1 General Information

1.1 Original Request for Proposal (RFP) Bid Document

The Auditor-General South Africa (AGSA) shall retain the RFP, and all related terms and conditions, exhibits, and other attachments, in original form in an archival copy. Any modification of these, in the bidder / vendor’s submission, is grounds for immediate disqualification.

1.2 The Organization

The Auditor-General of South Africa (AGSA) is the supreme audit institution (SAI) of South Africa. It is the only institution which, by law, has to audit and report on how the government is spending the South African taxpayers’ money. This has been the focus of the AGSA as an institution since its inception in 1911. When the country’s new Constitution came into effect in 1994, the role and responsibilities of the organisation were expanded even further to enable the institution to fulfil its constitutional mandate.

The AGSA is a “chapter 9” institution because its mandate is outlined in chapter 9 (sections 181 and 188) of the Constitution of the Republic of South Africa. The AGSA annually produces audit reports on all government departments, public entities, municipalities and public institutions. In
addition to these entity-specific reports, the audit outcomes are analysed in general reports that cover both the Public Finance Management Act (PFMA) and Municipal Finance Management Act (MFMA) cycles. Reports on discretionary audits, performance audits and other special audits are also produced.

Our vision
To be recognised by all our stakeholders as a relevant SAI that enhances public sector accountability.

Our reputation promise/mission
The AGSA has a constitutional mandate and, as the SAI of South Africa, exists to strengthen our country’s democracy by enabling oversight, accountability and governance in the public sector through auditing, thereby building public confidence.

Our values
- We value, respect and recognise our people
- Our accountability is clear and personal
- We are performance driven
- We value and own our reputation
- We work effectively in teams
- We are proud to be South African

Independence and transparency
The AGSA not only has to audit and report on the financial management in the public sector, but also has to do so in a manner that will enable the legislature (parliamentarians) to call the executive (cabinet ministers) to account for how they dealt with taxpayers’ money. Explaining how the public can be sure that the AGSA is indeed fulfilling its mandate and remains independent, former Auditor-General Terence Nombembe said: “Although we audit the public sector, we are not part of it. In 1993 we gained autonomy and were set apart from the public sector, so we are not bound by any public service rules and regulations. The Constitution also ensures our independence. We are legally, financially and
operationally independent. We are governed by our own act, called the Public Audit Act, No. 25 of 2004 (PAA). To generate income, we charge government institutions for the audits we conduct. We report directly to Parliament.”

The National Assembly established the Standing Committee on the Auditor-General (SCoAG) to maintain oversight of the AGSA as required by the PAA. In terms of the PAA, the committee is tasked with assisting and protecting the AGSA to ensure its independence, impartiality, dignity and effectiveness.

1.3 Existing Technology Environment

The AGSA has a hybrid technology environment, based on Microsoft Windows server 2008R1 and Windows 7 desktop operating system. The email communication system is hosted on Microsoft Exchange Server 2008 backbone.

The wide and local area network technology is based on Star topology architecture, with the main network hub at head office in Brooklyn, Pretoria with the regional office hubs connecting into it. We also have a wireless and a Virtual Private Network (VPN) network which provide connectivity redundancy.

The main data centre hosted in Brooklyn, Pretoria is virtualized on VMWare version 5.5 technologies. The main database is hosted in Oracle 10G R2. This database is fed from a PeopleSoft Enterprise Resource Planning (ERP) system. The current version of PeopleSoft is 9.0 (Finance and Human Capital modules) and 9.1 (CRM service management module). There plans underway to upgrade PeopleSoft ERP system to version 9.2 as well as upgrade the Oracle database to Oracle 12c. The key systems and databases are replicated to a disaster recovery (DR) site that is situated at our Gauteng regional office.

The AGSA also develops bespoke system using Microsoft .Net framework and hosting the data in a Microsoft SQL Server 2008 and 2012 database versions. To date the following Microsoft .Net application systems are in production:

- Audit Software Management Information System (ASMIS)
- AGSA Policy register
- AGSA Gift and Hospitality Register
- AGSA Exit Interview
- AGSA Talent Management

All the AGSA systems, except TeamMate are thin client, web based business application systems. TeamMate is a thick client, commercially off the shelf (COTS) Audit Management Software business application system. It is used by +- 2500 auditors to execute the auditing processes. Each installation of TeamMate is a standalone business application system which is used to collect audit evidence using Microsoft Word and Excel electronic working papers and generate various audit reports.

