

**Report of the Portfolio Committee on Science and Technology on its activities undertaken during the 5th Parliament (May 2014 – March 2019)**

**Key highlights**

1. **Reflection on Committee programme per year and on whether the objectives of such programmes were achieved**

The initial briefings to the Committee focussed on the mandate and work programme of the Department of Science and Technology (the Department) and the entities that report to it. These briefings allowed the Committee to identify the critical issues pertaining to the science, technology and innovation (STI) sector. These critical issues informed the development of the Committee’s strategic plan, which informed the Committee’s term programmes. The Committee achieved its objectives, but would have preferred to have had even greater engagement with the entities reporting to the Department and conducted more oversight visits, these jointly with other interested and affected parliamentary committees, if the parliamentary programme had allowed time and space for these to be undertaken.

1. **Committee’s focus areas during the 5th Parliament**
* The enabling environment created by the STI policy, legislative and strategic framework:
* The Committee processed the Protection, Promotion, Development and Management of Indigenous Knowledge Bill [B 6 – 2016], the National Research Foundation Amendment Bill [B 23 – 2017] and the Science and Technology Laws Amendment Bill [B 42 – 2018].
* The Committee considered the Science, Technology and Innovation Institutional Landscape (STIIL) Review Report, the Draft White Paper on Science, Technology and Innovation, updates to the administration of the Research and Development Tax Incentive, the implementation of the Research and Development Budget Coordination Mechanism, and the development of a framework for the next STI 10-Year Plan, which will serve as the first implementation plan of the new STI White Paper.
* STI human capital development and the overall transformation of the STI sector:
* The Committee routinely interrogated the criteria used to allocate bursaries and select students for study/experiential programmes.
* Increased public awareness and understanding of the STI sector:
* The Committee advocated for the professionalization of Science Communication.
* The mandated roles and areas of responsibility of the various national departments and stakeholders in the STI sector:
* The Committee advocated for improved cooperation and collaboration, and for the adoption and implementation of technologies that would improve service delivery, especially at local government level.
* The Committee encouraged national and provincial departments to effectively and efficiently use the resources allocated for research and development, and that where possible, these resources be increased.
* Enhancing the international standing and profile of South African STI.
* Study Tour to the Republic of Korea and Japan to learn how STI policy planning and co-ordination was conducted; and best practice with regard to integrating STI into all sectoral development plans.
* Adequate funding for the Department and its entities, and the National System of Innovation (NSI) in general.
* Completion of the 64-dish MeerKAT Radio telescope, which will form part of Phase 1 of the Square Kilometre Array (SKA) Radio Telescope.
1. **Key areas for future work**
* Implementation of the new STI White Paper, STI 10-Year Plan, and various review recommendations relating to better coordination and governance of the NSI;
* Implementation of the STI Budget Coordination Mechanism;
* Implementation of the Sovereign and SME Innovation Funds, and the Strategy for the Uptake of Locally Manufactured Technologies;
* Ratification of the Convention Establishing the SKA Observatory, and the obligations it will impose on South Africa;
* Improvements in administering the Research and Development Tax Incentive;
* Implementation of recommendations to increase and transform the STI workforce; and
* Implementation and review of key legislation.
1. **Key challenges emerging**
* Some briefings were scientifically technical and incorporated lots of scientific jargon; making it difficult to fully understand what was presented;
* Although copious amounts of information on various STI topics and initiatives are available; information specific to the Department, its entities and projects were not always available electronically on the internet, which is the fastest way of accessing information needed within a short space of time; and
* For a number of initiatives, the distinction between the roles, responsibilities and collaborative efforts of the Department, its entities and partners was not always clear.
* Operationally, the Committee did not have a Researcher since mid-2015.
1. **Recommendations**
* Due the cross-cutting nature of science, briefings and oversight visits should, where applicable, include all interested and affected parliamentary committees;
* The Committee may need to consider additional meeting times to accommodate increased interaction with the Department’s entities and interested and affected stakeholders;
* Due to the complexity of STI and the NSI, the Committee should consider incorporating briefings and/or workshops with experts in the fields of measuring STI performance and impact and evaluating STI policy;
* Greater interaction with the broader STI industry would provide the Committee with information regarding the impact of STI policies aimed at growing this sector of the economy;
* The Committee be included, by the Department, in more initiatives geared to market and communicate the impact of STI initiatives; and
* The Committee should consider and investigate strategies to enhance public understanding of and involvement in STI by, for example, hosting its own programme in support of key national events like National Science Week, hosting colloquiums on key STI issues/policies, and inviting experts to provide their opinion on the funding allocated to and the performance of the Department and its entities.

