

INVITATION TO BID

BID NUMBER: DFFE-T037 (24/25)

THE APPOINTMENT OF A SERVICE PROVIDER TO PROVIDE ANNUAL ENTERPRISE GIS SOFTWARE LICENCES AND SUPPORT SERVICES COMPATIBLE TO THE CURRENT GIS APPLICATIONS OF THE DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT (DFFE) AND ITS ENTITIES FOR A DURATION OF THREE (03) YEARS.

ENQUIRIES:

Name : SCM Officials

E-Mail : Tenders@dffe.gov.za

NATIONAL TREASURY CENTRAL SUPPLIER DATABASE (CSD) REGISTRATION INFORMATION

Company name	Supplier registration number	Unique reference number	
			Main contractor
			Sub-contracted/ joint venture comp 1
			Sub-contracted/ joint venture comp 2

THE CLOSING DATE OF THE BID: 26 FEBRUARY 2025 AT 11:00 AM

COMPULSORY BRIEFING SESSION INFORMATION

Date: 12th of February 2025

Time: 10H00 - 11H00

Platform/ Venue: Join the meeting now

PART A INVITATION TO BID

			FOR RE	QUIREMENTS OF THE					ONMENT.
	DFFE-T03			CLOSING DATE:		FEBRUARY 2025	CLOSING TIME		
DESCRIPTION	SUPPORT	T SERVICI	ES CON	A SERVICE PROVIDER IPATIBLE TO THE CUR (DFFE) AND ITS ENTIT	RENT	GIS APPLICATIONS	OF THE DEPART	MENT OF FORESTR	
BID RESPONSE D	OCUMEN	NTS MUST	BE DE	POSITED IN THE BID E	BOX S	ITUATED AT (STRE	ET ADDRESS)		
Department of Fo	restry, Fi	sheries ar	nd the E	nvironment, The Envir	onme	nt House,			
473 Steve Biko Ro	oad, Cnr	Soutpansl	oerg an	d Steve Biko Road, Are	cadia,	Pretoria /Tshwane			
BIDDING PROCEI	DURE EN	QUIRIES I	MUST B	E DIRECTED TO:	TEC	HNICAL ENQUIRIES	MUST BE DIRE	CTED TO:	
CONTACT PERSO	ON	SCM Offi	cials		CON	TACT PERSON	SCM Officials		
TELEPHONE NUM	/IBER				TELE	EPHONE NUMBER			
FACSIMILE NUME	BER	N/A			FAC	SIMILE NUMBER	N/A		
E-MAIL ADDRESS	3	tenders@	dffe.go	v.za	E-MA	AIL ADDRESS	tenders@dffe.go	ov.za	
SUPPLIER INFOR	MATION				l				
NAME OF BIDDER	₹								
POSTAL ADDRES	SS								
STREET ADDRES	SS						Г		
TELEPHONE NUM	/IBER	CODE			NU	JMBER			
CELLPHONE NUM	/IBER						Γ		
FACSIMILE NUME	BER	CODE			NU	JMBER			
E-MAIL ADDRESS	3								
VAT REGISTI NUMBER	RATION								
SUPPLIER COMP	LIANCE	TAX	ANOF		ΔD	CENTRAL			
STATUS		COMPLIA SYSTEM			OR	SUPPLIER DATABASE No:	MAAA		
B-BBEE STATUS	LEVEL	TI	CK APF	PLICABLE BOX]		BEE STATUS	[TIC	K APPLICABLE BO	X]
VERIFICATION CERTIFICATE						EL SWORN DAVIT			
OLIVIII IO/VIE			Yes	□No	/	D/(VII		Yes	No
				ION CERTIFICATE/ S E POINTS FOR B-BE		RN AFFIDAVIT (FC	R EMES & QS	Es) MUST BE SU	BMITTED IN
ARE YOU THE AC				OO. O. B-BB	_	VOLLA EGDE: 0: : =	AOED		
REPRESENTATIV	E IN SOU		□Ye	s 🔲 No		YOU A FOREIGN B PLIER FOR THE GC		□Yes	□No
AFRICA FOR THE /SERVICES /WOR		RED?	IIE VE	S ENCLOSE PROOF		RVICES /WORKS OF		 [IF YES, ANSWER	DADT D-2 1
QUESTIONNAIRE				•				T [II TEO, ANOWEN	TAIN D.0]
IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?									
DOES THE ENTITY HAVE A BRANCH IN THE RSA?			NO						
DOES THE ENTIT	Y HAVE A	A PERMAN	NENT ES	STABLISHMENT IN THE	RSA′	?		☐ YES ☐] NO
DOES THE ENTIT	DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?								
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION? IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.									

