Project Charter

FREE OPEN SOURCE SOFTWARE IMPLEMENTATION

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SITA

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Notice

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Approvals

The signatories hereof, being duly authorised thereto, by their signatures hereto authorise the execution of the work detailed herein, or confirm their acceptance of the contents hereof and authorise the implementation/adoption thereof, as the case may be, for and on behalf of the parties represented by them.

FOSS Programme Manager : Arno Webb	Date
SITA Chief Technical Officer: Dr Daniel Mashao	Date
SITA Chief: Strategic Services: Moses Mtimunye	Date
Director-General: Public Service & Administration: Dr Richard Levine	Date

POLICY

1) The South African Government will implement FOSS unless proprietary software is demonstrated to be significantly superior. Whenever the advantages of FOSS and proprietary software are comparable FOSS will be implemented when choosing a software solution for a new project. Whenever FOSS is not implemented, then reasons must be provided in order to justify the implementation of proprietary software.
2) The South African Government will migrate current proprietary software to FOSS whenever comparable software exists.
3) All new software developed for or by the South African Government will be based on open standards, adherent to FOSS principles, and licensed using a FOSS license where possible.
4) The South African Government will ensure all Government content and content developed using Government resources is made Open Content, unless analysis of specific content shows that proprietary licensing or confidentiality is substantially beneficial.
5) The South African Government will encourage the use of Open Content and Open Standards within South Africa.

Cabinet Decision, 2007

Amendment history

Revision	Date	Change proposal	Change comment
1.0	2008-10-01	New document	First release.
2.0	2009-03-01	DG Steercom meeting, Oct 2008	Extensive revision.
2.1	2009-09-15	DG Steercom meeting, July 2009	Extensive revision.

CONTENTS

Index of Tables

1. Inroductory overview

Commitment to use FOSS and planning for its implementation is becoming increasingly visible in government. SITA estimates that of all national departments -

- More than half have some FOSS implementation plans.
- About 25% use FOSS web servers.
- About 40% use FOSS in some form at the back end.
- At least 12% use some FOSS on desktops.

Trends detected in developed countries indicate that FOSS is increasingly yielding gains in efficiency and effectiveness, to an extent where in users' minds the fact that a solution is open source is becoming unimportant, overshadowed by the fact that it provides superior solutions. (See box.)

The government's FOSS programme proposes action to -

- Understand the FOSS landscape,
- Influence FOSS and open standards adoption in government,
- Enable FOSS and open standards adoption in government
- Support FOSS and open standards efforts in government & South Africa.

Appropriate initiatives, with associated deliverables are proposed below.
The selected deliverables are derived from a comprehensive situation analysis, which covered the key characteristics of the IT industry and an analysis of key stakeholder requirements, as well as the strategic elements accepted by Cabinet in 2007.

2. Situation analysis

2.1 Current environment

Software licensing is a considerable expense for government. Licensing a typical work station costs approximately R3000.

Normally the source code, being of proprietary software, is not available to government.

From a Forrester Report (USA):
87 percent of those surveyed realized the cost savings they expected from open source;
92 percent of respondents have had their quality expectations met or exceeded by open-source software.
(http://news.cnet.com/8301-13505_3-10118123-16.html, 09/06/23)

Government is therefore locked into a relationship with the software provider from which it is difficult to extricate itself.

Some prominent software providers operate as monopolies, reducing software procurement options available to government.

As a result Cabinet took the decision to support FOSS, copied on the approvals page.

2.2 Globally FOSS is entering the assimilation state of the change process

The full spectrum of a change process can be broken down into a sequence of states through which an individual or organisation has to progress before the change can be said to have been successfully completed:

Unaware
Aware
Know
Understand
Support
Commit
Implement
Adapt
Assimilate.

The following quote suggests that ICT professionals have started entering the final state, where they have assimilated FOSS in their mode of operation – to such an extent that users are not concerned or even aware that the solutions they are given are FOSS.

“It used to make sense to talk about open source as a separate line item in the enterprise IT lexicon. However, open source has become such a standard way of delivering enterprise IT that maybe it's time to update the lexicon.”

(CNET News, 3 March 2009)

This quote applies to the USA. It can be accepted that it is partly applicable to South Africa. One of the challenges to this Programme is to persist with advocacy until the whole government ICT community has entered this final state.

2.3 Advantages of open software

The South African government can derive important benefits from utilizing FOSS:

1. **Enhanced Security and Privacy** compared to proprietary software.

2. **Increased procurement speed** so institutions can get their programs deployed faster.

3. **No lock into one vendor.** Support can be provided by anyone since the code is in the public domain.

4. **Reduced cost of licenses and support.** It is claimed that, on average, open source products provide the same functionality at a 80-90% lower cost to the taxpayers.

5. **Improved quality.** Normally, supported open source products go through three times more quality reviews than proprietary software as part of community review, indemnification review, and then productizing.

6. **The Government can become part of the open source community** and directly inject their specific requirements into the product.

2.4 Prominent features of the FOSS industry

Linux is the dominant FOSS operating system. Its features make it the system of choice for most organisations adopting FOSS. Its reliability, security and efficiency is winning increasing support for it globally.

Virus attacks, hacking and similar security problems are considerably less in FOSS environments.

Some FOSS service providers have entered into agreements with Microsoft. In one case in particular, many voices from the FOSS community have criticized the deal heavily, maintaining that the company concerned is violating FOSS principles.

The standards used by proprietary software suppliers are only open in some cases, but it is predicted that, due to open standards requirements by user institutions, the openness will increase.

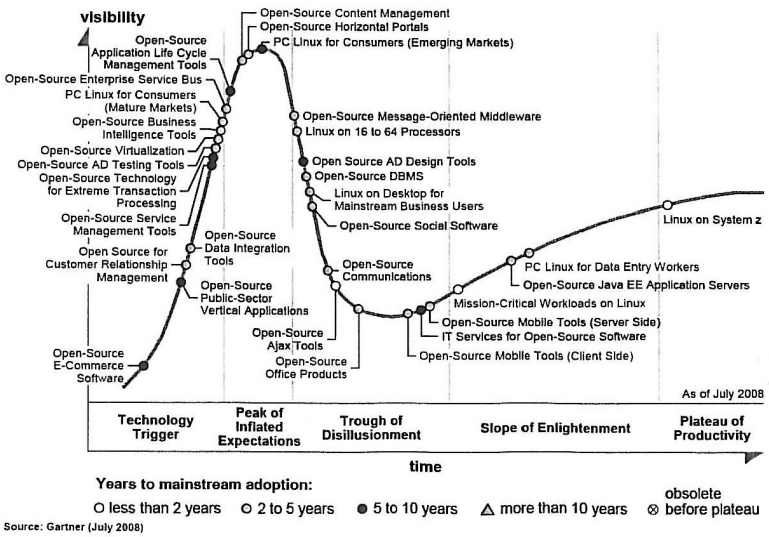
FOSS alternatives for virtually all business applications are available. In many cases they have reached a level of maturity that makes them suitable for implementation in big enterprises like the South African government.

In South Africa the support capacity for FOSS is perceived by many to be relatively small. Uncertainty about support is often raised as an objection against implementing FOSS. The ICT industry has however shown indications of being able to match skills needs if a demand for it should arise. One of the challenges ofa FOSS strategy would be to promote the establishment of a balance between supply and demand.

2.5 FOSS on the Gartner Hype Cycle

Figure 1 Show that a number of FOSS applications have now entered the “Slopw of Enlightenment. It is notable that “mission-critical workloads on Linux” fall in this category.

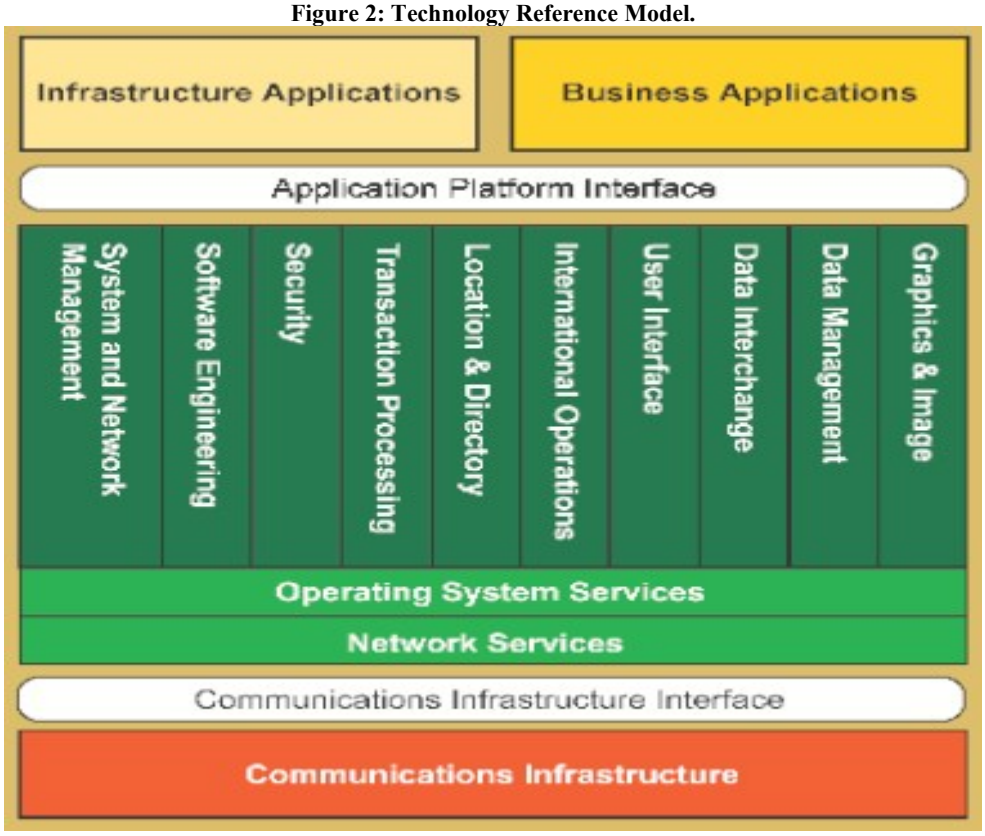
Figure 1: Hype cycle of open source software



2.6 Government wide enterprise architecture

The TOGAF standard for government enterprise architecture has been accepted for the South African government. Standards, procedures, guidelines for FOSS solutions need to comply. Of particular importance is the Technical Reference Model included in TOGAF, which is an important standard for describing software in the context of the total enterprise environment. See Figure 2 .

Figure 2: Technology Reference Model.



2.7 Open content

The third component of the FOSS policy (added to open source software and open standards) is open content. This was up till now dealt with by the Information Society and Development (ISAD) Cluster, supported by the PNC and Department of Arts and Culture. At the time of writing it appears that this cluster has been terminated. The importance of information freedom should be highlighed in a response to the Green Paper on National Strategic Planning.

2.8 Progress with implementing proposed FOSS strategy

The FOSS proposal accepted by Cabinet included the strategy elements listed in Table 1. The table also summarises action to date i.r.o. each initiative.

Table 1: Strategic initiatives required by 2007 Cabinet decision with responses to date.