Recommendations made by Committee at time of adoption of report:

* The Science and Technology Laws Amendment Bill should be revived and finalised.
* Given the technical nature of the portfolio, it was challenging for the Committee to operate without the support of a dedicated researcher and this needs to be addressed in the 6th Parliament.
* Oversight visits/site visits should form a key area of Committee activity, as it proved to enhance Members’ understanding of specific projects or programmes.
* There should be more collaborative meetings with other Parliamentary committees, especially on cross-cutting issues.
* The aim to spend 1.5% of Gross Domestic Product (GDP) on Research and Development should be continuously highlighted, until the set target is reached.
* The Committee should be allowed to attend more science and technology conferences, seminars, exhibitions, etc. Attendance of such events will assist the Members to learn and to improve their understanding about science and technology matters and better equip them to participate and engage in various science fora.
* Communication between the Committee and the Department should strengthen and the Committee must be informed, timeously, of events to be hosted by the Department Science and Technology, to ensure maximum participation from the Committee.
1. **Purpose of Report**

The purpose of this report is to provide an account of the work of the Portfolio Committee on Science and Technology (the Committee) during the 5th Parliament; and to inform the members of the 6th Parliament of key outstanding issues pertaining to the oversight and legislative programme of the Department of Science and Technology (the Department) and its entities.

1. **Introduction**
	1. **Portfolio Committee on Science and Technology**

Chapter 4 of the Constitution of the Republic of South Africa sets the mandate of the Committee, which is also aligned to the mission and vision of Parliament. Hence, the Committee must:

* Consider, amend and/or initiate legislation that is specific to, or impacts on science, technology and innovation (STI);
* Monitor and oversee the financial and non-financial performance of the Department and its entities;
* Monitor and oversee the implementation of the Department’s policies and legislation;
* Consider and review the strategic plans and budgets of the Department and its entities;
* Consider sector-related international treaties and agreements; and
* Provide a platform for the public to participate and present views on specific topics and/or legislation in relation to the STI sector.
	1. **Method of work of the Committee**

The Committee held weekly meetings on Wednesdays (allotted slot) as per each term programme to:

* Engage the Department and its entities on topical issues and other legislative mandates;
* Consider Strategic Plans, Annual Performance Plans (APPs), Budgets and Annual Reports of the Department and its entities;
* Oversee the implementation of the Department and entities’ programmes and budgetary use as per the APPs for each relevant Medium-Term Expenditure Framework (MTEF) period;
* Consider legislation as tabled;
* Engage the Department on government priorities as per the Medium-Term Strategic Framework (MTSF); and
* Engage other relevant government departments and institutions, for example, the Auditor-General, on issues related to the STI sector.

Furthermore, the Committee undertook oversight visits to programmes/initiatives in five of the nine provinces and to various entities.

* 1. **Department and Entities falling within the Committee’s portfolio**
		1. **Department of Science and Technology**

The Department’s 2015-2020 Strategic Plan introduced a new vision and mission to articulate what the Government wants to achieve through its investments and efforts in STI. The vision is for, “Increased well-being and prosperity through science, technology and innovation.” The mission is three-fold and seeks, “To provide leadership, an enabling environment, and resources for science, technology and innovation in support of South Africa’s development.”

The Department is responsible for the development, co-ordination and management of a National System of Innovation (NSI) that seeks to transform South Africa’s economy from being resource-based to a knowledge economy. The 1996 White Paper on Science and Technology was the first policy document to introduce the concept of a NSI. The NSI comprises all the role-players and stakeholders of the science and technology system and links these to social and economic activity to support and promote the attainment of national objectives. Other policies that inform the strategic investment in STI include the 2002 National Research and Development Strategy, the 2004 New Strategic Management Model for South Africa’s Science and Technology System and the 2007 Ten-Year Innovation Plan.

