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SAPS STRATEGIC PARTNERSHIPS IN THE SCIENTIFIC AND TECHNOLOGY ENVIRONMENT: THE STATE INFORMATION TECHNOLOGY AGENCY (SITA) AND THE COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH (CSIR)

1. Introduction

The National Development Plan (NDP) states that “a safe South Africa needs a strong criminal justice system” that “requires cooperation among all departments in the Justice, Crime Prevention and Security (JCPS) cluster”. The NDP places significant focus on the fact that the correct implementation of the recommendations in the *Review of the South African Criminal Justice System* will be able to address the system’s current weaknesses. One of the seven recommendations is to “modernise, in an integrated and holistic way, all aspects of systems and equipment”, which would include fast-tracking the implementation of current projects and modernisation initiatives. The NDP recommends that “technology should be used to increase efficiency across the board, and particularly to eliminate bottlenecks in the criminal justice system and should include, amongst others, the investigation-docket management systems. It further states that “*technology for preventing and investigating crime should be prioritised to prevent it from happening in the first instance, and to expedite investigations through increased forensic capacity, better crime scene investigation and analysis of current and future threats to safety.*”

The SAPS is currently engaged in strategic partnerships with the State Information Technology Agency (SITA) and the Council for Scientific and Industrial Research (CSIR). Both of these bodies will assist the SAPS to police smarter. This paper provides an overview of the functions, tasks and projects provided by the SITA and CSIR.

2. State Information Technology Agency (SITA)

The State Information Technology Agency (SITA) Act, 1998 (No. 88 of 1998) [*as amended by the State Information Technology Agency Act 38 of 2002*]¹ establishes a juristic person known as the State Information Technology Agency (Pty) Ltd that is responsible for the provision of information technology services to the public administration and to provide for matters connected therewith. According to Section 6 of the Act, the objects of the Agency are to improve service delivery to the public through the provision of information technology, information systems and related services in a maintained information systems security environment to departments and public bodies; and to promote the efficiency of departments and public bodies through the use of information technology.

As the Prime Systems Integrator (PSI) for the State, SITA aims to:²

¹ The SITA Act, 1998 was signed by the President on 31/10/2002 and published in the Gazette No. 24029 of 7/11/2002.

² SITA (2012)



- Reduce the cost of doing business with government;
- Enable the public service to serve citizens faster and better;
- Enable convenience to citizens through e-services;
- Enable the fight against corruption and improve public sector accountability; and
- Contribute towards job creation through supporting the growth of an indigenous information communication technology (ICT) industry.

The PSI value added to the SAPS through the SITA is:

- 1) Enable smarter policing through the harmonisation of the ICT systems within the SAPS;
- 2) Enable effective and efficient crime investigation; and
- 3) Enable improved accessibility of police services by citizens through technology.

The SAPS and the SITA has had a strenuous relationship due to poor service delivery from the Agency. The last meeting between the Committee, the SAPS and the SITA held on 22 May 2012 ended abruptly as it became clear that there has been no consultation between the two parties prior to the meeting. The Committee resolved to terminate the meeting without discussing the presentation and called on the two parties to sort out their differences.³

Most projects that involves the SITA has been running for numerous years at enormous cost implications for the SAPS. Most notable are the following projects:

- Integrated Case Document Management System (ICDMS) popularly known as e-docket. *The project was started in 2002 and is currently still ongoing. Between 2011/12 and 2013/14, it is expected that R148 million would have been spent for the roll out of the system at 79 stations.*
- National Network Upgrade Programme (NNUP). *The project is ongoing. In the 2011/12 financial year, R1.8 billion was availed to the project since the start of the project in 2005.*
- Integrated Mobile Vehicle Data Command and Control Solution (IMVDCS). *On 16 January 2015, SAAB Grintek Defence (Pty) Ltd filed papers in the North Gauteng High Court against the SAPS, SITA, National Commissioner, SAPS, Minister of Police and Minister of Public Service and Administration for the cancellation of the tender.*
- Property Control and Exhibit Management (PCEM) system: *In 2011, the SITA denied involvement in the project although the SAPS insisted that it was a SITA project.*