Strategy Element (Initiation Phase)	Responsible Entity	Initiatives to date
1. Disseminate information within Government	GITOC OSS WG (lead), Meraka Institute, SITA	The FPO initiated workshops, exhibitions, presentations, newsletters, brochures, website. Feedback questionnaires generally reflect satisfaction with the events concerned.
2. Initiate trial use and	Meraka	SITA and the DST developed/ conducted trials of several FOSS solutions such

Strategy Element (Initiation Phase)	Responsible Entity	Initiatives to date
development	(lead), DST, SITA	as Linux on mainframe, file servers and desktop, an office suite, Zimbra groupware, Joomla web platform, Alfresco ECM, Mobizen mobile interface, Sakai V-Learning, Hylafax fax to email, DimDim netmeetings, Xmind mind mapping, Firefox web browsing.
3. Establish a global position and maintain strategic partnerships	DTI, DOC	SITA and the DST are in regular dialogue with other governments supporting OSS, e.g. India, Brazil, Malaysia and others. Partnerships include the IBSA cooperation agreement, FOSS MOUs with Malaysia and FOSSFA and cooperation with institutions such as Cignex in India and CSI Piemonte in Italy.
4. Consult with partners and stakeholders	DOC, DPSA	SITA arranged CIO workshops in 2008 and 2009 and plans to continue the practice. Workshops on special topics such as ODF and cloud computing have taken place or will occur in due course.
5. Establish and execute a supporting research programme	Meraka, DOC, DPSA, PNC	SITA is in the process of refurbishing its FOSS lab at Perseus Park. FOSS related testing and development are also taking at SITA labs at Erasmuskloof and Centurion.
6. Consolidate support capacity	SITA	A second group of interns are currently in training in SITA. Training procedures have been established by SITA Training & Development. Several back end FOSS applications are in operation and fully supported in SITA, e.g. Linux and FreeBSD on file servers, as well as Z_Linux used for virtualisation on mainframe.
7. Include FOSS/OC utilisation in short and medium-term plans	DPSA, all	More than half of national departments for whom information was available have FOSS plans, either in MSPs or as separate FOSS strategies.
8. Level playing fields	Meraka, DPSA, DTI	A draft revised procurement policy was tabled at the OSS Standing Committee in June and is in the process of being revised.
9. Develop and execute a supporting communications strategy	GCIS	The FPO drafted and has started implementing a communication strategy.
10. Establish and nurture a legislative environment that supports the development and use of FOSS/OC as envisaged in this policy.	DPSA	The FOSS environment is not regarded as sufficiently mature to accommodate legislation yet. It is estimated that another 2 years will be required to create the appropriate envisonment for FOSS legislation.

The responsible entities were in general not able to fulfil obligations assigned to them. The proposals in this document indicates how SITA could partly compensate for this inability, but can only succeed in doing so if it succeeds in securing sufficient resources.

2.9 Scope

2.9.1 Institutions to be targeted

Institutions to be influenced are as follows:

41 national government departments
104 provincial departments
283 local governments
290 PFMA scheduled organisations
400 Thusong Centres
1 118 institutions in total (excluding schools)

plus 28 000 schools.

Up til now the FPO focused mainly on national government departments. It is anticipated that provincial and local government, as well as Thusong Centres and PWMA-scheduled institutions can be addressed over the medium term. SITA's ability to support FOSS in schools is unproven. Special attention to this important aspect will be needed.

2.9.2 Other dimensions of the target (estimated)

The estimated number of workstations in the 1 000+ government institutions number more than 1 million. Although this figure is subject to a certain margin of error, its order of magnitude is sufficiently reliable to be a basis for calculating the scale of work that needs to be undertaken. The following targets are proposed.

1 000 000	work stations must be converted to FOSS and be cooected to FOSS-based back ends and must themselves predomininatly use FOSS.
100 000	FOSS champions and FOSS power users must be developed.
10 000	FOSS technical staff (1 for every 100 work stations) must be available.
1 000	institutions must start implementing FOSS and have strategies to move over .
100	FOSS solutions must be available.
10	competency centres/centres of excellence must be established.
1	Shared vision must be developed initially.
1	Law to regulate FOSS usage must be passed as soon as the environment is sufficiently prepared.

2.10 Stakeholder analysis

Table 2 Divides the stakeholders in FOSS implementation by level of interest and potential impact that they can have. The most important stakeholders are those who can potentially have most impact, but those that only have a high interest can also either be driven to make a more significant impact, or can influence those who can already doing so. The shaded area of the table show the most important stakeholders, whose needs are analyzed further. Par 5. in the Supplement shows the role and expectations of these stakeholders.

Influence							
High		SITA Bus Development		Cabinet	Minister of PSA DG: PSA SITA Chief SS GCIO	CIOs	CTO
	M of A&C GCIS National Treasury	User Managers SITA Marketing SITA Account Managers External IT media	DG: Educ SITA Tr & Dev SITA IT Tr SITA IT Consulting	Minister of Ed SITA CEO Minister of Health	ISAD Cluster Minister of S&T	DG: Comms OCTO Managers	FPO staff GITOC OSS SC
	Computer-illiterate users AG Minister in Presidency	Average users	DG: DTI DG: Health SITA Comms	Minister of T&I Universities DG: A&C	Minister of Comms GITOC Software developers IT support staff	DG: S&T OGCIO	
		Min of Home Affairs				PNC and PIAC on ISAD USAASA	
					Power users	OCTO staff	SITA CIO
							CSIR FOSSFA OSS Vendors
						UNESCO Other int orgs	Training providers
Low			Interest				High

Table 2: Stakeholder grouping.

2.10.1 Stakeholder expectations

An analysis of roles and expectations of FOSS stakeholders shown to be important in Table 2 appear in par 4. of the Supplement. Their expectations were used as an input to decide on the vision and initiatives to include in planning.

The various expectations above can be categorised either as expected impact, outcome or output. See par 5. in the Supplement. The vision, planned outcomes and planned outputs take these into account.

3. Vision

The vision for FOSS implementation in government should describe a scenario where the benefits of FOSS are reaped to the fullest possible extent and as many stakeholder expectations as possible are met. Such a scenario will be where The bulk of software used in government is open software and where all software and systems apply open standards to the full. Where proprietary software is still in use, the managers of the relevant applications are working on migration to FOSS. Furthermore, all but sensitive government information is freely available to all under an open content policy supported by open content licensing.

This is enabled by -

1. A mature FOSS ecosystem that renders FOSS easier to implement and support than PS.
2. Well-developed information and intelligence systems, providing comprehensive knowledge and information about FOSS utilization in government.
3. The South African government having partnerships with several government and other entities that are achieving synergies in FOSS development, implementation and maintenance.

Simultaneously -

1. OSS utilization in the country as a whole is enhanced through a chain of FOSS competency centres across the country that serve both the public and private sector.
2. OSS is adequately covered in curricula at all education levels.
3. South Africa contributes more to the global open source community than the size of its ICT industry would lead one to expect.

4. Work breakdown structure

The work of the FPO falls into four main categories:

1. Understand the FOSS landscape
2. Influence FOSS and open standards adoption
3. Enable FOSS and open standards adoption
4. Support FOSS and open standards efforts.

The further breakdown of the work is shown below, while the manner in which the work items address the strategic elements adopted by Cabilet is shown in Table 3.

I. Understand the FOSS landscape
- A. Conduct surveys and research on FOSS penetration
  1. FOSS and open standards implementation in govt
  2. FOSS coverage in MSPs
  3. Skills requirements
  4. IT & FOSS expenditure
  5. Compliance with web standards in MIOS
  6. FOSS capability in the country
- B. Monitoring & assessment
  1. Measurement criteria
  2. Guidelines on applying criteria
  3. Incentives
  4. Information gathering
  5. Analysis & recommendations
  6. Recognition
     - a Awards
     - b Ceremonies
     - c Recording for posterity
- C. Measure FOSS capability in the country
  1. Surveys
  2. Secondary research
  3. Interaction with relevant institutions
- D. Projections and plans of resource/capacity supply & demand
- E. Transversal TRM for FOSS in govt

II. Influence FOSS and open standards adoption in govt
- A. Value proposition
  1. Generic
  2. S A Government specific
  3. Institution specific framework
- B. Change software procurement model
- C. Promote readiness assessment
  1. Readiness assessment guidelines
  2. Briefings on conducting assessments
  3. Readiness assessment project support
- D. Publish guidelines, standards, policies
  See III. D.
- E. Stakeholder contact
  1. Publications
     - a Newsletters
     - b Brochures
     - c Website
     - d Reports
     - e Success stories
  2. Networks/forums
  3. Events
  4. Direct stakeholder interaction
     - a Partners
       - i National
       - ii International
     - b Clients
     - c Service providers
     - d Principals

III. Enable FOSS and open standards adoption in govt
- A. Build the FOSS ecosystem
  1. Funding procedures
  2. Partnership development
     - a International partners
     - b South African partners
  3. Governance
     - a DG Steercom
     - b Programme Steercom
     - c GITOC SC
     - d Advisory Committee
  4. Procurement policy
  5. Download facility

6. Skills development

B. Provide applications with quick uptake
   1. Rating, development & implementation
      a R&D Facilities
         i Perseus Park Laboratory
         ii Competency Centres
      b Solution development
         i Quick wins not elsewhere specified
         ii Platforms & Utilities
            - Thusong centres
            - Zimbra
            - Cloud computing
            - ODF implementation
         iii Applications
            - Health Information Systems
            - Electronic Content Mgmt
               - Alfresco rollout strategy
               - Evaluating Alfresco alternatives
               - Additional features for Alfresco
            - Teachers' Empowerment
            - Transversal systems on Linux
            - Website standardisation
            - Hylafax rollout strategy
            - GIS
            - BI
            - ERP
            - Education management and delivery
               - Education delivery
               - Learning material
               - Education management up to institution level
               - Educ mgmt, meso & macro level
            - Localizsation through multilingualism
               - Spell checkers
               - Help functions
               - Tagging
               - Readout
            - OSS based telephony
         iv Transversal TRM
         v Implementation support
         vi Change management guidance

C. Promote readiness assessments
   1. See II. C.

D. OSS Implementation guidelines, standards, policies
   1. General FOSS implementation management guideline
   2. CIO FOSS implementation guidelines
   3. Per FOSS product (see III. B. 1. b)
   4. Open content implementation
      a ODF guidelines
      b Converting to FOSS web platforms

IV. Support FOSS and open standards efforts in govt & SA

A. Develop partnerships
   1. Partnership strategy
      a Local partners
      b Partners abroad

B. Advocacy
   1. Support initiatives aimed at audiences outside govt

5. Mapping the proposed work items onto strategy elements

Table 3: Manner in which FPO work breakdown addresses elements of the Cabinet FOSS Strategy

	Disseminate info	Trial use & developmt	Est. globl pos./ partners	Consult stakeholder	Research programme	Support capacity	FOSS/ OC in plans	Level playing fields	Comms strategy	Legislative environmt
I. Understand the FOSS landscape										
A. Conduct surveys and research on FOSS penetration				x	x					
B. Monitoring & assessment				x	x					
C. Measure FOSS capability in the country					x	x				
D. Projections and plans of resource/capacity supply & demand						x				
E. Transversal TRM for FOSS in govt							x			
II. Influence FOSS and open standards adoption in govt										
A. Value proposition	x				x		x			
B. Change software procurement model								x		
C. Promote readiness assessment							x			
D. Publish guidelines, standards, policies	x						x			
E. Stakeholder contact	x			x						
III. Enable FOSS and open standards adoption in govt										
A. Build the FOSS ecosystem						x				x
B. Provide applications with quick uptake		x								