Hence, the Department directs its efforts and resources toward the following five strategic outcome-orientated goals:

* Goal 1: Responsive, co-ordinated and efficient NSI – build on previous gains to create a responsive, co-ordinated and efficient NSI;
* Goal 2: Increased knowledge generation – maintain and increase the relative contribution of South African researchers to global scientific output;
* Goal 3: Human capital development – increase the number of high-level graduates and improve their representivity;
* Goal 4: Using knowledge for economic development – derive a greater share of economic growth from R&D-based opportunities and partnerships; and
* Goal 5: Knowledge utilisation for inclusive development – accelerate inclusive development through scientific knowledge, evidence and appropriate technology.

The 2014-2019 Medium-Term Strategic Framework (MTSF) represents the first phase of implementation of the National Development Plan (NDP) and commits Government to 14 key Outcomes. The Programmes and initiatives of the Department contribute to Outcomes 2 (long and healthy life), 4 (inclusive economic growth), 5 (skilled and capable workforce), 6 (efficient, competitive and responsive economic infrastructure network), 7 (sustainable rural communities) and 10 (environment and natural resources); as well as the Nine-Point Plan. The Nine-Point Plan seeks to stimulate and diversify South Africa’s economy. Specific areas where the Department contributes to the Nine-Point Plan include:

* Revitalisation of agriculture and agro-processing;
* Increasing the impact of the Industrial Policy Action Plan (IPAP);
* Beneficiation of mineral wealth;
* Unlocking the potential of small business and rural and township enterprises;
* Growing the oceans economy through Operation Phakisa;
* Resolving the energy challenge by advancing alternative energy sources; and
* Scaling-up private sector participation in R&D.
	+ 1. **Entities of the Department of Science and Technology:**

The entities that reported to the Department during the 5th term are:

* + - Academy of Science of South Africa (ASSAf)
		- Council for Scientific and Industrial Research (CSIR)
		- Human Sciences Research Council (HSRC)
		- National Advisory Council on Innovation (NACI)
		- National Research Foundation (NRF)
		- South African Council for Natural Scientific Professions (SACNaSP)
		- South African National Space Agency (SANSA)
		- Technology Innovation Agency (TIA)

| **Name of Entity** | **Role of Entity** |
| --- | --- |
| **Academy of Science of South Africa (ASSAf)** | ASSAf Act 67 of 2001 – ASSAf promotes outstanding achievement in all fields of scientific enquiry, recognises excellence, and provides evidence-based scientific advice to Government and other stakeholders. |
| **Council for Scientific and Industrial Research (CSIR)** | Scientific Research Council Act 46 of 1988 - Its mandate is to foster industrial and scientific development in national interest, through multidisciplinary research and technological innovation, either by itself or in partnership with public and private sector institutions. |
| **Human Sciences Research Council (HSRC)** | HSRC Act 17 of 2008 – Its mandate is to undertake, promote and co-ordinate policy-relevant, problem-orientated research in the human and social sciences. |
| **National Advisory Council on Innovation (NACI)** | NACI Act 55 of 1997 – NACI advises the Minister of Science and Technology, and through the Minister, the Cabinet, on the role and contribution of science, mathematics, innovation and technology, including indigenous technologies, in promoting and achieving national objectives. |
| **National Research Foundation (NRF)** | NRF Act 23 of 1998 - Its objective is to support and promote research through funding, human resource development and the provision of the necessary research facilities for the creation of knowledge, innovation and development in all fields of science and technology, including indigenous knowledge. |
| **South African Council for Natural Scientific Professions (SACNaSP)** | Natural Scientific Professions Act 27 of 2003 - Recognises and registers natural scientific practitioners and fosters the ethical practice and training of the natural scientific professions. |
| **South African National Space Agency (SANSA)** | SANSA Act 36 of 2008 – Its mandate is to promote the peaceful use of space, co-operation in space related activities and foster research in space science. |
| **Technology Innovation Agency (TIA)** | TIA Act 26 of 2008 – Its mandate is to support and enable technological innovation across different sectors of the economy to achieve socio-economic benefits through structural financial and non-financial interventions, development and maintenance of human capacity for innovation, building a culture of innovation and leveraging local and international partnerships. |