The SITA is also responsible for most, if not all, the ICT projects related to the Criminal Justice System Revamp (CJS) and Integrated Justice System (IJS) projects. For the 2014/15 financial year, a total amount of R184 million (R184 652 356.00) was appropriated towards the CJS/IJS projects. At the end of September 2014, the SAPS managed to spend 62 per cent or R83 million thereof. This lower than planned expenditure was due to the fact

³ PMG (2011)



that the SAPS and SITA Service Level Agreement (SLA) was not yet finalised and no expenditure occurred for the maintenance of the Biometric Enhancement Solution. The following projects form part of the CJS/IJS:

Criminal Record Centre (14 projects)

At the end of September 2014, eight (8) out of 17 milestones were achieved (47.1 per cent) in this environment. The following projects are currently ongoing within the Criminal Record Centre environment:

- 1) Automated fingerprint identification replacement: *The bid specification was submitted to the SITA for publishing, but was returned with remarks. The revised bid was submitted on 01 September 2014;*
- 2) Automated fingerprint identification maintenance: *No expenditure out of the R59 million allocated at the end of September 2014, due to the lack of a SLA;*
- 3) Decentralisation of the Automated fingerprint identification capabilities;
- 4) Replacement of stolen equipment at the Provincial Local Record Centres at Springs and Vryburg;
- 5) Provide end-user equipment for the newly appointed Criminal Record Centre members;
- 6) Audio visual and video conferencing;
- 7) Electronic plan drawing;
- 8) Facial compilation;
- 9) Biometric enhancement solution (maintenance);
- 10) Additional devices for enhancement and presentation of digital latent prints;
- 11) Additional devices for panoramic image capturing cameras;
- 12) HANIS (Home Affairs) Integration;
- 13) Decentralisation of JUDDIS; and
- 14) Re-prioritised Criminal Record Centre projects included in the SAPS Annual performance Plan 2014/15

Forensic Science Laboratories (23 projects)

At the end of September 2014, 15 out of 34 milestones were achieved (44.1 per cent) in this environment. The following projects are currently ongoing within the Forensic Science Laboratory environment:

- 1) Provide ballistic interface Unit (BIU) capabilities;
- 2) Automated ballistic identification system (ABIS) upgrade and maintenance;
- 3) Automated ballistic identification system (ABIS current solution maintenance);
- 4) Closed Circuit Television (CCTV) and access control;
- 5) End user equipment for forensic science laboratories: *The SAPS received approval from the Information Committee Technology to procure from the SITA Contract 285/1;*
- 6) Barcode printers for RI Lane Cape Town and Arcadia;
- 7) Procure iPads;
- 8) High resolution cameras for scientific analysis unit;
- 9) Barcode scanners – Cape Town and Arcadia;



- 10) Barcode for all police stations – Implementation of the DNA Act;
- 11) De-STRLAB Licences upgrade;
- 12) XRY devices;
- 13) Semi-automated DNA isolation instrument in DNA Crime Lane;
- 14) Scientific data management system upgrade;
- 15) Semi-automated DNA processing systems Eastern Cape;
- 16) Automatic DNA equipment for PCR QPR – RI LANE;
- 17) Expert systems and expert assistance system;
- 18) Radio Frequency Identification (RFID);
- 19) ROWA Storage;
- 20) SAN Storage (Eastern Cape and KZN);
- 21) Balance Solutions (SAU Pretoria);
- 22) Mixture Analysis Tool; and
- 23) Re-prioritised forensic science laboratories projects included in the SAPS Annual Performance Plan 2014/15.

Provincial, Cluster and Police Stations (2 projects)

At the end of September 2014, four (4) out of five (5) milestones were achieved (80 per cent) in this environment. The following projects are currently ongoing within the Provincial, Cluster and Police Stations environment:

- 1) End-user equipment and software license renewal; and
- 2) End-user equipment deployment and configuration.

Detective Services (8 projects)

At the end of September 2014, six (6) out of six (6) milestones were achieved (100 per cent) in this environment. The following projects are currently ongoing within the Detective Services environment:

- 1) Voice recording (Crime Stop Centres);
- 2) Expansion of digital extraction devices;
- 3) 12 Analytical solutions;
- 4) XRY Renewal;
- 5) XRY Expansion;
- 6) Cellibrite – UFED (*Cellibrite is digital forensics software*); and
- 7) Cellibrite – Ultimate Touch.