	Disseminate info	Trial use & developmt	Est. globl pos./ partners	Consult stakeholder	Research programme	Support capacity	FOSS/ OC in plans	Level playing fields	Comms strategy	Legislative environmt
C. Promote readiness assessments							x			
D. OSS Implementation guidelines, standards, policies	x						x			x
IV. Support FOSS and open standards efforts in govt & SA										
A. Develop partnerships			x							
B. Advocacy	x								x	

6. Initiatives and deliverables required

6.1 Proposed projects

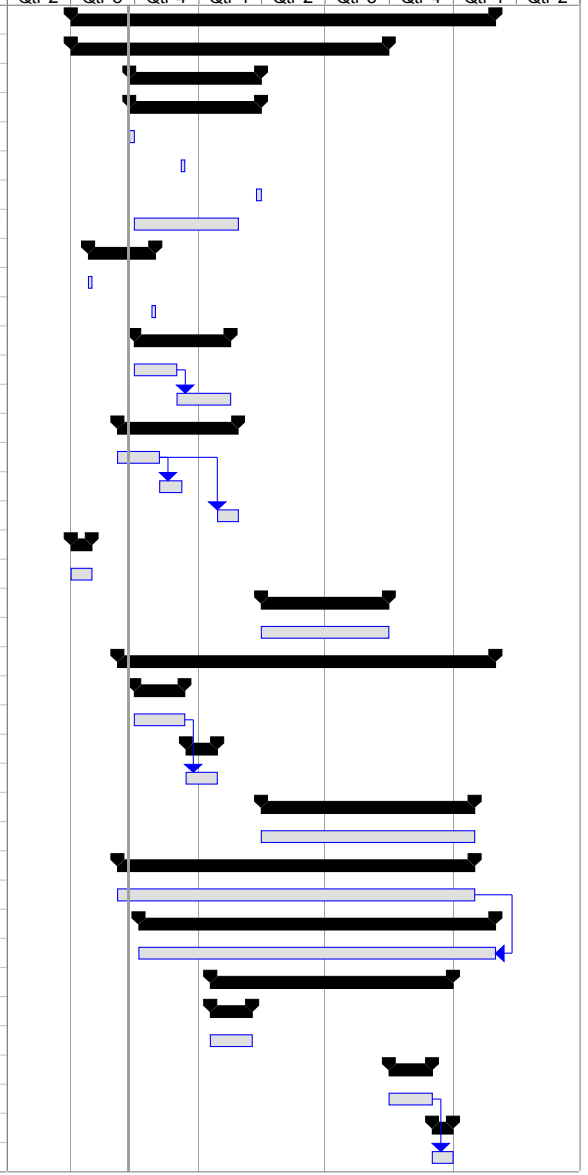
The projects that were identified on basis of the above analysis appear in Table 5.

Table 4: High level summary of initiatives

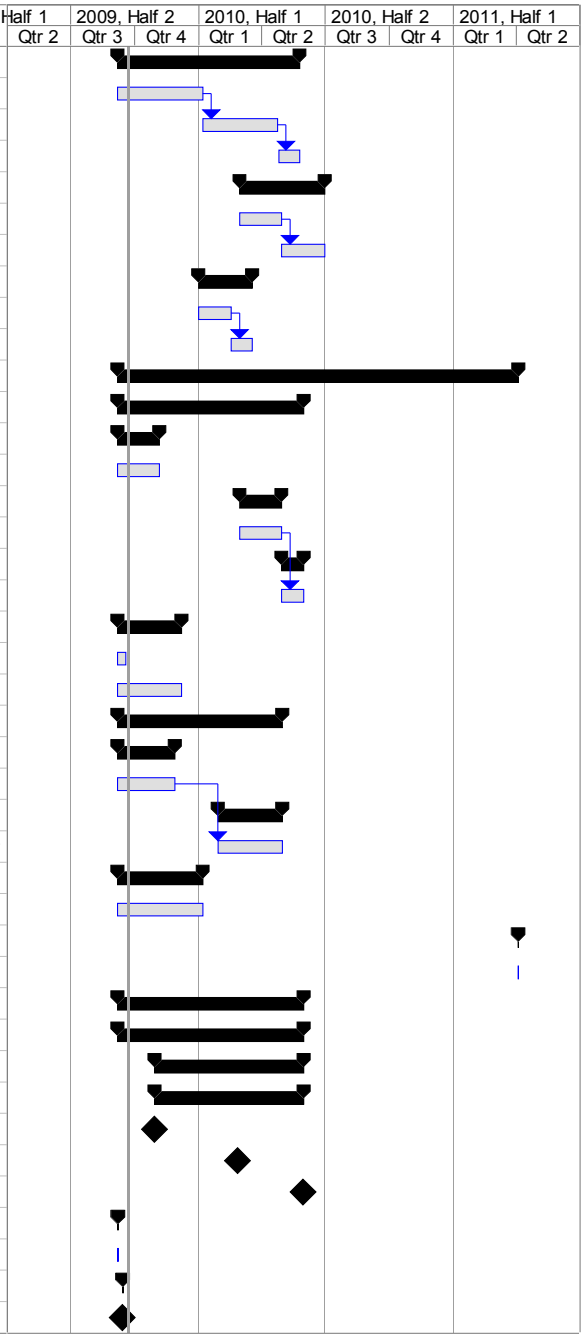
Initiative	Targetted completion
Understand the FOSS, open standards, open content landscape	2011/03/02
Conduct surveys and research on FOSS, open standards and open content penetration	2010/09/30
Monitoring & assessment	2011/03/02
Measure FOSS capability in the country	2010/05/25
Projections and plans of resource/capacity supply & demand	2010/06/30
Transversal Technology Reference Models for FOSS in govt	2010/03/18
Influence FOSS, open standards, open content adoption in govt	2011/04/04
Value proposition	2010/05/31
Change software procurement model	2009/12/07
Promote readiness assessment	2010/04/30
Publish guidelines, standards, policies	2011/04/04
Stakeholder contact	2010/05/31
Enable FOSS, open standards, open content adoption in govt	2011/04/01
Build the FOSS ecosystem	2011/03/02
Provide applications with quick uptake	2011/01/31
Promote readiness assessments	2010/05/03
OSS implementation guidelines, standards, policies	2011/04/01
Support FOSS, open standards, open content efforts in govt & SA	2010/03/09
Develop partnerships	2010/03/09
Advocacy	2010/02/26

Table 5: FOSS projects required

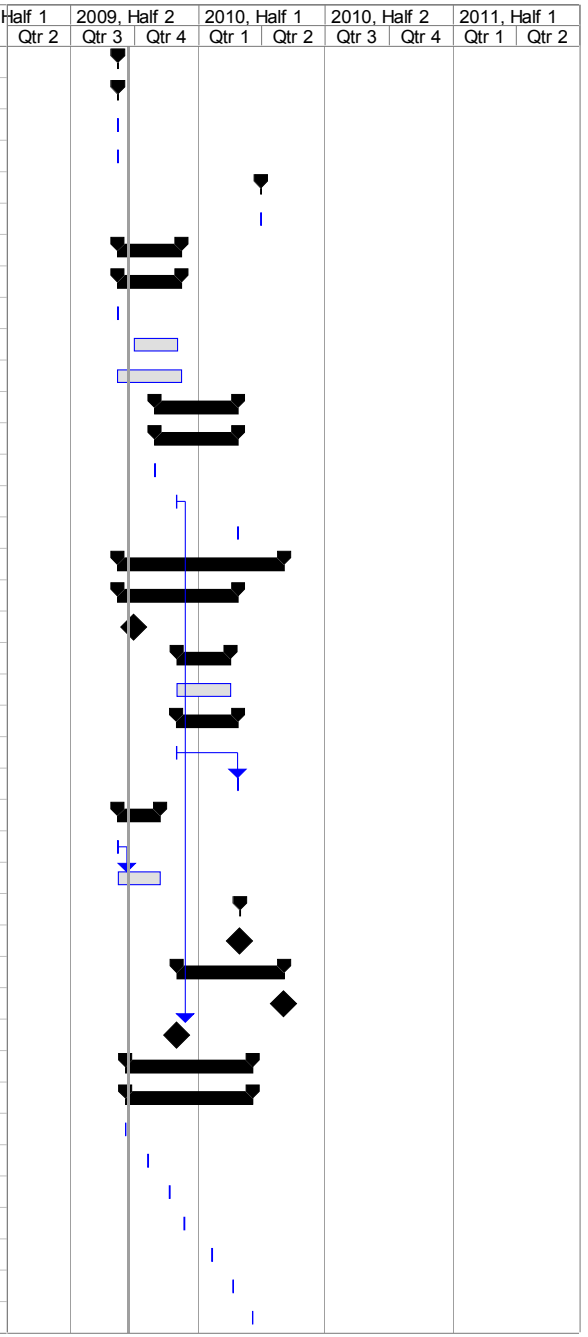
ID	Work Breakdown	Task Name	Start	Finish	Predec	Span
1	**1**	**Understand the FOSS, open standards, open content landscape**	**2009/07/02**	**2011/03/02**		
2	**1.1**	**Conduct surveys and research on FOSS, open standards and open content per MIOS**	**2009/07/02**	**2010/09/30**		**4**
3	**1.1.1**	**FOSS and open standards implementation in govt**	**2009/09/24**	**2010/03/31**		
4	**1.1.1.1**	**Quarterly updated status report**	**2009/09/24**	**2010/03/31**		**9**
5	1.1.1.1.1	Q3/2009	2009/09/24	2009/09/30		
6	1.1.1.1.2	Q4/2009	2009/12/07	2009/12/11		
7	1.1.1.1.3	Q1/2010	2010/03/25	2010/03/31		
8	1.1.1.2	Results of an OSS survey.	2009/10/01	2010/02/26		9
9	**1.1.2**	**FOSS in MSPs**	**2009/07/27**	**2009/10/30**		**7**
10	1.1.2.1	Report on findings	2009/07/27	2009/07/31		
11	1.1.2.2	Recommended monitoring procedures	2009/10/26	2009/10/30		
12	**1.1.3**	**Skills requirements**	**2009/10/01**	**2010/02/15**		**6**
13	1.1.3.1	Breakdown of national government OSS skills requirements	2009/10/01	2009/11/30		4
14	1.1.3.2	Recommended strategy for addressing needs.	2009/12/01	2010/02/15	13	
15	**1.1.4**	**IT & FOSS expenditure**	**2009/09/07**	**2010/02/26**		
16	1.1.4.1	FOSS survey	2009/09/07	2009/11/05		4
17	1.1.4.2	Report on FOSS utilisation	2009/11/06	2009/12/07	16	
18	1.1.4.3	Report on expenditure in national government.	2010/01/28	2010/02/26	16	
19	**1.1.5**	**Compliance with web standards in MIOS**	**2009/07/02**	**2009/07/31**		
20	1.1.5.1	Report on compliance.	2009/07/02	2009/07/31		4
21	**1.1.6**	**FOSS capability in the country**	**2010/04/01**	**2010/09/30**		**6**
22	1.1.6.1	Survey and analysis of capacity to develop skills, to develop, install and maintain OSS in all socio-economic sectors.	2010/04/01	2010/09/30		4
23	**1.2**	**Monitoring & assessment**	**2009/09/07**	**2011/03/02**		**1**
24	**1.2.1**	**Measurement criteria**	**2009/10/01**	**2009/12/11**		
25	1.2.1.1	Criteria for quantiative and qualitative assessment of planned and actual OSS implementation.	2009/10/01	2009/12/11		
26	**1.2.2**	**Guidelines on applying criteria**	**2009/12/14**	**2010/01/27**		
27	1.2.2.1	Guidelines for gathering and analysis of information on OSS implementation.	2009/12/14	2010/01/27	25	
28	**1.2.3**	**Incentives**	**2010/04/01**	**2011/01/31**		**6**
29	1.2.3.1	Incentives for users and IT staff to develop and use OSS skills.	2010/04/01	2011/01/31		
30	**1.2.4**	**Information gathering (other than surveys)**	**2009/09/07**	**2011/01/31**		**4**
31	1.2.4.1	Desk research reports.	2009/09/07	2011/01/31		
32	**1.2.5**	**Analysis & recommendations**	**2009/10/07**	**2011/03/02**		
33	1.2.5.1	Reports on findings and recommendations resulting from surveys.	2009/10/07	2011/03/02	21FF+22 days	
34	**1.2.6**	**Recognition**	**2010/01/18**	**2010/12/31**		
35	**1.2.6.1**	**Awards**	**2010/01/18**	**2010/03/18**		
36	1.2.6.1.1	Definition of awards.	2010/01/18	2010/03/18		
37	**1.2.6.2**	**Ceremonies**	**2010/10/01**	**2010/12/01**		
38	1.2.6.2.1	Ceremonies, where awards are handed over.	2010/10/01	2010/12/01		
39	**1.2.6.3**	**Recording for posterity**	**2010/12/02**	**2010/12/31**		
40	1.2.6.3.1	Capturing info on winners for posterity in suitable information repositories.	2010/12/02	2010/12/31	38	