1. **Key statistics**

The table below provides an overview of the number of meetings held, legislation and international agreements processed and the number of oversight trips and study tours undertaken by the Committee, as well as any statutory appointments the Committee made, during the 5th Parliament:

| **Activity** | **2014/15** | **2015/16** | **2016/17** | **2017/18** | **2018/19** | **Total** |
| --- | --- | --- | --- | --- | --- | --- |
| Meetings held | 19 | 19 | 21 | 26 | 25 | **110** |
| Legislation processed | None | None | 1 | 1 | 1 | **3** |
| Oversight trips undertaken | 3 | 5 | 3 | None | None | **11** |
| Study tours undertaken | None | None | None | None | 1 | **1** |
| International agreements processed | None | None | None | None | None | **None** |
| Statutory appointments made | None | None | None | None | None | **None** |
| Interventions considered | None | None | None | None | None | **None** |
| Petitions considered | None | None | None | None | None | **None** |

1. **Briefings – recurring issues that arose during the 5th Parliament**
* Governance of NSI – The enabling environment created by the prevailing STI policy, legislative and strategy framework was reviewed during the 5th term and culminated in a new draft White Paper that will be underpinned by a new 10-year STI Plan. Both of these will drive the national STI focus and oversight during the 6th Parliament. Furthermore, the amendments to the National Research Foundation Act and the Science and Technology Laws Act will inform operations at the NRF, specifically, and all entities in general. The 6th Parliament will also be responsible for oversight of the implementation of the Protection, Promotion, Development and Management of Indigenous Knowledge Bill, once enacted.
* Financing of STI – Due to the weak economy and volatile currency, the Department and entities were subjected to extensive budget cuts and had to continuously reprioritise the allocation of available funds. Where increased allocations were realised, these were well below inflation. The dearth of adequate funds impacted all programmes and initiatives. It also increased the entities reliance on securing external/contract funds. The Committee strongly advocated that the Department and National Treasury consider improved coordination around the national STI budget allocation (funds allocated to all national departments that either undertake/commission research and development) to ensure that these allocations were used for its intended purpose, and not redirected to cover funding shortfalls in other areas. Hence 2018/19 was the first year of a three to four years phased-in implementation plan for the STI Budget Coordination Mechanism, during which a government-wide medium-term research and development investment framework will be developed. Furthermore, attention was also given to formulating funding mechanisms specifically for innovation activities and for small and medium enterprises (SMEs); hence, the Sovereign Innovation Fund and the SME Innovation Fund is intended for implementation in the next MTEF. The new White Paper also proposes policy interventions to increase the resources available for STI.
* The mandated roles and areas of responsibility of the various national departments and stakeholders in the STI sector - The uptake and appropriate use of the knowledge generated by the science councils and various STI initiatives was of key concern to the Committee. Especially in areas where positive impact in terms of service delivery and improvements to standard of living could be achieved almost immediately. The proven role of STI in social and economic development has led the Committee to believe that the placement of STI policy, coordination and implementation needs serious consideration so that the benefits to be derived from a development policy entrenched in the pursuit and application of STI can be better realised.
* STI human capital development and the transformation of the STI sector – These aspects are not at the desired level yet, but significant progress has been made with increasing and transforming the STI workforce. Progress is hampered by too few students leaving high school with adequate mathematics and science marks (especially girls), inadequate bursary awards for continued postgraduate study, and more needs to be done to address the continued gender disparities within the STI workforce, among others. The results of recent studies will inform the policies of the Department and the NRF when designing future postgraduate support programmes. However, since the NRF only supports approximately 9% of postgraduates, interventions to grow and transform the STI workforce will need national roll-out to achieve the desired goals in this regard. This will require a closer working relationship between the Portfolio Committees on Science, Higher and Basic Education. In addition, the Committee advocated for the development of a student tracking mechanism for students funded by the public purse to see who stays within the STI sector once qualified.
* Increase public awareness and understanding of the STI sector – The recent inclusion of science engagement in the mandate of the NRF will allow a more structured and coordinated approach to the various programmes that seek to strengthen science communication and public understanding of STI. However, allocating adequate resources to enhance this function remains a difficulty in the current constrained fiscal climate. To enhance existing capacity in the field of science communication, the Committee suggested that this is an area that can potentially be used to absorb a number of unemployed STI graduates; hence creating employment and upskilling these graduates in an area of critical importance for the STI sector.
1. **Legislation**