Visible Policing (3 projects)

At the end of September 2014, two (2) out of five (5) milestones were achieved (40 per cent) in this environment. The following projects are currently ongoing within the Visible Policing environment:

- 1) Network infrastructure (Veritas building upgrade);
- 2) Mobile connectivity devices (Field terminal devices) – expansion; and
- 3) Mobile connectivity devices (Field terminal devices) – expansion.



Protection and Security Services (1 project)

At the end of September 2014, no milestones were achieved in the Protection and Security Services environment and no expenditure from the R973 209.00 allocated for 2013/14 was recorded. The following project is currently ongoing within the Criminal Record Centre environment:

- 1) Maintenance of CCTV capabilities: Mobile command centres.

Comments and questions

- 1) The Committee should request a comprehensive breakdown of all the ICT projects involving the SITA, not only regarding the CJS modernisation. This should include the total budget, fund spent to date, progress and clear timeframes.
- 2) The Committee should request the SAPS to indicate whether skills transfer to SAPS members is currently taking place. The lack of skills transfer was a major finding of the performance audit into the use of contractors conducted by the Auditor-General in 2012. If skills are being transferred, the Department should provide details on the expert skills being transferred. If not, the Department should indicate
- 3) The Committee should request the SAPS to provide details on the SAPS/SITA Business Agreement and to indicate the specific areas addressed therein. If possible, the Department should provide a copy of the agreement to the Committee.
- 4) The Committee should request the SITA to elaborate on the nature of the *SITA Contract 285/1* to procure equipment.
- 5) The Committee should request both the SITA and the SAPS to state the current readiness to implement the Criminal Law (Forensic Procedures) Amendment Act, 2013 (Act 37 of 2013) or commonly referred to as the DNA Act.
- 6) The Committee should request both Departments to indicate what the current status of the Integrated Case Document Management System (ICDMS) is and also to indicate the budget allocation made towards this project in the 2014/15 financial year. The SAPS should also indicate when the envisage completion date of the project is.
- 7) The SAPS launched its first e-police station at the end of January 2015 in Kabokweni, Mpumalanga. This entails the taking of statements on computers to minimise the loss of dockets, amongst others. The Committee should request the SAPS to explain what the difference between the e-docket system and the e-police station is and whether these are interlinked.
- 8) The Committee should request the SAPS to indicate what the current status of the Property Control and Exhibit Management (PCEM) system is, including the budget allocated to this project and the funds spent to date.
- 9) The Committee should request both Departments to indicate the current status of the National Network Upgrade Programme (NNUP), the budget and envisaged completion date. The lack of network capacity impacts negatively on the service delivery of the SAPS and also all technologic advancements are dependent on a stable and efficient data network. As such, the Committee should seek assurance from the SAPS and SITA whether the NNUP will provide sufficient data capabilities in future.
- 10) Although the SAPS cannot comment on an ongoing court cases, the Committee should request the SAPS to speak to the cancellation of the Integrated Mobile Vehicle



Data Command and Control Solution (IMVDCS) tender with SAAB Grinrod Defence, but most importantly whether the SAPS current has a functioning Automated Vehicle Location (AVL) system and whether this forms part of the cancelled tender.

- 11) The Committee should request the SAPS to provide the full names and functionality of the projects listed above, like, JUDDIS, ROWA etc.

3. Council for Scientific and Industrial Research (CSIR)

The SAPS recently stated that the Division: Supply Chain Management (SCM) identified the need to cooperate and obtain expertise in all areas of policing including technologies, research, procurement and skills development, in an effort to continually enhance the ability of the Service to fulfil its constitutional mandate.⁴ This prompted a need to access scientific and engineering expertise to support both the operational and strategic components in responding and ensuring national safety and security. The SAPS obtained approval from the National Treasury to approach the CSIR with the view to conclude a Memorandum of Agreement (MOA), that will create an institutional framework for the Service to have direct access to a scientific, engineering and technology base to support both the operational and strategic components of policing, and ensuring the national safety and security of the citizens of the Republic of South Africa.⁵