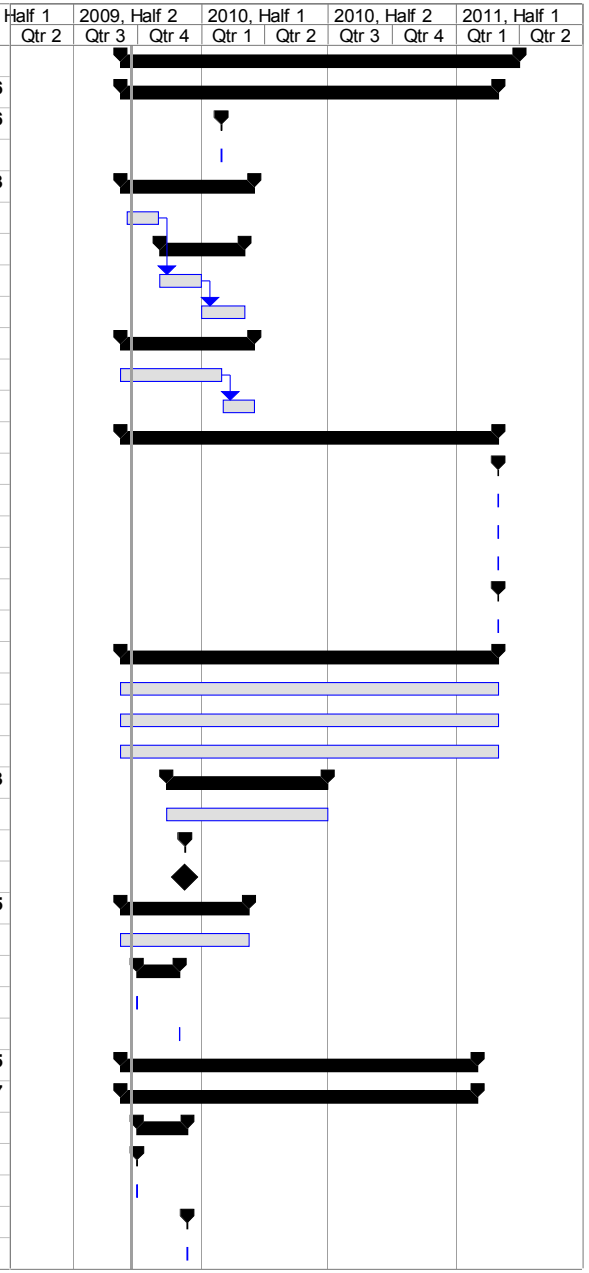
ID	Work Breakdown	Task Name	Start	Finish	Predec	Slack
41	**1.3**	**Measure FOSS capability in the country**	**2009/09/07**	**2010/05/25**		**6**
42	1.3.1	Plan survey	2009/09/07	2010/01/06		
43	1.3.2	Conduct survey	2010/01/07	2010/04/23	42	
44	1.3.3	Published findings of surveys.	2010/04/26	2010/05/25	43	
45	**1.4**	**Projections and plans of resource/capacity supply & demand**	**2010/03/01**	**2010/06/30**		**6**
46	1.4.1	Projected supply and demand of skills, technology, funding, etc.	2010/03/01	2010/04/29	17,18	
47	1.4.2	Plans to grow and balance supply and demand.	2010/04/30	2010/06/30	46	
48	**1.5**	**Transversal Technology Reference Models for FOSS in govt**	**2010/01/01**	**2010/03/18**		
49	1.5.1	Properly documented TRMs.	2010/01/01	2010/02/16		
50	1.5.2	Mechanism to review the TRMs at suitable intervals.	2010/02/17	2010/03/18	49	
51	**2**	**Influence FOSS, open standards, open content adoption in govt**	**2009/09/07**	**2011/04/04**		
52	**2.1**	**Value proposition**	**2009/09/07**	**2010/05/31**		**8**
53	**2.1.1**	**Generic**	**2009/09/07**	**2009/11/05**		
54	2.1.1.1	Generic value proposition on website.	2009/09/07	2009/11/05		
55	**2.1.2**	**Government specific**	**2010/03/01**	**2010/04/29**		
56	2.1.2.1	Value proposition specific to SA government based on info on the specific circumstances in gov	2010/03/01	2010/04/29	17,18	
57	**2.1.3**	**Institution specific framework**	**2010/04/30**	**2010/05/31**		
58	2.1.3.1	Framework to enable government institutions to compile their own value propositions	2010/04/30	2010/05/31	56	
59	**2.2**	**Change software procurement model**	**2009/09/07**	**2009/12/07**		**8**
60	2.2.1	Inputs to the Procurement Policy being developed by the OSS SC.	2009/09/07	2009/09/18		
61	2.2.2	Review of Microsoft evergreen licencing arrangement	2009/09/07	2009/12/07		
62	**2.3**	**Promote readiness assessment**	**2009/09/07**	**2010/04/30**		
63	**2.3.1**	**Readiness assessment guidelines**	**2009/09/07**	**2009/11/27**		
64	2.3.1.1	Publish a readiness assessment guideline.	2009/09/07	2009/11/27		
65	**2.3.2**	**Briefings on conducting assesments**	**2010/01/29**	**2010/04/30**		
66	2.3.2.1	Briefings to institutions and individuals intending to do assessments.	2010/01/29	2010/04/30	64FS+44 days	4
67	**2.3.3**	**Readiness assessment project support**	**2009/09/07**	**2010/01/06**		
68	2.3.3.1	Project management skills available to client departments	2009/09/07	2010/01/06		
69	**2.4**	**Publish guidelines, standards, policies**	**2011/04/04**	**2011/04/04**		**6**
70	2.4.1	See reference under "Predecessors"	2011/04/04	2011/04/04	232	
71	**2.5**	**Stakeholder contact**	**2009/09/07**	**2010/05/31**		**9**
72	**2.5.1**	**Publications**	**2009/09/07**	**2010/05/31**		**1**
73	**2.5.1.1**	**Newsletters**	**2009/10/30**	**2010/05/31**		
74	**2.5.1.1.1**	**Quarterly newsletters.**	**2009/10/30**	**2010/05/31**		
75	2.5.1.1.1.1	2009(3)	2009/10/30	2009/10/30		
76	2.5.1.1.1.2	2010(1)	2010/02/26	2010/02/26		
77	2.5.1.1.1.3	2010(2)	2010/05/31	2010/05/31		
78	**2.5.1.2**	**Brochures**	**2009/09/07**	**2009/09/07**		
79	2.5.1.2.1	One brochure per event organised.	2009/09/07	2009/09/07		
80	**2.5.1.3**	**Website**	**2009/09/14**	**2009/09/14**		
81	2.5.1.3.1	oss.gov.za accessible and up to date.	2009/09/14	2009/09/14		