The following pieces of legislation were referred to the Committee and processed during the 5th Parliament:

| **Year** | **Name of Legislation** | **Tagging** | **Objectives** | **Completed/Not Completed** |
| --- | --- | --- | --- | --- |
| **2014/15** | None |  |  |  |
|  |  |  |  |  |
| **2015/16** | None |  |  |  |
|  |  |  |  |  |
| **2016/17** | Protection, Promotion, Development and Management of Indigenous Knowledge Bill [B 6 – 2016] | Section 76 | The objects of this Act are to—(a) protect the indigenous knowledge of indigenous communities from unauthorised use and misappropriation;(b) promote public awareness and understanding of indigenous knowledge for the wider application and development thereof;(c) develop and enhance the potential of indigenous communities to protect their indigenous knowledge;(d) regulate the equitable distribution of benefits of the use of indigenous knowledge;(e) promote the commercial use of indigenous knowledge in the development of new products, services and processes;(f) provide for registration, cataloguing, documentation and recording of indigenous knowledge held by indigenous communities;(g) establish mechanisms for the accreditation of indigenous knowledge practitioners; and(h) recognise indigenous knowledge as prior art in the determination of, and eligibility for, protection of subject matter under intellectual property laws. | Completed |
|  |  |  |  |  |
| **2017/18** | National Research Foundation Amendment Bill [B 23 – 2017] | Section 75 | The object of the Foundation is to contribute to national development by– (a) supporting, and promoting and advancing research and human capacity development, through funding and the provision of the necessary research infrastructure, in order to facilitate the creation of knowledge, innovation and development in all fields of science and technology, including humanities, social sciences and indigenous knowledge;(b) developing, supporting and maintaining national research facilities;(c) supporting and promoting public awareness of, and engagement with science; and(d) promoting the development and maintenance of the national science system and support of Government priorities. | Completed |
|  |  |  |  |  |
| **2018/19** | Science and Technology Laws Amendment Bill [B 42 – 2018] | Section 75 | To amend the Scientific Research Council Act, 1988, the Academy of Science of South Africa Act, 2001, the Human Sciences Research Council Act, 2008, the Technology Innovation Agency Act, 2008, and the South African National Space Agency Act, 2008, to harmonise certain administrative processes, provide for consultation with the Minister, and to provide for the performance of functions by the entities outside the Republic; and to provide for matters connected therewith. | Completed.  |

1. **Challenges emerging**

The following challenges emerged during the processing of legislation:

* **Protection, Promotion, Development and Management of Indigenous Knowledge Bill [B 6B – 2016]**

The legislation incorporated various sectors; hence the Committee had to satisfy itself that the legislation did not conflict with any existing legislation, and that it did not impose an unnecessary legal burden on those that the legislation sought to empower. The legislation also created a number of structures and processes, and the Committee sought to ensure that these were arranged so that stakeholders could be serviced efficiently and effectively, and not be burdened by unnecessary and costly bureaucracy.

* **National Research Foundation Amendment Bill [B 23B – 2017]**

The key objective of this amendment Bill was to legislatively mandate the NRF to coordinate science engagement within the NSI, and to codify the powers of the Minister of Science and Technology in relation to determine national policies for research and funding and to issue national policy guidelines for the implementation of the policies. The Committee had to satisfy itself that the latter powers were in line with those afforded by the Constitution, and that the NRF was capable of executing the science engagement mandate.

1. **Issues for follow-up**

The 6th Parliament should consider following up on the following concerns that arose:

* **Protection, Promotion, Development and Management of Indigenous Knowledge Bill [B 6B – 2016]**

The implementation of this Act hinges on the regulations that are currently being developed. The 6th Parliament should consider these, as well as the resources allocated to the National Indigenous Knowledge Systems Office (NIKSO) to ensure that the intended benefits are realised.

* **National Research Foundation Amendment Bill [B 23B – 2017]**

The NRF is already under-resourced, so added functions in relation to science engagement, will require strategic prioritisation and allocation of funds that are already over-subscribed.