Microsoft Office 10 is the productivity suite of choice, with SharePoint 2010 hosting the intranet and used as a hub for internal collaboration and knowledge sharing. The AGSA internet site (www.agsa.co.za) is hosted on the community version of DotNetNuke technology and drives collaboration and communication with external stakeholders. Recently we developed and launched the AGSA’s first mobile application, which supports the internet in communicating audit reports in very intuitive manner. The application is developed in an HTML5 compliant technology framework and is available through the Apple and Google application stores. To download the application, search for “AGSA” in both stores. Business Intelligence and reporting is driven by Qlikview version 10 and Microsoft Excel, with the roadmap to move the bulk of reporting to Qlikview version 11 and Microsoft SQL Server 2013 business intelligence technology stack (SQL Server database, SQL Server Integration, SQL Server Analysis, and SQL Server Reporting Services).
2 Scope of Work, Specifications & Requirements

All proposals will be evaluated based on the criteria provided in the table 1 below. The detailed questions, which must be answered fully, are found in table 4 under section 2.3. Proposal responses will be evaluated on a scale of 1 to 4 per assessment question.

Table 1: Solution evaluation and selection criteria (Summary)

<table>
<thead>
<tr>
<th>Technical evaluation criteria (40%)</th>
<th>Portfolio of evidence (POE</th>
<th>Weighted score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data masking product certification/ accreditation by the product vendor</td>
<td>Accreditation/certification from the product vendor</td>
<td>15%</td>
</tr>
<tr>
<td>Skilled consultant(s) with data masking project implementation experience in a hybrid IT environment</td>
<td>Consultant CVs showing relevant skills and experience in data masking implementation</td>
<td>20%</td>
</tr>
<tr>
<td>Verifiable data masking project implementation experience</td>
<td>Three or more contract award letters and portfolio of completed data masking implementation projects</td>
<td>15%</td>
</tr>
<tr>
<td>Customer references where data masking projects were implemented</td>
<td>Three or more reference letters issued by customers where project was implemented</td>
<td>20%</td>
</tr>
<tr>
<td>Technical suitability of the data masking tool in line with AGSA business and technology architecture standards and requirements</td>
<td>Answer all the functional and technical specification questions in section 2.3. Provide a write-up that specifically highlights the suitability of your product to AGSA’s architecture standards. Screen shots of your product can be used to support your responses.</td>
<td>30%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>100%</strong></td>
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</tbody>
</table>
2.1 Pricing requirement

- The pricing specification is supplied separately in another document. Please complete the pricing as comprehensively as you can.
- Please also indicate the available pricing models and provide full details for each one, example Core CPU base and/or Volume of data masked and/or User based. The table 2 below is a guideline for pricing based on host environment CPU

N.B. If you have more than one pricing model, please indicate the one you are proposing to the AGSA.

Table 2: AGSA Database and host server configuration

<table>
<thead>
<tr>
<th>Application System</th>
<th>System Environment</th>
<th>Database environment</th>
<th>Server configuration</th>
<th>Number of Core CPUs</th>
<th>Core</th>
<th>VMware server version</th>
</tr>
</thead>
<tbody>
<tr>
<td>PeopleSoft Finance Production</td>
<td>Production (PRD)</td>
<td>Oracle 10GR2</td>
<td>Windows server 2008 R1</td>
<td>5</td>
<td>5.5</td>
<td></td>
</tr>
<tr>
<td>PeopleSoft Finance Quality Assurance</td>
<td>Quality Assurance (QA)</td>
<td>Oracle 10GR2</td>
<td>Windows server 2008 R1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PeopleSoft Finance User Acceptance Test</td>
<td>User Acceptance Test (UAT)</td>
<td>Oracle 10GR2</td>
<td>Windows server 2008 R1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PeopleSoft Finance Testing</td>
<td>Testing (TST)</td>
<td>Oracle 10GR2</td>
<td>Windows server 2008 R1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PeopleSoft Finance Development</td>
<td>Development (DEV)</td>
<td>Oracle 10GR2</td>
<td>Windows server 2008 R1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PeopleSoft Human Capital Production</td>
<td>Production (PRD)</td>
<td>Oracle 10GR2</td>
<td>Windows server 2008 R1</td>
<td>4</td>
<td>5.5</td>
<td></td>
</tr>
<tr>
<td>PeopleSoft Human Capital Quality Assurance</td>
<td>Quality Assurance (QA)</td>
<td>Oracle 10GR2</td>
<td>Windows server 2008 R1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PeopleSoft Human Capital User Acceptance Test</td>
<td>User Acceptance Test (UAT)</td>
<td>Oracle 10GR2</td>
<td>Windows server 2008 R1</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>PeopleSoft Human Capital Testing</td>
<td>Testing (TST)</td>
<td>Oracle 10GR2</td>
<td>Windows server 2008 R1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Application System | System Environment | Database environment | Server configuration | Number of Core CPUs | VMware server version
--- | --- | --- | --- | --- | ---
PeopleSoft Human Capital Development | Development (DEV) | Oracle 10GR2 | Windows server 2008 R1 | | |