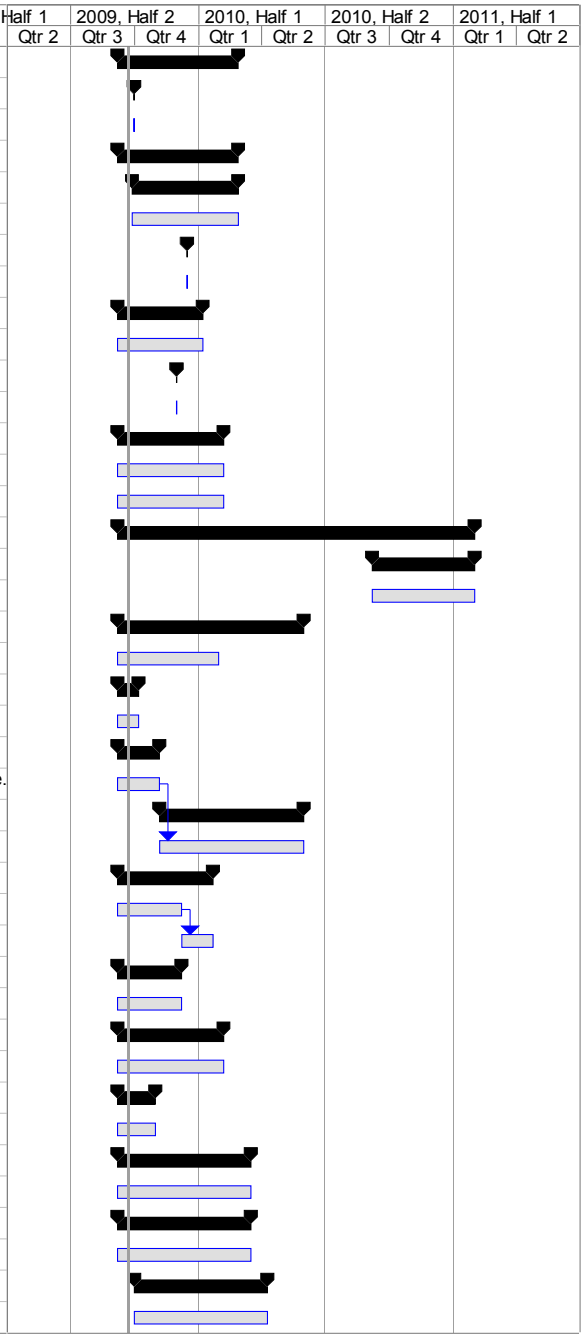
ID	Work Breakdown	Task Name	Start	Finish	Predec	Succ
82	**2.5.1.4**	**Reports**	**2009/09/07**	**2009/09/07**		
83	**2.5.1.4.1**	**Two comprehensive reports on projects/ areas of activity.**	**2009/09/07**	**2009/09/07**		
84	2.5.1.4.1.1	Report 1	2009/09/07	2009/09/07		
85	2.5.1.4.1.2	Report 2	2009/09/07	2009/09/07		
86	**2.5.1.5**	**Success stories**	**2010/03/31**	**2010/03/31**		
87	2.5.1.5.1	Four South African success stories documented.	2010/03/31	2010/03/31		
88	**2.5.2**	**Networks**	**2009/09/07**	**2009/12/07**		**1**
89	**2.5.2.1**	**Create a Linux interest group, ODF interest group, ECM interest group**	**2009/09/07**	**2009/12/07**		
90	2.5.2.1.1	ECM	2009/09/07	2009/09/07		
91	2.5.2.1.2	LUG	2009/10/01	2009/12/01		
92	2.5.2.1.3	ODF	2009/09/07	2009/12/07		
93	**2.5.3**	**Events**	**2009/10/30**	**2010/02/26**		**1**
94	**2.5.3.1**	**Organise/co-organise 3 events up to the end of FY 2010.**	**2009/10/30**	**2010/02/26**		**4**
95	2.5.3.1.1	Cloud computing workshop	2009/10/30	2009/10/30		
96	2.5.3.1.2	Vendor workshop	2009/11/30	2009/11/30		
97	2.5.3.1.3	CIO Workshop	2010/02/26	2010/02/26		
98	**2.5.4**	**1:1 stakeholder interaction**	**2009/09/07**	**2010/05/03**		**1**
99	**2.5.4.1**	**Partners**	**2009/09/07**	**2010/02/26**		**4**
100	2.5.4.1.1	Partnership strategy.	2009/09/30	2009/09/30		
101	**2.5.4.1.2**	**Priority areas for partnerships.**	**2009/12/01**	**2010/02/15**		
102	2.5.4.1.2.1	Action plans for cooperative projects.	2009/12/01	2010/02/15		
103	**2.5.4.1.3**	**National**	**2009/11/30**	**2010/02/26**		
104	2.5.4.1.3.1	MOUs with 2 partners.	2009/11/30	2009/11/30		
105	2.5.4.1.3.2	Operational governance structure for each.	2010/02/26	2010/02/26	104	
106	**2.5.4.1.4**	**Intenational**	**2009/09/07**	**2009/11/06**		
107	2.5.4.1.4.1	MOUs with 2 partners.	2009/09/07	2009/09/07		
108	2.5.4.1.4.2	Operational governance structure for each.	2009/09/08	2009/11/06	107	
109	**2.5.4.2**	**Clients**	**2010/03/01**	**2010/03/01**		
110	2.5.4.2.1	Survey of clients needs. See "Conduct Surveys". (Reference under "Predecessors")	2010/03/01	2010/03/01	8	
111	**2.5.4.3**	**Service providers**	**2009/12/01**	**2010/05/03**		
112	2.5.4.3.1	Workshop 1 with service providers	2010/05/03	2010/05/03	66	
113	2.5.4.3.2	Workshop 2 with service providers	2009/12/01	2009/12/01	96	
114	**2.5.4.4**	**Principals**	**2009/09/18**	**2010/03/19**		
115	**2.5.4.4.1**	**Regular monthly and quarterly reports.**	**2009/09/18**	**2010/03/19**		
116	2.5.4.4.1.1	Report Sep2009	2009/09/18	2009/09/18		
117	2.5.4.4.1.2	Report Oct2009	2009/10/20	2009/10/20		
118	2.5.4.4.1.3	Report Nov2009	2009/11/20	2009/11/20		
119	2.5.4.4.1.4	Report Dec2009	2009/12/11	2009/12/11		
120	2.5.4.4.1.5	Report Jan2010	2010/01/20	2010/01/20		
121	2.5.4.4.1.6	Report Feb2010	2010/02/19	2010/02/19		
122	2.5.4.4.1.7	Report Mar2010	2010/03/19	2010/03/19		



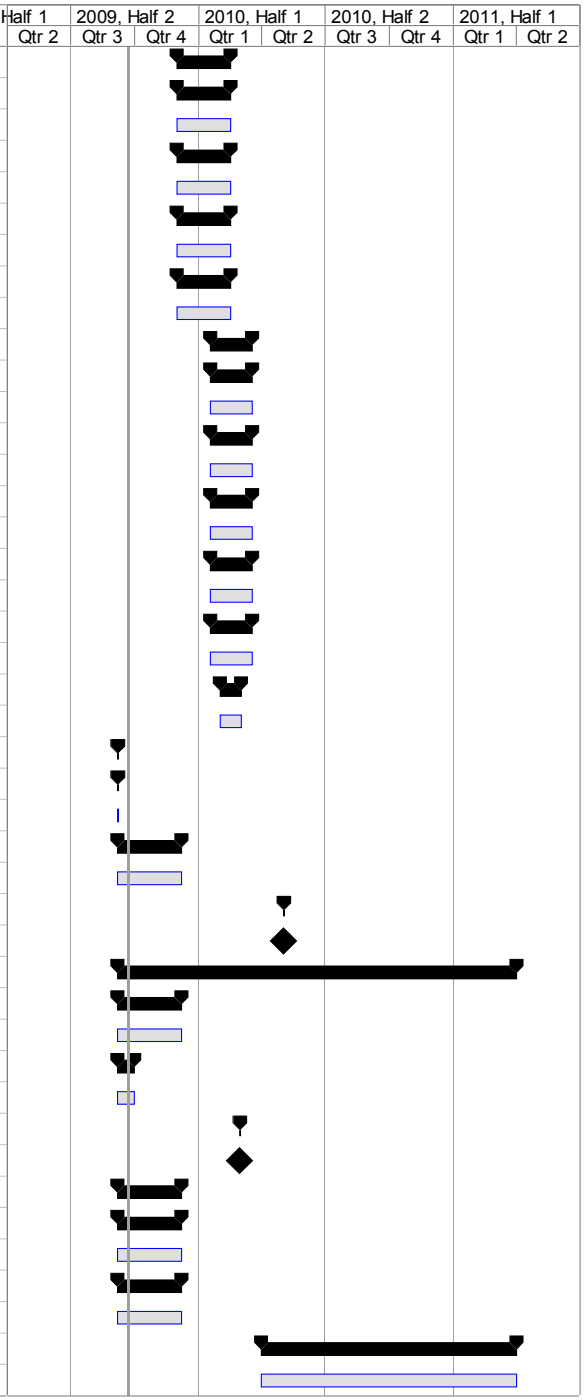
ID	Work Breakdown	Task Name	Start	Finish	Predec	Slack
123	**3**	**Enable FOSS, open standards, open content adoption in govt**	**2009/09/07**	**2011/04/01**		
124	**3.1**	**Build the FOSS ecosystem**	**2009/09/07**	**2011/03/02**		**6**
125	**3.1.1**	**Funding procedures**	**2010/01/29**	**2010/01/29**		**6**
126	3.1.1.1	Agreement of an approach with National Treasury.	2010/01/29	2010/01/29		
127	**3.1.2**	**Partnership development**	**2009/09/07**	**2010/03/17**		**3**
128	3.1.2.1	Analysis of what we need and what we can offer partners.	2009/09/16	2009/10/30		
129	**3.1.2.2**	**International partners**	**2009/11/02**	**2010/03/03**		
130	3.1.2.2.1	MOUs with 2 partners.	2009/11/02	2009/12/31	128	
131	3.1.2.2.2	Operational governance structure for each.	2010/01/01	2010/03/03	130	
132	**3.1.2.3**	**South African partners**	**2009/09/07**	**2010/03/17**		
133	3.1.2.3.1	MOUs with 2 partners.	2009/09/07	2010/01/29		
134	3.1.2.3.2	Operational governance structure for each.	2010/02/01	2010/03/17	133	
135	**3.1.3**	**Governance**	**2009/09/07**	**2011/03/02**		
136	**3.1.3.1**	**DG Steercom**	**2011/03/02**	**2011/03/02**		
137	3.1.3.1.1	Comprehensive reports on FPO activities.	2011/03/02	2011/03/02		
138	3.1.3.1.2	Quality proposals on the way forward.	2011/03/02	2011/03/02		
139	3.1.3.1.3	Setting the agenda for the Committee.	2011/03/02	2011/03/02		
140	**3.1.3.2**	**Programme Steercom**	**2011/03/02**	**2011/03/02**		
141	3.1.3.2.1	Full support of the Committee for matters going to the DG Steercom.	2011/03/02	2011/03/02		
142	**3.1.3.3**	**GITOC SC**	**2009/09/07**	**2011/03/02**		
143	3.1.3.3.1	Comprehensive reports on activities.	2009/09/07	2011/03/02		
144	3.1.3.3.2	Quality proposals on the way forward.	2009/09/07	2011/03/02		
145	3.1.3.3.3	Influencing the agenda for the Committee.	2009/09/07	2011/03/02		
146	**3.1.3.4**	**Advisory Committee**	**2009/11/12**	**2010/06/30**		**3**
147	3.1.3.4.1	First meeting of the committee, with accepted TOR.	2009/11/12	2010/06/30		
148	**3.1.4**	**Procurement policy**	**2009/12/08**	**2009/12/08**		
149	3.1.4.1	See reference under "Predecessors"	2009/12/08	2009/12/08	59	
150	**3.1.5**	**Download facility**	**2009/09/07**	**2010/03/09**		**5**
151	3.1.5.1	Download facility available for Perseus Park.	2009/09/07	2010/03/09		
152	**3.1.6**	**Skills development**	**2009/09/30**	**2009/11/30**		
153	3.1.6.1	Confirm curriculum for next intake.	2009/09/30	2009/09/30		
154	3.1.6.2	Inventory of government departments' OSS skills requiremnts.	2009/11/30	2009/11/30		
155	**3.2**	**Provide applications with quick uptake**	**2009/09/07**	**2011/01/31**		**5**
156	**3.2.1**	**Rating, development & implementation**	**2009/09/07**	**2011/01/31**		**7**
157	**3.2.1.1**	**R&D Facilities**	**2009/09/30**	**2009/12/11**		
158	**3.2.1.1.1**	**Perseus Park Laboratory**	**2009/09/30**	**2009/09/30**		
159	3.2.1.1.1.1	Laboratory in operation.	2009/09/30	2009/09/30		
160	**3.2.1.1.2**	**Competency Centres**	**2009/12/11**	**2009/12/11**		
161	3.2.1.1.2.1	Concept document available.	2009/12/11	2009/12/11		