**Science and Technology Laws Amendment Bill [B 42 – 2018]**

The NRF Bill may have to be aligned to compliment the changes effected by this Bill.

1. **Oversight trips undertaken:**

The following oversight trips were undertaken:

| **Date** | **Area Visited** | **Objective** | **Recommendations** | **Responses to Recommendations** | **Follow-up Issues** | **Status of Report** |
| --- | --- | --- | --- | --- | --- | --- |
| 29 October 2014 | Hydrogen South Africa (HySA) Systems Centre of Competence and the South African Institute for Advance Material Chemistry (SAIAMC) – University of the Western Cape | Enhance the Committee’s understanding of a component of South Africa’s research, development and innovation (RDI) programme that stimulates and guides innovation in the development of Hydrogen and Fuel Cell Technologies (HFCT). | On-site briefingDiscuss with the DST budget allocation challenges related to the project | Constraint budget | • When the prototypes that have been developed would be ready for commercialisation and what would be needed for this to be realised.• With regard to the drive for beneficiation of South Africa’s natural resources, on which minerals should South Africa focus its efforts.• Whether the investment by government in this initiative is sufficient and what steps could be taken to ensure the work being done was advertised more broadly.The partnerships formed with both the local and international industry and the potential job creation aspects of HySA and how this could be enhanced. | Adopted as minutes |
| 12 November 201425 – 26 November 2014 | SKA Project Office – Pinelands, Western CapeSouthern African Large Telescope (SALT) in Sutherland and the SKA and the Karoo Array Telescope (MeerKAT) sites in Carnarvon, Northern Cape | Understand and see how the control room remains the main engineering room from where the SKA telescope will be operated.Enhance the Committee’s understanding of the distinction between optical and radio astronomy | On site briefFamiliarisation with DST funded projectsSupport DST bid to host SKA |  |  | Adopted 16 February 2015 and published in ATC on 9 March 2015 |
| 18 March 2015 | Medical Research Council (MRC) on its Strategic Health Innovation Partnerships (SHIP) projects – Tygerberg, Western Cape | Enhance the Committee’s understanding of programme | On site briefExplore collaborative work on departmental/ parliamentary level on health issues.  |  |  | Adopted as minutes |
| 12 August 2015 | Centre for High Performance Computing | Enhance the Committee’s understanding of the Centre | On site briefingHighlight funding challenges with the DST and Parliamentary Budget processes  | Constraint budget |  | Adopted as minutes |
| 2 September 2015 | South African Astronomical Observatory (SAAO) – Cape Town | Enhance the Committee’s understanding of the SAAO | On site briefingHighlight funding challenges with the DST and Parliamentary Budget processes | Constraint budget |  | Adopted as minutes |
| 14 – 18 September 2015 | Facilities, supported by the Department of Science and Technology that are dedicated to health research, development and innovation (RDI) and research and development (R&D)-led industrial development in the Gauteng province | Enhance the Committee’s understanding of the Department’s support to health innovation and industrial development | Funding challenges, Incubation and the uptake of projects for marketing purposes | Constraint budgetImproved relationships among the entities in the portfolio. TIA and CSIR |  | Adopted |
| 4 November 2015 | Biologicals and Vaccines Institute of Southern Africa – Cape Town | Enhance the Committee’s understanding of Institute | On site briefingHighlight funding challenges with the DST and Parliamentary Budget processes | Constraint budget |  | Adopted as minutes |
| 2 - 3 February 2016 | Nkowankowa Demonstration Centre (Tzaneen) and the Hi Hanyile Essential Oils and Medicinal Plants Project (Giyani), based in Limpopo | Enhance the Committee’s understanding of the projects that support rural economies | Funding challenges, Incubation and the uptake of projects for marketing purposes.  | Constraint budget |  | Adopted |
| 14 – 16 September 2016 | Workshop on Protection, Promotion, Development and Management of Indigenous Knowledge Bill in Pretoria and North West | Engage with affected stakeholders as identified by the Department | Collaborative approach (inter departmental) | Broaden the consultation process to include all affected government portfolios.  |  | Adopted as minutes |
| 16 November 2016 | iThemba LABS – Faure, Western Cape | Enhance the Committee’s understanding of the nuclear physics research programme | On site briefingHighlight funding challenges with the DST and Parliamentary Budget processes | Commitment to Infra structure support |  | Adopted as minutes |
| 2017 | **None** |  |  |  |  |  |
| 2018 | **None** |  |  |  |  |  |

