity usage. AET’s concept looked at how they could reduce the time needed to heat water in a geyser, thus reducing electricity usage. This resulted in the company developing the Hot Spot, a plastic sleeve for geysers that can be fitted over any standard geyser element. The device pushes hot water from the bottom to the top of the geyser, providing 50 litres of hot water (at 50°C) within 30 minutes. The company is in the process of setting up a factory for the manufacturing of the Hot Spot at Dimbaza in the Buffalo City Metropolitan Municipality in the Eastern Cape. The Hot Spot earned Ms. Sandiswa Qayi, Managing Director of AET, a GCIP award for the Most Promising Youth-led Business in 2016.

Yolandi Schoeman with Minister Pandor, James New and Barlow Manilal.

Pam Alborough with Minister Pandor.

Boost Mechanics

Boost Mechanics has developed an innovative exhaust system for application in turbo-charged vehicles. The system reduces fuel consumption and emissions while maintaining engine performance. The technology is currently at the testing and certification phase, before it will be submitted to the SABS for emissions certification. Initial tests indicate a 5% fuel saving on the road, with the accompanying reduction in CO2 emissions. One of the company's biggest achievements is demonstrating a reduction in Nitrogen Oxide (NOx) emissions, which has become a massive technical challenge within the automotive industry. In addition to being a semi-finalist in the 2016 GCIP competition, Mr. Ipeleng Mathebula's innovation won him first prize at the Green Innovators Pitch at the 2016 Green Youth Indaba.

Thevia Roof Tile

Scavman was established as a manufacturer of outdoor and recreation related products, due to the high cost of imported products from Europe and the USA. In recent years, Scavman found that South Africa produces around 315m tons of mining waste, of which 1.5m is plastic. They also found that at least 10% of conventional roof tiles break during handling and transportation. As a result, they merged two ideas and looked at how they could manufacture a more durable tile. This resulted in Scavman creating the Thevia roof tile, made from 99% waste materials (crusher discard and recycled plastics). Each tile is 75% lighter than a conventional concrete roof tile, double the strength and with less than 0.1% breakage. Because of less breakage, Scavman found that this translates into cost savings of 8% to15% on total roof installation compared to entry-level clay or concrete tiles. Thevia roof tiles also insulate a thousand times better than corrugated iron. The tiles have been tested by the Centre for Polymer Technology in SA, with orders from major construction companies confirmed, pending certification by Agrément South Africa.

TECHNOLOGY INNOVATION PROGRAMMES

The Technology Innovation Programmes (TIPs) is a mechanism to encourage collaborative multi-party R&D initiatives that leverage the strengths of innovation partners with a view to develop a technology solution. In this role, TIA funds technology development through a value chain approach that fosters collaboration among actors such as public research institutions, entrepreneurs, companies, suppliers and manufacturers, all competing and co-operating in an industry. Effectively therefore, TIA plays a role as funder, connector and facilitator; and hence a catalyst in the establishment and management of a TIP. This objective of this Programme is to address national priorities or areas of strategic social and economic importance through the utilisation of technology innovation.

It currently supports four targeted initiatives that focus on animal health, beef and dairy genomics, as well as electric mobility. In addition to these, the unit explored opportunities to create new TIPs initiatives, one in electronic waste beneficiation and the other in medical devices and diagnostics.

PROGRAMME PERFORMANCE

During FY2016/17, the unit focused on two key actions, i.e. to grow its portfolio of projects through funding of new opportunities and conducting impact assessment studies on the various initiatives under management to guide future strategies and investment decisions.

Table 13: Technology Innovation Programme Portfolio Performance FY2016/17

PORTFOLIO SUMMARY	
Total number of projects	18
Portfolio exposure	R201m
Active disbursements	5
On-going - until 2019/20	R40m
FY2016/17 commitment:	R8.6m

PORTFOLIO SUMMARY
• Utilisation of the BGP Databank by breeders for breed selection
• Development of a BIO Bank by DGP, as well as a BIO Bank and Databank by BGP
• Two technology transfer packages developed from the AHC; Tetanus media replacement for an Onderstepoort Biological Products (OBP) vaccine G0115 and Pulpy Kidney Vaccine
• Four projects seeded for SMMEs through the uYilo Kick Start Fund
• Six research projects from the genomics programmes co-funded
• R2.3m raised in co-funding
• Funds disbursed = R40m (APP Budget = R17m)

PORTFOLIO HIGHLIGHTS

uYilo e-Mobility

The uYilo e-Mobility was established in March 2013 to support the development of advanced Electrical Vehicle (EV) and EV-related energy technologies in South Africa. The programme focuses on three areas, all related to electric vehicles, i.e. energy storage, data management and infrastructure. Key partners include the Nelson Mandela Metropolitan University (NMMU); eNTSA and various automotive original equipment manufacturing companies (commonly referred to as OEMs) through an industry committee and the Electric Vehicle Infrastructure Alliance (EVIA). To date, TIA has invested a total of R21m over three years.

In FY2016/17, TIA commissioned an independent impact assessment of the programme to determine its impact for the last three years and to help guide its future scope and financial requirements. Key findings from the study show that:

- R38.29m or 1.78 times the grant value has been contributed to GDP

- R13.73m to regional GDP with 64% of the grant value spent locally
- Seventy-four jobs to the local economy at a cost of R292 063 per decent job opportunity in the form of direct, indirect and induced employment
- R5.99m to household income with 28% of the grant ending up as new household income

The results of the study have greatly contributed to the development of a new Business Plan for 2017-2022, jointly compiled by TIA and the uYilo management team.

During the year, the programme also saw four projects supported through the uYilo Kick Start Fund.

- Powermote Drive Systems received R500 000 from uYilo and co-funded R500 000 for the development and validation of an efficient, environmentally-friendly electric vehicle test platform for use in 4×4 vehicle applications for typical rough terrain applications for the mining and safari industry. The project started at TRL 3 and progressed to TRL 8, resulting in an enquiry for a low-profile light weight Jeep-type vehicle for use in the mines.
- MLT Inverters received R500 000 from uYilo and co-funded R70 000 for upgrading of Karoo70 for second-life electric vehicle battery applications. The project was completed in March 2017 and the deliverable was a validated inverter prototype which provides MLT with new market opportunities in Lithium-ion battery applications.
- Stellenbosch University received R990 000 from uYilo and third-party funding of R1m from Mellowcabs for the development of ISO/IEC 15118 compliant battery management systems, chargers and electric drive systems for 48V Li-ion motor controller prototype for SMME start-up and project partner Mellowcabs.
- EWIZZ received R498 465 from uYilo and co-funded R184 965 for the development of a low cost EV management system, EV management unit and EV management cloud for micro EVs. The project partner is Melex Electro Vehicle.

Animal Health Programme

TIA established the Animal Health Technology Innovation Programme in 2013 as a consortium of institutional partners in the animal health research and development space. This programme focuses on developing new and improved vaccines, pharmaceuticals and diagnostics for the animal health industry. To date the programme has invested R117.6m in 32 animal health related R&D projects. In 2016, TIA commissioned an independent portfolio review of the programme, covering all projects across the different partner institutions, such as Onderstepoort Biological Products (OBP), University of Pretoria (UP), CSIR, ARC-OVI and the University of Cape Town (UCT). The review revealed interesting insights.

- More than half of the projects, i.e. 54%, are on course to be commercialised within five years. The total turnover of all funded projects collectively is projected to be 21% of the current local industry turnover;
- The total value added (income from salaries and wages, profits from the commercial and flow-on activities) is projected to be in the region of R678m in five years with close to 2 300 additional employment opportunities;
- The commercial activities could generate tax revenue (including corporate, personal, production and import taxes) in the region of R260m in five years;
- Royalty payments due to TIA could reach R60m per annum after five years;
- The National Research Foundation provided a co-investment amount of R5.7m towards human capital development for projects funded under the Innovation Programme;
- The programme attracted a co-investment amount of R3.5 m from OBP;
- Three dossiers have been submitted from OBP projects for Act 36[2] registration with the Department of Agriculture, Forestry and Fisheries (DAFF);
- Two diagnostic kits have been developed for avian influenza (TAHC12-00029) and H5 and H7-specific ELISAs for ostrich sera;
- The programme contributed several scientific outputs including 30 research papers, two known patent applications and nine projects declared that their projects were subject to trade secrets or non-disclosure agreements;
- The programme facilitated close to 56 post-graduate degrees (Masters and PhDs) in the field of micro-biology, biotechnology, molecular virology and biology and immunology, i.e. on average 1.8 students per project.

Dairy Genomic and Beef Genomics Programmes

The Dairy Genomics Programme (DGP) and Beef Genomics Programme (BGP) are key initiatives in TIA's role regarding enabling and supporting innovation through knowledge utilisation for inclusive development. Livestock plays a major role in economic and social development, more so in the South African commercial space. Until recently, selecting animals for breeding was conducted by observation of phenotypes and pedigree data, but lately the recent technologies apply the combination of phenotypic and genotypic data to estimate Genetically Enhanced Breeding Values (GEBVs).

Dairy Genomics Programme

The DGP aims to establish a national framework for the dairy breeding industry, develop a genotypic and phenotypic databank and generate genetically enhanced breeding values. To date, the DGP has successfully established its governing structures, both the project and research committees, and are functioning effectively. The programme's research committee has finalised six research projects and has collected 937 samples into the biobank. The programme has also received numerous in-kind contributions from external parties to fund semen flask, project committee meetings, research committee meetings, hair and semen samples. These include R300 000 from Taurus Evolution, an artificial insemination company; R228 572 from signatories to the MOU and R28 343 from other external sources.

Beef Genomics Programme

Investment in beef genomics is known to yield significant economic returns, which is evident in a similar programme known as the Australia Beef CRC. South Africa imports significant quantities of beef that negatively impacts on the current account trade balance. South African red meat is consistently faced with challenges of meeting international standards, implying that the red meat industry needs to improve its quality standards. The Beef Genomic Programme has thus been established to address this challenge through the collection of genomic and phenotypic data, combining it to generate a databank that has Genetically Enhanced Breeding Values (GEBVs).[2]

The Beef Genomics Programme has performed phenomenally well in FY2016/17, by collecting and storing 1 966 samples in the biobank, and genotyped and stored 1 728 in the databank. Since the inception of the programme, the databank contains

2 ACT 36 OF 1947 – FERTILIZER, FARM FEEDS AND REMEDIES ACT

a total of 4 444 genotypes and a 39 whole genome sequence data, and a total of 309 469 phenotypes that have been recorded. The beef breeding associations LRF and Studbook, and the ARC BTP have confirmed access to the portal and utilisation of the databank by scientists and the beef breeders. The amount of data has been shared, which is equal to 30GB (Gygabytes).

The programme has attracted third party funding worth R646 679 for four research projects from various sources such as the National Research Foundation (NRF), RMRDT,[3] University of Pretoria and African Union-IBAR. BGP held a Genomics Training Workshop from 3 to 7 October 2016, presented by international experts Dr Ignacy Miztal (US) and Dr Ignacio Aguilar (Uruguay).

TECHNOLOGY PLATFORMS PROGRAMME

The Technology Platforms Programme supports the creation of an enabling environment for biotechnology innovation through the establishment and provision of high-end technical infrastructure equipment to technology platforms. These platforms in turn provide access to technology, infrastructure and expertise to various users in the South African National System of Innovation (NSI). The Programme thus fulfils TIA's strategic role of an enabler by facilitating access to high-end skills, technologies and equipment for innovators by providing funding and expert support to host institutions that provide innovation service offerings. During FY2016/17, TPP comprised a network of nine technology platforms, three internal to TIA and six external.

Table 14: Technology Platform sub-programme project portfolio performance FY2016/17

PORTFOLIO SUMMARY	
Number of platforms	9
Number of projects supported by the platforms	119
Funds disbursed in FY2016/17	R73.5m
Number of innovation products	25
Patents successfully granted:	3
Number of projects completed	25
PORTFOLIO SUMMARY	
• R41m disbursed towards the support core operations of technology platforms • R32.5m disbursed towards new equipment and upgrades	

Figure 13 illustrates the breakdown of projects supported by the platforms according to Technology Readiness Level. Most projects lie between TRL level 3 and 7. A small percentage (i.e. 8%) of projects cannot readily be classified because they relate to workflows that may be used across various TRLs or insufficient information has been given by the client to determine the appropriate TRL.

A further breakdown of projects by location shows that TIA-funded platforms have wide national reach. The mapping of project origins by province is provided in the following graph. There are projects that are undertaken for international clients and contribute to foreign direct investment in local innovation activities. These projects are classified under "other" along with those projects that occur across multiple sites and/or not be readily attributed to a single location. Project breakdown by focus area shows that the majority of projects are in health (48%) and industrial biotechnology (35%).

3 RMRDT stands for Red Meat Research and Development Trust of South Africa

BREAKDOWN OF PROJECTS BY TRL

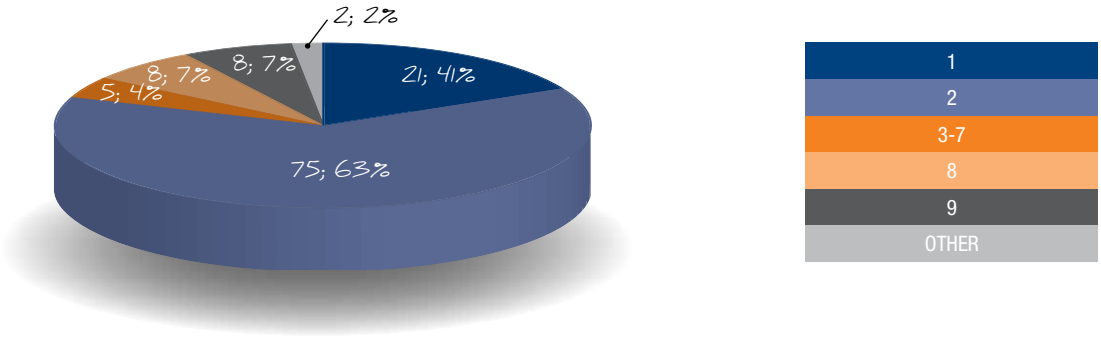
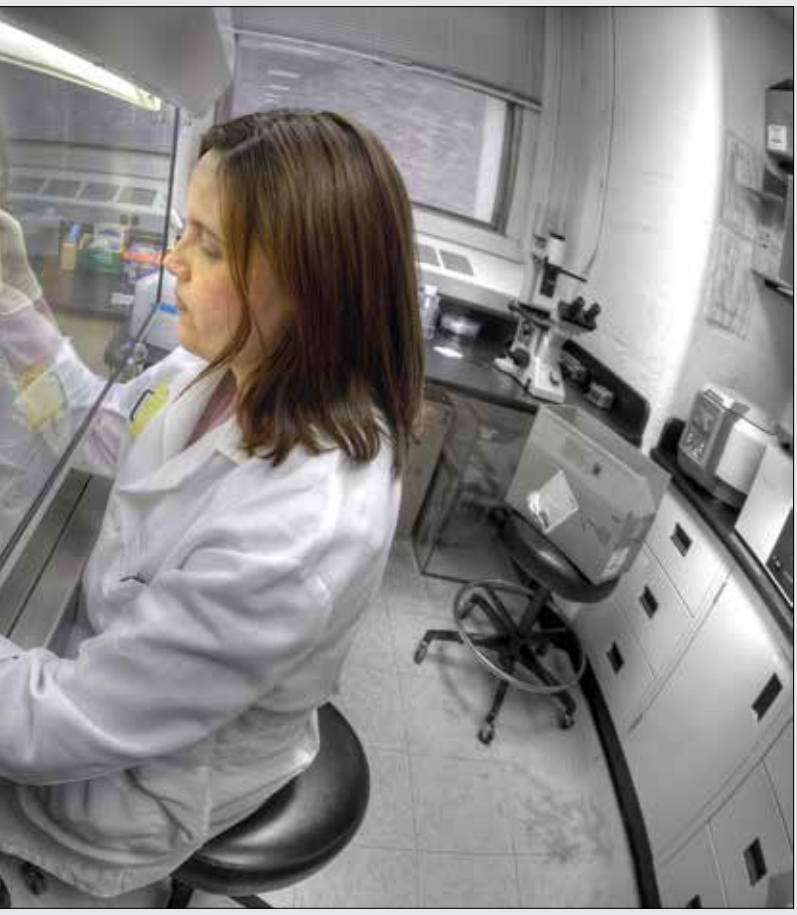


Figure 13: Technology Platform Project Analysis per Technology Readiness Level



PROJECT HIGHLIGHTS

H3D DELIVERS CLINICAL CANDIDATES TO TACKLE SOUTH AFRICA'S AND AFRICA'S CRITICAL DISEASE BURDEN OF MALARIA AND TB

H3D showed progress through the discovery and development of new anti-malarial compounds that were patented. The two leading compounds remain the clinical candidate and backup molecules, all of which have achieved a shift to a new stage of development. The following developments show that H3D continues to build on its established track record as Africa's premier drug development centre:

- MMV943 is a pre-clinical compound for malaria that has shifted from TRL 4 to TRL 5;
- The MMV048 compound has completed Phase 1 clinical trials and challenge studies, and will now enter Phase 2a clinical studies, once funding is secured;
- UCT943 has been formally approved as a pre-clinical candidate by the Medicines for Malaria Ventures in April 2016, and is ready for pre-clinical development;
- UCT 594 is a new chemical entity that is ready for pre-clinical development but has not yet formally been nominated as a clinical candidate.

TECHNOLOGY STATIONS PROGRAMME

IN FY2016 -2017 TIA ALLOCATED R76M TO THE TECHNOLOGY STATIONS

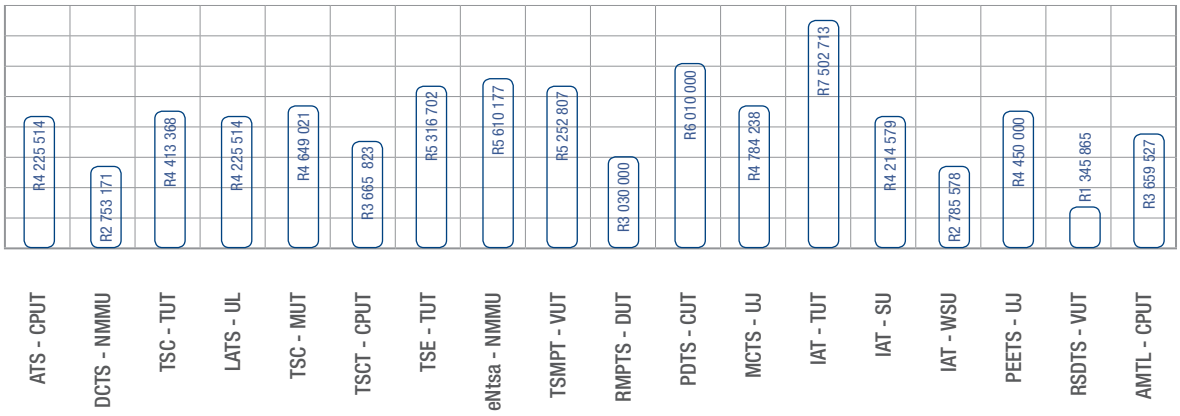


Figure 14: Technology Station sub-programme allocation per university in FY2016/17

The Technology Stations Programme enables Universities of Technology to provide technology services to small and medium enterprises. TIA provides financial support to institutions that house Technology Stations to facilitate technical support to SMMEs in terms of technology solutions, services and training. These Stations are equipped with state-of-the-art equipment and are resourced with highly competent individuals in specialised fields to develop new products and processes for industry and R&D-led entrepreneurs through serving as technology nurseries.

The Programme has a network of 18 Technology Stations that offer leading-edge and effective technological solutions to targeted industries and communities. During the reporting period, a total of R73m in grant funding was allocated to these Stations. The grant contributes towards improving the competitiveness of industry through the application of specialised knowledge, technology and facilitating the interaction between industry (especially SMMEs) and academia to enable and support innovation.

PROGRAMME PERFORMANCE

In FY2016/17, the Technology Stations supported over 2 250 enterprises and individuals through a range of various interventions. Figure 15 shows the total man-hours spent per type of intervention. The time used for training activities is 12%, 8% on application of R&D from different research fields and 47% infusion of knowledge-based technology into small firms through technical support services towards the emergence of entrepreneurial universities, which can foster regional development, formation of innovative firms, and clustering of high-tech firms from competitiveness.

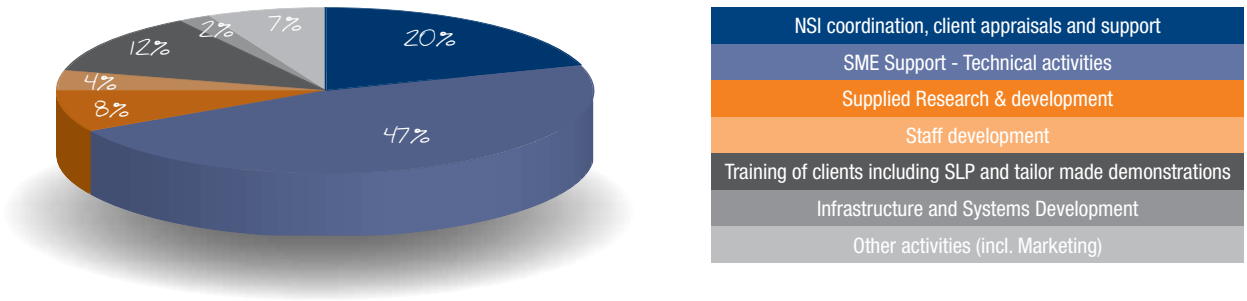


Figure 15: Total man-hours accounted, 743 978 on use of time at Technology Station in FY2016/17

A: % of innovative products for clients supported in the TSP to access new markets

B: % of knowledge based products as a result of designs, copyrights and application of R&D publications from HEI

C: % of innovators and clinets products that were supported through skills and training, routine services to comply to local/ international standards

D: D : % of enterprises receiving technological intervention, know-how and trade secrets in TS transferred to enterprise to enable them improve their products/process competetiveness.

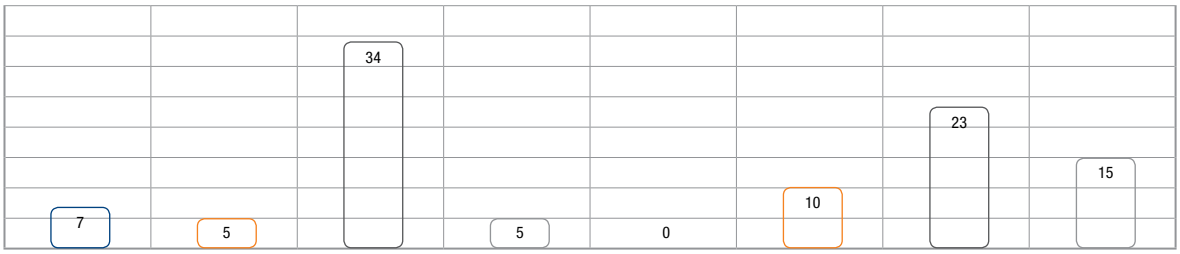


Figure 16: Total man-hours accounted, 743 978 on use of time at Technology Station in FY2016/17

Technology Stations spent 20% of their time in coordination and appraisals of a number of key government programmes in a cost-effective manner with the DST Technology Localisation Implementation Unit (TLIU); the dti's Manufacturing Competitiveness Enhancement Programme (MCEP); and Department of Small Business Development (DSBE) initiatives supported through SEDA programmes.

At enterprise level, TSP has assisted black companies in particular to better understand technology options and choices for competitiveness improvements. Overall, 55 enterprises secured contracts, integrating them into corporate supply chains as a result of interventions from the Technology Stations. Table 16 shows the percentage total of the different types of outputs resulting from the support provided by the Technology Stations.

In addition to the grant allocation, the Technology Stations attracted additional income of R66.3m. Of this, 8% was derived from direct industry contributions through their representative bodies. An additional key focus in the year has been to strengthen interactions with industry. This renewed focus saw a total of 96 collaborative projects in technology development completed, where other agencies of government had referred enterprises to the Technology Stations. The support provided by the Programme has further enabled universities to make 84 official disclosures in terms of the Intellectual Property Rights (IPR) from the Publicly Financed Research Act, Act No. 51 of 2008.

Table 15: Technology Station Disclosures supported in FY2016/17

OFFICIAL DISCLOSURES SUPPORTED THROUGH THE TECHNOLOGY STATIONS			
CONFERENCE PRESENTATIONS	JOURNAL - ACCREDITED	INVENTIONS/PATENTS	DESIGNS
83	22	11	13

PROJECT HIGHLIGHTS

Hawk 62 Aviation (Pty) Ltd

Hawk 62 Aviation is a SME based in Port Elizabeth, founded in 2014 with the goal to transform the aerial imaging industry. The company is responsible for the design of components, 3D (three dimentional) printing of custom components and technical /programming support in the development of advanced on-board embedded systems for the drone imaging platforms.

With eNtsa's support, the SME has expanded from offering fixed wing aerial photography to using multi-rotor drones to develop a broad range of cutting edge survey techniques to serve the growing renewable energy market in South Africa. The technology is applied in the aviation and renewable energy sector. Using systems which eNtsa has helped develop, Hawk 62 Aviation has been able to offer enormous added value to several solar and wind Independent Power Producers (IPPs) through the fast and efficient surveys they can now conduct.