In February 2014, the CSIR and the SAPS entered into Memorandum of Agreement (MOU), which establishes the institutional framework for the SAPS to do 'smart policing'.⁶ This strategic partnership was commended by the Minister of Science and Technology, Derek Hanekom, as fighting crime is one of the government's five priorities. According to the CSIR, the MOU "is a formal step towards the longer-term objective to establish a Safety and Security Evaluation and Research Institute that will perform independent, ongoing scientific and operational research and evaluation tasks and provide scientific decision support services to the SAPS as and when required".⁷

The MOU further outlines the portfolio of research and technology support programmes with deliverables over a three-year period. The following six (6) bilateral programmes will be addressed:

1) Command, Control and Shared Institutional Awareness

The first programme will address Command, Control and Shared Situational Awareness solutions, including technologies such as sensors, data fusion, intelligence and information gathering, display and dissemination, plus associated information technology infrastructure, as well as operational command and control systems and infrastructure in the form of so-called 'war rooms'. Such facilities have

⁴ SAPS (2014)

⁵ SAPS (2014)

⁶ CSIR (2014) http://www.csir.co.za/news/2014/02/CSIR_SAPS_partnership.html

⁷ CSIR (2014) http://www.csir.co.za/news/2014/02/CSIR_SAPS_partnership.html



already been piloted and tested at the CSIR for use in large-scale national surveillance and safety operations, such as during the Soccer World Cup in 2010.⁸

2) Information Technology

In the ICT domain, the CSIR will be focusing on optimising systems within the SAPS to improve efficiency and cost effectiveness. The programme will be conducted in alignment with the CSIR's relationship with the *State Information Technology Agency (SITA)*, which has a distinct statutory mandate regarding ICT services for government. The CSIR's responsibilities will lie in research, development and include next generation network systems architecting, analysis, simulation and evaluation, wireless solutions, cyber security and digital forensics.⁹

3) Integration and interoperability

Integration and interoperability are seen as a key to optimising existing infrastructure and resources in defence and security. This entails finding ways for the smarter use of existing equipment and systems and avoiding new investments, the pitfalls of vendor lock-in and risks of costly, yet soon obsolete systems.¹⁰ This not only leads to better use of existing infrastructure but also improved connectivity within the SAPS operations and beyond. One such area is border safeguarding, which is an issue of transversal importance for the SAPS, as well as the SANDF, the Department of Home Affairs, and National Parks on the issues of poaching and smuggling, and many others. This is an area where technology has been tested to synchronise activities between parties by establishing systems, standards and procedures for interoperability.¹¹

4) Operational Quick Reaction Tasks (QRTs)

The CSIR stated that "Operational Quick Reaction Tasks (QRTs) are critical in agile law enforcement". This includes the ability to rapidly design, engineer and create a custom solution to an urgent operational need. Examples can include urgent deployment of overhead surveillance in areas of uprising, droppable field mission control containers, and terrain-specific vehicle adaptation.¹² The partnership will ensure that the SAPS will have "access to knowledgeable, technically and operationally skilled personnel to respond to immediate needs at short notice and to provide solutions to immediate problems."¹³ The CSIR has performed this duty for the SANDF for many years. One such project was modifications made to the SANDFs 'Gecko' vehicle (already in use) to transform it into a waterborne base to enable an improved means of rescuing victims caught in flooded rivers.¹⁴ It is important to note that these tasks have to be completed within 24 to 72 hours and

⁸ CSIR (2014) and SAPS (2014)

⁹ CSIR (2014) and SAPS (2014)

¹⁰ CSIR (2014) and SAPS (2014)

¹¹ CSIR (2014) and SAPS (2014)

¹² CSIR (2014) and SAPS (2014)

¹³ CSIR (2014) and SAPS (2014)

¹⁴ CSIR (2013)



typically require a customised, solid – yet cost-effective – solution to address an urgent force deployment need.¹⁵ This is presumably the programme in which the current Nyala armoured vehicles will be modified for quicker response to public unrest.