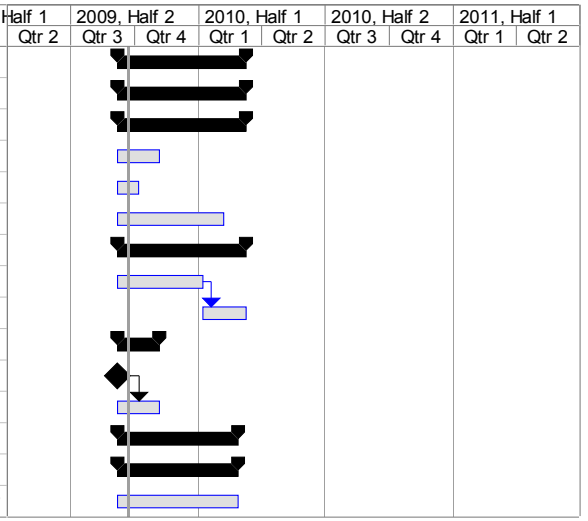
ID	Work Breakdown	Task Name	Start	Finish	Predec	Sem
162	**3.2.1.2**	**Solution development**	**2009/09/07**	**2010/02/26**		**2**
163	**3.2.1.2.1**	**Quick wins not elsewhere specified**	**2009/09/30**	**2009/09/30**		
164	3.2.1.2.1.1	Rollout strategies.	2009/09/30	2009/09/30		
165	**3.2.1.2.2**	**Platforms & Utilities**	**2009/09/07**	**2010/02/26**		
166	**3.2.1.2.2.1**	**Thusong centres**	**2009/09/28**	**2010/02/26**		
167	3.2.1.2.2.1.1	Successful pilot project.	2009/09/28	2010/02/26		
168	**3.2.1.2.2.2**	**Zimbra**	**2009/12/15**	**2009/12/15**		
169	3.2.1.2.2.2.1	Rollout strategy tested in one institution.	2009/12/15	2009/12/15		
170	**3.2.1.2.2.3**	**Cloud computing**	**2009/09/07**	**2010/01/06**		
171	3.2.1.2.2.3.1	Strategy for accommodating OSS in cloud computing.	2009/09/07	2010/01/06		
172	**3.2.1.2.2.4**	**OpenOffice implementation**	**2009/11/30**	**2009/11/30**		
173	3.2.1.2.2.4.1	OCTO implementation	2009/11/30	2009/11/30		
174	**3.2.1.2.2.5**	**ODF implementation**	**2009/09/07**	**2010/02/05**		
175	3.2.1.2.2.5.1	Rollout strategy.	2009/09/07	2010/02/05		
176	3.2.1.2.2.5.2	Review of implementation in 3 organisations.	2009/09/07	2010/02/05		
177	**3.2.1.3**	**Applications**	**2009/09/07**	**2011/01/31**		**2**
178	**3.2.1.3.1**	**Health Information Systems**	**2010/09/07**	**2011/01/31**		
179	3.2.1.3.1.1	POC of a HIS for municipal clinics.	2010/09/07	2011/01/31		
180	**3.2.1.3.2**	**Electronic Content Mgmt**	**2009/09/07**	**2010/05/31**		
181	3.2.1.3.2.1	Reports on three pilots.	2009/09/07	2010/01/29		
182	**3.2.1.3.2.2**	**Alfresco rollout strategy**	**2009/09/07**	**2009/10/06**		
183	3.2.1.3.2.2.1	Strategy for taking Alfresco to market.	2009/09/07	2009/10/06		
184	**3.2.1.3.2.3**	**Evaluating Alfresco alternatives**	**2009/09/07**	**2009/11/05**		
185	3.2.1.3.2.3.1	Comparative analysis of the performance of Alfresco and other OSS ECM solutions such as Nuxeo, Knowledgetree.	2009/09/07	2009/11/05		
186	**3.2.1.3.2.4**	**Additional features for Alfresco**	**2009/11/06**	**2010/05/31**		
187	3.2.1.3.2.4.1	Develop additional functionality to render Alfresco fully NARS compliant.	2009/11/06	2010/05/31	185	
188	**3.2.1.3.3**	**Teachers' Empowerment**	**2009/09/07**	**2010/01/21**		
189	3.2.1.3.3.1	Analyse case studues	2009/09/07	2009/12/07		
190	3.2.1.3.3.2	Analysis of the situation and recommendations for further action.	2009/12/08	2010/01/21	189	
191	**3.2.1.3.4**	**Transversal systems on Linux**	**2009/09/07**	**2009/12/07**		
192	3.2.1.3.4.1	Guidelines for implementation on Linux.	2009/09/07	2009/12/07		
193	**3.2.1.3.5**	**Website standardisation**	**2009/09/07**	**2010/02/05**		
194	3.2.1.3.5.1	Offer a standardisation service to SITA clients.	2009/09/07	2010/02/05		
195	**3.2.1.3.6**	**Hylafax fax2email rollout strategy.**	**2009/09/07**	**2009/10/30**		
196	3.2.1.3.6.1	Fax2email rollout strategy.	2009/09/07	2009/10/30		
197	**3.2.1.3.7**	**GIS**	**2009/09/07**	**2010/03/16**		
198	3.2.1.3.7.1	FOSS4G development and implementation strategy.	2009/09/07	2010/03/16		
199	**3.2.1.3.8**	**BI**	**2009/09/07**	**2010/03/16**		
200	3.2.1.3.8.1	BI development and implementation strategy.	2009/09/07	2010/03/16		
201	**3.2.1.3.9**	**ERP**	**2009/10/01**	**2010/04/09**		
202	3.2.1.3.9.1	Development and implementation strategy.	2009/10/01	2010/04/09		



ID	Work Breakdown	Task Name	Start	Finish	Predec	Slack
203	**3.2.1.3.10**	**Education management and delivery**	**2009/12/01**	**2010/02/15**		
204	**3.2.1.3.10.1**	**Education delivery**	**2009/12/01**	**2010/02/15**		
205	3.2.1.3.10.1.1	Development and implementation strategy.	2009/12/01	2010/02/15		
206	**3.2.1.3.10.2**	**Learning material**	**2009/12/01**	**2010/02/15**		
207	3.2.1.3.10.2.1	Development and implementation strategy.	2009/12/01	2010/02/15		
208	**3.2.1.3.10.3**	**Education management up to institution lvel**	**2009/12/01**	**2010/02/15**		
209	3.2.1.3.10.3.1	Development and implementation strategy.	2009/12/01	2010/02/15		
210	**3.2.1.3.10.4**	**Education management, meso & macro level**	**2009/12/01**	**2010/02/15**		
211	3.2.1.3.10.4.1	Development and implementation strategy.	2009/12/01	2010/02/15		
212	**3.2.1.3.11**	**Localisation through multilingualism**	**2010/01/18**	**2010/03/18**		
213	**3.2.1.3.11.1**	**Spell checkers**	**2010/01/18**	**2010/03/18**		
214	3.2.1.3.11.1.1	Development and implementation strategy.	2010/01/18	2010/03/18		
215	**3.2.1.3.11.2**	**Help functions**	**2010/01/18**	**2010/03/18**		
216	3.2.1.3.11.2.1	Development and implementation strategy.	2010/01/18	2010/03/18		
217	**3.2.1.3.11.3**	**Tagging**	**2010/01/18**	**2010/03/18**		
218	3.2.1.3.11.3.1	Development and implementation strategy.	2010/01/18	2010/03/18		
219	**3.2.1.3.11.4**	**Readout**	**2010/01/18**	**2010/03/18**		
220	3.2.1.3.11.4.1	Development and implementation strategy.	2010/01/18	2010/03/18		
221	**3.2.1.3.12**	**OSS based telephony**	**2010/01/18**	**2010/03/18**		
222	3.2.1.3.12.1	Development and implementation strategy.	2010/01/18	2010/03/18		
223	**3.2.1.4**	**Transversal TRM**	**2010/02/01**	**2010/03/02**		
224	3.2.1.4.1	Documentation detailing OSS usage in a transversal TRM.	2010/02/01	2010/03/02		
225	**3.2.1.5**	**Implementation support**	**2009/09/07**	**2009/09/07**		
226	**3.2.1.5.1**	**Capacity to support applications being made available as a result of OSS**	**2009/09/07**	**2009/09/07**		**7**
227	3.2.1.5.1.1	Develop policies & procedures for providing capacity	2009/09/07	2009/09/07		
228	**3.2.1.6**	**Change management guidance**	**2009/09/07**	**2009/12/07**		
229	3.2.1.6.1	Change management guideline document for guidance of OSS implementation	2009/09/07	2009/12/07		
230	**3.3**	**Promote readiness assessments**	**2010/05/03**	**2010/05/03**		**7**
231	3.3.1	See reference under "Predecessors"	2010/05/03	2010/05/03	66	
232	**3.4**	**OSS implementation guidelines, standards, policies**	**2009/09/07**	**2011/04/01**		**5**
233	**3.4.1**	**General OSS implementation management guideline**	**2009/09/07**	**2009/12/07**		
234	3.4.1.1	Publish a guideline.	2009/09/07	2009/12/07		
235	**3.4.2**	**CIO OSS implementation guideline**	**2009/09/07**	**2009/09/30**		
236	3.4.2.1	Publish a guideline.	2009/09/07	2009/09/30		
237	**3.4.3**	**Guidelines per OSS product**	**2010/03/01**	**2010/03/01**		
238	3.4.3.1	Publish guides, standards, policies as part of deliverables per product	2010/03/01	2010/03/01	162	
239	**3.4.4**	**Open content implementation guidelines**	**2009/09/07**	**2009/12/07**		
240	**3.4.4.1**	**ODF guideline**	**2009/09/07**	**2009/12/07**		
241	3.4.4.1.1	Publish a policy and guideline.	2009/09/07	2009/12/07		
242	**3.4.4.2**	**OSS website platforms utilisation**	**2009/09/07**	**2009/12/07**		
243	3.4.4.2.1	Publish a policy and guideline.	2009/09/07	2009/12/07		
244	**3.4.5**	**Regulation & legislation review**	**2010/04/01**	**2011/04/01**		
245	3.4.5.1	Review relevant legislation & regulation	2010/04/01	2011/04/01		10



ID	Work Breakdown	Task Name	Start	Finish	Predec	Span
246	**4**	**Support FOSS, open standards, open content efforts in govt & SA**	**2009/09/07**	**2010/03/09**		**10**
247	**4.1**	**Develop partnerships**	**2009/09/07**	**2010/03/09**		**3**
248	**4.1.1**	**Partnership strategy**	**2009/09/07**	**2010/03/09**		**6**
249	4.1.1.1	Partnership strategy.	2009/09/07	2009/11/05		
250	4.1.1.2	Priority areas for partnerships.	2009/09/07	2009/10/06		
251	4.1.1.3	Action plans for cooperative projects.	2009/09/07	2010/02/05		
252	**4.1.1.4**	**Local partners**	**2009/09/07**	**2010/03/09**		
253	4.1.1.4.1	MOUs with 2 partners.	2009/09/07	2010/01/06		
254	4.1.1.4.2	Operational governance structure for each.	2010/01/07	2010/03/09	253	
255	**4.1.1.5**	**Partners abroad**	**2009/09/07**	**2009/11/05**		
256	4.1.1.5.1	MOUs with 2 partners.	2009/09/07	2009/09/07		
257	4.1.1.5.2	Operational governance structure for each.	2009/09/07	2009/11/05	256	
258	**4.2**	**Advocacy**	**2009/09/07**	**2010/02/26**		
259	**4.2.1**	**Support advocacy initiatives aimed at audiences outside govt**	**2009/09/07**	**2010/02/26**		**4**
260	4.2.1.1	Participation in 2 initiatives p.a. that cover sectors outside government.	2009/09/07	2010/02/26		3



7. Risk analysis

7.1 Risk assessment

Table 6 shows the risks that were identified for the FOSS Programme with associated details such as the causes, possible consequences and the appropriate response.