Server names

<table>
<thead>
<tr>
<th>Server names</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
Pshrdvdb64 | 3 | 5.5 |
Psdevdb | 3 | 5.5 |
Psdevdb64 | 3 | 5.5 |
Psuat | 2 | 5.5 |

The colours represent the environments that are sharing servers.

2.2 Solution objectives

The objectives of the user groups with respect to the data masking solutions are as follows:

- Protect the confidentiality, integrity and availability of sensitive personally identifiable information which is created and hosted in the PeopleSoft Enterprise Resource Planning and other related information systems.
- Compliance with the protection of personal information act (POPI Act) and protection of state information bill (POSI Bill)

The user groups and their objectives are specified below:

Table 3: System user groups and their objectives

<table>
<thead>
<tr>
<th>User group</th>
<th>No of users</th>
<th>Business objective</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Finance</td>
<td>10</td>
<td>Protect sensitive information in accounts payable and receivables</td>
<td>The ten users are mainly the super users in the Finance business unit. They mainly use PeopleSoft ERP to do their jobs.</td>
</tr>
<tr>
<td>User group</td>
<td>No of users</td>
<td>Business objective</td>
<td>Comment</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Human Capital</td>
<td>10</td>
<td>Protect sensitive information in</td>
<td>The ten users are mainly the super users in the Finance business unit. They mainly use PeopleSoft Human Capital module to do their jobs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Asset register</td>
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<td></td>
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<td>- Electronic data interchange (EDI) with banks</td>
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<td></td>
<td></td>
<td>- Payroll</td>
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<td></td>
<td></td>
<td>- Supply Chain Management</td>
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<tr>
<td></td>
<td></td>
<td><strong>Business objective</strong></td>
<td></td>
</tr>
<tr>
<td>ICT</td>
<td>80</td>
<td>Protect sensitive information during</td>
<td>The eighty (80) users are mainly the super users in the Information and Communications Technology (ICT) business unit. They mainly use PeopleSoft ERP development framework and Microsoft .Net development tools to do their jobs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Production system maintenance and support</td>
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<td></td>
<td></td>
<td>- System quality assurance</td>
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<td></td>
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<td>- System testing and integration</td>
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<td></td>
<td></td>
<td>- System development</td>
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</tr>
<tr>
<td>Auditors</td>
<td>2500</td>
<td>Protect sensitive information during</td>
<td>The 2500 users are mainly the auditors at different levels (Trainee auditors to junior audit clerks to senior management) in the AGSA audit business units. They mainly use TeamMate with Microsoft Word and Excel to do their jobs.</td>
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<tr>
<td></td>
<td></td>
<td><strong>Business objective</strong></td>
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<tr>
<td></td>
<td></td>
<td>- Audit evidence collection</td>
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<td></td>
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<td>- Audit evidence analysis</td>
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<td></td>
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<td>- Audit reporting</td>
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</tbody>
</table>
### 2.3 Functional and technical requirements

Legend:
1 = Does not meet requirement; 2 = partially meets requirement; 3 = fully meets requirement; 4 = exceeds requirement