Additionally, and with a longer term view, the CSIR will perform operational assessments of current doctrine, tactics, procedures, optimising the use of personnel, systems and equipment.¹⁶

5) Science and technology capability development

The programme to drive science and technology capability development is set to bring skills and capabilities to the SAPS to support systems and product evaluation, acquisition, product deployment or customisation, plus to establish new technical capabilities that are currently underutilised. This is part of a global trend for police and defence forces to train staff not only in law enforcement skills, but to provide varying levels of technology competence development as well due to the role technology plays in combatting crime and understanding greater levels of sophistication in technologies used to perpetrate crime.¹⁷

6) Strategic and Operational Decision Support

In the area of Strategic and Operational Decision Support, activities will focus on the establishment of a scientific decision support base for the SAPS for both operational and strategic needs. This will include tender support, programme and project management support (quality assurance and configuration management), strategic technology forecasting, analysis and modelling (e.g. crime statistics) and facility planning. The ultimate aim is the establishment of a strategically independent Safety and Security Evaluation and Research Institute that will serve as the SAPS ‘in house’ science and research capability for ongoing evaluation, procurement support and strategic technology capability management.¹⁸

The MOA provides for the establishment of:¹⁹

- a Bilateral Committee, who is responsible to oversee the fulfilling of the objectives of the MOA;
- a Programme Management Steering Group, who is responsible to manage (“operationalise”) the Bilateral Programmes;
- related sub-committees, as appointed by the Bilateral Committee, as and when the need arises; and
- Programme co-ordinators, as appointed by the Programme Management Steering Group, for purposes of co-ordinating any specific Bilateral Programme.

¹⁵ CSIR (2013) http://www.csir.co.za/enews/2013_jun/21.html

¹⁶ CSIR (2014) and SAPS (2014)

¹⁷ CSIR (2014) and SAPS (2014)

¹⁸ CSIR (2014) and SAPS (2014)

¹⁹ SAPS (2014)



In a response by the SAPS in 2014 (Annual Report hearings) it was stated that there is no specific budget allocated for the utilisation of the services of the CSIR.

Comments and questions

- 1) The Committee should request a Copy of MOU with details of full research portfolio, the needs already identified by the Division: SCM and the CSIR quotations approved to date.
- 2) The Committee should request the CSIR to indicate the level of cooperation with the SITA in terms of information technology (IT). Have they entered into a MOU or SLA?
- 3) It is important to note that these tasks have to be completed within 24 to 72 hours and typically require a customised, solid – yet cost-effective – solution to address an urgent force deployment need.
- 4) The Committee should request the SAPS to indicate in which programme the development of the new generation Nyala armoured vehicle and mobile police service points (to be used in rural areas) are located. The Committee should also request progress on the development together with the budget allocation.
- 5) The Committee should request the CSIR and the SAPS to unpack the scope within the Strategic and Operational Decision Support Programme, especially in terms of the integration of this programme with existing capabilities of the Department, in terms of tender support and crime statistics.
- 6) The Committee should seek clarity on the long term goal of establishing a “*Safety and Security Evaluation and Research Institute*”, which will serve as the SAPS ‘in house’ science and research capability for ongoing evaluation, procurement support and strategic technology capability management. Will this “institute” be located within the SAPS or in the CSIR as is currently the case with the specialised arm of the CSIR dealing with defence issues?
- 7) The Committee should request the SAPS and CSIR to elaborate on the composition of the Bilateral Committee responsible to manage (‘operationalise’) the Bilateral programmes? How often does the Committee meet?
- 8) The Committee should request the SAPS to indicate whether the Division: SCM has decided on a specific sourcing strategy to be followed in terms of CSIR quotations.
- 9) The SAPS must explain the work procedure of the CSIR/SAPS in detail to the Committee.
- 10) The CSIR and SAPS should indicate whether the three year contract is sufficient to develop the capabilities listed in the six bilateral programmes?

4. Conclusion

The strategic partnerships of the SAPS within the scientific and technology environment has the potential to add significant value to the manner in which the SAPS currently police. The effective and efficient use of technology and science will undoubtedly enable the SAPS to police smarter, but strict controls to govern these projects and programmes must be put in place to ensure successful outcomes are achieved through these investments. These



partnerships must contribute to the vision of the NDP, though the prioritisation of technology to prevent and investigate crime.

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