IDECO Biometric Security System (Pty) Ltd

IDECO is a company specialising in the design, distribution and integration of biometric solutions. The company sells biometric products, services and solutions for visitor management, workforce management, access control and all aspects of identity control.

IDECO is a registered SME at the Institute for Advanced Tooling (IAT) at the University of Stellenbosch. It offers services such as CAM design (as related to rotary motion), Computer Numerical Control (CNC) of various inserts for gravity casting moulds for ankle brackets and manufacturing.

The objective of the project was to design and manufacture 19 injection moulds for the mobile multimodal biometric device. The project was executed through a cluster of five tool rooms in the Western Cape. The IAT was responsible for the full execution of the project management, mould flow simulation, selected designs and machining of intricate inserts. The product will be used in the ICT sector. The envisaged impact will include the development of a mobile multimodal biometric device configurable for border control purposes, criminal booking stations, voter registration, citizen registration and many other applications.

John Gray & Son (Pty) Ltd (JGS)

JGS is a female-owned enterprise based at the Nelson Mandela Metropolitan University (NMMU) technology station in Port Elizabeth. The company specialises in research and development. One of the recent projects includes the designing and refining of a bending jig to bend the bristles for brushes. The process involved determining the most efficient number of bristles required per brush and how to position these for manufacturing. The final product will be used in the road construction and maintenance sector. The impact of the project includes local manufacturing of a product previously imported. To date, the company has sold 1 500 units in the three months of production, created four new permanent jobs (30% increase in staff), upgraded on workshop computer skills, and exported products to African countries, including Namibia and Zambia, among others. The materials are also sourced from local South African companies.

National Diploma in Chemical Process Technology

The Downstream Chemicals Technology Station based at NMMU in liaison with industry, developed a National Diploma in Chemical Process Technology. The first batch of 14 students graduated in 2016. The course is currently the only one of its kind in South Africa. The curriculum has been designed around a comprehensive competency profile for a chemical process. There are currently 17 first year students, 16 second year students and 30 third year students for 2017 participating in this programme. Total enrolments across all three levels of the course currently stand at 63 learners. Support bursaries and sponsorships will be received from the following industry partners in 2017: AECI, BASF, Umicore, Heraeus, Fuchsoil and Chieta. This is a success indicator on how the technology station can add value to industry by responding to their needs and having graduates who are ready for employment.

BAZINGA!

YOUTH TECHNOLOGY INNOVATION PROGRAMME

YOUTH TECHNOLOGY INNOVATION PROGRAMME (YTIP)

The Youth Technology Innovation Programme supports young innovators, between the ages of 18 and 35 who require funding, mentorship and business support to take their innovative ideas with commercialisation potential to the next level. The Programme offers funding through a voucher system to enable access to prototype development, testing and certification, intellectual property protection and enterprise development. The voucher includes a component for a small stipend to enable the entrepreneur's mobility as they develop their technologies.

PROGRAMME PERFORMANCE

PORTFOLIO SUMMARY	
Total number of projects	70
Portfolio exposure	R37m
Active disbursements	R2,5m
Ongoing - until 2019/20	R5m
FY2016/17 commitment:	R10m

PORTFOLIO SUMMARY

- Thirteen new investments funded to the value of R7.4m
- R1.5m was paid to SEDA/eGoliBio to provide incubation services to TIA investees under the programme
- Follow-on funding of R1.4m was raised by three projects

PROJECT HIGHLIGHTS

Para-Tube

Para-Tube is an innovation developed by Ms. Portia Mavhangu for people who are confined to wheelchairs, with challenges such as poor access to toilet facilities. The Para-Tube project is a wheelchair developed for paraplegic individuals who have difficulties in using normal toilet systems. It is developed with a built-in waste collection system that has a disposal container. Portia became wheelchair-bound in 2011 after breaking her pelvis in a car accident. After facing many challenges in accessing and using a toilet facility, she identified a need to develop a wheelchair to accommodate wheelchair users who face similar challenges. In 2013, Portia approached The Innovation Hub with her concept and entered the GAP Medical Innovation competition, where she was recognised for her idea. In 2015 TIA funded the innovation to the amount of R471 000 for prototype development and this has successfully progressed to Technology Readiness Level 5. Portia has showcased her project at the Parliamentary Budget Vote.

PART D
HUMAN RESOURCES

INTRODUCTION

People are the heart and soul of any organisation. No organisation can become a high-performance organisation without high-performing individuals. In its endeavour to inculcate a high-performance culture in the organisation and to make TIA a talent-centric organisation, the Human Resources (HR) Business Unit has partnered with Line of Business to develop a three-year Talent Management strategy. The strategy encompasses talent management programmes to be implemented over a three-year period ending in FY2018/19. In tandem with this, HR policies were revised in consultation with staff, union members and Line of Business to create flexibility and enhance governance and compliance in the management of the talent life-cycle of an employee in the organisation.

PRIORITIES FOR THE YEAR

The HR priorities for FY2016/17, were informed by the need to stabilise TIA and build a strong foundation, pursuant to the baseline that was set during FY2015/16. In doing so, the HR business unit conducted an exercise to harmonise the remuneration of employees whose pay level was below the 25th percentile. The performance management calibration process was implemented to ensure alignment among the objectives and outputs of the APP, operational plans of the business units and the performance agreements of employees. This exercise was conducted in partnership with the PRIME business unit and the Line of Business. To enhance the accuracy of the HR data, an HR Information Management System was procured.

TALENT MANAGEMENT STRATEGY

The focus for FY2016/17, was to develop the Talent Management Strategy, the Competency Framework, the Career Progression Model and the Trainee Development Programme. This is preparatory work that was done during the year to prepare for complete implementation of the talent eco-system in TIA to address talent shortages and loss of talent in mission-critical positions.

Given the flat organisational structure, the career progression model was developed to facilitate horizontal career moves in the organisation. This approach will enable employees to broaden their skills repertoire before they ascend TIA's hierarchy. This model will enable TIA to harmonise employees, based on their competency proficiency levels and performance levels. Also, the career progression model will enable TIA to retain high-performers in the organisation, whilst developing employees with potential to grow into more complex positions. The Trainee Development Programme is a vehicle for TIA to build its own timber and develop a talent pipeline for both specialist and managerial positions.

TIA'S ORGANISATIONAL STRUCTURE

The restructuring which was finalised during FY2015/16, culminated in a functional structure which was augmented by creating a governance business unit, namely Planning, Risk Management, Strategic Intelligence Analysis and Monitoring and Evaluation (referred to hereafter as PRIME).

During FY2016/17, the realignment and optimisation of the structure focused on developing a more strategic focus in the organisation through building strategic relationships and partnerships. In December 2016, the Strategic Stakeholder Relations and Communications business unit was realigned by migrating strategic engagements from this unit to establish the Corporate Relations and Strategic Engagements business unit.

The following table shows the number of employees assigned to each division in the organisation.

Table 17: Number of positions in each division

DIVISION	NUMBER OF POSITIONS
Board Secretariat	3
CEO's Office (Including Internal Audit and Legal)	12
Finance	16
IES	42
IFPCS	47
PRIME	6
PSF	29

NB: The total staff complement is 155, including staff on fixed-term contracts and vacant positions, excluding staff from the Platforms.

HR OPERATIONS

The HR unit reviewed and mapped the HR processes which need to be automated in the HR People System during the period under review. The HR People System should be implemented fully in the first quarter of the next financial year and will ensure a more structured approach towards the management of talent on an employee level.

PERFORMANCE MANAGEMENT

During the performance moderation exercise, it was realised that there are gaps between the content of the operational plans and the performance contracts of the employees. The HR unit conducted a performance calibration exercise on two dimensions. The first one focused on the alignment between the content of the Annual Performance Plan and the performance contracts of each employee. This exercise was done in consultation with the PRIME business unit.

The second exercise was conducted by the HR business unit to establish alignment between the content of the performance contracts and the job profiles. The intent is to ensure that the strategic objectives of the organisation, to be achieved during FY2016/17, have been cascaded into the operational plans of the various business units and employees' performance contracts.

EMPLOYEE DEVELOPMENT

In its endeavour to upskill and retain an innovative and professional workforce, that plays an active role in the NSI, TIA is committed to the training and development of all employees. The following training and development initiatives were embarked on during FY2016/17:

Table 18: In-house training attended in FY2016/17

TRAINING TYPE	NUMBER OF EMPLOYEES TRAINED	COSTS
Mandatory (according to individual PDP)	71	R452 559
Statutory	45	R76 720
Formal qualifications	23	R576 625
In-house training	154	R610 112
Leadership development	27	R495 000
Total		**R2 211 017**

EMPLOYEE WELLNESS PROGRAMMES

There are several initiatives focusing on employee wellness. These include bi-annual wellness days which give employees an opportunity to undergo health assessments and to use those results to develop health improvement plans. TIA entered a new agreement with Careways to become its partner in the management of employee wellness.

STAFF MOVEMENT

During the period under review, the employment of 16 employees was terminated. Among these, nine resigned, one employee was dismissed due to misconduct, the fixed-term contracts of four employees were not renewed and two employees were transferred from the technology stations to the various universities in the country. In total, the highest number of employee departures were due to resignations. TIA is still in a transition phase to become a stable, yet high performing organisation.

Table 19: Reasons for staff leaving

REASON	NUMBER	% OF TOTAL NO. OF STAFF LEAVING
Death	0	0
Resignation	9	5.4%
Dismissal	1	0.6%
Retirement	0	0
End of contract	4	2.4%
Retrenchment	0	0
Transfers to universities	2	1.2%
Total:	**16**	**9.6%**

EMPLOYMENT EQUITY

TIA has established the Employment Equity Consultative Committee (EECC) to facilitate implementation of the five-year Employment Equity (EE) Plan which was submitted to the Department of Labour (DoL) in 2012. This plan expires in September 2017. The EECC, in consultation with the Human Resources business unit will contribute to the development of the next five-year EE Plan for submission to the DoL in October 2017.

Table 20: Employment Equity: Progress as at 31 March 2017

OCCUPATIONAL LEVELS	MALE				FEMALE				FOREIGN NATIONALS		TOTAL
	A	C	I	W	A	C	I	W	MALE	FEMALE	
Top management	1	0	1	2	0	1	0	1	0	0	6
Senior management	10	1	1	0	4	0	4	1	0	0	21
Professionally qualified and experienced specialists and mid-management	18	5	2	5	21	0	4	9	3	0	67
Skilled technical and academically qualified workers, junior management, supervisors, foremen and superintendents	14	0	1	1	26	6	2	3	0	0	53
Semi-skilled and discretionary decision-making	2	0	0	0	6	1	1	1	0	0	11
Unskilled and defined decision-making	2	0	0	0	5	0	0	0	0	0	7
TOTAL PERMANENT	**47**	**6**	**5**	**8**	**62**	**8**	**11**	**15**	**3**	**0**	**165**
Temporary employees	0	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	**47**	**6**	**5**	**8**	**62**	**8**	**11**	**15**	**3**	**0**	**165**

The EECC members were trained on how to carry out their duties when consulting with TIA staff and the management representatives on Employment Equity matters. The table below indicates the actual number of employees, including staff from the platforms, as at 31 March 2017.

The current EE information stipulated in the following table indicates that there is 33% of female representation in top management occupational level and 42,8% female representation in senior management level. This suggests that there are more males than females in top management and senior management positions.

Henceforth, it is important for TIA to source female candidates to fill vacant positions at these occupational levels to obtain at least 50% female representation in both levels. It is also worth noting that Black females constitute 16.6% of top management and 38% of senior management. Below these two occupational levels, female representation is not a concern.

DISABILITY STATUS

TIA has conducted a disability status verification exercise, which is being conducted on an ongoing basis to ensure that the number of employees with disabilities is updated. The following table indicates the number of employees with disabilities in the organisation. Only 1.8% of the staff complement is living with disabilities.

APPOINTMENTS

It is worth noting that the requisite skills to fulfil the TIA mandate are quite scarce. These include Workout and Restructuring Portfolio Managers, Intellectual Property Legal Advisors, Portfolio Managers with Commercialisation background and Investment and Internal Auditors with Quality Assurance experience. TIA struggles to attract and retain talent with such skills, given the depth and breadth of expertise required and current pay scales which are the lowest in the NSI for the above mission-critical positions.

This poses an operational risk to the organisation. To mitigate this risk, TIA has implemented the Trainee Development Programme to build a talent pipeline for future requirements. A work study has also been commissioned to assist with workforce planning and review of the Operating Model.

Table 21: Disability Status

OCCUPATIONAL LEVELS	MALE				FEMALE				FOREIGN NATIONALS		TOTAL
	A	C	I	W	A	C	I	W	MALE	FEMALE	
Top management	0	0	0	2	0	0	0	0	0	0	2
Professionally qualified and experienced specialists and mid-management	0	0	0	0	1	0	0	0	0	0	1
Skilled technical and academically qualified workers, junior management, supervisors, foremen and superintendents	0	0	0	0	0	0	0	0	0	0	0
Semi-skilled and discretionary decision-making	0	0	0	0	0	0	0	0	0	0	0
Unskilled and defined decision-making	0	0	0	0	0	0	0	0	0	0	0
TOTAL PERMANENT	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**3**
Temporary employees	0	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**3**

Table 22: Appointments

OCCUPATIONAL LEVELS	MALE				FEMALE				FOREIGN NATIONALS		TOTAL
	A	C	I	W	A	C	I	W	MALE	FEMALE	
Top management	1	0	0	1	1	1	0	0	0	0	4
Senior management	2	1	1	0	6	0	0	2	0	0	12
Professionally qualified and experienced specialists and mid-management	3	0	0	0	1	0	1	0	0	0	5
Skilled technical and academically qualified workers, junior management, supervisors, foremen and superintendents	1	0	0	0	1	1	0	1	0	0	4
Semi-skilled and discretionary decision-making	0	0	0	0	1	0	0	0	0	0	1
Unskilled and defined decision-making	3	0	0	0	0	0	0	0	0	0	3
TOTAL PERMANENT	**10**	**1**	**1**	**1**	**10**	**2**	**1**	**3**	**0**	**0**	**29**
Temporary employees	0	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	**10**	**1**	**1**	**1**	**10**	**2**	**1**	**3**	**0**	**0**	**29**

TERMINATIONS

Table 23: Terminations

OCCUPATIONAL LEVELS	MALE				FEMALE				FOREIGN NATIONALS		TOTAL
	A	C	I	W	A	C	I	W	MALE	FEMALE	
Top management	0	0	0	0	2	0	0	0	0	0	2
Senior management	1	0	0	1	0	0	0	0	0	0	2
Professionally qualified and experienced specialists and mid-management	1	0	0	0	2	0	2	0	0	0	5
Skilled technical and academically qualified workers, junior management, supervisors, foremen and superintendents	0	0	0	1	3	0	0	0	0	0	4
Semi-skilled and discretionary decision-making	0	0	0	0	2	0	0	0	0	0	2
Unskilled and defined decision-making	0	0	0	0	1	0	0	0	0	0	1
TOTAL PERMANENT	**2**	**0**	**0**	**2**	**10**	**0**	**2**	**0**	**0**	**0**	**16**
Temporary employees	0	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	**2**	**0**	**0**	**2**	**10**	**0**	**2**	**0**	**0**	**0**	**16**

EMPLOYEE ENGAGEMENT

An employee engagement survey is the mechanism by which an organisation determines how involved and how satisfied the employees are with the employment conditions. The main components being measured in an employee engagement survey are attract, retain and performance.

The attract component measures how attractive the organisation is for the employees, i.e. do they speak positively about the organisation to colleagues and potential clients; the retention component measures how strong their sense of belonging is towards the organisation and performance measures their commitment and effort in achieving individual and organisational objectives. The culmination of the three components (Attract = 77%, Retain = 51% and Performance = 73%) resulted in an overall increase in the employee engagement from 57% to 63% for FY2016/2017.

PART E
LIVING THE TIA PHILOSOPHY

TEAMWORK

STAKEHOLDER ENGAGEMENTS

FY2016/17 saw TIA increasing its visibility in the NSI through a wide range of activities and platforms. TIA undertook its stakeholder engagement initiatives all centred around the high-performance drivers of Teamwork, Impact and Accountability.

PARTNERING FOR A PRODUCTIVE RESEARCH ECOSYSTEM

The FY2016/17 once again marked TIA's deepened engagement with our stakeholders in the higher education sector and broader research community. Led by the CEO, Mr. Barlow Manilal, TIA undertook a series of high-level strategic engagements with several universities to explore more opportunities for strengthened collaboration. These included visits to the Universities of Johannesburg, Northwest, Zululand, KwaZulu-Natal and the Tshwane University of Technology. Whilst TIA enjoys a healthy rapport with universities through the Seed Fund, many opportunities remain unexploited, such as strengthening the partnership around the development of viable local innovation systems, township and rural innovation. Strengthening the capacity of researchers to take their technologies to market also remains one of the main challenges that preoccupy the many initiatives by technology transfer offices, universities and science councils.

In addition to the individual engagements, TIA has continued to work closely with the Southern African Research and Innovation Management Association (SARIMA) and the South African Technology Network. There are two significant developments worth highlighting:

- TIA partnered with SARIMA in the 2016 conference held from 16 to 22 May 2016 where it actively participated in various thought leadership events and workshops. At this event, TIA hosted a highly successful Seed Fund workshop, attended by representatives from all technology transfer offices, that provided an open platform to exchange ideas and solicit inputs from the key stakeholders on ways to improve the performance of the Seed Fund. The outcomes of this workshop have thus provided a sound basis for TIA to undertake a more formal impact assessment study of the Seed Fund that is currently under way.
- TIA partnered with the South African Technology Network (SATN) in the hosting of their Ninth Annual International Conference 2016 with the theme "Partnerships for innovation and development: Making it Happen. Making it Matter". Through this platform, TIA hosted a three-day pre-conference student workshop funded in partnership with the SATN.

The workshop focused on innovation skills development, "Future 500 Programme: From Idea to Product". TIA also participated in two thought leadership workshops, i.e. hosting a panel session on "Going global: Driving change at systemic, regional and local levels through successful partnerships" and a panel discussion on "Powering the Global Economy".

Most significantly, TIA closed FY2016/17, with the signing of a ground-breaking MoU with SATN in March 2017 that aims to strengthen collaboration around curriculum development for new and emerging technology areas, capacity-building and various mechanisms to accelerate the commercialisation of technologies coming out of universities of technology.

Science councils in South Africa constitute key sources of a good pipeline of projects for TIA. With their inherent technical, research and institutional capabilities, science councils have proven effective in producing a rich portfolio of knowledge innovation products (prototypes and patents) that are potential investment opportunities for TIA.

TIA has thus initiated a focussed programme of engagement with the CSIR, Mintek, the Water Research Commission and the Agricultural Research Council to identify potential projects for funding. This approach is consistent with our new approach to directly seek out and bring into the TIA funding stream, those promising innovations that demonstrate the greatest potential for commercialisation. The next financial year will see TIA pursuing this programme with greater vigour.

WORKING WITH THE BUSINESS SECTOR

The business sector constitutes a key focus area for TIA in our quest to strengthen the productivity of the National System of Innovation in increasing business sector investment in science, technology and innovation, as well as promoting deepened engagement in the innovation discourse in general. The business sector constitutes key partners for funding, market uptake, commercialisation, joint innovation and access to facilities for training and innovation for young entrepreneurs.

Pursuant to this objective, TIA partnered for the first time with the South African Breweries Foundation through its highly acclaimed Social Innovation Awards Competition held in October 2016 that saw 19 participants receiving support from TIA's Technology Stations Programme (TSP). This marked the beginning of a long-term relationship that will greatly contribute to TIA, directly extending its reach to young innovators who develop solutions that address social challenges faced by rural and township communities.

TIA has continued to make strides to forge working relationships with state-owned enterprises such as ESKOM, Transnet and NECSA, among others, to drive technology innovation and support the Department's localisation programme through our services offered by the network of technology stations. The planned programme with these institutions will be initiated over the remaining strategic period to FY2019/20.

The Technology Stations Programme (TSP), Innovation Skills Development (ISDP) and the Technology Innovation Programmes (TIPS) continued to lead our efforts in partnering with the business sector.

Strengthening the capacity of the State to formulate sound policies that advance science, technology and innovation is one of the key principles informing TIA's stakeholder engagement activities. In this regard, TIA has once again paid particular attention to this through a range of initiatives, including the hosting of thematic workshops and participating in events hosted by our external partners.

THOUGHT LEADERSHIP DIALOGUES ON E-WASTE

In October 2016, TIA hosted a series of three Thought Leadership Dialogues on e-waste in KZN, Cape Town and Gauteng, capitalising on the visit of two experts from India, Mr. Raman Sharma (Exigo Recycling Ltd) and Prof. Raza Gauhar (CSIR India), who attended the SATN conference. The sessions drew speakers from the Department of Environmental Affairs, Electronic Waste Association of South Africa, researchers, policymakers, producers and recyclers.

SCIENCE FORUM 2016

The DST's Annual Science Forum held in March 2017, provided TIA with the opportunity to host a panel discussion with the theme, "Enhancing Women SMMEs in Innovation". The session highlighted the enabling and constraining factors for women-owned SMMEs in innovation, the nurturing and mentorship role of women in the innovation ecosystem, how being innovative resulted out of necessity as a key driver to business success.

E-MOBILITY WORKSHOPS

TIA hosted four workshops with implementation partners such as AIDC, Alphadot, UNIDO and SANEDI from the e-Mobility Technology Innovation Programme. The purpose of these sessions was to facilitate the development of the implementation plan and to gain buy-in from the key partners to foster greater collaboration and national integration.

Electric-Mobility (e-Mobility) requires a collection of technologies and industries to interconnect and form a network of systems. It hosts a cross-sectional technology through bringing together industry sectors with little historical connection, such as the automotive and energy utility sectors. This workshop resulted in the signing of an MoU between the implementation partners.

CONTRIBUTING TO HEALTH DIALOGUES

TIA participated in a range of national dialogues on health issues during FY2016/17. These include:

- The dti's National Natural Ingredients Strategic Workshop titled "National Natural Ingredients Strategy: from Nature to Markets". The workshop was focused on the development of a sector export strategy on natural ingredients and products. More significantly, this served as a good platform to contribute to the development of the national strategy on commercialisation of natural ingredients, including Indigenous Knowledge Systems.
- TIA participated in the Symposium on Nanomedicine and Malaria in South Africa that provided a good platform for TIA to promote awareness of its funding instruments and technology infrastructure, as well as an opportunity to provide guidance to researchers on the structuring of projects, so that they demonstrate a clear commercialisation path.
- The Traditional Medicine Commemoration Day organised by the Gauteng Department of Health at Chris Hani Baragwanath Hospital, aimed to sensitise

traditional health practitioners on regulation of traditional medicine and on other opportunities and information for empowerment. This event, attended by some 500 traditional practitioners, provided a good platform to explain the role of TIA in this sector.

- Our Biosafety Platform, sponsored by the Academy of Science of South Africa (ASSAf), participated in the Network of African Science Academies' (NASA's) communication event, entitled "Harnessing modern agricultural biotechnology for Africa's economic development; recommendations to policymakers".

THE AFRICAN AGENDA

TIA continuously seeks opportunities for contributing positively to the development of effective and functional innovation ecosystems in Africa, including technology solutions that resolve challenges that are specific to the continent. TIA pursues these objectives through close collaboration with our African counterpart institutions and partners. In this regard, TIA undertook several initiatives, examples of which follow.

MALARIA PROJECT

Malaria is an ongoing health challenge with socio-economic impact in Africa. There are ongoing global efforts to address treatment options. The TIA and Medicines for Malaria Venture (MMV) co-funded an anti-malarial drug development programme at H3D (a drug discovery and development centre at the University of Cape Town (UCT)), through a research and collaboration agreement. Significant progress was achieved and the programme yielded a clinical candidate in 2012. In May 2016, MMV confirmed approval of a second preclinical candidate from the H3D programme. The approved preclinical candidate is a backup to the previous clinical candidate developed in 2012.

Further preclinical studies will be conducted before clinical trials will be initiated. A new treatment option for Malaria with the potential of binge a single dose cure would have significant implications for treatment options and socio-economic impact in Africa. The funded programme has yielded two preclinical candidates which is an outstanding achievement in the drug discovery field in Africa. Furthermore, the programme has resulted in significant capacity development in the South African drug discovery landscape and will likely lead to greater collaboration with African partners in the ongoing development of the candidates.

NAMIBIA

Following the signing of its landmark MoU with the Namibian National Commission on Research Science and Technology (NCRST) in 2015, TIA supported this newly established partner institution to launch its first Innovation Challenge in 2016. The NCRST received more than one hundred applications from various sectors, including engineering, agriculture, manufacturing technologies, energy, health, indigenous knowledge systems, etc. To maintain transparency in the evaluation phase, the NCRST sought the assistance of external industry experts, including TIA. One of the successful applicants was recommended to receive support through TIA's Agro-food Technology Station, based at the Cape Peninsula University of Technology.

TANZANIA

In an effort to scale-up the bilateral research outputs emanating from the National Research Foundation (NRF) and the Tanzanian Commission for Science and Technology (COSTECH), TIA, supported by the DST, participated in the Tanzania – South Africa Technical Workshop on Technology, Innovation and Institutional Development that was held in Dar-es-Salaam in March 2017. The outcomes of this workshop will lead to the launch of new joint calls for proposals between TIA and COSTECH, marking the beginning of joint technology innovation projects between the two countries.