#### Table 4: Functional and Technical solution specification

<table>
<thead>
<tr>
<th>Functional requirement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.3.1 Data masking solution - valid vendor accreditation(s) / certification(s)</td>
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<tr>
<td>2.3.1.1. The bidder submitted proof of data masking solution training certification / accreditation</td>
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<td>2.3.1.2. The bidder submitted proof of data masking solution implementation certification</td>
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<tr>
<td>2.3.2 Data masking solution - certified consultants (CV + valid &amp; current copy of certificates)</td>
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<tr>
<td>2.3.2.1. The bidder submitted profiles of consultants certified as data masking solution trainers</td>
<td></td>
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<tr>
<td>2.3.2.2. The bidder submitted profiles of consultants certified as implementers</td>
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<tr>
<td>2.3.3 Data masking solution - project implementation experience</td>
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<tr>
<td>2.3.3.1. The bidder submitted proof of a data masking solution training project (s)</td>
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<tr>
<td>2.3.3.2. The bidder submitted proof of a data masking solution implementation project(s)</td>
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<tr>
<td>2.3.4 Data masking solution - customer project reference(s)</td>
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<tr>
<td>2.3.4.1. The bidder submitted customer reference(s) from a data masking solution training project (s)</td>
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<tr>
<td>2.3.4.2. The bidder submitted customer reference(s) from a data masking solution implementation project (s)</td>
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</tbody>
</table>
### Functional requirement

<table>
<thead>
<tr>
<th>2.3.5</th>
<th>Technical suitability of the data masking tool in line with AGSA business and technology architecture standards and requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.3.5.1</td>
<td>The data masking solution must have a flexible business rules engine or be able to integrate with an open standards based business rules engine</td>
</tr>
<tr>
<td>2.3.5.2</td>
<td>The data masking solution must be able to accommodate the AGSA’s custom business rules for data masking</td>
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<tr>
<td>2.3.5.3</td>
<td>The data masking solution must be able to accommodate current and emerging data security and privacy regulations like POPI Act and POSI Bill</td>
</tr>
<tr>
<td>2.3.5.4</td>
<td>We prefer a data masking solution that addresses the masking processes at the application layer/logic level, especially for popular ERP environments like Oracle PeopleSoft, SAP and Microsoft.</td>
</tr>
</tbody>
</table>

### Production

- Sensitive and personally identifiable information in the AGSA production database must be dynamically masked. No static or persistent masking of the data will be allowed to prevent interfering with integrity of the data/information.

- The masking of the specific information must align to the role and security access permission of the user accessing the data. For example the Human Capital administrators and line managers of employees must be able to see the real values in the specific fields being masked, e.g. employee job data like position, salary, etc. if they have permissions to access it.

- The reporting component of the software is to generate compliance regulated specific reports through predefined dictionaries with reporting and exporting capabilities for internal logs and external audit requirements. For example POPI Act and POSI Bill once the reporting requirements made available by the regulator.

- The specific data to be included in a report should be selectable using a menu system. The system will reject a report request if the requestor does not have access rights to the data.

- The data masking product will have integration capabilities into other data security products (native database audit and logging) through the use of internet content adaptation protocol (ICAP) and integration into authentication servers through the use of security assertion mark-up language (SAML).