PART B TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:

- 1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
- 1.2. ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED—(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.
- 1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
- 1.4. THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).

2. TAX COMPLIANCE REQUIREMENTS

- 2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
- 2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
- 2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
- 2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
- 2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
- 2.6 WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
- 2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

SIGNATURE OF BIDDER:	
CAPACITY UNDER WHICH THIS BID IS SIGNED: (Proof of authority must be submitted e.g. company resolution)	
DATE:	

NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.

PRICING SCHEDULE (Professional Services)

NAME OF BIDDE CLOSING TIME 1	R:			(24/25) FEBRUARY 2025	
OFFER TO BE V/	ALID FOR120DAYS FROM THE CLOSING DATE OF BID.				
LICENCES ANI	THE APPOINTMENT OF A SERVICE PROVIDER TO PR D SUPPORT SERVICES COMPATIBLE TO THE CURRENT SHERIES AND THE ENVIRONMENT (DFFE) AND ITS ENTIT	GIS APPLICATION	ONS OF THE D	EPARTMENT OF	
		**(ALL APPLI	CABLE TAXES	S INCLUDED)	
1.	The accompanying information must be used for the formulation of proposals.				
2.	Bidders are required to indicate a ceiling price based on the total estimated time for completion of all phases and including all expenses inclusive of all applicable taxes for the project.	R			
3.	PERSONS WHO WILL BE INVOLVED IN THE PROJECT AND RATES APPLICABLE (CERTIFIED INVOICES MUST BE RENDERED IN TERMS HEREOF)				
4.	PERSON AND POSITION	HOURLY RATE	DAIL	Y RATE	
		R			_
		R			_
		R			_
		* *			
		R			-
5.	PHASES ACCORDING TO WHICH THE PROJECT WILL BE COMPLETED, COST PER PHASE AND MAN-DAYS TO BE SPENT				
		R		day:	s
		R		day	s
		R		day	s
		R		day	s
5.1	Travel expenses (specify, for example rate/km and total km, class of airtravel, etc). Only actual costs are recoverable. Proof of the expenses incurred must accompany certified invoices.				
	DESCRIPTION OF EXPENSE TO BE INCURRED	RATE	QUANTITY	AMOUNT	
				R	
				R	
				R	
				R	

TOTAL: R.....

^{** &}quot;all applicable taxes" includes value- added tax, pay as you earn, income tax, unemployment insurance contributions and skills development levies.

5.2	Other expenses, for example accommodation (specify, eg. Three star hotel, bed and breakfast, telephone cost, reproduction cost, etc.). On basis of these particulars, certified invoices will be checked for correctness. Proof of the expenses must accompany invoices.	i		
	DESCRIPTION OF EXPENSE TO BE INCURRED	RATE	QUANTITY	AMOUNT
				R
				R
				R
				R
		TOTAL: R		
6.	Period required for commencement with project after acceptance of bid			
7.	Estimated man-days for completion of project			
8.	Are the rates quoted firm for the full period of contract?			*YES/NO
9.	If not firm for the full period, provide details of the basis on which adjustments will be applied for, for example consumer price index.			

Any enquiries regarding bidding procedures must be directed to the -

Department of Forestry, Fisheries and the Environment

*[DELETE IF NOT APPLICABLE]

Contact Person: SCM Officials E-mail: Tenders@dffe.gov.za

BIDDER'S DISCLOSURE

1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

2. Bidder's declaration

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest1 in the enterprise, employed by the state?

YES/NO

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

2.2 Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? **YES/NO**

2.2.1 If so, furnish particulars:

¹ the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

	SE
2.3	Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? YES/NO
2.3.1	If so, furnish particulars:
3	DECLARATION
	I, the undersigned, (name)in

3.1 I have read and I understand the contents of this disclosure:

to be true and complete in every respect:

3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;

submitting the accompanying bid, do hereby make the following statements that I certify

- 3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium2 will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.6 I am aware that, in addition and without prejudice to any other remedy provided to

² Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract

combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

Signature	Date
Position	Name of bidder

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

1. GENERAL CONDITIONS

- 1.1 The following preference point systems are applicable to invitations to tender:
 - the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and

1.2 To be completed by the organ of state

- a) The applicable preference point system for this tender is the **80/20** preference point system.
- b) The **80/20** preference point system will be applicable in this tender. The lowest/ highest acceptable tender will be used to determine the accurate system once tenders are received.
- 1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:
 - (a) Price; and
 - (b) Specific Goals.