SWAZILAND AND SUDAN

Biosafety South Africa (BSA) continues to engage successfully with various public entities involved in the biosafety regulatory and risk assessment processes on the African continent to share the South African experience. The platform was approached by the Swaziland Environment Authority (SEA) to assist in developing its technical capacity biosafety risk assessment. BSA conducted a five-day workshop on Genetically Modified Organisms' (GMO) risk analysis and sustainability analysis, specifically designed to fit the Swaziland context.

BSA also presented a biosafety risk analysis workshop at a Joint South Africa - Sudan meeting hosted by the Department of Science and Technology (DST) in January 2017. The workshop was meant to share knowledge with members of BSA on effective regulation of GMOs in Sudan.

PROMOTING INNOVATION IN THE AIR TRAFFIC AND NAVIGATION SERVICES

TIA partnered with the Air Traffic and Navigation Services (ATNS) to host the second Avi Afrique Innovation Awards at the Avi Afrique Conference held during November 2016. The awards are intended to recognise excellence in technology innovation within the aviation sector. For this purpose, TIA has been instrumental in developing the call for proposals and the evaluation of the various proposals.

An online portal was established for applicants (entrepreneurs, innovators, organisations and media) to enter their air traffic navigation ideas. A one-day "critical thinking workshop" was facilitated by ISDP to assist the 18 finalists to refine their aviation ideas through writing and presentation skills. The panel consisted of aviation industry experts and representatives from the CSIR and TIA. From the 18 finalists, ten were chosen for the various awards, based on their ideas they put forward.

This partnership has helped to position TIA as a critical stakeholder in the aviation sector, encouraging innovation as a platform to overcome the challenges experienced in the sector whilst developing a pipeline of projects that will be eligible for support from TIA.

THE SASOL SOLAR CAR CHALLENGE

TIA partnered with the Sasol Solar Car Challenge for the fourth time since the launch of this competition, sponsoring four university teams from Northwest University, the University of Johannesburg, Mangosuthu University of Technology and the Tshwane University of Technology.

The Sasol Solar Challenge is a competition for teams to design, manage, build and drive solar-powered vehicles across South Africa. The eight-day event sees local and international solar-powered cars travel as far as they can on various roads and loops between Pretoria and Cape Town. During this competition, the teams travelled distances of over 4 000 kilometres, traversing some of the world's most beautiful and diverse landscapes, from deserts and savannahs to mountains and coastal forest.

The Sasol Solar Challenge initiative is intended to encourage young people to achieve success in STEM (Science, Technology, Engineering and Mathematics) subjects. It helps to educate young people in the principles of science, technology, engineering, innovation, teamwork and business; and promotes collaboration between students, industry and government. Students get an opportunity to practically apply the science and technology theory they have learnt at school or university. South African students get a chance to test their engineering skills against some of the best solar car teams in the world. A total of 13 teams participated in the race. TIA funded the participation of four university teams and co-funded a team (zingBug) from TIA's GCIP-SA Programme.

SCIENCE TO COMMUNITIES

In support of the Department's Science Engagement Strategy to promote science, technology and innovation amongst our communities, TIA has actively engaged with non-science communities through various initiatives. These include:

NATIONAL SCIENCE WEEK

The National Science Week activities included the launch of ISDP "Next Gen 100 and Future 500" programmes by the Minister at the National Science Week launch at the University of the Western Cape. A series of regional activities followed the National Launch at TIA's Technology Stations and Platforms.

ANNUAL GOVERNMENT OPEN DAY EXPO

TIA participated in the Second Annual Government Open Day Expo, a series of two-day community development programmes taking place in nine provinces across 11 cities in South Africa. The Expo targeted high schools, colleges, universities and the public in a bid to stimulate a culture of innovation and to showcase the various TIA programmes for the youth and entrepreneurs.

The Expos were held in East London, Polokwane, Nelspruit, Rustenburg, Mamelodi, Soweto, Bloemfontein and Kimberley.

SCIFEST AFRICA

Scifest Africa is a programme to promote the public awareness, understanding and appreciation of science, technology, engineering, mathematics and innovation. The theme for 2017 was "Tour de Science" to encourage visitors to embark on a journey that explores the milestones, accomplishments, mysteries, discoveries, and the historic and exciting wonders of science. TIA hosted workshops and exhibitions for the duration of the event attended by learners from York High School, Libode Village, Flamingo Combined School, Forbes Grant Secondary School, Qokolweni Secondary School, Mfesane Secondary School, Breidbach Secondary School, Butterworth Department of Education and Thululwazi Secondary School.

SASOL TECHNO X

The Sasol Techno X took place from 15 to 19 August 2016 at Boiketlong Sports Centre in Sasolburg. The event is a combination of career guidance with practical, hands-on experiments to encourage learners to explore the wide range of exciting disciplines and career choices that science, mathematics and technology offer. It aims to provide learners with stimulating, interactive and hands-on workshops and exhibits while creating awareness of the infinite possibilities in the world of science, technology, engineering, mathematics and innovation.

MEDIA ENGAGEMENT

While quarter one started off slowly, media coverage picked up significantly during quarter two. The upwards trajectory of positive news coverage not only kept TIA in the news, but also attracted increased interest by television producers, a definite first for TIA. Apart from good interest by national media, there was also a noticeable increase in coverage by regional media with an even spread across the various provinces, whereas previously regional reports mainly featured Gauteng. Data produced by the South African Agency for Science and Technology Media Monitoring Services shows that TIA enjoyed an estimated total Advertising Value Equivalent (AVE) of some R5.6m.

STAKEHOLDER SATISFACTION SURVEY

Genex Insights was commissioned by TIA to conduct an assessment of the satisfaction of the Agency's stakeholders. The purpose of the survey was for TIA to gauge its performance and to effect improvements to service delivery.

The full sample achieved was as follows:

Table 24: Stakeholder Satisfaction Survey for FY2015/16 to FY2016/17

STAKEHOLDER GROUP	2016 STUDY	2017 STUDY
Innovators, researcher and SMMEs	222	318
Support institutions	107	123
Funders	0	20
Total	**329**	**461**

TOP-LINE RESULTS

Overall, the average stakeholder satisfaction with TIA was 5.4 out of a score of 10 for 2017. This is a 0.3 decline from 2016. Funders have the highest satisfaction (6.9) score, followed by support institutions (6.3). Innovators, researchers and SMMEs have the lowest satisfaction score and have seen a decline of 0.6 points since 2016.

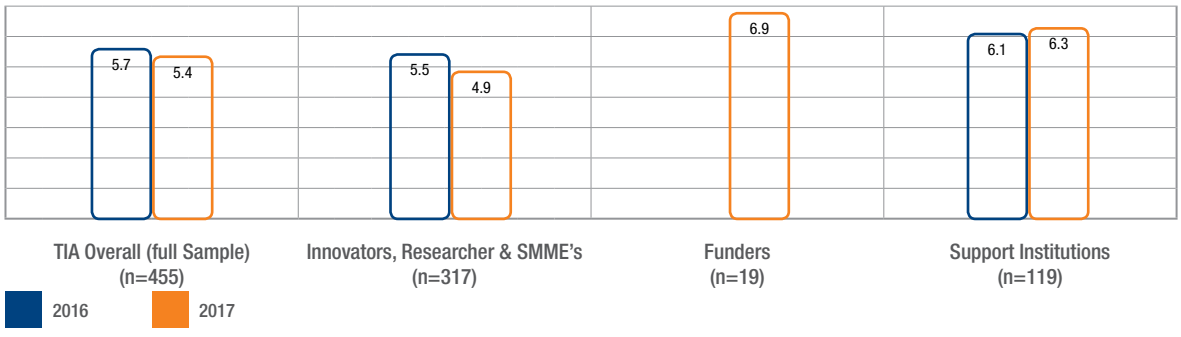


Figure 17: Satisfaction by Stakeholder Group for FY2015/16 to FY2016/17

TIA's satisfaction among those that have had funding approved is 6.7, 0.6 points higher than the same group in 2016, which was 6.1. Those with declined applications are less satisfied this year, their satisfaction this year is 3.6 compared to 4.1 in 2016.

EXPECTATIONS

Half of TIA's stakeholders indicated that TIA is falling short of their expectations (50%), while 8% indicated that TIA is exceeding expectations. The graph below illustrates the percentage of respondents who feel TIA has exceeded expectations. Support institutions have seen improvement year-on-year, with 7% more respondents this year saying TIA has exceeded their expectations. Innovators, researchers and SMMEs have seen a decline, but if we look only at those with approved applications, then 16% feel TIA has exceeded their expectations.

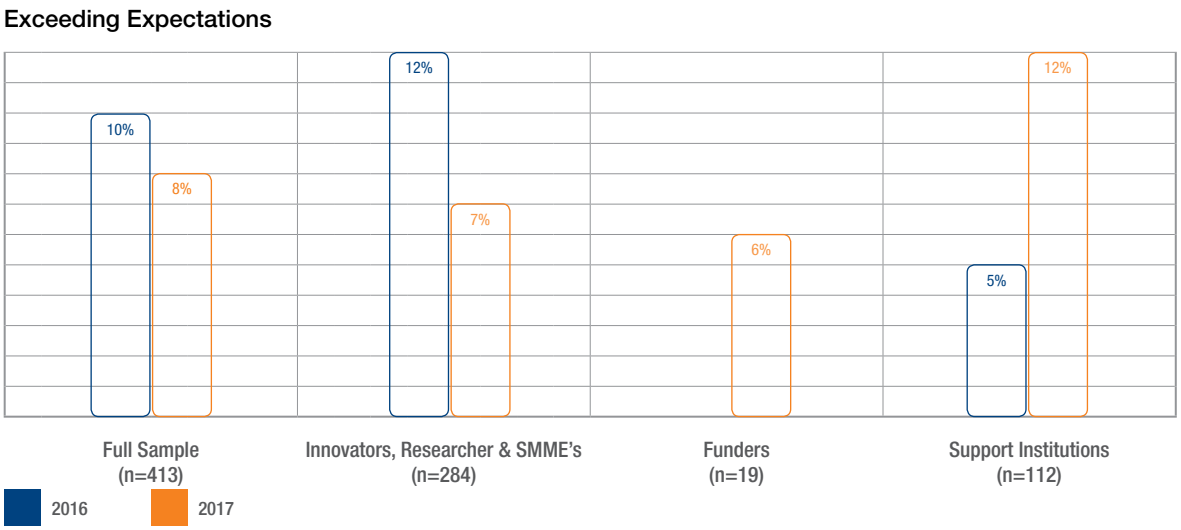


Figure 18: Comparison in the levels of expectations for FY2015/16 and FY2016/17

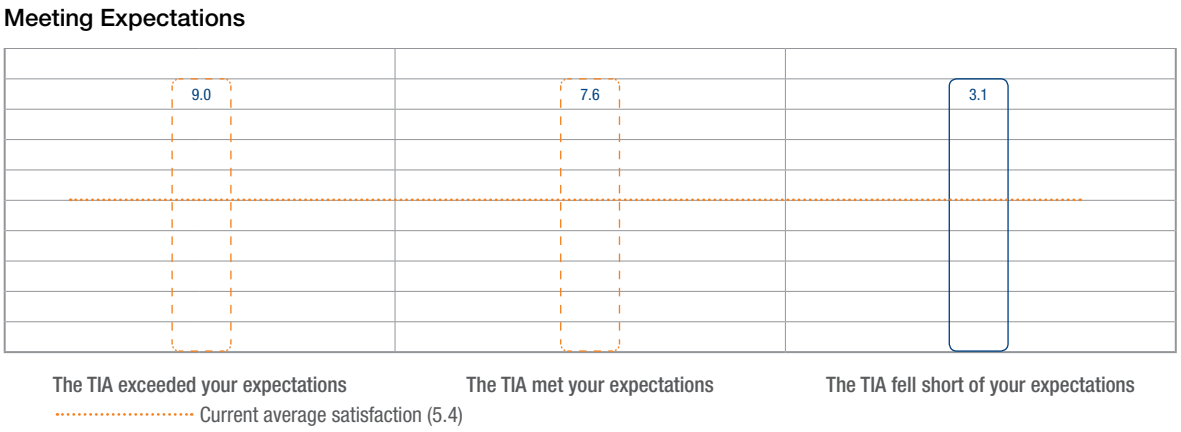


Figure 19: Bar graph depicting levels of service meeting expectations for FY2015/16 and FY2016/17

IMPACT

ECONOMIC IMPACT ASSESSMENT

TIA commissioned an economic impact assessment (EIA) for FY2016/17. The EIA study was undertaken by Urban-Econ Development Economists (Pty) Ltd, Pretoria. The study determines the contribution TIA makes to the South Africa economy, the National System of Innovation (NSI), as well as to national development priorities. The main motivation for the study is for TIA to assess whether it is achieving its objectives of impacting the national technology innovation system, economic growth, and improvement in quality of life. Overall this assessment demonstrates TIA's significance to the economy, and how it could potentially improve on its activities and contribution.

The economic impact modelling that was conducted by Urban-Econ, used an internationally and nationally accepted Social Accounting Matrix (SAM). A SAM represents the flow of all economic transactions that take place within an economy (regional or national); it is essentially a matrix representation of the national accounts for a given country, which can be extended to include non-national accounting flows. It measures direct, indirect and induced impacts as can be gleaned from the table 24:

Table 24: Direct, Indirect and Induced Economic Assessment Multipliers - FY2016/17 (Source: Urban-Econ)

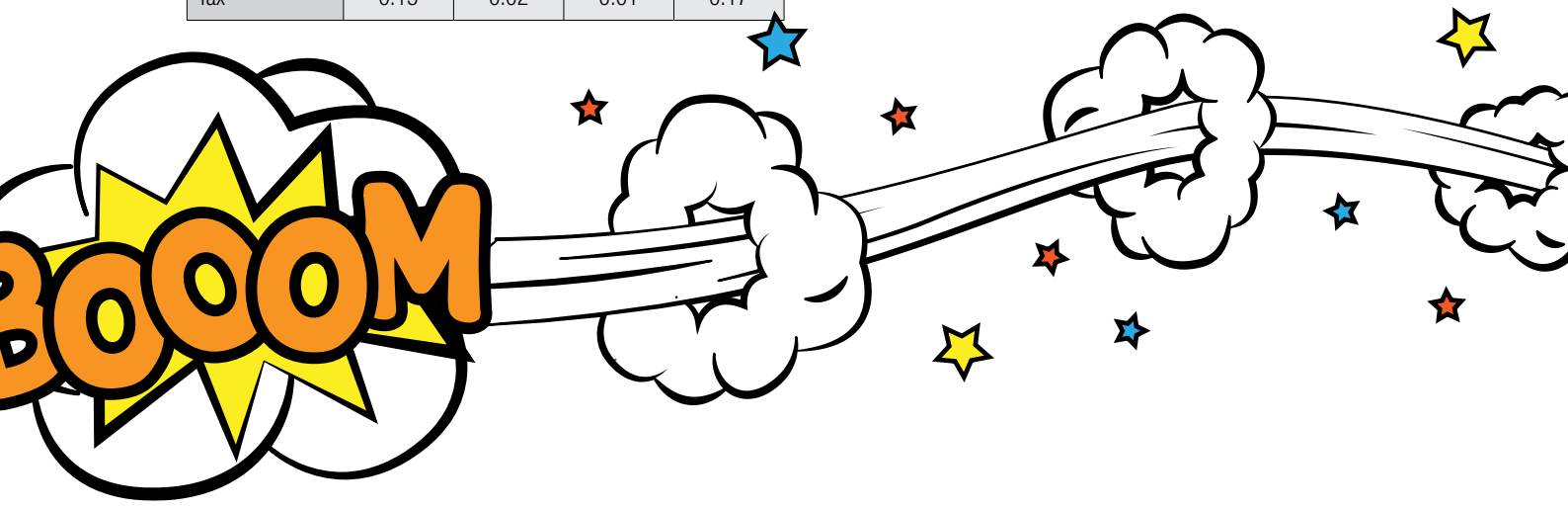
STAKEHOLDER GROUP	DIRECT	INDIRECT	INDUCED	TOTAL
Production	1.00	1.66	0.72	3.38
GDP	0.30	0.54	0.29	1.16
Employment	0.56	2.16	1.08	3.98
Income	0.15	0.24	0.13	0.57
Tax	0.15	0.02	0.01	0.17

TIA's multiplier results, as per Urban-Econ's findings from 2010, are as follows:

Table 25: Direct, Indirect and Induced Economic Assessment Multipliers from FY2010/11 to FY2016/17 (Source: Urban-Econ)

	DIRECT	INDIRECT	INDUCED	TOTAL
2010/11	1.00	1.10	0.78	2.87
2011/12	1.00	1.11	0.83	2.94
2012/13	1.00	0.94	0.79	2.73
2013/14	1.00	1.01	0.79	2.80
2014/15	1.00	1.06	0.77	2.83
2015/16	1.00	1.01	0.81	2.87
2016/17	1.00	1.66	0.72	3.38

The following figure shows that, other than the technology innovation sector, TIA also stimulated the following sectors, which are according to Statistics South Africa's Standard Industrial Classification (SIC): Business Services; Transport and Communication; Trade and Accommodation; and Finance. The relationships between the technology innovation sector and other sectors such as these are based on the backward and forward linkages in the economy. Therefore, the Agency's impact is not limited to the NSI only, but it also creates ripple effects (or benefits) in multiple sectors outside this space. TIA's activities stimulate production, employment, and income in these sectors in addition to the NSI, therefore contributing to overall economic growth and living standards.



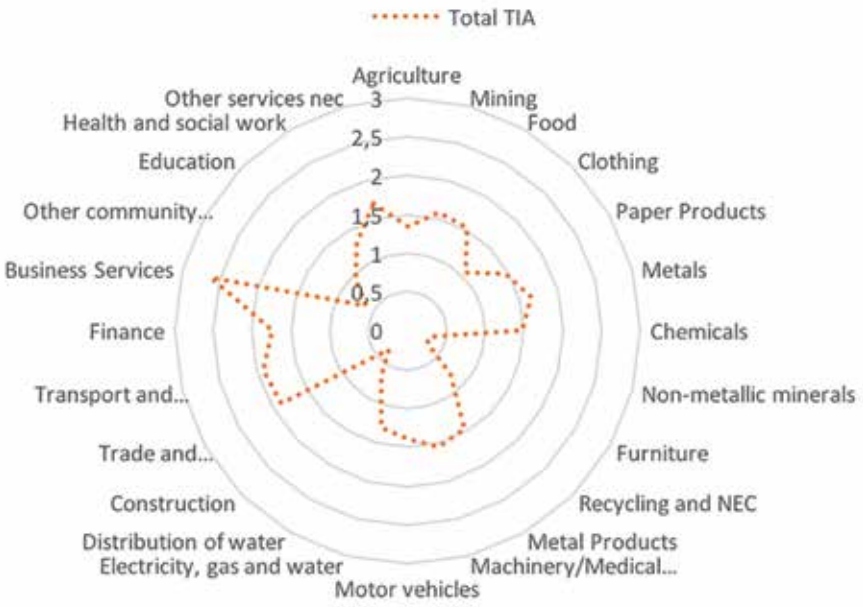


Figure 20: Sectorial Economic Impact in FY2016/17 (Source: Urban-Econ)

SOCIO-ECONOMIC BENEFITS FROM TIA SUPPORT

Table 26: Socio-Economic Benefits from TIA support in FY2016/17

SOCIO-ECONOMIC IMPLICATIONS	EXAMPLES OF TIA'S CONTRIBUTION
Economic growth, poverty and inequality alleviation	• TIA's Technology Platform Programme (TPP) through the Bioprocessing and Institute of Diagnostic Research (BIDR) Technology Platform supported two cooperative projects in rural KwaZulu-Natal on quality control. Such support assisted the cooperatives to place their agro-processed products on the market and begin to generate income. • Through the TPP's support, four novel technology products were created and placed in the hands of small companies (SMMEs) to assist them to become profitable. TIA assisted in poverty alleviation through the support of various development initiatives in rural Hluhluwe through the establishment of an agro-processing plant by Enzyme Technologies (Pty) Ltd, and in Upington through the establishment of a Microalgal Technology Demonstration and Incubation Centre. • The Youth Technology Innovation Programme (YTIP) is assisting with the introduction of PDIs into the mainstream technology development. Through its focus on the youth and previously disadvantaged universities; the involvement of previously marginalised groups such as the youth and blacks into the innovation space, the programme assists in lessening the income inequalities in South Africa.
Improved quality of life	• Projects such as the CPT Pharma and UCT anti-malarial projects are expected to result in the improvement of quality of life of both South Africans and other Africans at large, and prevent loss of productivity through illness. • The Technology Platforms Programme supported a number of projects in health that could help in the improvement of quality of life of South Africans should they be successfully commercialised. One example is the CPGR's Men of African Descent and Cancer of the Prostate (MADCaP) project, conducted in collaboration with the University of Pennsylvania and the University of Stellenbosch. This entails a large-scale prostate cancer genotyping study. Should the project be successful, it could yield the successful development of precision medicine for chronic diseases such as prostate cancer. • Projects, such as the smoke-free cook stove developed through support from the Global Cleantech Innovation Programme minimises the incidence of respiratory diseases in poor communities as a result of their reliance on traditional forms of energy, such as firewood for cooking purposes. Such projects are also imperative in reducing carbon emissions, thus contributing towards climate smart living in South Africa. In a study conducted by the Global Cleantech Innovation Programme (GCIP) involving ten out of the 77 teams that have participated in their programme since its inception in South Africa in 2013, the technologies from the ten teams are estimated to having reduced 65 000 tons of carbon emissions into the atmosphere. Furthermore, these ten teams are also estimated to having created 294 jobs, thus contributing towards curtailing unemployment and poverty in South Africa.

ACCOUNTABILITY

CORPORATE GOVERNANCE

Corporate governance is at the core of the Board's approach to the enhancement of shareholder value and the protection of shareholders' funds. TIA is committed to ensuring that its policies and practices in the critical areas of financial reporting, remuneration reporting and corporate governance meet high levels of disclosure and compliance.

The Board recognises the need to conduct the business in accordance with relevant legislation and best practice principles of discipline, independence, responsibility, fairness, social responsibility, transparency and the accountability of directors to all stakeholders. Several these principles are entrenched in TIA's internal controls and policy procedures governing corporate conduct.

TIA was established by the Technology Innovation Agency Act, Act No. 26 of 2008 (the TIA Act). The object of TIA is to support the State in stimulating and intensifying technological innovation to improve economic growth and the quality of life of all South Africans by developing and exploiting technological innovations.

The TIA Board, appointed by the Executive Authority, the office of the Honourable Minister (Executive Authority), in terms of Section 5 of the TIA Act, is responsible for the overall governance of the organisation leading with integrity, accountability and transparency and to ensure that an appropriate governance structure is in place. With the assistance of its sub-committees, the Board carries out its fiduciary duties relevant to its strategic planning, providing oversight on the implementation of the plan through the office of the Chief Executive.

For FY2016/2017, the Board and its Executive Committee are confident that the organisation has been compliant.

SHAREHOLDERS' COMPACT

TIA is required to agree, annually, in consultation with the Executive Authority, on its key performance objectives, measures and indicators. TIA concluded such agreement and enforced it by way of a Shareholders' Compact between the TIA Board and the Executive Authority.

The compact promotes good governance practices in TIA by assisting in clarifying the roles and responsibilities of the Board and the Executive Authority, as well as ensuring agreements on the TIA mandate and key objectives.

FINANCIAL STATEMENTS

The TIA Board and the Executive Committee are responsible for the preparation of the financial statements that fairly present the state of affairs of TIA as of the end of the financial year, i.e. 31 March 2017. The financial statements are prepared in accordance with the Generally Recognised Accounting Practices (GRAP). The TIA Board is satisfied that the adequate accounting records have been maintained. The external auditor, Ngubane & Co., is responsible for independently auditing and reporting on whether the financial statements present fairly, in all material aspects, the financial position of TIA in accordance GRAP and in a manner required by the PFMA.

APPROACH TO RISK MANAGEMENT

TIA's approach to risk management is based on governance processes and relies on both individual responsibility and collective oversight, supported by comprehensive reporting. This approach balances strong corporate oversight at company level, beginning with proactive participation by the Chief Executive Officer (CEO) and the Executive Committee in all significant risk matters, together with independent risk management structures within individual business units.

To ensure independence and appropriate segregation of responsibilities between business and risk management, business unit risk officers report operationally to their respective business unit heads and functionally to the Executive Committee.

INTERNAL AUDIT

TIA has an internal audit function that reviews its operations. TIA adopts internal controls, including policies, procedures and processes to provide reasonable assurance in safeguarding assets, preventing and detecting errors, the accuracy and completeness of accounting and reporting

records, and the reliability of financial statements. Internal audits provide independent, objective assurance of the system of internal controls within TIA.

The Audit and Risk Committee (ARC) approves the internal audit charter and the annual audit plan to ensure that the unit maintains its independence.

The annual audit plan is designed to position Internal Audit to address the requirements of the PFMA (1999) and Treasury Regulations (2005) and support the expectations of the International Professional Practice Framework of the Institute of Internal Auditors. In addition, Internal Audit provides TIA with an independent capability to perform audits that are consistent with the relevant legislation, respond to TIA priorities, and ensure that:

- Risks are appropriately identified and managed;
- Assets are adequately and appropriately safeguarded;
- There is compliance with applicable laws, regulations and directives;
- Resources are acquired economically, used efficiently and adequately protected; and
- Significant financial, managerial, and operating information is accurate, reliable and timely.