Table 6: Risk assessment for FOSS implementation

Risk Category	Human resources	Financial	Process and service delivery	Regulatory	Information and technology	Process and service delivery
Risk Name	Skills shortages and experience	Funds shortages for implementation internal and External	Lack of coordination between different SITA units	Failure to enforce FOSS policy by GITOC and Political level.	Unsatisfactory performance of the software	Effective proprietary software marketing efforts
Root Cause	1. SITA not employer of choice, 2. General IT skill shortage in the Country, 3. IT industry is underdeveloped in SA, 4. Lack of skill and experience in project management	Lack of management commitment.	1. Bureaucra-cy, 2. Delays in procureemnt, 3. Lack of communi-cation	1. FOSS not rated as high priority, 2. Lack of commitment by user,3. User resistance	Software not purpose-built for the environment where it is deployed.	PS suppliers perceive a hreat to their market share.
Consequencs	1. FOSS solutions not available to government, 2. Slow rollout and failure to capitalise on benefits, 3. Suboptimal utulisation of FOSS, 4. Project not completed within budgeted amount and within timelines.	Reduced pace of implemen-tation.	1. Reduced pace of implemen-tation. 2. Gaps and overlaps	1. Reduced incentive for institutions to implement FOSS, 2. Non compliance with policy and loss of benefit thereof.	FOSS loses reputation.	Resistance to FOSS implementation.
Risk Owner	Shared service/ strategic service	Strategic services/ External clients	Procurement/ Strategic services	GITOC/DPSA	FOSS governance structure.	DPSA
Control Name	Preventative	None	None		None	Advocacy

Risk Category	Human resources	Financial	Process and service delivery	Regulatory	Information and technology	Process and service delivery
Control Description	SITA internship programme	none	none		none	Information disseminati on through various channels.
Impact	4	4	3	3	4	3
Likeli hood	5	2	5	3	2	4
Risk Ranking	Critical	Moderate	High	Moderate	Moderate	Moderate
Risk Strategy (Terminate, Treat, Tolerate, Transfer)	Treat	Treat	Treat	Tolerate	Treat	Tolerate
Future Control	Skills enhancement., Outsourcing, National training and development, contract service providers. Study project management methodology	Compiling stronger motivation for funds as necessary. Develop value proposition guidelines.	Information exchange initiatives between relevant units in SITA. Committees with representati ves from all developing units	Advocacy, Information disseminati on through various channels.	Change managemen t guidelines., Taking more care in compiling URS and executing change mangement strategies	
Task Owner for future owner		FPO- Arno	FPO		FPO	
Due Date		2010-03-31	2009-07-31		2010-03-31	
Status of future control			To be developed.		To be developed.	

7.2 Project complexity

7.2.1 FOSS implementation displays the characteristics of complexity

Research by the Standish Group found that only 35% of IT projects are successful[1]. This is partly because the project management methodology used cannot cope with highly complex projects. More advanced methodologies have been developed for use in such situations. It is shown in Table 7 that, based on relevant criteria the FOSS suite of projects are highly complex.

Hass identifies 9 characteristics of complex projects. FOSS implementation displays 8 of them:

1. Large and long in duration;
2. Dispersed and culturally diverse;
3. Ambiguous business problems, opportunities and solutions;
4. Poorly understood, volatile requirements;
5. Highly visible, strategic and politically sensitive;
6. In need of complex, large scale change initiatives;

1Hass Kathleen B, *Managing Complex Projects*, Management Concepts,2009

7. Significant dependencies and external constraints;
8. High level of IT complexity.

The 9th characteristic of complex projects is that it is highly innovative and urgent. It is felt that, due to FOSS having been implemented by other governments, it should not be classified as highly innovative. However, government IT staff, who are often quite unfamiliar with FOSS, may find its implementation highly innovative.

7.2.2 Dealing with the complexities

Guidelines for ensuring success despite complexities that will be taken into account, are to -

1. Maintain active networking.
2. Establish a superordinate governance structure.
3. Break the project down into smaller sub-projects with sufficient reachable short term milestones, producing results incrementally.
4. Obtain regular feedback from stakeholders regarding the project's direction.
5. Conduct reviews and quality checks at regular intervals and act on lessons learnt.

Complexity due to large, dispersed, culturally diverse project teams require the following:

1. Provide strong leadership by a leader with well develop project management capability. See paragraph 27 for the characteristics of a competent project manager.
2. Engage in team building activities.
3. Cultivate shared vision.

8. Programme governance structure

8.1 DG FOSS Steering Committee

8.1.1 General objective

A. Promote free and open source software, open standards and open content implementation within Government.

B. Monitor implementation of Cabinet decisions on FOSS, open standards and open content and report back on progress.

8.1.2 Membership

C. Directors-General of -
   1. Public Service and Administration (Chairperson)
   2. Science and Technology,
   3. Communications,
   4. Education,
   5. Trade and Industry,
   6. Home Affairs;

D. Chief Executive Officers of -
   1. CSIR,
   2. SITA

E. Government Chief Information Officer

F. Chair: GITOC OSS Standing Committee.

8.1.3 Scope

In the above general objectives -

- "Government" refers to entites listed in the schedules of the Public Finance Management Act.
- "Free and open source software", "open standards" and "open content" refer to (a) software, (b) IT and information standards and (c) content that conform to the definitions in the "definitions" section below.

8.1.4 Functions

G. Monitor progress with FOSS, open standards and open content implementation in government, i.e. -
   1. Ecosystem development, covering but not limited to skills, funding streams, knowledge repositories and exchange mechanisms, standards, guidelines, policies, procedures, R&D services, procurement mechanisms, implementation support, governance and institutional structures.
   2. Evaluate and respond to assessment reports on implementation i.r.o.
      a. Progress against plans for ecosystem development
      b. Progress with FOSS, open standards and open content implementation
      c. Estimated financial savings and other benefits
      d. Factors impeding implementation and/or the realisation of savings and benefits.
   3. Ratify plans for effecting (1) and (2) above.
   4. Evaluate and respond to inputs on trends, opportunities and challenges submitted by the FPO or other authoritative institutions.

H. Report to Cabinet on A above.

I. Advise the FPO on strategies, plans and their execution.

J. Ensure that FPO follow sound management principles in discharging its duties by determining whether -.
   1. Meetings are scheduled regularly
   2. Minutes of meetings are kept
   3. Plans and charters are approved
   4. Progress with activities are tracked
   5. Expenditure is tracked.

8.1.5 Enabling documentation

To enable the Steering Committee to perform its functions, it shall be entitled to direct access to relevant documentation, such as -

6. Strategies and plans
7. Performance reports
8. Reports based on research and analysis
9. Any other documents that the Steering Committee may reasonably be required to study to perform its functions.

8.1.6 Support structures

The Steering Committee shall be supported by the FOSS Programme Steering Committee,
Made up of -

- representatives (officials) of each of the institutions that are represented on the DG FOSS Steering Committee; and
- other institutions' representatives, invited by members as and when necessary.

This Programme Steering Committee will support -

- the SITA FOSS Programme in carrying out its mandate;
- the DG Steering Committee by, amongst others, coordinating, executing and reporting back on resolutions of the DG Steering Committee.

8.1.7 Regularity of meetings

The Steering Committee shall meet at least once every quarter.

8.1.8 Communication model

Figure 3 represents the communication model for the Programme.

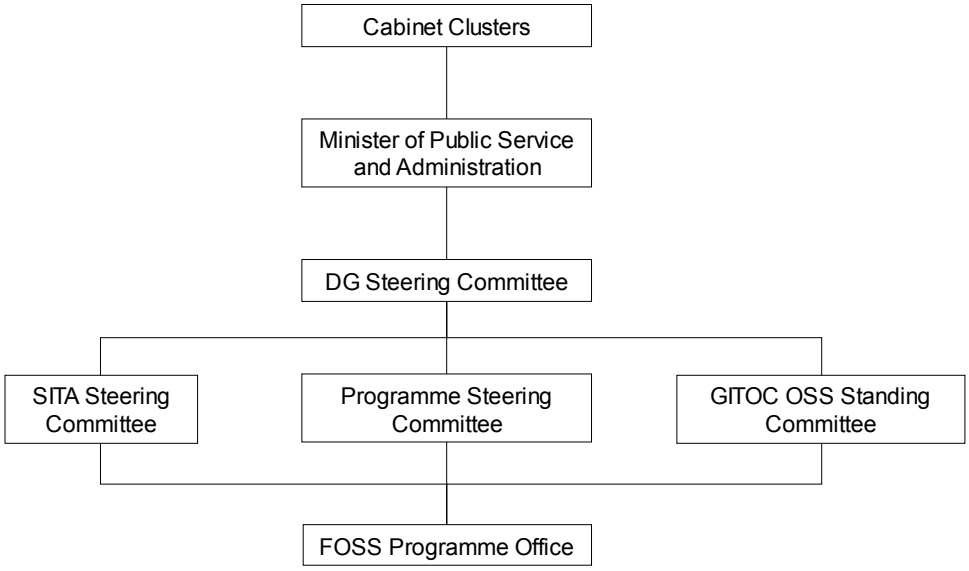


Figure 3: Programme Communication Model

9. Programme controls management

Reporting on monthly and quarterly basis by the FPO will be used to compile progress report to the political level.

10. Programme quality management

10.1 Quality standards

Quality standards are to be set at project level.

10.2 Quality checkpoints

Scrutiny of milestones and deliverables by Programme Steering Committee and GITO Council OSS Standing Committee.

11. FPO Staffing requirements

1. Programme manager x 1
2. Project manager x 1
3. Project coordinator x 1
4. Project administrator x 1
5. Sen specialist, planning, and monitoring x 1
6. Sen specialist, FOSS architecture x 1

7 Sen specialist, FOSS business analysis x 1
8 Sen Specialist, Rating & Development x 1
8.1 Specialist, Software rating & development x 1
8.1.1 Software developers x 3
8.2 Specialist, research information services
8.3 Interns x3 - 10

12. Measurement and acceptance criteria

To be set at project level.

SUPPLEMENT

1. Abbreviations

A&C	Arts & Culture
AG	Auditor-General
CSIR	Council for Scientific and Industrial Research
CTO	Chief Technology Officer
DG	Director-General
DTI	Department of Trade & Industry
FOSS	free open source software
FOSSFA	Free Software and Open Source Foundation for Africa
FPO	FOSS Programme Office
GCIO	Government Chief Information Officer
GCIS	Government Communication and Information System
GITOC	Government IT Officers Council
ISAD	Information Society and Development
MSP	Master Systems Plan
OCTO	Office of the Chief Technology Officer
OGCIO	Office of the Government Chief Information Officer
PIAC	Presidential International Advisory Committee
PNC	Presidential National Commission
PSA	Public Service and Administration
S&T	Science & Technology
SC	Standing Committee
SITA	State IT Agency
SS	Strategic Services
T&I	Trade & Industry
UNESCO	United Nations Educational Scientific and Cultural Organisation
USAASA	Universal Service and Access Agency of South Africa
V-learning	virtual learling

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3. Project complexity

Complexity dimension	Highly complex project profile	Conformance of FOSS project with criteria			Comment
		Yes	Somewhat	No	
Time	>6 months	✓			
Cost	>$750K	✓			
Team size	>10 team members	✓			Several teams across institutions
Team composition and performance	Project manager inexperienced in leading complex projects	✓			Particularly to implement FOSS.
	Complex team structure of various competencies	✓			Lack of FOSS skills & experience cause this.
	Complex contracts		✓		Partnering and subcontracting will be necessary
	Contractor performance unknown		✓		Due to the small number of completed implementations
	Diverse methodologies	✓			Due to the wide range of applications to be implemented.
Urgency and flexibility of cost, time and scope	Overambitious schedule	✓			Principals are impatient due to perceived slow progress to date.
	Overambitious scope		✓		To implement FOSS across all of government.
	Deadline is aggressive, fixed and cannot be changed			✓	Although rapid progress is important, specific deadlines are loosely defined.
	Budget, has no room for flexibility			✓	The expectations are that the necessary funding would be forthcoming as long as