1. **Study tours undertaken**

The following study tour was undertaken:

| **Date** | **Places Visited** | **Objective** | **Lessons Learned** | **Status of Report** |
| --- | --- | --- | --- | --- |
| 15 – 25 June 2018 | Republic of Korea – SeoulJapan - Tokyo | The purpose of the study tour to Korea and Japan was to:(a) Learn how STI policy planning and co-ordination was conducted;(b) Learn best practice with regard to integrating STI into all sectoral development plans;(c) Identify possible policy approaches that could be used to increase the level of R&D investment;(d) Learn about the areas of STI co-operation with Korea and Japan; and how successful co-operation projects could be expanded and/or continued;(e) Identify opportunities for human capacity development; and(f) Gather information on how Parliament, through its oversight function, can ensure that STI is wholly integrated into all sectoral development plans and adequately resourced. | (a) Throughout the study tour, the delegation noted the emphasis on human values, ethical development, creativity, care for others and the environment, and the value of challenge as the drivers behind the use and implementation of STI.(b) Furthermore, the nurturing of creativity, in people and in organisations, is regarded as crucial to being innovative and is entrenched in all strategies and plans. For example, Korea’s economic plan is titled the Creative Economy Plan and seeks to create jobs and strengthen innovation by being creative (i.e., problem-solving, converging STI with culture and industry), and build a society where creativity is respected and embedded in the national psyche. Japan, in its science communication exhibits, characterises scientific investigation as the application of creative thinking.(c) All the organisations visited by the delegation expressed a strong desire to further expand the collaboration efforts already in existence between the two countries. This extends to student training and exchange.(d) Both Korea and Japan, at the time of their reconfiguring their economies through STI, had in place, an already highly-skilled workforce; created by the importance that their cultures place on education. South Africa, has the added challenge of creating a highly-skilled workforce while it stays abreast of, and develops its own strategic areas of expertise, within the global technology development sphere.(e) Both Korea and Japan have STI policy formulation and the co-ordination of their science and innovation systems located within cabinet offices under the President and lead by the Prime Minister. This configuration ensures that all ministries that receive a budget allocation for R&D, implements their R&D mandates as dictated by the national STI plan.(g) The delegation noted the importance placed on science communication in ensuring that the public understood the role and value of STI. Japanese universities have formal undergraduate and postgraduate degree courses in science communication. Furthermore, science communication initiatives are imbedded in all levels of education, starting with early childhood development. | Report published in the ATC on 6 September 2018.Considered by National Assembly on 28 February 2019. |

1. **International Agreements:** *None were referred during the period under consideration*
2. **Statutory appointments:** *The Committee does not make any statutory appointments*
3. **Interventions:** *None were referred during the period under consideration*
4. **Petitions:** *None were referred during the period under consideration*
5. **Obligations conferred on Committee by legislation:**
* Section 5(1) of the Money Bills Amendment Procedure and Related Matters Act (No. 9 of 2009) mandates and sets out the process that allows Parliament’s National Assembly, through its Committees, to make recommendations to the Minister of Finance to amend the budget of a national department. As obligated by Act No. 9 of 2009, in October each year, the Committee must submit a Budgetary Review and Recommendation Report (BRRR) to the Minister of Science and Technology regarding the activities and budget of the Department and the entities that fall under its oversight responsibilities.
1. **Summary of outstanding issues relating to the department/entities that the Committee has been grappling with:**

The following key issues are outstanding from the Committee’s activities during the 5th Parliament:

| **Responsibility** | **Issue(s)** |
| --- | --- |
| Department and ASSAf | The requirement for ASSAF to comply with the PFMA, as currently legislated. The Science and Technology Laws Amendment Bill will hopefully bring finality to this matter. |
| NACI | NACI has been operating with an acting-CEO since 2014. |

1. **Other matters referred by the Speaker/Chairperson (including recommendations of the High Level Panel):** *None were referred during the period under consideration*
2. **Committee strategic plan:** *Annexed to this report*
3. **Master attendance list:** *Annexed to this report*