Areas of significance are highlighted by internal control reviews by the external auditors and is incorporated into the internal audit plan. Management reviews investment and internal audit findings regularly and present them to the Audit and Risk Committee quarterly.

TIA's audit methodology and planning follows a risk-based approach. The internal audit plan is compiled and is approved by the Audit and Risk Committee. Special assignments are considered on request with appropriate arrangements made to ensure that these do not compromise the achievement of the overall audit plan for the year.

EXTERNAL AUDIT

The external auditors are responsible for the independent auditing and reporting on the Annual Financial Statements. The internal audit function provides assurance to the ARC and management on the adequacy and effectiveness of the internal controls in line with the requirements of the PFMA and good governance. TIA adheres to the General Standard of Auditor Independence.

THE BOARD

The roles, powers and responsibilities of the Board are formalised in the Board Charter, which defines the matters that are reserved for the Board and its Committees, and those that are the responsibility of the Chief Executive and management.

Board members who served during the year under review were:

- Ms. Khungeka Njobe (Chairperson)
- Ms. Helen Brown
- Prof. David Ellis Kaplan
- Dr Steve Lennon
- Adv. Motlatjo Josephine Ralefatane
- Dr Petro Terblanche
- Ms. Rosetta Xaba
- Prof. Diane Hildebrandt
- Ms. Fuzlin Levy-Hassan

BOARD MEMBERS' REMUNERATION

Board members receive fees for the services they render to the Board in accordance with the relevant tariffs as determined by the National Treasury and approved by the Minister of Science and Technology.

SCHEDULE OF ATTENDANCE OF THE TIA BOARD AND SUB-COMMITTEE MEETINGS (1 APRIL 2016 – 31 MARCH 2017)

The Board convened six times in the period under review, four meetings were ordinary and two were special meetings.

TIA BOARD COMMITTEES

AUDIT AND RISK COMMITTEE (ARC)

Chairperson:	Dr Steve Lennon
Members:	Prof. David Ellis Kaplan
	Ms. Rosetta Xaba
	Adv. Motlatjo Josephine Ralefatane

The Committee convened five times in the period under review, four meetings were ordinary and one was a special meeting.

Table 27: Schedule of attendance of the TIA Board and Sub-committee Meetings in FY2016/17

	BOARD MEETINGS	25 APRIL 2016	10 MAY 2016	30 MAY 2016	28 JULY 2016	29 NOV 2016	28 FEB 2017
Ms. Khungeka Njobe	6	✓	✓	✓	✓	✓	✓
Ms. Helen Brown	6	✓	✓	✓	✓	✓	✓
Prof. David Ellis Kaplan	5	✓	✓	×	✓	✓	✓
Dr Steve Lennon	6	✓	✓	✓	✓	✓	✓
Adv. Motlatjo Ralefatane	4	✓	A	✓	×	✓	✓
Dr Petro Terblanche	5	✓	✓	✓	×	✓	✓
Ms. Rosetta Xaba	4	✓	A	✓	✓	×	✓
Prof. Diane Hildebrandt	4	✓	×	✓	×	✓	✓

✓ In attendance × Apology received A Absent without apology

Table 28: Schedule of attendance of the ARC meetings in FY2016/17

	BOARD MEETINGS	15 APRIL 2016	23 MAY 2016	21 JULY 2016	15 NOV 2016	16 FEB 2017
Dr Steve Lennon (Chairperson)	5	✓	✓	✓	✓	✓
Prof. David Kaplan	4	✓	×	✓	✓	✓
Adv. Motlatjo Josephine Ralefatane	4	A	✓	✓	✓	✓
Ms. Rosetta Xaba	4	✓	✓	✓	✓	A

✓ In attendance × Apology received A Absent without apology

HUMAN RESOURCES AND REMUNERATION COMMITTEE (HR-REMCO)

Chairperson: Ms. Helen Brown
Members: Ms. Khungeka Njobe
Adv. Motlatjo Josephine Ralefatane
Dr Petro Terblanche

The Committee convened five times in the period under review, four meetings were ordinary and one was a special meeting.

INVESTMENT AND FINANCE COMMITTEE (IFC)

Chairperson: Dr Petro Terblanche
Members: Ms. Rosetta Xaba
Prof. David Kaplan
Prof. Diane Hildebrandt
Ms. Fuzlin Levy-Hassan

The Committee convened nine times in the period under review, four meetings were ordinary and five were special meetings.

Table 29: Schedule of attendance of the HR-Remco meetings in FY2016/17

	BOARD MEETINGS	5 APRIL 2016	16 MAY 2016	13 JULY 2016	9 NOV 2016	9 FEB 2017
Ms. Helen Brown (Chairperson)	5	✓	✓	✓	✓	✓
Dr Petro Terblanche	1	×	✓	×	×	×
Adv. Motlatjo Josephine Ralefatane	5	✓	✓	✓	✓	✓
Ms. Khungeka Njobe	5	✓	✓	✓	✓	✓

✓ In attendance × Apology received A Absent without apology

Table 30: Schedule of attendance of the IFC meetings in FY2016/17

	BOARD MEETINGS	12 MAY 2016	6 JULY 2016	2 AUG 2016	14 SEPT 2016	17 OCT 2016	3 NOV 2016	12 DEC 2016	26 JAN 2017	15 MAR 2017
Dr Petro Terblanche	9	✓	✓	✓	✓	✓	✓	✓	✓	✓
Prof. David Kaplan	7	✓	✓	✓	✓	✓	✓	✓	×	×
Ms. Rosetta Xaba	6	×	✓	✓	×	×	✓	✓	✓	✓
Prof. Diane Hildebrandt	9	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ms. Fuzlin Levy – Hassan	4	✓	×	×	×	×	✓	×	✓	✓

✓ In attendance × Apology received A Absent without apology

PUBLIC FINANCE MANAGEMENT ACT, ACT NO. 1 OF 1999 (PFMA)

The PFMA came into effect on 1 April 2000 and has had an impact on governance matters in terms of the regulation of financial management in the public sector.

TIA is fully committed to complying with the provisions of the PFMA. The internal and external auditors continue to provide the Board with assurance on the degree of compliance with the PFMA.

MATERIALITY FRAMEWORK

In accordance with the PFMA and the Treasury regulations 28.1.5, TIA has developed a framework of acceptable levels of materiality and significance.

MEMBERS OF THE TIA BOARD

In accordance with the PFMA and the Treasury regulations 28.1.5, TIA has developed a framework of acceptable levels of materiality and significance.

TIA BOARD

MS. KHUNGEKA NJOBE
CHAIRPERSON

MS. HELEN BROWN

PROF. DAVID ELLIS KAPLAN

ADV. MOTLATJO JOSEPHINE RALEFATANE

DR STEVE LENNON

MS. ROSETTA XABA

DR PETRO TERBLANCHE

PROF. DIANE HILDEBRANDT

MS. KHUNGEKA NJOBE	
Position/Affiliation:	Executive Chairperson: Kay Ann Group
Qualifications:	BSc (Hons) in Biology, MSc Zoology
Field of Expertise:	IP Management and technology transfer, establishment of an R&D and innovation function, leadership of marketing and business development functions, strategic management
Board Memberships and Committees:	Chair of the Boards of Sasol Inzalo Public Limited and Sasol Inzalo Public Funding Limited, Director of Safcol and Chair of the Human Resources and Remuneration Committee

MS. HELEN BROWN	
Position/Affiliation:	Programme Manager: Artisan Innovation and Development at the Manufacturing Engineering and Related Education Authority (merSETA)
Qualifications:	BA (Social Sciences), HD Personnel Management
Field of Expertise:	SME and innovation challenges
Board Memberships and Committees:	Member of the Qualifications Sub-committee of the Umalusi Board

PROF. DAVID ELLIS KAPLAN	
Position/Affiliation:	Professor of Business and Government Relations, University of Cape Town
Qualifications:	BA, BComm, MA and DPhil
Field of Expertise:	Public Research Performing Institutions (Innovation Policies)
Board Memberships and Committees:	None

ADV. MOTLATJO JOSEPHINE RALEFATANE	
Position/Affiliation:	Conciliator and Arbitrator Panellist: General Public Services Sector Bargaining Council (GPSSBC)
Qualifications:	BProc, LLB, Admitted Advocate of the Supreme Court
Field of Expertise:	Legal Human Resources
Board Memberships and Committees:	Non-Executive Director: Road Accident Fund (RAF) and Chairperson of the Human Capital and Remuneration Committee of the RAF, Member of the Regulating Committee for Meteorological Services

DR STEVE LENNON	
Position/Affiliation:	Managing Director: Shanduvan (Pty) Ltd
Qualifications:	BSc, MSc (Engineering), PhD
Field of Expertise:	Energy sector, sustainability and the National System of Innovation
Board Memberships and Committees:	Director: SolaJoule (Pty) Ltd

MS. ROSETTA XABA	
Position/Affiliation:	Director: Rossal NO 98 (Pty) Ltd
Qualifications:	BSc (Life Sciences), Post Graduate Diploma in Education; BCompt and BCompt Honours, Post Graduate Diploma in Accounting, CA (SA)
Field of Expertise:	Finance
Board Memberships and Committees:	Treasurer and Board member of the Little Eden Society for the Care of Persons with Intellectual Disability, Non-Executive Director and chair of the audit committee for FINBOND Limited, Non-Executive Director and chair of Social and Ethics Committee for Conduit Capital Limited; Non-Executive Director and chair of audit committee for Constantia Insurance (Pty) Ltd; Audit committee member for SALGA

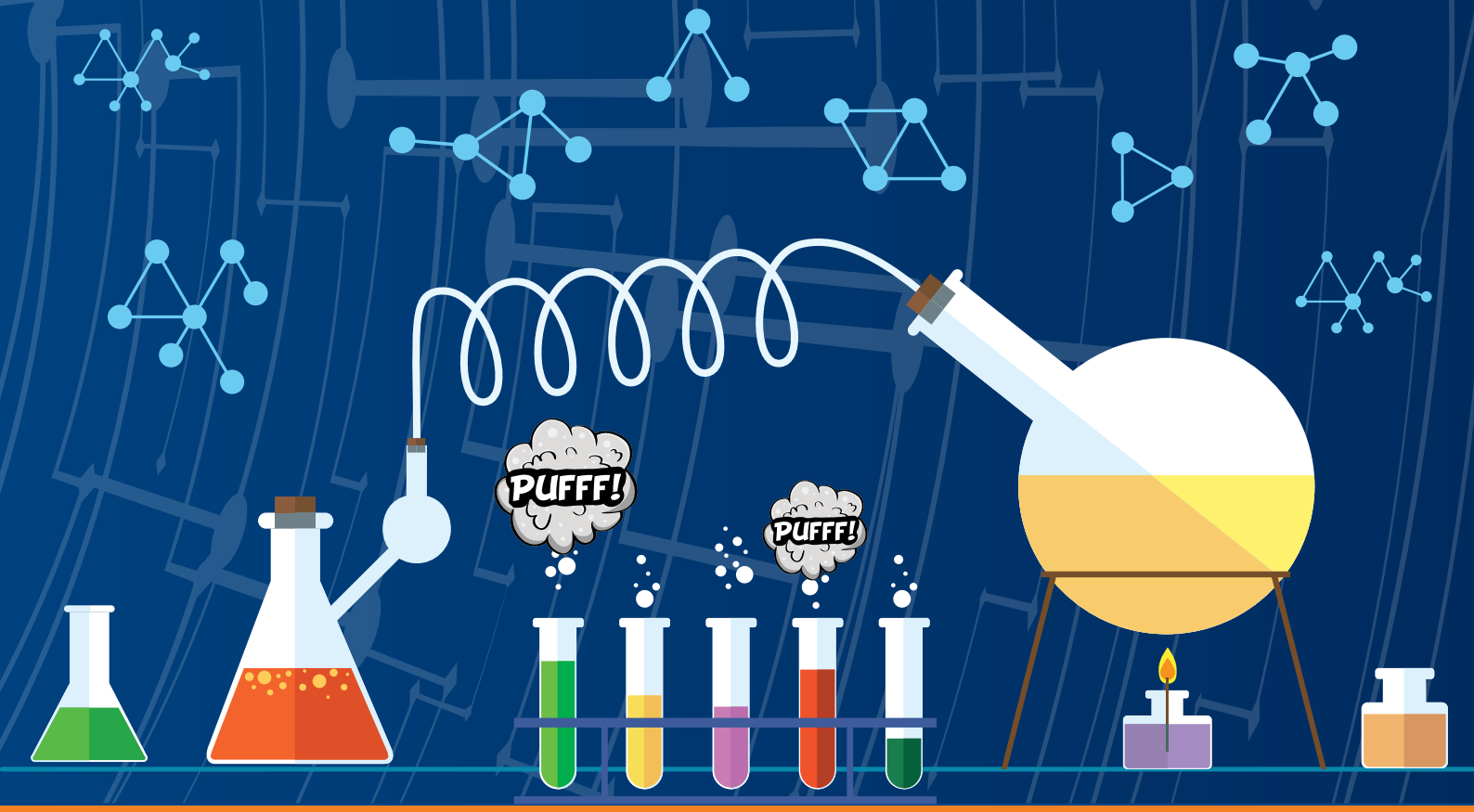
DR PETRO TERBLANCHE	
Position/Affiliation:	Professor at North West University in the Business Development
Qualifications:	BSc, BSc (Hons), MSc (Cum Laude), DSc
Field of Expertise:	Biotechnology, Medical oncology and Environmental Health.
Board Memberships and Committees:	Faculty of Health Sciences
	National Intellectual Property Management Organisation (NIPMO) Advisory Board, Chairperson of Ketlaphela Pharmaceuticals SOC Ltd Board, Industrial Advisory Group Molecular Sciences Institute, WITS School of Chemistry, Advisory Committee for the University of Pretoria Centre for Sustainable Malaria Control, Member of the Bio-economy Strategy Advisory Committee of DST and Member of the Advisory Committee of the University of Pretoria Fluorochemicals Engineering Chair

PROF. DIANE HILDEBRANDT	
Position/Affiliation:	Co- Director for the Research Unit MaPS (Material and Process Synthesis) at UNISA, South Africa
Qualifications:	BSc, MSc and PhD from the University of the Witwatersrand
Field of Expertise:	Chemical Engineering and Chemical Technology
Board Memberships and Committees:	Member of Council of the University of Johannesburg

MS. FUZLIN LEVY-HASSEN (CO-OPTED MEMBER OF THE BOARD)	
Position/Affiliation:	Senior Deal Maker, New Industries, IDC
Qualifications:	Bachelor of Commerce (Honours in Accounting) from the University of Cape Town Certificate in Venture Capital from UC Berkley, Haas School of Business Post-graduate Diploma in Accounting from the University of Cape Town Bachelor of Commerce from the University of Cape Town
Field of Expertise:	Expert in due diligences, venture capital and private equity; Expert in appraising investment proposals, performing detailed analysis of investment opportunities, deal closure, structuring of deals and preparing different reports and presenting to various committees; Expert in managing investments, addressing and solving complex issues; Expert in financial modelling, financial analysis, business analysis, risk analysis, strategic business planning and negotiations; Expert in preparing and monitoring financial plans/projections; Expert in turnaround and recovery plans; Expert in overseeing financial, operational and commercial side of businesses; Expert in overseeing disbursements of approved investments/projects and monitoring performance of investments/ projects; Expert in SWOT analysis, identifying and establishing good corporate governance and internal controls
Board Memberships and Committees:	Director of a company that manufactures electrical components and appliances, Former Director of a multi-media company; Former Investment Committee member of a Venture Capital Fund – South African Intellectual Fund, Investment Committee member of a Niche Fund (Manufacturing Competitiveness Enhancement Programme), Treasurer and School Governing Body Member of the Montrose Primary School Governing Body, Former Trustee of The Governing Body Foundation

PART F

ANNUAL FINANCIAL STATEMENTS



AUDIT COMMITTEE STATEMENT

TIA engaged in a performance contract with the Honourable Minister of the Department of Science and Technology to ensure the effective delivery on TIA's mandate in line with the TIA Act.

In terms of Section 94(2) of the Companies Act, Act No. 71 of 2008 and principle 3.1 of the King Code of Corporate Governance, the Board is required to appoint an Audit Committee as a sub-committee of the Board. Serving as the Audit and Risk Committee, the Committee's role is to oversee TIA's financial and non-financial resource management systems for efficiency and effectiveness. In so doing the committee provides an oversight function over the work of Internal Audit, External Audit and benchmarks its processes against the guidance and recommendations of the Auditor-General of South Africa.

The Committee has performed its duties and carried out its responsibilities in accordance with its Board-approved Charter, which is reviewed annually as per best practice, as well as carried out specific duties delegated to it by the full Board.

In accordance with the Charter, the Committee committed to, inter alia:

a) Examine and review the Annual Financial Statements and report on the final results;
b) Appoint and evaluate the qualification, appropriateness, eligibility and independence of the external auditor;
c) Provide oversight on the relationship between the internal and external auditors;
d) Approve the internal audit plan, internal audit charter and fees of the external auditor;
e) Evaluate the scope and effectiveness of the internal audit function with a view to ensuring that effective internal controls have been identified and are in place; and
f) Ensure that TIA complies with regulatory requirements, both legal and financial.

AUDIT AND RISK COMMITTEE (ARC) BOARD

Chairperson: Dr Steve Lennon

Members: Prof. David Ellis Kaplan
Ms. Rosetta Xaba
Adv. Motlatjo Josephine Ralefatane

During the year under review, the following Committee members attended five scheduled ARC Meetings, four of which were ordinary and one special:

Table 31: Schedule of attendance of the Audit and Risk Committee Meetings in FY2016/17

BOARD MEMBER	NO. OF MEETINGS ATTENDED
Dr Steve Lennon (Chairperson)	5
Prof. David Kaplan	4
Adv. Motlatjo Josephine Ralefatane	4
Ms. Rosetta Xaba	4

The ARC carried out its functions and assisted the Board to:

a) evaluate the adequacy and efficiency of the internal control systems, accounting practices, information systems and auditing processes applied in the management of TIA;
b) discharge its duties relating to the safeguarding of assets, the implementation of adequate IT systems, effective control processes and the preparation of accurate financial reporting and statements in compliance with all applicable legal requirements and accounting standards;
c) comply with applicable laws, regulations, licences, standards and best practice guidelines;
d) improve the credibility and objectivity of the accountability process;
e) improve the effectiveness of the internal and external audit functions and be a forum for improving communications between the Board and the internal and external auditors;
f) meet with the Investment Committee at least once annually as a discussion forum, with a view to assessing, evaluating and recommending to the Board likely risks on other portfolios. The joint sitting of the Committees considers compliance with investment policies, guidelines and relative risk levels.

QUARTERLY REPORTS

Issued in terms of the Public Finance Management Act, No. 1 of 1999 (PFMA), Section 5.3.1 of the Treasury Regulations, read together with Section 27(4) read with 36(5) of the PFMA, requires the Accounting Officer of an institution to establish procedures for quarterly reporting to the executive authority to facilitate effective performance monitoring, evaluation and corrective action. In the period under review the Committee ensured compliance with Treasury Regulation 5.3.1 for the establishment of such procedures. The Committee recommended that pre-determined objectives and corresponding targets be reviewed. Further, that the quality of the reporting be reviewed for accuracy and credibility.

ANNUAL FINANCIAL STATEMENTS

The Committee reviewed the Annual Financial Statements (AFS) and the accounting practices in detail and is satisfied that the information contained in the AFS, as well as the application of accounting practices applied, is reasonable.

INTERNAL AUDIT

The internal audit function has been well integrated into TIA; reporting to the office of the CEO. The Acting Head of Investment and Internal Audit provided TIA with effective, integrated assurance against risk and internal audit services. The Committee considered and approved the 2016/2017 risk-based Internal Audit Plan that was developed by the internal audit function.

During FY2016/2017 the internal audit function was to assist management in evaluating the process through which risk, control, and reporting information was compiled and communicated. Recommendations were provided where deficiencies were found. Internal Audit was further tasked with specific matters related to governance failure to ensure that areas of weaknesses were well addressed. The Annual Internal Audit Plan for FY2016/17 was approved by the Committee and was executed by the internal audit function. As at the end of FY2016/17, approximately 87% of the audit activities were completed (within the overall budgeted audit hours). This included both assurance audits on the various TIA business units, as well as proactive and requested advisory engagements (relating to specific high-risk areas and matters).

EXTERNAL AUDIT

The Committee is satisfied that the external auditors, Ngubane & Co, are independent and have complied with sections 90(2)(b) and 94(8) of the Companies Act, Act No. 71 of 2008 (as amended) and confirms that there are no conflicts of interest as determined by the criteria prescribed by the Independent Regulatory Board for Auditors. The Committee, in consultation with management, agreed to the engagement letter, audit plan and audit fees for the FY2016/17 ended 31 March 2017. In consideration of the external audit plan, the Committee is satisfied that it is comprehensive and adequately interrogates the risk areas identified.

RISK MANAGEMENT

The period under review saw a robust engagement on risk management. The Committee believes that the methodology adopted is sound. The Committee advised that the Risk Management Framework and Policy be finalised for implementation to aid in the effective monitoring of the risk environment. The full Board is satisfied that the evaluation process and the identified action plans adequately ensure that risks will be mitigated to acceptable levels.

INFORMATION TECHNOLOGY (IT) OVERSIGHT

Pursuant to the provisions of King III, the Board through the ARC, adopted full oversight over IT governance. In the year under review the ARC approved the IT Policy and its relevant strategy which allows for TIA to achieve its overall IT objectives.

IRREGULAR EXPENDITURE

Because of the strong measures in place, the Committee reported no irregular expenditure in the period under review.

FRUITLESS AND WASTEFUL EXPENDITURE

No fruitless and wasteful expenditure was reported for the period under review.

GOING CONCERN

Given that TIA is a Schedule 3A entity in terms of the PFMA, and is entrusted with a specific mandate in terms of its enabling Act (No. 26 of 2008), TIA is dependent on an annual allocation to carry out its mandate. In the light of its positioning as highlighted in its objectives and responsibility toward its shareholder, TIA remains relevant. The accounting records and all audit procedures performed reveal that TIA will continue well into the future. A going concern qualification was therefore not a matter of concern for TIA, given its financial viability and critical positioning.

Dr Steve Lennon
Chairperson: Audit and Risk Committee

BOARD'S RESPONSIBILITIES AND APPROVAL

The Board is required by the Public Finance Management Act (Act 1 of 1999), to maintain adequate accounting records and is responsible for the content and integrity of the Consolidated and Separate Financial Statements and related financial information included in this report. It is the responsibility of the Board to ensure that the consolidated and separate financial statements fairly present the state of affairs of the entity and its controlled entities ("the economic entity") as at the end of the financial year and the results of its operations and cash flows for the period then ended. The external auditors are engaged to express an independent opinion on the consolidated and separate financial statements and were given unrestricted access to all financial records and related data.

The consolidated and separate financial statements have been prepared in accordance with Generally Recognised Accounting Practice (GRAP) including any interpretations, guidelines and directives issued by the Accounting Standards Board.

The consolidated and separate financial statements are based upon appropriate accounting policies consistently applied and supported by reasonable and prudent judgements and estimates.

The Board acknowledges that it is ultimately responsible for the system of internal financial control established by the economic entity and places considerable importance on maintaining a strong control environment. To enable the Board to meet these responsibilities, the Board sets standards for internal controls aimed at reducing the risk of error in a cost effective manner. The standards include the proper delegation of responsibilities within a clearly defined framework, effective accounting procedures and adequate segregation of duties to ensure an acceptable level of risk. These controls are monitored throughout the economic entity and all employees are required to maintain the highest ethical standards in ensuring the economic entity's business is conducted in a manner that in all reasonable circumstances is above reproach. The focus of risk management in the economic entity is on identifying, assessing, managing and monitoring all known forms of risk across the economic entity. While operating risk cannot be fully eliminated, the economic entity endeavours to minimise it by ensuring that appropriate infrastructure, controls, systems and ethical behaviour are applied and managed within predetermined procedures and constraints.

The Board is of the opinion, based on the information and explanations given by management, that the system of internal control provides reasonable assurance that the financial records may be relied on for the preparation of the financial statements. However, any system of internal financial control can provide only reasonable, and not absolute assurance against material misstatement or deficit.

The Board has reviewed the economic entity's cash flow forecast for the year to 31 March 2018 and, in the light of this review and the current financial position, is satisfied that the economic entity has access to adequate resources to continue in operational existence for the foreseeable future.

The financial statements set out on pages 105 to 141, which have been prepared on the going concern basis, were approved by the Board on 30 May 2017 and were signed on its behalf by:

Prof Edward Chr Kieswetter
Chairperson

REPORT OF THE AUDITORS

OPINION

We have audited the Consolidated Annual Financial Statements of Technology Innovation Agency Group, which comprise the Statement of Financial Position as at 31 March 2017, the Statement of Financial Performance, Statement of Changes in Net Assets and Statement of Cash Flows for the year then ended, and notes to the Financial Statements, including a summary of significant accounting policies.

In our opinion, the Consolidated Annual Financial Statements present fairly, in all material respects, the financial position of Technology Innovation Agency Group as at 31 March 2017, and its financial performance and cash flows for the year then ended in accordance with South African Standards of Generally Recognised Accounting Practice (SA Standards of GRAP) and the requirements of the Public Finance Management Act (PFMA).