Complexity dimension	Highly complex project profile	Conformance of FOSS project with criteria			Comment
					the value proposition can be put forward convincingly.
	Quality has no room for flexibility	✓			The likelihood that FOSS will be rejected if it cannot match PS performance and functionality is significant.
	Scope has no room for flexibility		✓		There has always been an expectation that the overwhelming majority of programs will be replaced by FOSS alternatives.
Clarity of problem, opportunity and solution	Unclear business objectives	✓			The strategy concentrates on software objectives.
	Problem or opportunity is ambiguous and undefined			✓	
	Solution is difficult to define	✓			
Requirements volatility and risk	Inadequate customer and user support	✓			
	Requirements are poorly understood, volatile and largely undefined.	✓			
	Higly complex functionality	✓			
Strategic importance, political implications, multiple stakeholders	Mixed/ inadequate executive support			✓	
	Impact on core mission		✓		
	Major political implications		✓		
	Visible at highest levels of the organization	✓			
	Multiple stakeholder groups with conflicting expectations	✓			
Level of organisational change	Large scale organisational change that impacts the enterprise			✓	
	Spans functional groups or agencies	✓			
	Shifts or transforms the organisation			✓	
	Impacts many business processes and IT systems	✓			
Level of commercial change	Groundbreaking commercial practice	✓			
Risks, dependencies and external constraints	Considered high risk			✓	
	Overall project success depends largely on external factors		✓		
	Significant integration required	✓			
	Highly regulated or novel sector			✓	
	Significant exposure	✓			
Level of IT complexity	Solution requires groundbreaking innovation			✓	
	Solution is likely to use immature, unproven, or complex technologies provided by outside vendors		✓		
	IT complexity and legacy integration are high	✓			

Table 7: FOSS Project Complexity Analysis

4. Stakeholder expectations

Stakeholder	Relevant Role	Expectation
SITA Bus. Development	Commercializes solutions	Profitable new business opportunities
SITA Chief.SS	1. Ensure that SS activities have impact.	Comprehensive plan for FOSS implementation.

Stakeholder	Relevant Role	Expectation
GCIO	1. SITA oversight. 2. Monitor FPO performance. 3. Monitor implementation of Cabinet decisions. 4. Report status to DG & Minister	1. FOSS implementations supported adequately. 2. Cabinet decisions implemented. 3. FOSS road map. 4. DG Steering Committee decisions implemented.
Cabinet	Drive socio-economic development.	1. Efficient public service. (incl e-Government) 2. Effective electronic interaction with citizens.
CTO	1. Promote FOSS implementation. 2. Determine progress with FOSS implementation in government. 3. Value proposition widely available. 4. FOSS landscape known.	1. Rate of progress with FOSS implementation increases. 2. Increased stakeholder support for FPO/OCTO. 3. FOSS based laptops for teachers. 4. Conduct surveys and research of FOSS penetration in the country and government 5. Measure our FOSS capability in the country 6. Select quick wins 7. Draw the transversal TRM for FOSS in government 8. Produce a value proposition of FOSS (maintained) 9. Change the government procurement model to favour FOSS and open standards 10. Execute events meant to show FOSS; produce newsletters with targeted audience 11. Build the FOSS ecosystem 12. Provide applications that can used with quick uptake. 13. Develop a partnership strategy (that produces results in increasing FOSS efforts in government)
DG of PSA	1. Clear road map for implementation. 2, Credible progress with implementing the road map.	Minister/Cluster/Cabinet informed of and satisfied with FOSS implementation progress.
Minister of PSA	Develop eGovernment.	E-Government improvement. Reduced ICT spending Reduced vendor lock-in Increased govt contribution to skills development. More FOSS applications in operation.
CIOs	Risk-free FOSS implementation.	Adequate support capacity. Ease of operation and maintenance of IT systems.
DG of Communication	Universal ICT access.	Increased ICT utilization in all sectors.
SITA Tr & Development	Improve SITA and government ICT skills.	Quantitative & qualitative guidance i.t.o. training needs.
SITA IT Training	Improve SITA and government ICT skills	Quantitative & qualitative guidance i.t.o. training needs.
SITA IT Consulting	Develop ICT solutions	Supply of implementation guidelines for FOSS solutions.
DG of Education		FOSS-based learning systems FOSS training content FOSS-based education management systems at school level FOSS-based education management systems at govt dept level'

Stakeholder	Relevant Role	Expectation
SITA account managers	Market SITA services.	Products to offer with proper go-to-market strategies.
User managers	Manage business systems.	Effective, efficient software solutions.
Minister of Arts & Culture	Provide open content Promote all official languages	Free platforms to deliver open content to all Localization of software.
External IT media	Inform the world on SITA activities.	Consistent, abundant flow of news from SITA.
SITA Marketing	Improve SITA's image	FOSS offerings to publicize/messages to convey
OCTO managers	1. ICT RDI 2. ICT environmental analysis. 3. ICT standards setting and implementation.	1. Innovative ICT solutions. 2. Knowledge of the ICT landscape.
GITOC OSS WG	1. Set develop government FOSS strategy. 2. Initiate FOSS projects. 3. Report FOSS status to GITOC.	1. Significant implementation 2. Reduced support requirements 3. Adequate support capacity. 4. Implementation of all aspects of the Cabinet decision. 5. FOSS-based laptops for teachers.
FPO staff	1. Implement FOSS 2. Develop the FOSS ecosystem 3. Generate FOSS commitment.	Increased uptake of FOSS. Increased number of working FOSS solutions.
ISAD cluster	Increase ICT contribution to socio-economic development.	Increased access to and utilization of ICT and electronic content.
Minister of S&T	Promote, science, technology, innovation.	Greater access for all to ICT. Rise in the level of sophistication of IT solutions being used.
Minister of Education	Increased quality and reach of education.	Increased contribution of ICT to education delivery and management.
Minister of Health	Health services	Increased availability of e-Health.
SITA CEO	Improve SITA service delivery.	Clients' IT performance improves because of FOSS implementation
DG of Trade & Industry	Promote trade and industrial development.	Development of local IT industry
Minister of Trade & Industry	1. Develop the local ICT industry.	Development of local IT industry
IT support staff	Support FOSS-based ICT installations	FOSS standards and procedures
DG of S&T	1. Build S&T capacity. 2. Increase rate of innovation. 3. Increase benefits from S,T&E	1. Capacity for FOSS-related development and implementation. 2. Econ benefits flowing from FOSS utilization
DG of Health	eHealth development	Affordable eHealth systems.
DG of Arts & Culture	Promote open content Promote software localisation.	1. Software based on open standards to access electronic content. 2. Multilingualism in utility software menus, help functions, etc.
Universities	Develop IT knowledge and skills.	Government training requirements.
OGCIO	1. Supports FOSS SC. 2. Supports FPO Programme Steering Committee. 3. Reports FPO Progress	1. Progress with implementing Cabinet decisions. 2. Progress with implementing DG Steering

Stakeholder	Relevant Role	Expectation
		Committee decisions. 3. Progress with implementing Programme Steering Committee decisions.
SITA Communication	Communicate achievements and noteworthy events.	Information about FOSS outputs delivered.
GITOC	Optimize ICT utilization in government	Compliance with FOSS policy
Minister of Communication	Universal ICT access.	Increased ICT utilization in all sectors.
Developers	Enhance existing FOSS Place their developed products in the public domain.	Implementation, generating work opportunities.
SITA CIO	SITA responding adequately to Cabinet's FOSS decision.	FOSS product offerings. FOSS uptake of offerings by government.
GCIS	Convey messages about what government is doing. Conduct surveys to determine popular opinion etc.	Positive messages about government to convey.
National Treasury	Optimise government income and expenditure.	Value for money i.t.o. software and systems acquisition in government.

5. Stakeholder expectations grouped by expected result (expected impact, outcome or output)

5.1 Stakeholder expectations: FOSS impact

1. Ease of operation and maintenance of IT systems.
2. Significant implementation
3. Reduced support requirements
4. Increased uptake of FOSS.
5. Increased ICT utilization in all sectors.
6. Affordable eHealth systems.
7. Econ benefits flowing from FOSS utilization
8. Increased access to and utilization of ICT and electronic content.
9. Increased availability of e-Health.
10. Clients' IT performance improves because of FOSS implementation
11. Development of local IT industry
12. Greater access for all to ICT
13. Rise in the level of sophistication of IT solutions being used.
14. Increased contribution of ICT to education delivery and management.
15. Reduced vendor lock-in
16. Effective electronic interaction with citizens.
17. Efficient public service. (incl e-Government)
18. Increased ICT utilization in all sectors.
19. Implementation, generating work opportunities.
20. E-Government improvement.
21. Uptake of FOSS offerings by government.
22. Reduced ICT spending
23. Value for money i.t.o. software and systems acquisition in government.

5.2 Stakeholder expectations: Outcome

1. Adequate support capacity.
2. Capacity for FOSS-related development and implementation.
3. FOSS-based laptops for teachers.
4. Rate of progress with FOSS implementation increases.
5. Increased stakeholder support for FPO/OCTO.
6. FOSS offerings to publicize/messages to convey
7. Build the FOSS ecosystem
8. Provide applications that can used with quick uptake.
9. A partnership strategy increasing FOSS efforts in government
10. Consistent, abundant flow of news from SITA.
11. Multilingualism in utility software menus, help functions, etc.
12. FOSS implementations supported adequately.
13. Localization of software.
14. More FOSS applications in operation.
15. Cabinet decisions implemented.
16. Free platforms to deliver open content to all
17. Compliance with FOSS policy
18. FOSS based laptops for teachers
19. Innovative ICT solutions.
20. New government procurement model to favour FOSS & open standards
21. Minister/Cluster/Cabinet satisfied with FOSS implementation progress.
22. Increased govt contribution to skills development.

5.3 Stakeholder expectations: Output

1. Supply of implementation guidelines for FOSS solutions.
2. Surveys, research of FOSS penetration, country and govt
3. Measurement of our FOSS capability in the country
4. Events to show FOSS; newsletters with targeted audience
5. FOSS product offerings
6. Profitable new business opportunities
7. Progress with implementing Cabinet decisions.
8. Quantitative & qualitative guidance i.t.o. training needs.
9. Effective, efficient software solutions.
10. Information about FOSS outputs delivered.
11. Implementation of all aspects of the Cabinet decision.
12. Select quick wins
13. Draw the transversal TRM for FOSS in government
14. Produce a value proposition of FOSS (maintained)
15. Knowledge of the ICT landscape.
16. Increased number of working FOSS solutions.
17. DG Steering Committee decisions implemented.
18. Progress with implementing DG Steering Committee decisions.
19. Comprehensive plan for FOSS implementation.
20. FOSS road map.
21. Products to offer with proper go-to-market strategies.
22. FOSS-based education management systems at govt dept level'
23. Progress with implementing Programme Steering Committee decisions.
24. FOSS-based learning systems
25. FOSS training content
26. FOSS-based education management systems at school level

27. Software based on open standards to access electronic content.
28. Government training requirements.
29. FOSS standards and procedures