### Development and Test databases and environments
### Functional requirement

<table>
<thead>
<tr>
<th>Requirement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.3.5.10. The data masking solution must provide capabilities to create and manage test data per application</td>
<td></td>
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<tr>
<td>2.3.5.11. If the solution cannot create test data from scratch, then it must provide persistent or static data masking in the test database environment.</td>
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<tr>
<td><strong>Development database and environment</strong></td>
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<tr>
<td>2.3.5.12. The ability to mask free format data/information contained in Microsoft Office productivity tools (Word, Excel, Project, PowerPoint and OneNote)</td>
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<tr>
<td>2.3.5.13. The ability to mask free format data/information Adobe and image files formats</td>
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<td>2.3.5.14. The ability to mask data/information in XML files format</td>
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<tr>
<td><strong>Data masking solution architecture</strong></td>
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<tr>
<td>2.3.5.15. The data masking tool must be developed in and support open standards web architectures</td>
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<td>2.3.5.16. The data masking solution must be able to function in and support distributed data platform</td>
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<tr>
<td>2.3.5.17. The data masking server technology must support a VMWare virtualised Windows server environment</td>
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<tr>
<td>2.3.5.18. The data masking server technology must support a hybrid data centre environment, compatible with the main database technologies like Oracle, Microsoft SQL Server, IBM DB2, MySQL as well as file based systems.</td>
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<tr>
<td>2.3.5.19. The data masking solution must ideally provide database security functionalities like database activity monitoring, database intrusion prevention, database firewall and SQL injection protection</td>
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<tr>
<td>2.3.5.20. The data masking endpoint agents must support Microsoft Windows operating systems and office environments.</td>
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<tr>
<td>2.3.5.21. The virtual appliance deployment option, if applicable must support VMware.</td>
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<tr>
<td>2.3.5.22. The data masking technology must be compliant with standards based data integration and middleware technologies like IBM Websphere, Oracle WebLogic and Microsoft BizTalk Server</td>
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<tr>
<td>2.3.5.23. The data masking technology must support and be compliant with standards based enterprise content management (ECM) technologies like Microsoft SharePoint and Oracle</td>
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<tr>
<td>2.3.5.24. The data masking solution must have system performance monitoring tools and not degrade performance of the host business application and database environment.</td>
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<tr>
<td>2.3.5.25. The data masking solution must have capability to discover and protect sensitive data in big data environment (e.g. social media and RSS feeds)</td>
<td></td>
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</tbody>
</table>
2.4 Engagement Methodology

The winning bidder will be expected to work on site at our Brooklyn, Pretoria data centre to implement the solution for the duration of the project. The hours of work are from 07H30 – 16H15.
Annexure A – Business use cases

Use cases

The AGSA systems and data centre are hosted in VMWare virtualised environment, using HP hardware. The supporting server and desktop operating environment is Microsoft Windows.

The wide area network architecture is a star topology, with the regional office all connecting into the Head Office hub in Pretoria.

The main data centre is in Brooklyn, Pretoria and the secondary site serving as a hot Disaster Recovery (DR) site is situated in Houghton, Johannesburg. The data centre hosts a hybrid database environment made up of Oracle and Microsoft SQL server database environments.

Use case 1 – PeopleSoft ERP environment

The AGSA ICT business application system developers develop applications in a PeopleSoft ERP environment, which is supported by an Oracle 10G R2 database. The Oracle database is due to be upgraded to Oracle 12c database version in 2015. PeopleSoft ERP application is also due to be upgraded from PeopleSoft ERP version 9.0 (Financials and Human Capital modules) and PeopleSoft CRM module version 9.1 to PeopleSoft ERP version 9.2 across all the modules.

The methodology used for PeopleSoft ERP business applications development is the traditional waterfall approach.

There are four separate environments supporting the PeopleSoft ERP/Oracle database environment as follows:

- Development environment

  The PeopleSoft ERP development environment is used primarily and solely for development of new applications and maintenance (bug fixing) and enhancement of the existing applications. The development database is refreshed from the production database through a full database import and export. A custom SQL program (see annexure B) is then used to scramble selected database table fields as a strategy for implementing data masking. Access to this environment is restricted to PeopleSoft ERP developers and testers only.
• **Testing environment**

The PeopleSoft ERP test environment is used primarily and solely for testing of new applications and maintenance (bug fixing) and enhancement of the existing applications. The test database is refreshed from the production database through a full database import and export. A custom SQL program (see annexure B) is then used to scramble selected database table fields as a strategy for implementing data masking.

Access to this environment is restricted to PeopleSoft ERP developers and testers only.

• **Quality assurance (QA) environment**

The PeopleSoft ERP QA environment is used primarily and solely for user acceptance testing of new applications and maintenance (bug fixing) and enhancement of the existing applications. The QA database is refreshed from the production database through a full database import and export. A custom SQL program (see annexure B) is then used to scramble selected database table fields as a strategy for implementing data masking.

Access to this environment is restricted to PeopleSoft ERP developers and testers only.

• **Production environment**

The PeopleSoft ERP production environment is used primarily and solely for running PeopleSoft ERP live applications. No maintenance (bug fixing) and enhancement of the existing applications is allowed directly in the PeopleSoft ERP production environment. The production database is the master database and the single source of the AGSA’s live data. The production environment is replicated to a DR environment hosted in a separate facility at another site.