BASIS FOR OPINION

We conducted our audit in accordance with the International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the auditor's responsibilities for the audit of the Consolidated Annual Financial Statements section of our report.

We are independent of the Technology Innovation Agency Group in accordance with the Independent Regulatory Board for Auditors' Code of professional conduct for registered auditors (IRBA Code) and other independence requirements applicable to performing audits of the financial statements in South Africa. We have fulfilled our other ethical responsibilities in accordance with the IRBA Code and in accordance with other ethical requirements applicable to performing audits in South Africa. The IRBA Code is consistent with the International Ethics Standards Board for Accountants' Code of Ethics for professional accountants (parts A and B).

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

KEY AUDIT MATTER	HOW OUR AUDIT ADDRESSED THE KEY AUDIT MATTER
GOING CONCERN	
In terms of ISA 570, the going concern assumption implies that an entity is viewed as continuing in business for the foreseeable future. The auditor's responsibility is to obtain sufficient appropriate audit evidence about the appropriateness of management's use of the going concern assumption in the preparation of the financial statements and to conclude whether there is a material uncertainty about the entity's ability to continue as a going concern	As per discussions with management, our considerations on whether any adverse events/conditions exist that may cast significant doubt on the entity's ability to continue as a going concern as well as funds for the next 12 months the first tranche of which has already been received at the date of signature of this report. Neither financial nor operational indicators that may cast doubt on the entity's ability to continue as a going concern were identified. considerations of the time taken by management and those charged with governance to approve the financial statements, no going concern indicators were evident and the entity will continue to operate for the foreseeable future. TIA has managed to secure unconditional project

KEY AUDIT MATTER	HOW OUR AUDIT ADDRESSED THE KEY AUDIT MATTER
REPORTABLE IRREGULARITIES	
In terms of the Auditing Professions Act definitions, a reportable irregularity is described as any unlawful act or omission committed by any person responsible for the management of an entity, which: (a) Has caused or is likely to cause material financial loss to the entity or to any partner, member, shareholder, creditor or investor of the entity in respect of his, her or its dealings with that entity; or (b) Is fraudulent or amounts to theft; or (c) Represents a material breach of any fiduciary duty owed by such person to the entity or any partner, member, shareholder, creditor or investor of the entity under any law applying to the entity or the conduct or management thereof.	Professional skepticism was maintained by the audit team at all times throughout the course of the audit and no possible reportable irregularities have been identified.
FRAUD AND ILLEGAL ACTS	
Fraud is described in ISA 240 as an intentional act by one or more individuals among management, those charged with governance, employees, or third parties, involving the use of deception to obtain an unjust or illegal advantage. The primary responsibility for the prevention and detection of fraud rests with both those charged with governance of the entity and management. An auditor conducting an audit in accordance with ISAs is responsible for obtaining reasonable assurance that the financial statements taken as a whole are free from material misstatement, whether caused by fraud or error	Risk assessment procedures were performed to obtain an understanding of the entity including its internal control. Risks of material misstatement due to fraud at the financial statement level, and at the assertion level for classes of transactions, account balances and disclosures were identified and audit procedures were performed to address the identified risks in order to minimise these to an acceptable level. Audit evidence was obtained for all identified risks and evaluated. Written representations were also received in the form of the signed management representation letter asserting that the financial statements are free of material errors and no instances of fraud occurred. The audit team maintained professional skepticism at all times throughout the audit.
MANAGEMENT JUDGEMENT AND ACCOUNTING ESTIMATES	
In accordance with ISA 540, accounting estimates are those financial statement items that cannot be measured precisely, but can only be estimated. They are an approximation of a monetary amount in the absence of a precise means of measurement	We have reviewed the outcome of accounting estimates included in the prior period financial statements, for the purpose of the current period. Accounting estimates included among others the leave provision, bonus provision as well as the depreciation expense for the year. We then tested how management made the accounting estimates and the data on which they are based. We also assessed whether management has appropriately applied the requirements of the applicable financial reporting framework relevant to the accounting estimate and whether the methods for making the accounting estimates are appropriate and have been applied consistently. No material differences were identified

RESPONSIBILITIES OF THE MANAGEMENT FOR THE FINANCIAL STATEMENTS

The management is responsible for the preparation and fair presentation of the Consolidated Annual Financial Statements in accordance with Standard of GRAP and the requirements Public Finance Management Act (PFMA) and Companies Act 71 of 2008, and for such internal control as the managements determine is necessary to enable the preparation of Financial Statements that are free from material misstatement, whether due to fraud or error.

In preparing the Consolidated Annual Financial Statements, the management is responsible for assessing the company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the managements either intend to liquidate the company or to cease operations, or have no realistic alternative but to do so.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether the Consolidated Annual Financial Statements as a whole are free from material misstatement, whether due to fraud or error and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these Consolidated Annual Financial Statements.

As part of an audit in accordance with ISAs, we exercise professional judgement and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Managements.
- Conclude on the appropriateness of the managements' use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in? our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated annual financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves a fair presentation.

We communicate with the managements regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the managements with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

REPORT ON THE AUDIT OF THE ANNUAL PERFORMANCE REPORT

In accordance with the Public Audit Act of South Africa, 2004 (Act No. 25 of 2004) (PAA) and the general notice issued in terms thereof we have a responsibility to report material findings on the reported performance information against predetermined objectives for selected objectives presented in the annual performance report. We performed procedures to identify findings but not to gather evidence to express assurance.

Our procedures address the reported performance information which must be based on the approved performance planning documents of the Technology Innovation Agency Group. We have not evaluated the completeness and appropriateness of the performance indicators established and included in the planning documents. Our procedures also did not extend to any disclosures or assertions relating to planned performance strategies and information relating to future periods that may be included as part of the reported performance information. Accordingly, our findings do not extend to these matters.

We evaluated the usefulness and reliability of the reported performance information in accordance with the criteria developed from the Performance management and reporting framework, as defined in the general notice, for the following selected objectives presented in the annual performance report of the Technology Innovation Agency Group for the year ended 31 March 2017:

i) To provide technology development funding and support in strategic high impact areas.

ii) To provide thought leadership and an enabling environment for Technology Innovation in collaboration with others.

We performed procedures to determine whether the reported performance information was properly presented and whether the performance was consistent with the approved performance planning documents. We performed further procedures to determine whether the indicators and related targets were measurable and relevant, and assessed the reliability of the reported performance information to determine whether it was valid, accurate and complete.

REPORT ON AUDIT OF COMPLIANCE WITH OTHER LEGAL AND REGULATORY REQUIREMENTS

PUBLIC AUDIT ACT REQUIREMENTS (PAA)

In accordance with the Public Audit Act of South Africa (PAA) and the General Notice issued in terms thereof, we report findings relevant to reported performance against predetermined objectives of selected objectives presented in the annual performance report, compliance with laws and regulations as well as internal control. We performed tests to identify reportable findings as described under each subheading but not to gather evidence to express assurance on these matters. Accordingly, we do not express an opinion or conclusion on these matters.

COMPLIANCE WITH LEGISLATION

We performed procedures to obtain evidence that the public entity had complied with applicable legislation regarding financial matters, financial management and other related matters. We did not identify any instances of material non-compliance with specific matters in the key applicable laws and regulations, as set out in the General Notice issued in terms of PAA.

OTHER INFORMATION

The Technology Innovation Agency Group management is responsible for the other information. The other information comprises the information included in the annual report which include the Board Report and the Audit Committee's Report as required by the Companies Act 71 of 2008. The other information does not include the consolidated and separate financial statements, the auditor's report thereon and those selected objectives presented in the annual performance report that have been specifically reported on in the auditor's report.

In our opinion, the financial statements and findings on the reported performance information and compliance with legislation does not cover the other information and we do not express an audit opinion or any form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the Consolidated Annual Financial Statements and the selected objectives presented in the annual performance report, or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If based on the work we have performed on the other information obtained prior to the date of this auditor's report, we conclude that there is a material misstatement of this other information, and we are required to report that fact.

INTERNAL CONTROL DEFICIENCIES

We considered internal controls relevant to our audit of the financial statements, performance Information Report and compliance with legislation. We did not identify any deficiencies in internal control which we considered sufficiently significant for inclusion in this report.

AUDITOR TENURE

In terms of the IRBA rule published in Government Gazette Number 39475 dated 4 December 2015, we report that Ngubane and Company has been the auditor of Technology Innovation Agency Group for 3 years.

Ngubane & Co. (JHB) Inc.
Nqabisa Ravele
Chartered Accountants (SA)
Registered Auditors

Midrand
05 June 2017

STATEMENT OF FINANCIAL POSITION

AS AT 31 MARCH 2017

	NOTES	ECONOMIC ENTITY 2017 R'000	ECONOMIC ENTITY 2016 R'000	CONTROLLING ENTITY 2017 R'000	CONTROLLING ENTITY 2016 R'000
Assets					
Current Assets					
Trade and other receivables	3	5,886	16,738	3,417	15,013
Cash and cash equivalents	4	70,198	141,137	64,567	132,333
Loans and receivables	9	1,577	-	1,577	-
Prepayments		3,578	1,102	3,578	1,105
		81,239	**158,977**	**73,139**	**148,451**
Non Current Assets					
Property and equipment	5	13,557	11,108	12,470	12,530
Intangible assets	6	3,459	861	3,422	816
Investments in controlled entities	7	-	-	-	-
Investments in associates	8	5,605	5,718	3,013	3,013
Loans and receivables	9	3,452	19,226	3,452	19,226
Other financial assets	10	26,300	26,300	26,300	26,300
		52,373	**63,213**	**48,657**	**61,885**
Total Assets		**133,612**	**222,190**	**121,796**	**210,336**
Liabilities					
Current Liabilities					
Finance lease obligation	11	61	194	61	194
Trade and other payables	12	32,056	22,876	28,891	21,116
Operating lease liability		514	178	496	75
		32,631	**23,248**	**29,448**	**21,385**
Non Current Liabilities					
Loans from shareholders		2,762	2,762	-	-
Committed conditional grants and receipts		54,443	44,086	54,443	44,086
		57,205	**46,848**	**54,443**	**44,086**
Total Liabilities		**89,836**	**70,096**	**83,891**	**65,471**
Net Assets		**43,776**	**152,094**	**37,905**	**144,865**
Net assets attributable to owners of controlling entity					
Reserves					
Foreign currency translation reserve		(132)	(469)	-	-
Accumulated surplus		52,700	160,648	37,905	144,865
		52,568	**160,179**	**37,905**	**144,865**
Non controlling interest		(8,792)	(8,085)	-	-
Total Net Assets		**43,776**	**152,094**	**37,905**	**144,865**

STATEMENT OF FINANCIAL PERFORMANCE

FOR THE YEAR ENDED 31 MARCH 2017

	NOTES	ECONOMIC ENTITY 2017 R'000	ECONOMIC ENTITY 2016 R'000	CONTROLLING ENTITY 2017 R'000	CONTROLLING ENTITY 2016 R'000
Revenue					
Revenue from non exchange transactions	15	465,777	429,310	465,777	429,310
Other income	16	15,819	15,898	11,087	17,980
Interest received	17	15,955	17,810	15,591	17,356
Total revenue		**497,551**	**463,018**	**492,455**	**464,646**
Expenditure					
Employee related costs	18	(93,356)	(92,618)	(88,674)	(83,557)
Project funding expenditure	19	(450,476)	(334,383)	(450,891)	(335,119)
Depreciation and amortisation		(3,630)	(6,693)	(3,324)	(6,332)
Lease rentals on operating lease		(9,432)	(9,181)	(8,905)	(8,594)
Impairment	20	(14,264)	(43,638)	(14,249)	(43,638)
Repairs and maintenance		(403)	(424)	(391)	(420)
Other operating expenses	21	(34,515)	(36,490)	(32,964)	(31,567)
Total expenditure		**(606,076)**	**(523,427)**	**(599,398)**	**(509,227)**
Operating deficit		**(108,525)**	**(60,409)**	**(106,943)**	**(44,581)**
Gain on foreign exchange		(17)	(1,717)	(17)	(1,717)
(Deficit)/Surplus from equity accounted investments		(113)	8,415	-	-
Deficit for the year		**(108,655)**	**(53,711)**	**(106,960)**	**(46,298)**
Attributable to:					
Owners of the controlling entity		(107,948)	(52,956)	(106,960)	(46,298)
Non controlling interest		(707)	(755)	-	-
		(108,655)	**(53,711)**	**(106,960)**	**(46,298)**

STATEMENT OF CHANGES IN NET ASSETS

FOR THE YEAR ENDED 31 MARCH 2017

ECONOMIC ENTITY	FOREIGN CURRENCY TRANSLATION RESERVE R'000	ACCUMULATED SURPLUS R'000	TOTAL ATTRIBUTABLE TO OWNERS OF THE ECONOMIC ENTITY / CONTROLLING ENTITY R'000	NON-CONTROLLING INTEREST R'000	TOTAL NET ASSETS R'000
Balance at 01 April 2015	**-**	**213,604**	**213,604**	**(7,330)**	**206,274**
Currency translation differences	(469)	-	(469)	-	(469)
Deficit for the year as previously reported	-	(52,956)	(52,956)	(755)	(53,711)
Balance at 01 April 2016	**(469)**	**160,648**	**160,179**	**(8,085)**	**152,094**
Currency translation differences	337	-	337	-	337
Deficit for the year	-	(107,948)	(107,948)	(707)	(108,655)
Balance at 31 March 2017	**(132)**	**52,700**	**52,568**	**(8,792)**	**43,776**
CONTROLLING ENTITY					
Balance at 01 April 2015	-	191,163	191,163	-	191,163
Deficit for the year as previously reported	-	(46,298)	(46,298)	-	(46,298)
Balance at 01 April 2016	**-**	**144,865**	**144,865**	**-**	**144,865**
Deficit for the year	-	(106,960)	(106,960)	-	(106,960)
Balance at 31 March 2017	**-**	**37,905**	**37,905**	**-**	**37,905**

CASH FLOW STATEMENT

FOR THE YEAR ENDED 31 MARCH 2017

	NOTES	ECONOMIC ENTITY 2017 R'000	ECONOMIC ENTITY 2016 R'000	CONTROLLING ENTITY 2017 R'000	CONTROLLING ENTITY 2016 R'000
Cash flows from operating activities					
Receipts					
Grants		465,777	429,310	465,777	429,310
Interest income		15,955	12,371	11,087	11,917
Other receipts		24,323	83,328	24,684	74,244
		506,055	**525,009**	**501,548**	**515,471**
Payments					
Employee costs		(93,356)	(92,699)	(88,674)	(83,557)
Project funding expenses		(450,476)	(334,383)	(450,891)	(335,119)
Other payments		(33,816)	(57,525)	(33,267)	(56,723)
		(577,648)	**(484,607)**	**(572,832)**	**(475,399)**
Net cash flows used in operating activities	23	**(71,593)**	**40,402**	**(71,284)**	**40,072**
Cash flows from investing activities					
Purchase of property and equipment		(6,686)	(7,317)	(3,986)	(7,317)
Disposal of property and equipment		87	-	251	-
Purchase of intangible assets		(3,065)	(43)	(3,065)	-
Repayment of loans received		961	-	961	-
Loans granted		(1,000)	(3,650)	(1,000)	(3,650)
Proceeds on sale of investment		-	9,083	-	9,083
Net cash flows used in investing activities		**(9,703)**	**(1,927)**	**(6,839)**	**(1,884)**
Cash flows from financing activities					
Conditional grants received		57,201	73,080	57,201	73,080
Conditional grants paid		(46,844)	(45,216)	(46,844)	(45,216)
Net cash flows from financing activities		**10,357**	**27,864**	**10,357**	**27,864**
Net decrease in cash and cash equivalents		**(70,939)**	**66,339**	**(67,766)**	**66,052**
Cash and cash equivalents at the beginning of the year		141,137	74,798	132,333	66,281
Cash and cash equivalents at the end of the year	4	**70,198**	**141,137**	**64,567**	**132,333**

STATEMENT OF COMPARISON OF BUDGET AND ACTUAL AMOUNTS

FOR THE YEAR ENDED 31 MARCH 2017

BUDGET ON CASH BASIS CONTROLLING ENTITY	APPROVED BUDGET R'000	ADJUSTMENTS R'000	FINAL BUDGET R'000	ACTUAL AMOUNTS ON COMPARABLE BASIS R'000	DIFFERENCE BETWEEN FINAL BUDGET AND ACTUAL R'000	NOTE
STATEMENT OF FINANCIAL PERFORMANCE						
Revenue						
DST allocation	382,364	-	382,364	382,364	-	
Other income	124,044	(14,000)	110,044	94,483	(15,561)	32.1
Interest received	10,000	5,000	15,000	15,591	591	
Total revenue	**516,408**	**(9,000)**	**507,408**	**492,438**	**(14,970)**	
Expenditure						
Employee related costs	(100,569)	12,500	(88,069)	(88,674)	(605)	
Project funding expenditure	(356,733)	(129,800)	(486,533)	(450,891)	35,642	32.2
Impairment of investments	-	-	-	(14,249)	(14,249)	
Other operating expenses	(59,106)	13,000	(46,106)	(45,584)	522	
Total expenditure	**(516,408)**	**(104,300)**	**(620,708)**	**(599,398)**	**21,310**	
Surplus/(Deficit)	**-**	**(113,300)**	**(113,300)**	**(106,960)**	**6,340**	

ACCOUNTING POLICIES

FOR THE YEAR ENDED 31 MARCH 2017

1. PRESENTATION OF FINANCIAL STATEMENTS

The financial statements have been prepared in accordance with the Standards of Generally Recognised Accounting Practice (GRAP), issued by the Accounting Standards Board in accordance with Section 91(1) of the Public Finance Management Act (Act 1 of 1999).

These financial statements have been prepared on an accrual basis of accounting and are in accordance with historical cost convention as the basis of measurement, unless specified otherwise. They are presented in South African Rand. Amounts are rounded to the nearest thousand.

These accounting policies are consistent with the previous period.

1.1 CONSOLIDATION

Basis of consolidation

Consolidated financial statements are the financial statements of the economic entity presented as those of a single entity.

The consolidated financial statements incorporate the financial statements of the controlling entity and all controlling entities, including special purpose entities, which are controlled by the controlling entity.

Consolidated financial statements are prepared using uniform accounting policies for like transactions and other events in similar circumstances.

Control exists when the controlling entity has the power to govern the financial and operating policies of another entity so as to obtain benefits from its activities.

The revenue and expenses of a controlled entity are included in the consolidated financial statements from the transfer date or acquisition date as defined in the Standards of GRAP on Transfer of functions between entities under common control or Transfer of functions between entities not under common control. The revenue and expenses of the controlled entity are based on the values of the assets and liabilities recognised in the controlling entity's financial statements at the acquisition date.

The financial statements of the controlling entity and its controlled entities used in the preparation of the consolidated financial statements are prepared as of the same date.

When the end of the reporting dates of the controlling entity are different from that of a controlled entity, the controlled entity prepares, for consolidation purposes, additional financial statements as of the same date as the financial statements of the controlling entity unless it is impracticable to do so. When the financial statements of a controlled entity used in the preparation of consolidated financial statements are prepared as of a date different to that of the controlling entity, adjustments are made for the effects of significant transactions or events that occur between that date and the date of the controlling entity's financial statements. In any case, the difference between the end of the reporting date of the controlled entity and that of the controlling entity is no more than three months. The length of the reporting periods and any difference between the ends of the reporting dates is the same from period to period.

Adjustments are made when necessary to the financial statements of the controlled entities to bring their accounting policies in line with those of the controlling entity.

All intra entity transactions, balances, revenues and expenses are eliminated in full on consolidation.

Non controlling interest in the net assets of the economic entity are identified and recognised separately from the controlling entity's interest therein, and are recognised within net assets.

1.1 CONSOLIDATION (CONTINUED)

Changes in a controlling entity's ownership interest in a controlled entity that do not result in a loss of control are accounted for as transactions that affect net assets.

Investment in associates

An associate is an entity, including an unincorporated entity such as a partnership, over which the investor has significant influence and that is neither a controlled entity nor an interest in a joint venture. Significant influence is the power to participate in the financial and operating policy decisions of an activity but is not control or joint control over those policies.

An investment in associate is accounted for using the equity method. Under the equity method, investments in associates are carried in the consolidated statement of financial position at cost adjusted for post-acquisition changes in the economic entity's share of net assets of the associate, less any impairment losses.

Equity method is a method of accounting whereby the investment is initially recognised at cost and adjusted thereafter for the post acquisition change in the economic entity's share of net assets of the investee. The surplus or deficit of the economic entity includes the economic entity's share of the surplus or deficit of the investee.

The economic entity's share of the surplus or deficit of the investee is recognised in surplus or deficit.

Distributions received from an investee reduce the carrying amount of the investment.

The most recent available financial statements of the associate are used by the economic entity in applying the equity method. When the reporting dates of the economic entity and the associate are different, the associate prepares, for the use of the economic entity, financial statements as of the same date as the financial statements of the economic entity unless it is impractical to do so.

When the financial statements of an associate used in applying the equity method are prepared as of a different date from that of the economic entity, adjustments are made for the effects of significant transactions or events that occur between that date and the date of the economic entity's financial statements. In any case, the difference between the end of the reporting dates of the associate and that of the economic entity is no more than three months. The length of the reporting dates and any difference between the ends of the reporting dates is the same from period to period.

The economic entity's financial statements are prepared using uniform accounting policies for like transactions and events in similar circumstances.

Deficits in an associate in excess of the economic entity's interest in that associate are recognised only to the extent that the economic entity has incurred a legal or constructive obligation to make payments on behalf of the associate. If the associate subsequently reports surpluses, the economic entity resumes recognising its share of those surpluses only after its share of the surpluses equals the share of deficits not recognised.

Surpluses and deficits on transactions between the economic entity and an associate are eliminated to the extent of the economic entity's interest therein.

The controlling entity discontinues the use of the equity method from the date that it ceases to have significant influence over an associate and accounts for the investment in accordance with the Standards of GRAP on Financial instruments from that date, unless the associate becomes a controlled entity or a joint venture, in which case it is accounted for as such. The carrying amount of the investment at the date that it ceases to be an associate is regarded as the fair value on initial recognition as a financial asset in accordance with the Standards of GRAP on Financial instruments.

1.2 SIGNIFICANT JUDGEMENTS AND SOURCES OF ESTIMATION UNCERTAINTY

In preparing the financial statements in conformity with GRAP, management is required to make judgements, estimates and assumptions that affect the amounts represented in the financial statements and related disclosures. Use of available information and the application of judgement is inherent in the formation of estimates. Actual results in the future could differ from these estimates which may be material to the financial statements. These estimates and underlying assumptions are reviewed by management on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision effects both current and future periods. Significant judgements include:

Loans and receivables

The economic and controlling entity assesses its loans and receivables for impairment at the end of each reporting period. In determining whether an impairment loss should be recorded in surplus or deficit, the economic entity makes judgements as to whether there is observable data indicating a measurable decrease in the estimated future cash flows from a financial asset.

The impairment for loans and receivables is calculated on an individual basis, based on historical losses, financial position of the entity, repayment terms and the commercial viability of the business.

Impairment testing (non financial assets)

The recoverable amounts of individual assets has been determined based on the higher of value in use calculations and fair values less costs to sell. These calculations require the use of estimates and assumptions. It is reasonably possible that the assumptions used may change, which may then impact on estimations and may then require a material adjustment to the carrying value of tangible assets.

The economic and controlling entity reviews and tests the carrying value of assets when events or changes in circumstances suggest that the carrying amount may not be recoverable. If there are indications that impairment may have occurred, estimates are prepared of expected future cash flows for each asset. Expected future cash flows used to determine the value in use of other assets are inherently uncertain and could materially change over time.

Allowance for doubtful debts

On debtors, an impairment loss is recognised in surplus and deficit when there is objective evidence that it is impaired. The impairment is measured as the difference between the debtors carrying amount and the present value of estimated future cash flows discounted at the effective interest rate, computed at initial recognition.

1.3 PROPERTY AND EQUIPMENT

Property and equipment are tangible non current assets (including infrastructure assets) that are held for use in the production or supply of goods or services, rental to others, or for administrative purposes, and are expected to be used during more than one period.

The cost of an item of property and equipment is recognised as an asset when:

- it is probable that future economic benefits or service potential associated with the item will flow to the economic entity; and
- the cost of the item can be measured reliably.

1.3 PROPERTY AND EQUIPMENT (CONTINUED)

Property and equipment is initially measured at cost.

The cost of an item of property and equipment is the purchase price and other costs attributable to bring the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Trade discounts and rebates are deducted in arriving at the cost.

Where an asset is acquired through a non exchange transaction, its cost is its fair value as at date of acquisition.

Where an item of property and equipment is acquired in exchange for a non monetary asset or monetary assets, or a combination of monetary and non monetary assets, the asset acquired is initially measured at fair value (the cost). If the acquired item's fair value was not determinable, it's deemed cost is the carrying amount of the asset(s) given up.

When significant components of an item of property and equipment have different useful lives, they are accounted for as separate items (major components) of property and equipment.

Costs include costs incurred initially to acquire or construct an item of property and equipment, and costs incurred subsequently to add to, replace part of, or service it. If a replacement cost is recognised in the carrying amount of an item of property and equipment, the carrying amount of the replaced part is derecognised.

Recognition of costs in the carrying amount of an item of property and equipment ceases when the item is in the location and condition necessary for it to be capable of operating in the manner intended by management.

Property and equipment is carried at cost less accumulated depreciation and any impairment losses.

Property and equipment are depreciated on the straight line basis over their expected useful lives to their estimated residual value.

The depreciable amount of an asset is allocated on a systematic basis over its useful life.

Each part of an item of property and equipment with a cost that is significant in relation to the total cost of the item is depreciated separately.

The depreciation method used reflects the pattern in which the asset's future economic benefits or service potential are expected to be consumed by the economic entity. The depreciation method applied to an asset is reviewed at least at each reporting date and, if there has been a significant change in the expected pattern of consumption of the future economic benefits or service potential embodied in the asset, the method is changed to reflect the changed pattern. Such a change is accounted for as a change in an accounting estimate.

The economic entity assesses at each reporting date whether there is any indication that the economic entity's expectations about the residual value and the useful life of an asset have changed since the preceding reporting date. If any such indication exists, the economic entity revises the expected useful life and/or residual value accordingly. The change is accounted for as a change in an accounting estimate.

The depreciation charge for each period is recognised in surplus or deficit unless it is included in the carrying amount of another asset.

Items of property and equipment are derecognised when the asset is disposed of or when there are no further economic benefits or service potential expected from the use of the asset.

The gain or loss arising from the derecognition of an item of property and equipment is included in surplus or deficit when the item is derecognised. The gain or loss arising from the derecognition of an item of property and equipment is determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item.

The economic entity separately discloses expenditure to repair and maintain property and equipment on the face of the statement of financial performance.

1.4 INTANGIBLE ASSETS

An asset is identifiable if it either:

- is separable, i.e. is capable of being separated or divided from an entity and sold, transferred, licensed, rented or exchanged, either individually or together with a related contract, identifiable assets or liability, regardless of whether the entity intends to do so; or
- arises from binding arrangements (including rights from contracts), regardless of whether those rights are transferable or separable from the economic entity or from other rights and obligations.

A binding arrangement describes an arrangement that confers similar rights and obligations on the parties to it, as if it were in the form of a contract.

An intangible asset is recognised when:

- it is probable that the expected future economic benefits or service potential that are attributable to the asset will flow to the economic entity; and
- the cost or fair value of the asset can be measured reliably.

The economic entity assesses the probability of expected future economic benefits or service potential using reasonable and supportable assumptions that represent management's best estimate of the set of economic conditions that will exist over the useful life of the asset.

Where an intangible asset is acquired through a non exchange transaction, its initial cost at the date of acquisition is measured at its fair value as at that date.

Expenditure on research (or on the research phase of an internal project) is recognised as an expense when it is incurred.

Intangible assets are carried at cost less any accumulated amortisation and any impairment losses.

An intangible asset is regarded as having an indefinite useful life when, based on all relevant factors, there is no foreseeable limit to the period over which the asset is expected to generate net cash inflows or service potential. Amortisation is not provided for these intangible assets, but they are tested for impairment annually and whenever there is an indication that the asset may be impaired. For all other intangible assets amortisation is provided on a straight line basis over their useful life.

The amortisation period and the amortisation method for intangible assets are reviewed at each reporting date.

Amortisation is provided to write down the intangible assets, on a straight line basis, to their residual values as follows:

ITEM	USEFUL LIFE
Computer software	2 years

1.5 INVESTMENTS IN CONTROLLED ENTITIES

Controlling entity financial statements

In the entity's separate financial statements, investments in controlled entities are carried at cost.

The entity applies the same accounting for each category of investment.

The entity recognises a dividend or similar distribution in surplus or deficit in its separate financial statements when its right to receive the dividend or similar distribution is established.

1.5 INVESTMENTS IN CONTROLLED ENTITIES (CONTINUED)

Investments in controlled entities that are accounted for in accordance with the accounting policy on Financial instruments in the consolidated financial statements, are accounted for in the same way in the controlling entity's separate financial statements.

1.6 INVESTMENTS IN ASSOCIATES

Controlling entity financial statements

An investment in an associate is carried at cost.

The entity applies the same accounting for each category of investment.

The entity recognises a dividend or similar distribution in surplus or deficit in its separate financial statements when its right to receive the dividend or similar distribution is established.

1.7 FINANCIAL INSTRUMENTS

Classification

The entity has the following types of financial assets (classes and category) as reflected on the face of the statement of financial position or in the notes thereto:

CLASS	CATEGORY
Investment in controlled entities	Financial assets at cost
Investment in associates	Financial assets at cost
Other financial assets	Financial assets at cost
Cash and cash equivalents	Financial assets at amortised cost
Loans and receivables	Financial assets at amortised cost

The entity has the following types of financial liabilities (classes and category) as reflected on the face of the statement of financial position or in the notes thereto:

CLASS	CATEGORY
Trade and other payables	Financial liability measured at amortised cost
Finance lease obligation	Financial liability measured at amortised cost
Loans from shareholders	Financial liability measured at amortised cost

Initial recognition

The entity recognises a financial asset or a financial liability in its statement of financial position when the entity becomes a party to the contractual provisions of the instrument.

The entity recognises financial assets using trade date accounting.

Initial measurement of financial assets and financial liabilities

1.7 FINANCIAL INSTRUMENTS (CONTINUED)

The entity measures a financial asset and financial liability initially at its fair value plus transaction costs that are directly attributable to the acquisition or issue of the financial asset or financial liability.

The entity first assesses whether the substance of a concessionary loan is in fact a loan. On initial recognition, the entity analyses a concessionary loan into its component parts and accounts for each component separately. The entity accounts for that part of a concessionary loan that is a social benefit in accordance with the Framework for the Preparation and Presentation of Financial Statements, where it is the issuer of the loan.

Subsequent measurement of financial assets and financial liabilities

The entity measures all financial assets and financial liabilities after initial recognition using the following categories:

- Financial instruments at amortised cost.
- Financial instruments at cost.

All financial assets are subject to an impairment review.

Reclassification

The entity does not reclassify a financial instrument while it is issued or held unless it is:

- a combined instrument that is required to be measured at fair value; or
- an investment in a residual interest that meets the requirements for reclassification.

Gains and losses

For financial assets and financial liabilities measured at amortised cost or cost, a gain or loss is recognised in surplus or deficit when the financial asset or financial liability is derecognised or impaired, or through the amortisation process.

Impairment and uncollectibility of financial assets

The entity assesses at the end of each reporting period whether there is any objective evidence that a financial asset or group of financial assets is impaired. The impairment is calculated on an individual basis, based on historical losses, financial position of the entity, repayment terms and the commercial viability of the business.

Financial assets measured at amortised cost:

If there is objective evidence that an impairment loss on financial assets measured at amortised cost has been incurred, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the financial asset's original effective interest rate. The carrying amount of the asset is reduced through the use of an allowance account. The amount of the loss is recognised in surplus or deficit.

1.7 FINANCIAL INSTRUMENTS (CONTINUED)

If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised, the previously recognised impairment loss is reversed by adjusting an allowance account. The reversal does not result in a carrying amount of the financial asset that exceeds what the amortised cost would have been had the impairment not been recognised at the date the impairment is reversed. The amount of the reversal is recognised in surplus or deficit.

Financial assets measured at cost:

If there is objective evidence that an impairment loss has been incurred on an investment in a residual interest that is not measured at fair value because its fair value cannot be measured reliably, the amount of the impairment loss is measured as the difference between the carrying amount of the financial asset and the present value of estimated future cash flows discounted at the current market rate of return for a similar financial asset. Such impairment losses are not reversed.

Derecognition

Financial assets

The entity derecognises financial assets using trade date accounting.

The entity derecognises a financial asset only when:

- the contractual rights to the cash flows from the financial asset expire, are settled or waived; or
- the entity transfers to another party substantially all of the risks and rewards of ownership of the financial asset.

On derecognition of a financial asset in its entirety, the difference between the carrying amount and the sum of the consideration received is recognised in surplus or deficit.

If a transfer does not result in derecognition because the entity has retained substantially all the risks and rewards of ownership of the transferred asset, the entity continues to recognise the transferred asset in its entirety and recognise a financial liability for the consideration received. In subsequent periods, the entity recognises any revenue on the transferred asset and any expense incurred on the financial liability. Neither the asset, and the associated liability nor the revenue, and the associated expenses are offset.

Financial liabilities

The entity derecognises a financial liability (or a part of a financial liability) from its statement of financial position when it is extinguished — i.e. when the obligation specified in the contract is discharged, cancelled, expires or waived.

The difference between the carrying amount of a financial liability (or part of a financial liability) extinguished or transferred to another party and the consideration paid, including any non cash assets transferred or liabilities assumed, is recognised in surplus or deficit. Any liabilities that are waived, forgiven or assumed by another entity by way of a non exchange transaction are accounted for in accordance with the Standards of GRAP on Revenue from Non exchange Transactions (Taxes and Transfers).

1.7 FINANCIAL INSTRUMENTS (CONTINUED)

Presentation

Interest relating to a financial instrument or a component that is a financial liability is recognised as revenue or expense in surplus or deficit.

Dividends or similar distributions relating to a financial instrument or a component that is a financial liability is recognised as revenue or expense in surplus or deficit.

Losses and gains relating to a financial instrument or a component that is a financial liability is recognised as revenue or expense in surplus or deficit.

Distributions to holders of residual interests are recognised by the entity directly in net assets. Transaction costs incurred on residual interests are accounted for as a deduction from net assets.

A financial asset and a financial liability are only offset and the net amount presented in the statement of financial position when the entity currently has a legally enforceable right to set off the recognised amounts and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

In accounting for a transfer of a financial asset that does not qualify for derecognition, the entity does not offset the transferred asset and the associated liability.

1.8 LEASES

A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership. A lease is classified as an operating lease if it does not transfer substantially all the risks and rewards incidental to ownership.

When a lease includes both land and building elements, the entity assesses the classification of each element separately.

Finance leases - lessee

Finance leases are recognised as assets and liabilities in the statement of financial position at amounts equal to the fair value of the leased property or, if lower, the present value of the minimum lease payments.

The discount rate used in calculating the present value of the minimum lease payments is the interest rate implicit in the lease.

Minimum lease payments are apportioned between the finance charge and reduction of the outstanding liability. The finance charge is allocated to each period during the lease term so as to produce a constant periodic rate on the remaining balance of the liability.

Operating leases - lessee

Operating lease payments are recognised as an expense on a straight line basis over the lease term. The difference between the amounts recognised as an expense and the contractual payments are recognised in the statement of financial position as an operating lease asset or liability.

1.9 BUDGET INFORMATION

Economic entity is typically subject to budgetary limits in the form of appropriations or budget authorisations which is given effect through authorising appropriation via a vote.

General purpose financial reporting by the economic entity shall provide information on whether resources were obtained and used in accordance with the legally adopted budget. The standard applies to entities that are required or elect to make publicly available their approved budgets, in the economic entity's case this principle only applies to the budget of the controlled entity.

The approved budget is prepared on an accrual basis and presented by economic classification.

The approved budget covers the financial period from 1 April 2016 to 31 March 2017.

The financial statements and the budget are on the same basis of accounting therefore a comparison with the budgeted amounts for the reporting period have been included in the statement of comparison of budget and actual amounts.

1.10 RELATED PARTIES

The economic entity operates in an economic sector currently dominated by entities directly or indirectly owned by the South African Government. As a consequence of the constitutional independence of the three spheres of government in South Africa, only entities within the national sphere of government are considered to be related parties.

Management are those persons responsible for planning, directing and controlling the activities of the economic entity, including those charged with the governance of the economic entity in accordance with legislation, in instances where they are required to perform such functions.

1.11 EMPLOYEE BENEFITS

Employee benefits are all forms of consideration given by an entity in exchange for services rendered by employees.

Termination benefits are employee benefits payable as a result of either:

- an entity's decision to terminate an employee's employment before the normal retirement date; or
- an employee's decision to accept voluntary redundancy in exchange for those benefits.

Short term employee benefits

Short term employee benefits are employee benefits (other than termination benefits) that are due to be settled within twelve months after the end of the period in which the employees render the related service.

Short term employee benefits include items such as:

- wages, salaries;
- short term compensated absences (such as paid annual leave and paid sick leave) where the compensation for the absences is due to be settled within twelve months after the end of the reporting period in which the employees render the related employee service;

1.11 EMPLOYEE BENEFITS (CONTINUED)

- bonus, incentive and performance related payments payable within twelve months after the end of the reporting period in which the employees render the related service; and
- non monetary benefits (for example, medical care, and free or subsidised goods or services such as housing, cars and cellphones) for current employees.

The expected cost of compensated absences is recognised as an expense as the employees render services that increase their entitlement or, in the case of non accumulating absences, when the absence occurs. The entity measures the expected cost of accumulating compensated absences as the additional amount that the entity expects to pay as a result of the unused entitlement that has accumulated at the reporting date.

The entity recognises the expected cost of bonus, incentive and performance related payments as accruals when the entity has a present legal or constructive obligation to make such payments as a result of past events and a reliable estimate of the obligation can be made. A present obligation exists when the entity has no realistic alternative but to make the payments.

Post employment benefits: Defined contribution plans

Defined contribution plans are post employment benefit plans under which an entity pays fixed contributions into a separate entity (a fund) and will have no legal or constructive obligation to pay further contributions if the fund does not hold sufficient assets to pay all employee benefits relating to employee service in the current and prior periods. The entity contributes to a pension fund under this definition.

1.12 CONTINGENCIES

Contingent assets and contingent liabilities are not recognised in the statement of financial position, but are disclosed as a note to the financial statements.

1.13 REVENUE FROM EXCHANGE TRANSACTIONS

Revenue is the gross inflow of economic benefits or service potential during the reporting period when those inflows result in an increase in net assets, other than increases relating to contributions from owners.

Exchange transactions are transactions in which one entity receives assets or services, or has liabilities extinguished, and directly gives approximately equal value (primarily in the form of cash, goods, services or use of assets) to another entity in exchange.

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.

Revenue from exchange transactions include interest, royalties and dividends earned as well as profit on sale of assets.

Measurement

Revenue is measured at the fair value of the consideration received or receivable, net of trade discounts and volume rebates.

1.13 REVENUE FROM EXCHANGE TRANSACTIONS (CONTINUED)

Interest, royalties and dividends

Revenue arising from the use by others of entity assets yielding interest, royalties and dividends is recognised when:

- It is probable that the economic benefits or service potential associated with the transaction will flow to the entity, and
- The amount of the revenue can be measured reliably.

Interest is recognised, in surplus or deficit, using the effective interest method.

Royalties are recognised in surplus or deficit, as they are earned in accordance with the substance of the relevant agreements.

Dividends, or their equivalents are recognised, in surplus or deficit, when the entity's right to receive payment has been established.

1.14 REVENUE FROM NON EXCHANGE TRANSACTIONS

Revenue comprises gross inflows of economic benefits or service potential received and receivable by an entity, which represents an increase in net assets, other than increases relating to contributions from owners.

Conditions on transferred assets are stipulations that specify that the future economic benefits or service potential embodied in the asset is required to be consumed by the recipient as specified or future economic benefits or service potential must be returned to the transferor.

Control of an asset arises when the entity can use or otherwise benefit from the asset in pursuit of its objectives and can exclude or otherwise regulate the access of others to that benefit.

Exchange transactions are transactions in which one entity receives assets or services, or has liabilities extinguished, and directly gives approximately equal value (primarily in the form of cash, goods, services, or use of assets) to another entity in exchange.

Non exchange transactions are transactions that are not exchange transactions. In a non exchange transaction, an entity either receives value from another entity without directly giving approximately equal value in exchange, or gives value to another entity without directly receiving approximately equal value in exchange.

Restrictions on transferred assets are stipulations that limit or direct the purposes for which a transferred asset may be used, but do not specify that future economic benefits or service potential is required to be returned to the transferor if not deployed as specified.

Stipulations on transferred assets are terms in laws or regulation, or a binding arrangement, imposed upon the use of a transferred asset by entities external to the reporting entity.

Transfers are inflows of future economic benefits or service potential from non exchange transactions, other than taxes.

Recognition

An inflow of resources from a non exchange transaction recognised as an asset is recognised as revenue, except to the extent that a liability is also recognised in respect of the same inflow.

1.14 REVENUE FROM NON EXCHANGE TRANSACTIONS (CONTINUED)

As the entity satisfies a present obligation recognised as a liability in respect of an inflow of resources from a non exchange transaction recognised as an asset, it reduces the carrying amount of the liability recognised and recognises an amount of revenue equal to that reduction.

Measurement

Revenue from a non exchange transaction is measured at the amount of the increase in net assets recognised by the entity.

When, as a result of a non exchange transaction, the entity recognises an asset, it also recognises revenue equivalent to the amount of the asset measured at its fair value as at the date of acquisition, unless it is also required to recognise a liability. Where a liability is required to be recognised it will be measured as the best estimate of the amount required to settle the obligation at the reporting date, and the amount of the increase in net assets, if any, recognised as revenue. When a liability is subsequently reduced, because the taxable event occurs or a condition is satisfied, the amount of the reduction in the liability is recognised as revenue.

1.15 INVESTMENT INCOME

Investment income is recognised on a time proportion basis using the effective interest method.

1.16 FINANCE COSTS

Borrowing costs are interest and other expenses incurred by an entity in connection with the borrowing of funds.

Borrowing costs are recognised as an expense in the period in which they are incurred.

1.17 IRREGULAR AND FRUITLESS AND WASTEFUL EXPENDITURE

Irregular expenditure means expenditure incurred in contravention of, or not in accordance with, requirements of any applicable legislation, including the PFMA.

Fruitless and wasteful expenditure means expenditure that was made in vain and would have been avoided had reasonable care been exercised.

All irregular and fruitless and wasteful expenditures are charged against the respective class of expenditure in the statement of financial performance in the period in which they are incurred and disclosed in a note in the period in which it is identified.

2. STANDARDS AND INTERPRETATIONS

2.1 STANDARDS AND INTERPRETATIONS ISSUED, BUT NOT YET EFFECTIVE

The economic entity has not applied the following standards and interpretations, which have been published and are mandatory for the economic entity's accounting periods beginning on or after 01 April 2017 or later periods:

STANDARD/ INTERPRETATION:	EFFECTIVE DATE: YEARS BEGINNING ON OR AFTER	EXPECTED IMPACT:
GRAP 20: Related parties	01 April 2017	Unlikely there will be a material impact

3. TRADE AND OTHER RECEIVABLES

	ECONOMIC ENTITY		CONTROLLING ENTITY	
	2017 R'000	2016 R'000	2017 R'000	2016 R'000
Trade receivables	4,031	3,415	2,925	2,045
Deposits	486	444	364	364
Other receivables	1,369	12,879	128	12,604
	5,886	**16,738**	**3,417**	**15,013**

FAIR VALUE OF TRADE AND OTHER RECEIVABLES

The entity is of the opinion that the carrying value approximates the fair value of trade and other receivables at period end, due to the short term nature of these balances.

TRADE AND OTHER RECEIVABLES PAST DUE BUT NOT IMPAIRED

Trade and other receivables which are less than 3 months past due are not considered to be impaired.

The ageing of amounts past due but not impaired is as follows:

3 months past due	2,160	429	1,889	14

TRADE AND OTHER RECEIVABLES IMPAIRED

The amount of the provision for impairment is R 322,191 as of 31 March 2017 (2016: R 311,084).

The ageing of these balances are as follows:

3 to 6 months	11	-	11	-
Over 6 months	311	429	311	311

RECONCILIATION OF PROVISION FOR IMPAIRMENT OF TRADE AND OTHER RECEIVABLES

Opening balance	-	311	311	311
Provision for impairment	-	-	11	-
	322	**311**	**322**	**311**

The creation and release of the provision for impaired receivables has been included in operating expenses in the statement of financial performance. Amounts charged to the allowance account are generally written off when the recovery of such amounts is improbable.

No collateral is held as security.

4. CASH AND CASH EQUIVALENTS

	ECONOMIC ENTITY		CONTROLLING ENTITY	
	2017 R'000	2016 R'000	2017 R'000	2016 R'000
Cash on hand	14	6	14	6
Bank balances	70,184	141,131	64,553	132,327
	70,198	**141,137**	**64,567**	**132,333**

The R 64,567,432 cash balance in the Controlling entity on 31 March 2017 is committed in full through conditional grants and trade and other payables. Refer to note 12 and 14 for details.

The entity is of the opinion that the carrying value approximates the fair value of cash and cash equivalents at period end, due to the short term nature.

5. PROPERTY AND EQUIPMENT

	2017			2016		
ECONOMIC ENTITY	COST R'000	ACCUMULATED DEPRECIATION / IMPAIRMENT R'000	CARRYING VALUE R'000	COST R'000	ACCUMULATED DEPRECIATION / IMPAIRMENT R'000	CARRYING VALUE R'000
Land and buildings	4,376	(945)	3,431	1,676	(861)	815
Furniture and office equipment	29,263	(21,486)	7,777	27,637	(18,957)	8,680
Motor vehicles	303	(303)	-	303	(303)	-
Leasehold improvements	15,300	(14,234)	1,066	14,214	(14,185)	29
Other property and equipment	7,374	(7,374)	-	7,374	(7,281)	93
Laboratory equipment	12,410	(11,127)	1,283	13,121	(11,630)	1,491
Total	**69,026**	**(55,469)**	**13,557**	**64,325**	**(53,217)**	**11,108**
CONTROLLING ENTITY						
Land and buildings	2,700	-	2,700	2,700	-	2,700
Furniture and office equipment	27,949	(20,358)	7,591	26,251	(17,844)	8,407
Motor vehicles	299	(299)	-	299	(299)	-
Leasehold improvements	15,300	(14,234)	1,066	14,214	(14,185)	29
Laboratory equipment	12,161	(11,048)	1,113	12,872	(11,478)	1,394
Total	**58,409**	**(45,939)**	**12,470**	**56,336**	**(43,806)**	**12,530**

5. PROPERTY AND EQUIPMENT (CONTINUED)

RECONCILIATION OF PROPERTY AND EQUIPMENT: ECONOMIC ENTITY - 2017

	OPENING BALANCE R'000	ADDITIONS R'000	DISPOSALS R'000	OTHER CHANGES, MOVEMENTS R'000	DEPRECIATION R'000	CLOSING BALANCE R'000
Land and buildings	815	2,700	-	-	(84)	3,431
Furniture and office equipment	8,680	2,357	(156)	-	(3,104)	7,777
Leasehold improvements	29	1,087	-	-	(50)	1,066
Other property, plant and equipment	93	-	-	12	(105)	-
Laboratory equipment	1,491	542	(95)	152	(807)	1,283
	11,108	**6,686**	**(251)**	**164**	**(4,150)**	**13,557**

RECONCILIATION OF PROPERTY AND EQUIPMENT: ECONOMIC ENTITY - 2016

	OPENING BALANCE R'000	ADDITIONS R'000	DISPOSALS R'000	OTHER CHANGES, MOVEMENTS R'000	DEPRECIATION R'000	CLOSING BALANCE R'000
Land and buildings	934	-	-	-	(119)	815
Furniture and office equipment	5,335	7,299	(808)	762	(3,908)	8,680
Motor vehicles	16	-	(9)	-	(7)	-
Leasehold improvements	2,705	-	-	-	(2,676)	29
Other property, plant and equipment	173	-	-	-	(80)	93
Laboratory equipment	2,845	18	-	-	(1,372)	1,491
	12,008	**7,317**	**(817)**	**762**	**(8,162)**	**11,108**

RECONCILIATION OF PROPERTY AND EQUIPMENT: CONTROLLING ENTITY - 2017

	OPENING BALANCE R'000	ADDITIONS R'000	DISPOSALS R'000	DEPRECIATION R'000	CLOSING BALANCE R'000
Land and buildings	2,700	-	-	-	2,700
Furniture and office equipment	8,407	2,357	(156)	(3,017)	7,591
Leasehold improvements	29	1,087	-	(50)	1,066
Laboratory equipment	1,394	542	(95)	(728)	1,113
	12,530	**3,986**	**(251)**	**(3,795)**	**12,470**

5. PROPERTY AND EQUIPMENT (CONTINUED)

RECONCILIATION OF PROPERTY AND EQUIPMENT: CONTROLLING ENTITY - 2016

	OPENING BALANCE R'000	ADDITIONS R'000	DISPOSALS R'000	OTHER CHANGES, MOVEMENTS R'000	DEPRECIATION R'000	CLOSING BALANCE R'000
Buildings	2,700	-	-	-	-	2,700
Furniture and office equipment	4,917	7,299	(808)	762	(3,763)	8,407
Motor vehicles	15	-	(9)	-	(6)	-
Leasehold improvements	2,705	-	-	-	(2,676)	29
Laboratory equipment	2,075	18	-	-	(699)	1,394
	12,412	**7,317**	**(817)**	**762**	**(7,144)**	**12,530**

PLEDGED AS SECURITY

None of the assets above have been pledged as security or have restrictions on title.

The carrying value of assets included in furniture and office equipment under finance leases: R 60,555 (2016: R 186,477). (See note 11)

Depreciation related to technology platform programme is included in project expenditure.