Access to the PeopleSoft ERP production environment is restricted to PeopleSoft ERP super users, service desk and production support staff, system administrators and database administration team. Application system developers do not have access to the PeopleSoft ERP production environments.
Use case 2 – TeamMate Audit Management software environment

The AGSA uses TeamMate audit management software to execute the regulatory and information systems audits at predetermined intervals during the year. Teammate is a file based system and uses a FoxPro database to store a limited amount of audit data. The bulk of the audit data is stored in a semi-structured format in Microsoft Excel workbooks. Microsoft Word, Adobe Acrobat and video and audio files are also used as file formats to store audit data, although to a lesser extent when compared to Microsoft Excel.

The TeamMate operations structure is decentralised, with each business unit maintaining its own TeamMate server to store, retrieve and backup the data files following a predefined protocol. Each business unit divides the audit into audit teams, with each team responsible for one or more audits at a time. On a daily basis, audit teams work from a client site to do audit work. The audit team leader is required to update the audit master file kept at the client site by synchronising with the audit team members. At a predetermined time at the end of the day, the master file is also synchronised with the master copy hosted on each business unit's TeamMate server.

Most of the TeamMate server backup is done online by ICT and the data is backed up to a central server at the AGSA data centre. There is a limited number of business units who still backup their data to tape and send it over by courier to AGSA ICT in Pretoria. The data on the tapes is then restored to the central server and the tape is rotated for use.

The audit data generated and managed through TeamMate is very sensitive as it relates to both personally identifiable information and state information from municipalities, municipal entities, provincial and national departments and state owned business entities which are semi-independent. It must be highlighted here that the AGSA is legislated to audit all the functions of these government entities, from Human Resources, Finance and Procurement (Supply Chain Management) to mention a few critical ones. The AGSA also audits departments and state entities that are responsible for defense, police, health and telecommunications. Therefore there is always an element of very sensitive and personally identifiable information as well as information that is critical to state security.
Use case 3 – Custom-built / bespoke application system environment

The AGSA has a unique business model and there are always business requirements that cannot be accommodated by neither the PeopleSoft ERP nor the TeamMate Audit Management software applications. This result in business requesting business applications that are custom built to suit their unique needs. To date there are several such business applications developed and in production. Other new ones are at different stages of the software development lifecycle.

The following are bespoke business applications that are in production. First is the Audit Software MIS (ASMIS), which was developed specifically to close the data and functionality gaps in TeamMate as well as provide management information. The system is developed in DevExpress technology and uses Microsoft SQL Server database to host the data.

Then there are smaller application developed in Microsoft .Net technology and the data hosted in Microsoft SQL server database. Two key applications that come to mind are the Gifts, Hospitality and Interest Register which contains personally identifiable data and the other one is the AGSA policy register, which contains data about policies and procedures and the relevant policy and procedures documents.

Use case 4 – Qlikview business intelligence application system environment

The business intelligence and data ware application system environment is at the very early stage of development. To date the AGSA does not have a centralised or distributed data warehouse and there are desperate small Qlikview analytic and reporting applications that are being developed.

The data warehouse is planned for development in 2015 and it will source data from all the operational applications mention in use cases 1 – 3, which includes but not limited to PeopleSoft ERP, Audit Management software and bespoke business applications. A decision has been made to host the data warehouse in the Microsoft SQL server database technology stack. It is envisaged that initially the data warehouse will host data from Human Capital, Finance, Procurement, ASMIS, Audit Management software and grow over time as the business requirements of the AGSA change.
Annexure B – Data masking scripts

UPDATE PS_JOB
SET ANNUAL_RT =
CASE WHEN (JOBCODE = 'F1') Then 115619
    WHEN (JOBCODE = 'F2') Then 102549
    WHEN (JOBCODE = 'GC1') Then 86309
    WHEN (JOBCODE = 'GC2') Then 154997
    WHEN (JOBCODE = 'E1') Then 268825
    WHEN (JOBCODE = 'E3') Then 201076
    WHEN (JOBCODE = 'E4') Then 195052
    WHEN (JOBCODE = 'E5') Then 191052
    WHEN (JOBCODE LIKE 'D%') Then 405354
    WHEN (JOBCODE LIKE 'C%') Then 535354
    WHEN (JOBCODE LIKE 'B%') Then 903870
    WHEN (JOBCODE LIKE 'A%') Then 1670930
ELSE
    153823
END,
MONTHLY_RT =672,
DAILY_RT =31.015,
HOURLY_RT =3.782364,
ANNL_BENEF_BASE_RT =11898
WHERE EMPL_STATUS IN ('A','L','P','S');