DEPRECIATION RATES

Item	Depreciation method	Average useful life
Buildings	Straight line	20 - 25 years
Furniture and fixtures	Straight line	2 - 6 years
Motor vehicles	Straight line	4 years
Leasehold improvements	Straight line	Shorter of the period of the lease agreement or the useful life
Other property, plant and equipment	Straight line	5 - 10 years
Laboratory equipment	Straight line	6 - 8 years

DETAILS OF PROPERTIES

	ECONOMIC ENTITY		CONTROLLING ENTITY	
Portion 84, Moerasrivier NO 233 division George, Eastern Cape	2017 R'000	2016 R'000	2017 R'000	2016 R'000
- Purchase price: 20/03/2013	-	-	2,700	-
- Decrease in Valuation 07/04/2017	-	-	(192)	-
	-	**-**	**2,508**	**-**

6. INTANGIBLE ASSETS

ECONOMIC ENTITY	2017 COST R'000	2017 ACCUMULATED AMORTISATION / IMPAIRMENT R'000	2017 CARRYING VALUE R'000	2016 COST R'000	2016 ACCUMULATED AMORTISATION / IMPAIRMENT R'000	2016 CARRYING VALUE R'000
Computer software	7,190	(3,731)	3,459	4,126	(3,265)	861

CONTROLLING ENTITY	2017 COST R'000	2017 ACCUMULATED AMORTISATION / IMPAIRMENT R'000	2017 CARRYING VALUE R'000	2016 COST R'000	2016 ACCUMULATED AMORTISATION / IMPAIRMENT R'000	2016 CARRYING VALUE R'000
Computer software	6,521	(3,099)	3,422	3,457	(2,641)	816

RECONCILIATION OF INTANGIBLE ASSETS: ECONOMIC ENTITY - 2017	OPENING BALANCE R'000	ADDITIONS R'000	AMORTISATION R'000	TOTAL R'000
Computer software	861	3,065	(467)	3,459

RECONCILIATION OF INTANGIBLE ASSETS: ECONOMIC ENTITY - 2016	OPENING BALANCE R'000	ADDITIONS R'000	AMORTISATION R'000	TOTAL R'000
Computer software	1,236	43	(418)	861

RECONCILIATION OF INTANGIBLE ASSETS: CONTROLLING ENTITY - 2017	OPENING BALANCE R'000	ADDITIONS R'000	AMORTISATION R'000	TOTAL R'000
Computer software	861	3,065	(459)	3,422

RECONCILIATION OF INTANGIBLE ASSETS: CONTROLLING ENTITY - 2016	OPENING BALANCE R'000	AMORTISATION R'000	TOTAL R'000
Computer software	1,228	(412)	816

RESTRICTED TITLE

None of the above intangible assets have restrictions in title or have been pledged as security.

7. INVESTMENTS IN CONTROLLED ENTITIES

NAME OF COMPANY	REPORTING PERIOD END	% HOLDING 2017	% HOLDING 2016	CARRYING AMOUNT 2017 R'000	CARRYING AMOUNT 2016 R'000
Active investments					
African Clinical Research Organisation (Pty) Ltd	31 Mar	83.01%	83.01%	-	-
Bio2Biz (Pty) Ltd	31 Dec	58.75%	58.75%	-	-
Investments in deregistration/liquidation					
Capelands Nurseries (Pty) Ltd	31 Mar	100.00%	100.00%	-	-
Ithemba Pharmaceuticals (Pty) Ltd	31 Dec	50.10%	50.10%	-	-
Natural Carotenoids South African (Pty) Ltd	31 Jul	98.83%	98.83%	-	-
				-	-

The carrying amounts of controlled entities are shown net of impairment losses.

CONTROLLED ENTITIES WITH DIFFERENT REPORTING DATES FROM THAT OF THE CONTROLLING ENTITY

A number of controlled entities have reporting dates that differ from the controlling entity. If the reporting date is within a 3 month period of the reporting period of the controlling entity, the annual financial statements for that period will be used in consolidating the results of the entity. The management accounts for the entities were reviewed in order to ensure that no significant changes took place between the reporting date and 31 March, 2017.

Where the reporting dates differ by more than 3 months, a review of the financial affairs of the entity is performed up to the reporting date of the controlling entity and this is used for consolidation purposes.

8. INVESTMENTS IN ASSOCIATES

NAME OF ENTITY	REPORTING PERIOD END	% HOLDING 2017	% HOLDING 2016	EQUITY ACCOUNTED AMOUNT 2017 R'000	EQUITY ACCOUNTED AMOUNT 2016 R'000	CARRYING AMOUNT 2017 R'000	CARRYING AMOUNT 2016 R'000
Active Investments							
Blue Cube Systems (Pty) Ltd	31 Dec	25.00%	25.00%	5,605	5,718	3,013	3,013
Lifeassay (Pty) Ltd	28 Feb	26.00%	26.00%	-	-	-	-
Ribotech (Pty) Ltd	31 Aug	35.00%	35.00%	-	-	-	-
Investments in deregistration/liquidation							
Bio Career Technology (Pty) Ltd	28 Feb	51.00%	51.00%	-	-	-	-
Commercial Aquaculture (Pty) Ltd	28 Feb	34.00%	34.00%	-	-	-	-
Control Maize Trading (Pty) Ltd	28 Feb	51.00%	51.00%	-	-	-	-
Edgi Tech (Pty) Ltd	28 Feb	26.00%	26.00%	-	-	-	-
Eyeborn (Pty) Ltd	31 Mar	25.00%	25.00%	-	-	-	-
Femtech (Pty) Ltd	28 Feb	69.00%	69.00%	-	-	-	-
Geratech Zirconium Benefication (Pty) Ltd	28 Feb	48.02%	48.02%	-	-	-	-
Jerihsa Medical (Pty) Ltd *	28 Feb	-%	31.00%	-	-	-	-
Mycoroot (Pty) Ltd	28 Feb	25.00%	25.00%	-	-	-	-
Niocad (Pty) Ltd	28 Feb	22.00%	22.00%	-	-	-	-
Nkomazi Chemicals (Pty) Ltd	30 Jun	35.74%	35.74%	-	-	-	-
Nulane Investment 219 (Pty) Ltd*	28 Feb	-%	26.00%	-	-	-	-
Optimal Energy (Pty) Ltd	28 Feb	33.80%	33.80%	-	-	-	-
Robonica (Pty) Ltd **	31 Mar	-%	41.00%	-	-	-	-
Silverlake Trading (Pty) Ltd	28 Feb	28.00%	28.00%	-	-	-	-
Stellenbosch Wind Technologies (Pty) Ltd	31 Mar	26.00%	26.00%	-	-	-	-
Tenacent SA (Pty) Ltd	28 Feb	20.00%	20.00%	-	-	-	-
				5,605	**5,718**	**3,013**	**3,013**

The carrying amounts of investments in associates are shown net of impairment losses.

Although the controlling entity holds more than 50% of the voting powers in some of the entities, the investment is not considered a controlled entity because the controlling entity does not have control over the entity due to voting rights/ appointment powers of directors. These investments are therefore classified as investments in associates.

* During 2016/2017 the controlling entity sold its shares in these companies in return for a royalty from date of commercialisation.

** The controlling entity received a final liquidation dividend during 2016/2017.

8. INVESTMENTS IN ASSOCIATES (CONTINUED)

	ECONOMIC ENTITY		CONTROLLING ENTITY	
	2017 R'000	2016 R'000	2017 R'000	2016 R'000
MOVEMENTS IN CARRYING VALUE				
Opening balance	5,718	21,242	3,013	15,401
Share of (deficit)/surplus	(113)	8,164	-	-
Sale of investment in associate	-	(23,688)	-	(12,388)
	5,605	**5,718**	**3,013**	**3,013**

PRINCIPAL ACTIVITIES

Legal name	Principal activity
Blue Cube Systems (Pty) Ltd	Development of real time IT systems for Mining applications
LifeAssay Diagnostics (Pty) Ltd	Manufacturer of vitro diagnostics test kits
Ribotech (Pty) Ltd	Manufacturing of rHOG CSF. Product is used in cancer treatment

All the above entities are incorporated in South Africa.

SUMMARY OF CONTROLLING ENTITY'S INTEREST IN ASSOCIATES

Total assets	42,723	131,228
Total liabilities	(154,567)	(194,888)
Net assets/(liabilities)	(111,844)	(63,660)
Revenue	35,879	56,746
Surplus/(deficit)	(10,616)	(6,880)

ASSOCIATES WITH DIFFERENT REPORTING DATES

A number of associate entities have reporting dates that differ from that of the controlling entity. If the reporting date is within a 3 month period of the reporting period end of the controlling entity, the annual financial statements for that period will be used in the results of the entity using equity accounting. The management accounts for the entities were reviewed in order to ensure that no significant changes took place between reporting date and 31 March, 2017.

UNRECOGNISED SHARE OF LOSSES OF ASSOCIATES

The economic entity has discontinued recognising its share of the deficits of associate companies, as the investment is held at R nil and the economic entity has no obligation for any deficits of the associate. The total unrecognised deficits for the current period amount to R 3,697,116 (2016 : R 5,764,853). The accumulated unrecognised deficits to date amount to R 51,572,258 (2016: R 52,584,299).

9. LOANS AND RECEIVABLES	ECONOMIC ENTITY 2017 R'000	ECONOMIC ENTITY 2016 R'000	CONTROLLING ENTITY 2017 R'000	CONTROLLING ENTITY 2016 R'000
OTHER ENTITIES				
Agriprotein (Pty) Ltd *	-	13,237	-	13,237
The loan bears interest at prime and is repayable on demand after 24 months from first disbursement over a period of 60 months.				
Xsit (Pty) Ltd	5,029	5,989	5,029	5,989
The loan has fixed repayment terms over a period of 5 years and accrues interest at prime plus 1%				
Xsit (Pty) Ltd - current portion	(1,577)	-	(1,577)	-
The loan has fixed repayment terms over a period of 5 years and accrues interest at prime plus 1%				
	3,452	**19,226**	**3,452**	**19,226**

* This loan was impaired during the current financial year in line with the controlling entity's accounting policy.

Carrying amounts of loans and receivables are shown net of impairment losses.

LOANS TO ASSOCIATES AND OTHER ENTITIES IMPAIRED

As of 31 March 2017, loans to associates and other entities of R 175,279,685 (2016: R163,811,540) were impaired and provided for. The movement from prior year to current year includes the deregistration of previously impaired investee companies as well as current year impairment.

The creation and release of provision for impaired receivables has been included in operating expenses in the statement of financial performance. Amounts charged to the allowance account are generally written off when the recovery of such amounts is improbable.

The economic entity does not hold collateral as security.

10. OTHER FINANCIAL ASSETS

DESIGNATED AT FAIR VALUE				
The Biologicals and Vaccines Institute of SA (Pty) Ltd	26,300	26,300	26,300	26,300

11. FINANCE LEASE OBLIGATION

MINIMUM LEASE PAYMENTS DUE				
• within one year	61	194	61	194
PRESENT VALUE OF MINIMUM LEASE PAYMENTS DUE				
• within one year	61	194	61	194

It is the economic entity's policy to lease certain office equipment under finance leases.

The average lease term is 5 years and the average effective borrowing rate was 0% (2016: 15%).

	ECONOMIC ENTITY		CONTROLLING ENTITY	
12. TRADE AND OTHER PAYABLES	2017 R'000	2016 R'000	2017 R'000	2016 R'000
Trade payables	22,913	14,255	21,343	12,978
Employee related accruals	7,228	6,222	7,026	5,739
Other payables	1,915	2,399	522	2,399
	32,056	**22,876**	**28,891**	**21,116**

13. LOANS FROM SHAREHOLDERS

Loans from shareholders	2,762	2,762	-	-

These loans are non interest bearing and have no fixed repayment terms.

14. COMMITTED CONDITIONAL GRANTS AND RECEIPTS

UNSPENT CONDITIONAL GRANTS AND RECEIPTS

Advanced manufacturing technology strategy	3,531	3,531	3,531	3,531
Africa programme	1,001	-	1,001	-
SABDI (Biodesign initiative programme)	18,384	10,031	18,384	10,031
BIO entrepreneurship programme	52	128	52	128
Bio fuels	3,597	8,047	3,597	8,047
Biosafety communication strategy	1,251	1,530	1,251	1,530
DST KZN regional innovation strategy	-	1,097	-	1,097
Fibrelux	28	-	28	-
ICT flagship programme	3,000	3,000	3,000	3,000
Innovation bridge	4,293	7,081	4,293	7,081
Innovation for inclusive development	1,923	-	1,923	-
Limpopo agri food technology station	100	93	100	93
NRF newton fund	505	2,000	505	2,000
Sugarcane	1,960	1,822	1,960	1,822
Technology station programme	14,327	90	14,327	90
Technology station expansion programme	491	5,636	491	5,636
	54,443	**44,086**	**54,443**	**44,086**

15. REVENUE FROM NON EXCHANGE TRANSACTIONS

DST allocation received during the year	382,364	385,188	382,364	385,188
Committed conditional grant funding recognised for:				
Advanced manufacturing technology strategy	-	391	-	391
BIO entrepreneurship programme	89	521	89	521
Bio fuels	4,823	66	4,823	66
Biosafety communication strategy	389	521	389	521
CHUMA (NRF Newton Fund)	1,495	-	1,495	-
Fibrelux	569	-	569	-
Innovation bridge	3,314	-	3,314	-
SABDI (Biodesign initiative programme)	61	-	61	-
Seed fund programme	10,082	5,000	10,082	5,000
Technology station programme	62,591	37,623	62,591	37,623
	465,777	**429,310**	**465,777**	**429,310**

16. OTHER INCOME	ECONOMIC ENTITY 2017 R'000	ECONOMIC ENTITY 2016 R'000	CONTROLLING ENTITY 2017 R'000	CONTROLLING ENTITY 2016 R'000
Royalties received	2,159	5,652	2,159	5,652
Sundry receipts	5,469	20,004	737	738
EWSETA funding received	3,075	3,075	3,075	3,075
NRF funding received	-	700	-	700
Profit on disposal of assets	384	61	384	61
Profit/(loss) on sale of investment	253	(17,653)	253	3,695
Limpopo agri food technology station	845	2,870	845	2,870
Reversal of provision	2,170	-	2,170	-
UNIDO funding received	1,464	1,189	1,464	1,189
	15,819	**15,898**	**11,087**	**17,980**

17. INVESTMENT INCOME

INTEREST RECEIVED

Interest earned - Loans and receivables	-	5,439	-	5,439
Interest earned - Bank	15,315	11,743	14,951	11,289
Interest received - Loans and receivables	640	628	640	628
	15,955	**17,810**	**15,591**	**17,356**

18. EMPLOYEE RELATED COSTS

Remuneration	87,004	86,682	82,322	77,621
Defined contribution plans	6,352	5,936	6,352	5,936
	93,356	**92,618**	**88,674**	**83,557**

Employee costs for the internal technology platforms are included in project funding expenditure disclosed in note 19.

19. PROJECT FUNDING EXPENDITURE

Project grants - third party	450,476	334,383	450,891	335,119

PROJECT FUNDING EXPENDITURE IS MADE UP OF THE FOLLOWING:

Technology development	98,784	81,196	99,199	81,196
Technology innovation programme	40,110	4,344	40,110	4,344
Technology station programme	123,740	83,433	123,740	83,433
Technology platform programme *	76,425	67,118	76,425	67,118
Youth technology innovation programme	15,871	5,249	15,871	5,249
Seed fund programme	71,958	70,297	71,958	70,297
Innovation skills development programme	16,458	21,154	16,458	21,154
Thought leadership	4,761	-	4,761	-
Contracted conditional grant spend not disclosed above	61	1,499	61	1,499
Other	2,308	93	2,308	829
	450,476	**334,383**	**450,891**	**335,119**

* Included in the technology platform programme expenditure are operational costs associated with internal platforms such as salaries and depreciation.

20. IMPAIRMENT	ECONOMIC ENTITY 2017 R'000	ECONOMIC ENTITY 2016 R'000	CONTROLLING ENTITY 2017 R'000	CONTROLLING ENTITY 2016 R'000
Impairment of financial assets at cost	-	14,272	-	14,272
Impairment of financial assets at amortised cost	14,236	29,366	14,236	29,366
Bad debts written off	28	-	13	-
	14,264	**43,638**	**14,249**	**43,638**

21. OTHER OPERATING EXPENSES

Other operating expenses include expenditure such as:				
Auditors remuneration	1,209	1,221	1,123	1,092
Consulting and professional fees	6,735	6,022	4,352	5,440
IT expenses	6,424	7,153	6,215	6,921
Marketing	2,600	1,914	2,117	1,595
Printing and stationery	1,078	509	1,042	454
Security	1,424	982	1,098	977
Training	3,855	3,156	3,829	3,137
Travel and accommodation	6,276	5,525	6,276	5,524
Electricity	1,401	1,428	1,156	1,272
Sponsorships	1,168	30	1,168	30

22. TAXATION

The controlling entity is exempt from income tax in terms of the provisions of section 10(1)(cA)(i) of the Income Tax Act.

23. NET CASH FLOWS USED IN OPERATING ACTIVITIES

Deficit	(108,655)	(53,711)	(106,960)	(46,298)
Adjustments for:				
Depreciation and amortisation	4,617	8,743	4,254	7,565
(Gain)/loss on foreign exchange	337	(469)	-	-
Income from equity accounted investments	113	(8,415)	-	-
Assets written off	-	(46)	-	(44)
Sale of investments	-	17,653	-	(3,695)
Impairment	14,264	43,638	14,249	43,638
Interest on loan accounts	-	(5,439)	-	(5,439)
Changes in working capital:				
Trade and other receivables	10,867	49,494	11,583	59,959
Prepayments	(2,476)	-	(2,473)	-
Trade and other payables	9,340	(11,046)	8,063	(15,614)
	(71,593)	**40,402**	**(71,284)**	**40,072**

24. RELATED PARTIES

RELATIONSHIPS

Members	Refer to members' report note
Controlled entities	Refer to note 7
Associates	Refer to note 8
National Department	Ministry of Science and Technology
National Government Business Enterprises	Council for Scientific and Industrial Research
National Public Entities	Agricultural Research Council/Onderstepoort Biological Products SOC National Research Foundation

RELATED PARTY BALANCES	CONTROLLING ENTITY 2017 R'000	CONTROLLING ENTITY 2016 R'000
Loan accounts - Owing to related parties		
ACRO - Batswadi Pharmaceuticals (Pty) Ltd	(2,625)	(2,625)
Committed conditional grants		
Ministry of Science and Technology	(54,443)	44,086)

RELATED PARTY TRANSACTIONS

Interest received from related parties		
TIA - Interest received from associates	-	(628)
Royalties received from related parties		
TIA - Royalties received from associates	(778)	(986)
Allocations received		
TIA - Ministry of Science and Technology	(474,095)	(429,310)
TIA - National Research Foundation	-	(700)
Project funds returned		
TIA - Council for Scientific and Industrial Research	-	(2,484)
TIA - Agricultural Research Council	(299)	-
Grants disbursed		
TIA - Council for Scientific and Industrial Research	13,298	11,852
TIA - Agricultural Research Council	23,347	6,792
TIA - Grants disbursed to associates	-	372

25. MEMBERS' EMOLUMENTS

EXECUTIVE: 2017	Emoluments R'000	Annual Bonus R'000	Allowances* R'000	Total R'000
Mr. B Manilal - CEO	2,681	199	6	2,886
Mr. W van der Merwe - CFO	2,070	154	20	2,244
Ms. F Pienaar	1,624	90	-	1,714
Dr. BM Sehlapelo (from 01/05/2016)	1,482	-	5	1,487
Ms. B Lue-Marais (from 01/01/2017)	418	-	-	418
Ms. F Harrisunker	902	67	-	969
	9,177	**510**	**31**	**9,718**

* Allowances include the following: Cell phone, car, acting, travel and subsistence.

EXECUTIVE: 2016	Emoluments R'000	Bonus R'000	Allowances* R'000	Other R'000	Total R'000
Mr. B Manilal - CEO (from 01/04/2015)	2,496	-	15	-	2,511
Mr. W van der Merwe - CFO	1,920	68	20	-	2,008
Ms. F Pienaar (from 01/07/2015)	1,130	-	-	-	1,130
Dr. S Gumbi (until 30/11/2015) **	1,277	63	88	289	1,717
Ms. P Maruping (until 31/01/2016)	1,680	70	86	-	1,836
Ms. F Harrisunker	837	-	-	-	837
	9,340	**201**	**209**	**289**	**10,039**

* Allowances include the following: Cell phone, car, acting, travel and subsistence.

** Although Dr S Gumbi terminated her employment contract with the controlling entity on 30 November 2015, her services were retained on a fixed term contract for the remaining 4 months of the financial year.

BOARD: 2017	Member's Fees R'000	Other Fees R'000	Total R'000
Ms. K Njobe	93	-	93
Ms. H Brown	87	-	87
Prof. D Kaplan	106	-	106
Dr. S Lennon	95	1	96
Adv. M Ralefatane	80	-	80
Ms. R Xaba	77	-	77
Dr. P Terblanche	113	-	113
Prof. D Hildebrandt	75	-	75
Ms. F Levy-Hassen	-	3	3
ACRO (non-executive directors)			
Mr. D du Toit	14	-	14
	740	**4**	**744**

25. MEMBERS' EMOLUMENTS (CONTINUED)

BOARD: 2016	Member's Fees R'000	Other Fees R'000	Total R'000
Ms. K Njobe	134	-	134
Ms. H Brown	126	-	126
Prof. D Kaplan	135	-	135
Dr. S Lennon	134	-	134
Dr. B Mehlomakulu (until 13/05/2015)	72	-	72
Adv. M Ralefatane	136	-	136
Ms. R Xaba	86	-	86
Mr. M Moolla	2	-	2
Dr. P Terblanche	170	-	170
Prof. D Hildebrandt (from 09/09/2015)	41	-	41
ACRO (non-executive directors)			
Mr. D du Toit	-	9	9
Mr. C Whitfield	-	9	9
	1,036	**18**	**1,054**

26. CONTINGENCIES

	ECONOMIC ENTITY		CONTROLLING ENTITY	
	2017 R'000	2016 R'000	2017 R'000	2016 R'000

CONTINGENT LIABILITIES

Roll over of funds (Controlling Entity)

In terms of section 53(3) of the PFMA an entity may not accumulate surpluses unless prior written approval is obtained from National Treasury. According to the instruction note from National Treasury, the cash surplus is reduced with current liabilities (R 28,891,000, note 12) and committed conditional grants (R 54,443,000, note 14). In application of the above principles there is no cash surplus, and therefore no written approval from National Treasury is needed to retain these funds. The controlling entity did obtain approval to retain surpluses as reported in 2015/2016.

Legal proceedings

During the financial year, a former employee instated a claim against the Controlling entity at the Labour Courts of South Africa. Neither the outcome of this claim nor the possible outflow of economic benefits can be determined at this time.

Project funding

Project funding in terms of funding agreements.

Funding agreements	219,793	235,665	219,793	236,073

These agreements will be funded using surplus cash and funds to be allocated in the financial periods in which these agreements become payable.

27. COMMITMENTS	ECONOMIC ENTITY 2017 R'000	ECONOMIC ENTITY 2016 R'000	CONTROLLING ENTITY 2017 R'000	CONTROLLING ENTITY 2016 R'000
AUTHORISED CAPITAL EXPENDITURE				
Already contracted for but not provided for				
• Property and equipment	87	-	87	-
• Intangible assets	208	-	208	-
	295	**-**	**295**	**-**

This committed expenditure relates to computer equipment and computer software and will be financed by available funds.

OPERATING LEASES AS LESSEE (EXPENSE)				
Minimum lease payments due				
• within one year	8,912	9,546	8,820	8,828
• in second to fifth year inclusive	8,314	15,605	8,314	15,423
	17,226	**25,151**	**17,134**	**24,251**

Operating lease payments represent rentals payable by the economic entity for certain of its offices. Leases are negotiated for an average term of five years and rentals are fixed for an average of three years. No contingent rent is payable.

28. RISK MANAGEMENT

CAPITAL RISK MANAGEMENT

The economic entity's objective when managing capital is to safeguard their ability to continue as a going concern in order to provide benefits to its stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

The capital structure of the economic entity consists of cash and cash equivalents disclosed in note 4 and reserves as disclosed in the statement of financial position.

There are no externally imposed capital requirements and there were no changes in what the entity does to manage capital.

FINANCIAL RISK MANAGEMENT

The economic entity's activities expose it to a variety of financial risks: market risk (including currency risk, foreign currency risk and cash flow interest rate risk), credit risk and liquidity risk.

LIQUIDITY RISK

The economic entity manages liquidity risk through the compilation and monitoring of cash flow forecasts as well as ensuring that there are adequate banking facilities.

28. RISK MANAGEMENT (CONTINUED)

The maturity profiles of the financial instruments are summarised as follows:

ECONOMIC ENTITY

At 31 March 2017	Less than 1 year R'000	Between 1 and 2 years R'000	Between 2 and 5 years R'000	Over 5 years R'000
Trade and other payables	32,056	-	-	-
Loans from shareholders	-	-	-	2,762
Finance lease obligations	61	-	-	-

At 31 March 2016	Less than 1 year R'000	Between 1 and 2 years R'000	Between 2 and 5 years R'000	Over 5 years R'000
Trade and other payables	16,654		-	-
Loans from shareholders	-		-	2,762
Finance lease obligations	194		-	-

CONTROLLING ENTITY

At 31 March 2017	Less than 1 year R'000	Between 1 and 2 years R'000	Between 2 and 5 years R'000	Over 5 years R'000
Trade and other payables	22,876	-	-	-
Finance lease obligation	61	-	-	-

At 31 March 2016	Less than 1 year R'000	Between 1 and 2 years R'000	Between 2 and 5 years R'000	Over 5 years R'000
Trade and other payables	15,377	-	-	-
Finance lease obligation	194	-	-	-

INTEREST RATE RISK

Changes in interest rates will affect the revenue from the exchange transaction revenue stream as the return on investment of surplus funds is linked to the prime rate.

CASH FLOW INTEREST RATE RISK

Financial instrument	Current interest rate	Due in less than a year R'000	Due in one to two years R'000	Due in two to three years R'000	Due in three to four years R'000	Due after five years R'000
Cash reserves at CPD	7.26%	29,340	-	-	-	-
Cash reserves at Standard Bank of South Africa	5.50%	35,214	-	-	-	-
Other cash reserves at commercial banks	Various	5,644	-	-	-	-

28. RISK MANAGEMENT (CONTINUED)

CREDIT RISK

Potential concentrations of credit risk consist mainly of cash and cash equivalents and trade receivables. The economic entity limits its counterparty exposures from its bank accounts by investing surplus funds with well established financial institutions with a high quality credit standing. The credit exposure to any one counterparty is managed by monitoring transactions.

Loans and receivables, investment in controlled entities, investment in associates and other investments consist mainly of funding granted to start-up companies. The exposure to credit risk is managed through ongoing review of the operating results and financial position of the investee companies. Should the entity have doubt over the recoverability of the loan or the value of the investment, the loan/investment is impaired and further funding is carefully considered.

Financial assets exposed to credit risk at year end were as follows:

	ECONOMIC ENTITY		CONTROLLING ENTITY	
Financial instrument	2017 R'000	2016 R'000	2017 R'000	2016 R'000
Cash and cash equivalents	70,198	141,131	64,567	132,327
Trade and other receivables	5,886	17,840	3,417	16,118
Loans and receivables	5,029	19,226	5,029	19,226

The entity has little doubt over the recoverability of trade and other receivables not considered to be impaired at year end.

The entity has reviewed the financial position of each of the entities where they have not impaired the loan disbursed or investment made to the investee company and based on this, management is of the opinion that at period end the amount is recoverable.

FOREIGN EXCHANGE RISK

Foreign currency exposure arises from the sale of goods by entities within the economic entity.

A controlled entity, ACRO, operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the US dollar and the Euro. Foreign exchange risk arises from future commercial transactions, recognised assets and liabilities and net investment in foreign operations.

The economic entity reviews its foreign currency exposure, including commitments on an ongoing basis.

29. IRREGULAR EXPENDITURE

Opening balance	43,923	44,349	36,000	36,000
Incurred by controlled entities	522	663	-	-
Incurred by controlling entity - relates to current year	-	117	-	117
Less: Condoned	(19,403)	(17)	(19,403)	(17)
Less: Written off as not condoned and not recoverable	(16,597)	(100)	(16,597)	(100)
Less: Condoned by the Board of controlled entities	(522)	(663)	-	-
Less: Amounts written off as company was sold	-	(426)	-	-
	7,923	**43,923**	**-**	**36,000**

29. IRREGULAR EXPENDITURE (CONTINUED)

Economic entity: 13 controlled entities were inherited when the trusts (Biopad, Lifelab, Plantbio, Thumisano, Innovation Fund, Cape Biotech Trust) were combined to form TIA. The entities were not set up to comply with the detail requirements of Treasury Regulation 16A6.1. The controlling entity is continuing to exit these entities and of the original 13 only 5 are remaining.

Controlling entity: No irregular expenditure was incurred during the current financial year 2016/2017.

Two projects carried over from 2015/2016 period, where approval was not obtained in terms of the delegation of authority, were finalised during the financial year 2016/2017. The Board is satisfied that no amount was recoverable from the third parties.

The Board of the controlling entity condoned irregular expenses where it is allowed, in terms of the Treasury Regulation and practise notes issued, and accepted irregular expenses as not condoned not recoverable where value was received for payments made.

30. FRUITLESS AND WASTEFUL EXPENDITURE

	ECONOMIC ENTITY		CONTROLLING ENTITY	
	2017 R'000	2016 R'000	2017 R'000	2016 R'000
Opening balance	58	58	-	-
Fruitless and wasteful expenses incurred by controlled entities	22	-	-	
	80	**58**	**-**	**-**

Economic entity: The nature of the expenses that could have been avoided are interest and penalties on PAYE for two controlled entities which were subsequently deregistered.

31. LOSSES THROUGH CRIMINAL CONDUCT

Losses during the financial year	79	27	79	27
Losses recovered	(234)	(33)	(234)	(33)
	(155)	**(6)**	**(155)**	**(6)**

Controlling entity: Losses relate to laptops stolen from the agency's employees. Insurance claims were lodged to minimise the losses. The losses recovered also include insurance claims submitted in 2015/2016 only paid in 2016/2017.

32. BUDGET DIFFERENCES

MATERIAL DIFFERENCES BETWEEN BUDGET AND ACTUAL AMOUNTS

The cash surplus in the controlling entity carried over from the financial year 2015/2016 resulted in the budget being revised. Management applied the practise of reviewing and revising the budget to ensure that additional funds that are saved through operational savings or additional income received is allocated to project funding. This process resulted in efficient utilisation of the budget and ensured that it's not necessary to request a "roll over" of funds from National Treasury.

The budget reviews included the utilisation of the cash surplus carried over from 2015/2016, additional income received and operational savings, and these were all allocated to project funding.

32.1 After the reduction in the MTEF allocation in 2014/2015, management in TIA set stretched targets to counter the shortfall. Although the stretched target was not achieved, the actual amount reflects a new record since inception of TIA. Planned initiatives in the innovation funding did not materialise.

32.2 TIA continued to enforce high governance standards which led to decisions not to fund certain projects towards the end of the financial year where due processes were not followed. The amount paid towards project funding is the highest ever since 2010/2011.

ANNEXURE 1

Table 32: Year-on-year Business Performance and Targets

STRATEGIC OBJECTIVE	KPI NO.	DESCRIPTION AS PER APP	2015/2016		2016/2017		2017/2018	2018/2019	2019/2020
			PLANNED	ACTUAL	PLANNED	ACTUAL	PLANNED	PLANNED	PLANNED
Strategic Objective 1: To provide customer centric technology development funding and support	1.1	Number of technologies, processes or services advancing by two or more TRL levels.	6	27	12	31	26	28	30
	1.2	Number of innovation project outputs taken up in the market.	4	9	14	21	10	11	12
	1.3	Amount of additional funding attracted into TIA's portfolio.	R75m	R98m	R59m	R182m	R113m	R147m	R157m
	1.4	Amount of income received.	R98m	R154m	R124m	R111m	R141.8m	R148.3m	R158.1m
Strategic Objective 2: To provide thought leadership and an enabling environment for technology innovation in collaboration with role-players	2.1	Number of knowledge innovation products produced (prototypes developed, patents registered, technology demonstrators and technology transfer packages) as a result of TIA funding and support programmes.	30	76	46	64	83	91	100
	2.2	Number of knowledge innovation products produced by the TIA supported programmes receiving third party funding.	7	8	25	25	27	30	33
	2.3	Number of Small, Medium and Micro Enterprises (SMMEs) receiving technology support.	2 000	2 197	2200	2 261	2 800	3 360	3 840
	2.4	Number of PDI-owned SMMEs assisted as a percentage of total projects supported, receiving funding, support and/or technology services from TIA.	Target was not defined during this FY	Target was not defined during this FY	63%	64,4%	65%	67%	69%
	2.5	Number of technology innovation initiatives (conference papers, presentations, policy recommendations, panel discussions, position papers, publications, think tanks, keynote addresses) undertaken by TIA.	3	27	10	56	31	37	43
Strategic Objective 3: To develop an effective and efficient internal environment to successfully execute the strategy	3.1	Investment approval turnaround time on calls.	4 months	11 weeks, 3 days	4 months	3 months 2 days	16 weeks	15 weeks	14 weeks
	3.2	Improved adequacy and effectiveness of the control environment.	Unqualified	Unqualified	Clean Audit	Clean Audit	ISO 9001 certification	100% ISO 9001 compliance	Organisational improvement ratios by 5% related to QMS
	3.3	Amount of funds utilised for projects and programmes as a percentage of the total actual expenditure.	68%	72%	69%	77%	70%	70%	70%
	3.4	Functional organisational structure as measured by vacancy rate.	Below 5%	13,38%	Below 8%	9,59%	Below 11%	Below 10%	Below 10%
	3.5	Effective implementation of talent management strategy - resulting in an improved employee engagement ratio.	3,5	3,7	3,5	3,85	3,8	3,9	4,0

ANNEXURE 2

In its Strategic Plan 2015-2020, DST has defined five Strategic Outcome-oriented Goals with associated Proxy Indicators spanning a period of five years. TIA has aligned its performance, in accordance with these and, as such, the numbers reflected in the table below demonstrate TIA's achievements in relation to its planned performance in FY2016/17 in contributing to the Proxy Indicators.

Table 33: Contribution to the DST Strategic Outcome-oriented Goals in FY2016/17

CONTRIBUTION TO THE DST STRATEGIC OUTCOME-ORIENTED GOALS (FIVE-YEAR PLAN) NOTE: A 2014/15-2019/20 MID-TERM REVIEW IS DUE AT THE END OF FY2017/18		PLANNED FOR FY2016/17	ACTUAL FOR FY2016/17
Strategic outcome-oriented goal (1)	To build on previous gains in building a responsive, coordinated and efficient NSI.		
Proxy Indicator 3:	By 2019, a 300% increase in the rand value of investment by government and the private sector in R&D partnerships as compared to 2013 achieved (MTSF Outcome 4, sub-outcome 10).	R108m	R182m
Strategic outcome-oriented goal (2)	To maintain and increase the relative contribution of South African researchers to global scientific output.		
Strategic outcome-oriented goal (3)	To increase the number of high-level graduates and improve their representivity.		
Proxy Indicator 2:	4 200 graduates and students placed in Science, Engineering, Technology And Innovation (SETI) institutions by March 2019.	100	382
Proxy Indicator 3:	5 521 160 people reached through science engagement activities by 2019.	15 000	381 223
Proxy Indicator 4:	Three times the number of master's and PhDs in areas of priority identified in the NRDS and TYIP by 2019 (measured on a 2012 baseline)	80	23
Strategic outcome-oriented goal (4)	To derive a greater share of economic growth from R&D-based opportunities and partnerships.		
Proxy Indicator 2:	By 2019, additional revenue of R500m generated from firms and companies that are receiving, or have received support from DST-funded instruments since 2010.	R104m	R110m
Proxy Indicator 3:	By 2019, performance of 10 000 SMEs improved through technology interventions	2 400	2 261
Strategic outcome-oriented goal (5)	To accelerate inclusive development through scientific knowledge, evidence and appropriate technology.		
Proxy Indicator 2:	Between 2014 and 2019, contribution of technology-based opportunities for local economic development introduced or strengthened in at least five distressed municipalities.	1	1

ANNEXURE 3

MEDIUM-TERM STRATEGIC FRAMEWORK OUTCOMES

In contributing to the triple challenges of poverty, inequality and unemployment, TIA has aligned its initiatives to the Medium-Term Strategic Framework (MTSF). The initiatives outlined below are aligned to the planned outcomes contained in the NDP. The MTSF is based on an outcomes approach, and this current cycle focuses on 14 key outcomes with measurable outputs and key activities. TIA contributed to the following:

Table 34: Contribution to the MTSF commitments undertaken by TIA in the 2015-2020 cycle

OUTCOME	SUB-OUTCOME	ACTION/COMMITMENT	PERFORMANCE ACHIEVED FY2016/17
Outcome 2: A long and healthy life for all South Africans	Sub-outcome 8: Reduced costs of healthcare	Investment into the development of affordable and adaptable novel health products. Support early stage research outputs, through providing funding and access to services, to enable innovators, researchers and SMMEs to address the health needs of South Africa with funding and programmatic support. Collaborate with other NSI stakeholders and role-players to enable their pipelines of technologies that address the health of South Africans and contribute to a long life for all.	Funding for development of the MARTI TB Point of Care diagnostics kit was approved by TIA. The CPT Pharma project is focused on developing a cost-effective process for local production of affordable anti-TB drugs. The design and building of the pilot plant are completed, and equipment installation commenced. The project is now focused on plant qualification and accreditation. The UCT anti-malarial project is focused on developing novel drug candidates for malaria treatment. The project produced a second preclinical candidate. The UCT anti-malarial programme based at H3D is focused on earlier stage drug discovery and development research. The Seed Fund Programme's portfolio has several health innovations, including natural drug candidates, TB and HIV diagnostic devices and other medical devices that have cost advantages. TIA is collaborating with the IDC to fund and support the CPT Pharma TB drug piloting project. This provides a pipeline for IDC, as the intent is for IDC to fund the commercial scale production once the piloting phase is complete. The IDC is funding BioDx (Pty) Ltd to establish a manufacturing facility. TIA and the IDC are collaborating to also provide non-financial support to the project.
Outcome 4: Decent employment through inclusive economic growth	Sub-Outcome 10: Investment in research, development and innovation which supports inclusive growth by enhancing productivity of existing and emerging enterprises and supporting the development of new industries.	Support new energy generation technologies. Use our partnerships with science councils, HEIs and incubators and development agencies to provide financial and non-financial support to entrepreneurs and SMMEs; thereby increasing their chances of success and creating gainful employment.	As part of the approval process for the HyPlat Fuel Cell project, the Investment and Finance Committee (IFC) recommended that an international competitiveness study be conducted to validate the competitiveness of the technology. The study, which was done by Blueprint, has been completed and a report has been delivered to TIA. The NextGen 100 programme, partnered with Universities of Technology and the CSIR, resulted in the Basic Technology Awareness workshops being conducted for 209 delegates, and carried out the Bio-Entrepreneurship programme which resulted in five start-ups being supported.

OUTCOME	SUB-OUTCOME	ACTION/COMMITMENT	PERFORMANCE ACHIEVED FY2016/17
Outcome 4: Decent employment through inclusive economic growth (continued)	Sub-Outcome 10: Investment in research, development and innovation which supports inclusive growth by enhancing productivity of existing and emerging enterprises and supporting the development of new industries. (continued)		The Technology Station sub-programme assisted ten enterprises with over 800 hours Supplier Development Technology Assistance Package support, to make them competitive. This is done by enhancing the opportunities they have identified through the provision of engineering support and technology transfer services required for their growth and sustained employment. Significant impact on the automotive sector manufacturers had been made by targeting SMMEs in manufacturing. Furthermore, the Technology Station sub- programme spent 20% in coordination and appraisals of several key government programmes in a cost-effective manner with the DST Technology Localisation Implementation Unit (TLIU); the dti Manufacturing Competitiveness Enhancement Programme (MCEP); and Department of Small Business Development (DSBE) initiatives supported through the Small Enterprise Development Agency (SEDA) programmes for co-investment. TIA facilitated four laureates under the Young Enterprise Initiative South Africa (YEI-SA) Programme in partnership with the French Embassy in South Africa to visit France in December 2016 and January 2017. The purpose of the mission was to identify market opportunities for TIA-supported companies in the portfolio of clean energy technologies, including GCIP-SA alumni.
Outcome 5: A skilled and capable workforce to support an inclusive growth path	Sub-outcome 2: Increase access and success in programmes leading to intermediate and high-level learning.	Capacitating the NSI with critical thinking skills. Support the technology transfer process and the NSI partners, thereby creating experiential learning opportunities through commercialisation of opportunities.	Conducted three critical thinking skills sessions with ISDP for unemployed graduates at VUT, WITS and UNISA. Co-hosted with NIPMO, three Intellectual Property workshops for TTOs, TIA employees and investees, universities' researchers and general innovators.
Outcome 7: Comprehensive rural development and land reform	Sub-outcome 5: Increased access to quality infrastructure and functional services, particularly in education, healthcare and public transport in rural areas.	Extend YTIP's reach in providing access and financial support in prototype development and testing, Intellectual Property advice and protection, business incubation and business coaching to rural communities.	Rolled out a rural innovation initiative aimed at engaging with youth located in rural areas who has innovative ideas that can address challenges experienced by their rural communities.
Outcome 10: Protect and enhance our environmental assets and natural resources	Sub-outcome 3: An environmentally sustainable, low carbon economy resulting from a well-managed transition.	Promoting clean technology innovation.	Over the past three years the Global Clean Technology Innovation Programme (GCIP) has organised three business accelerator programmes, training 77 SMMEs and start-ups in energy efficiency, renewable energy, waste to energy, water efficiency and green buildings. The commercialisation of these technologies will contribute to the protection of environmental assets and natural resources. Special consideration has been given to the need to mainstream gender and youth imperatives into the programme. The programme has thus created specific recognition categories for Most Promising Women-led Business and Most Promising Youth-led Business.

ANNEXURE 4

TRIPLE CHALLENGES

In responding to the triple challenges of poverty, inequality and unemployment, TIA's performance for FY2016/17 contributed to the following:

Table 35: Contribution of Science Technology Innovation (STI) to the reduction of poverty, inequality and unemployment

STI CONTRIBUTION	POVERTY	INEQUALITY	UNEMPLOYMENT
Direct	TIA invests in innovations in mining and mineral processing; environmental management; and water resources. The success of technologies in these areas will ensure access to clean water, a liveable environment, as well as a safe and long-lasting mining environment. These achievements will create jobs, increase productivity, hence also profitability that would increase contribution to the fiscus to enable better social benefits to society.	TIA supported 31 projects. Of these, 28 were undertaken by youth from HDI communities.	Enzyme Technologies (Pty) Ltd created two permanent jobs in Durban and four jobs in the agro processing plant in the farming community of Hluhluwe. Three new permanent jobs were created by BioDx (Pty) Ltd as a result of TIA funding. The UCT anti-malarial programme provided funding for 14 jobs over a four-year period.
Indirect	TIA is funding the GR Active project, which is focused on developing a bioactive skin tone to be manufactured in Mamelodi. It is envisaged that on completion, the establishment of the manufacturing plant in the township will create job opportunities that will in turn contribute to alleviating poverty.	The scientific capacity at Technology Stations (232) includes 31% females and 57% Blacks, 16% Coloureds and 3% Indians with an average age of 35 years.	The GR Active project created three temporary jobs for research assistants. At enterprise level, the Technology Stations assisted Black-owned companies to better understand technology options and choices for competitiveness improvements. Overall 55 enterprises confirmed they had secured contracts after intervention.

PART G

LIST OF ACRONYMS AND ABBREVIATIONS

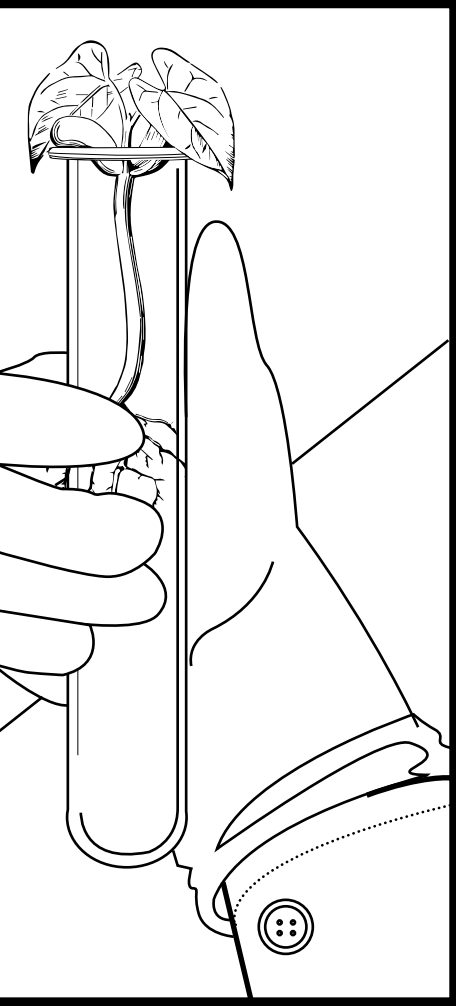
ACRO	African Clinical Research Organisation
AGAP	Africa Geospatial Access Platform
AHTIP	Animal Health Technology Innovation Programme
AMTRP	Advanced Manufacturing Technology Roadmap Project
AMTS	Advanced Manufacturing Technology Strategy
APP	Annual Performance Plan
ARC	Agricultural Research Council
ASSAf	Academy of Science of South Africa
ATIP	Aerospace Technology Innovation Program
ATNS	Air Traffic Navigation Systems
AU-IBAR	African Union Inter-African Bureau for Animal Resources
AVE	Advertising Value Equivalent
AGV	Automated Guided Vehicle
BEE	Black Economic Empowerment
BGP	Beef Genomics Programme
BIDC	Biomanufacturing Industry Development Centre
BioDX	Biological Chemical Technologies (Pty) Ltd
Biovac	Biovac Institute
BTDP	Biofuels Technology Demonstration Programme
C.O.J.E.D.I.	City of Joburg Educating Digital Intern Programme
CAD	Computer-Aided Design
CCDI	Cape Craft and Design Institute
CEIP	Centre for Engineering Innovation and Production
CHUMA	Future 500 Commercialisation Internship Initiative
COC	Certificate of Conformance
CPD	Continuous Professional Development
CPGR	Centre for Proteomic and Genomic Research
CPT	Chemical Process Technologies
CPT Pharma	Pharma Chemical Process Technologies
CRC	Cooperative Research Centre (of Australia - beef)
CSIR	Council for Scientific and Industrial Research
CUBIC	Cape University Body Imaging Centre
DAFF	Department of Agriculture, Forestry and Fisheries
DGP	Dairy Genomics Programme
DRDLR	The Department of Rural Development and Land Reform

DSBD	Department of Small Business Development
DST	Department of Science and Technology
DUT-IEETRC	Durban University of Technology – Industrial Energy Efficiency Training & Resource Centre
ECDC	Eastern Cape Development Corporation
eNtsa-NMMU	eNtsa-Nelson Mandela Metropolitan University
EU	European Union
EV	Electric Vehicle
EVIA	Electric Vehicle Industry Association
EWSETA	Energy and Water Sector Education and Training Authority
FASSET	Finance and Accounting Services Sector Education and Training
FLIP	Foresight Leadership Innovation Programme
FUTURE 500	Future 500 (ISD Programme)
GAP	Gauteng Accelerator Programme
GCIP-SA	Global Cleantech Innovation Programme – South Africa
GDP	Gross Domestic Product
GEBVs	Genetically Enhanced Breeding Valves
GEF	Global Environment Facility
GFIA	Global Forum for Innovation in Agriculture
GI	Glycaemic Index
GIT	Green Iron Technology
GMO	Genetically Modified Organisms
GMP	Genetically Modified Products
GRAP	Generally Recognised Accounting Practice
H3D	Drug discovery and development centre
HSRC	Human Sciences Research Council
HySA	Hydrogen South Africa
IAT-SU	Institute for Advanced Tooling-Stellenbosch University
IAT-TUT	Institute for Advanced Tooling-Tshwane University of Technology
iBATECH	Indigenous Botanical Adjuvant Technology
IDC	Industrial Development Corporation
IES	Innovation Enabling and Support
IFC	Investment Framework Committee
IFPCS	Innovation Funding, Pre-Commercialisation and Support
IKS	Indigenous Knowledge System
Invo Tech	Innovation Technology Business Incubator

IP	Intellectual Property
IPR	Intellectual Property Rights
ISO	International Standards Organisation
JICA	Japan International Cooperation Agency
KPI	Key Performance Indicator
LEDA	Limpopo Economic Development Agency
LEDET	Limpopo Economic Development, Environment and Tourism
MCEP	Manufacturing Competitiveness Enhancement Programme
MMV	Medicines for Malaria Venture
MRC	Medical Research Council
MTEF	Medium-Term Expenditure Framework
MTSF	Medium-Term Strategic Framework
NACI	National Advisory Council for Innovation
NYDA	National Youth Development Agency
NDP	National Development Plan
NECSA	South African Nuclear Energy Corporation SOC Limited
NEF	National Empowerment Fund
NEPAD	New Economic Programme for African Development
NIPMO	National Intellectual Property Management Office
NRF	National Research Foundation
NSI	National System of Innovation
OBP	Onderstepoort Biological Products
OTT/TTO	Office of Technical Transfer/Technology Transfer Offices
OVI	Onderstepoort Veterinary Institute
PDI	Previously Disadvantaged Individuals
PI	Performance Indicator
PLMCC	Product Lifecycle Management Competency Centre
RDI	Research and Development Innovation
SABDI	South African BioDesign Initiative
SABS	South African Bureau of Standards
SAENSE	Screening Applications and Exploring Novelty in Specialised Environments
SANEDI	South African National Energy Development Institute
SATN	South African Technology Network
SARIMA	South African Research & Innovation Management Association
SEDA	Small Enterprise Development Agency

SEFA	Small Enterprise Finance Agency
SETI	Science, Engineering, Technology and Innovation
SHIP	Strategic Health Innovation Partnerships
SSAJRP	Swiss South African Joint Research Programme
SWET	Stellenbosch Wind Energy Technologies
TIA	Technology Innovation Agency
TLIU	Technology Localisation Implementation Unit
TRL	Technology Readiness Level
TVET	Technical and Vocational Education and Training
UNIDO	United Nations Industrial Development Organisation
WRC	Water Research Council

NOTES



"The mere formulation of a problem is far more often essential than its solution, which may be merely a matter of mathematical or experimental skill. To raise new questions, new possibilities, to regard old problems from a new angle requires creative imagination and marks real advances in science.

Great spirits have always encountered violent opposition from mediocre minds. "

Albert Einstein

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