UPDATE PS_ZAC_PACKAGE_EMP E
SET E.ZAC_TOTAL_PACKAGE =
(CASE
    WHEN (E.GRADE = 'F1') THEN 115619
    WHEN (E.GRADE = 'F2') Then 102549
    WHEN (E.GRADE = 'GC1') Then 86309
    WHEN (E.GRADE = 'GC2') Then 154997
    WHEN (E.GRADE = 'E1') Then 268825
    WHEN (E.GRADE = 'E3') Then 201076
    WHEN (E.GRADE = 'E4') Then 195052
    WHEN (E.GRADE = 'E5') Then 191052
    WHEN (E.GRADE LIKE 'D%') Then 405354
    WHEN (E.GRADE LIKE 'C%') Then 535354
    WHEN (E.GRADE LIKE 'B%') Then 903870
    WHEN (E.GRADE LIKE 'A%') Then 1670930
ELSE
    153823
END,
WHEN (E.GRADE = 'GC2') Then 154997
WHEN (E.GRADE = 'E1') Then 268825
WHEN (E.GRADE = 'E3') Then 201076
WHEN (E.GRADE = 'E4') Then 195052
WHEN (E.GRADE = 'E5') Then 191052
WHEN (E.GRADE LIKE 'D%') Then 405354
WHEN (E.GRADE LIKE 'C%') Then 535354
WHEN (E.GRADE LIKE 'B%') Then 903870
WHEN (E.GRADE LIKE 'A%') Then 1670930
ELSE
153823
END)
WHERE E.EMPLID IN (SELECT DISTINCT J.EMPLID FROM PS_JOB J WHERE J.EMPL_STATUS IN ('A','L','P','S'));
/
UPDATE PS_EMPLOYEES EP
SET EP.ANNUAL_RT =
CASE WHEN (EP.JOBCODE = 'F1') Then 115619
WHEN (EP.JOBCODE = 'F2') Then 102549
WHEN (EP.JOBCODE = 'GC1') Then 86309
WHEN (EP.JOBCODE = 'GC2') Then 154997
WHEN (EP.JOBCODE = 'E1') Then 268825
WHEN (EP.JOBCODE = 'E3') Then 201076
WHEN (EP.JOBCODE = 'E4') Then 195052
WHEN (EP.JOBCODE = 'E5') Then 191052
WHEN (EP.JOBCODE LIKE 'D%') Then 405354
WHEN (EP.JOBCODE LIKE 'C%') Then 535354
WHEN (EP.JOBCODE LIKE 'B%') Then 903870
WHEN (EP.JOBCODE LIKE 'A%') Then 1670930
ELSE
153823
END,
EP.MONTHLY_RT =672,
EP.DAILY_RT =31.015,
EP.HOURLY_RT =3.782364,
EP.ANNL_BENEF_BASE_RT =11898,
EP.ADDRESS1 =’300 Middel Street’,
EP.ADDRESS2 =’Brooklyn’,
EP.ADDRESS3 =’P.O. Box 446’,
EP.ADDRESS4 =’PRETORIA’,
EP.CITY =’PRETORIA’,
NUM1 =0001,
NUM2=0001,
STATE = ‘GA’,
POSTAL =’0001’
WHERE EP.EMPLID IN (SELECT DISTINCT J.EMPLID FROM PS_JOB J WHERE J.EMPL_STATUS IN (‘A’,'L','P','S'));

/
UPDATE PS_EP_APPR SET EP_RATING = '0';
UPDATE PS_EP_APPR_SECTION SET EP_RATING = '0';
UPDATE PS_EP_APPR_SUBITEM SET EP_RATING = '0';
UPDATE PS_EP_APPR_SECTION SET AG_EP_MOD_RATING = '0', AG_EP_MGR_RATING = '0';