1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and SPECIFIC GOALS	100

1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. **DEFINITIONS**

- (a) "tender" means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) "price" means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) "rand value" means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes:
- (d) "tender for income-generating contracts" means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) "the Act" means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

3.1.1 THE 80/20 PREFERENCE POINT SYSTEMS

A maximum of 80 points is allocated for price on the following basis:

80/20

$$Ps = 80\left(1 - \frac{Pt - Pmin}{Pmin}\right)$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

3.2. FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

3.2.1. POINTS AWARDED FOR PRICE

A maximum of 80 points is allocated for price on the following basis:

80/20

$$Ps = 80 \left(1 + \frac{Pt - P max}{P max} \right)$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmax = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:
- 4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
 - (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
 - (b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,

then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

(Note to organs of state: Where the 80/20 preference point system is applicable, corresponding points must also be indicated as such.

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the tenderer)
More than 50% (fifty percent) ownership by Black people	20	
More than 50% (fifty percent) ownership by Women	20	
More than 50% (fifty percent) ownership by people with disabilities	20	

DECLARATION WITH REGARD TO COMPANY/FIRM

4.3.	Name of company/firm	
4.4.	Company registration number:	
4.5.	TYPE OF COMPANY/ FIRM	
	 □ Partnership/Joint Venture / Consortium □ One-person business/sole propriety □ Close corporation □ Public Company □ Personal Liability Company □ (Pty) Limited □ Non-Profit Company □ State Owned Company [TICK APPLICABLE BOX] 	

- 4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:
 - i) The information furnished is true and correct;
 - ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
 - iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
 - iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in

addition to any other remedy it may have -

- (a) disqualify the person from the tendering process;
- (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
- (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
- (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
- (e) forward the matter for criminal prosecution, if deemed necessary.

	SIGNATURE(S) OF TENDERER(S)
SURNAME AND NAME:	
DATE:	
ADDRESS:	



THE DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT (DFFE) AS AN ORGAN OF THE STATE SUBSCRIBES TO AND PROPAGATES THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 (ACT NO. 5 OF 2000) AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022.

TERMS OF REFERENCE

THE APPOINTMENT OF A SERVICE PROVIDER TO PROVIDE ANNUAL ENTERPRISE GIS SOFTWARE LICENCES AND SUPPORT SERVICES COMPATIBLE TO THE CURRENT GIS APPLICATIONS OF THE DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT (DFFE) AND ITS ENTITIES FOR A DURATION OF THREE (03) YEARS.

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ABBREVIATIONS

GIS	Geographic Information System
RTO	Recovery Time Objective - RTO is the maximum acceptable amount of time that a system, application, or service can be down after a disaster occurs before normal operations must be restored.
RPO	Recovery Point Objective - RPO refers to the maximum acceptable amount of data loss measured in time. It indicates how much data can be lost during a disaster or failure.

1. PURPOSE

1.1. To appoint a service provider for the provision of annual enterprise GIS software and licences which are compatible with the current GIS applications of the Department of Forestry, Fisheries and the Environment (DFFE) and its entities¹ and to ensure seamless operations of all current applications. This engagement will encompass the delivery of GIS software for desktops, servers, cloud/online, and on-premises environments, along with enterprise support. It will also include formal GIS training through certified courses (virtual/e-learning and/or classroom) over a period of three (3) years, as well as the support and maintenance of all existing and/or legislatively mandated spatial applications.

2. INTRODUCTION AND BACKGROUND

Introduction to Geographic Information Systems (GIS) and GIS Software

- 2.1 Geographic Information Systems (GIS) have revolutionized the way organizations interact with spatial data, offering advanced capabilities for mapping, analysing, and managing geographical information. By integrating spatial data with traditional data systems, GIS technology empowers organizations to visualize complex relationships, make informed decisions, and enhance operational efficiency.
- 2.2 The DFFE advocates for the ongoing development of an enterprise spatial environment. This approach enhances the use of its GIS investments and spatial data, boosts productivity through automated workflows, integrates various data sets, and fosters better collaboration, communication, reporting, and decision-making for integrated planning and spatial analysis.
- 2.3 Since 2012, the Department has strategically employed an enterprise license model to maximize the use of GIS technology in multiple areas of its operations. This enterprise license model has been vital in allowing the Department to leverage GIS for real-time information processing and precise spatial data management, both essential for meeting legislative requirements and operational duties.
- 2.4 The DFFE is initiating a competitive bidding tender process in accordance with Section 217 of the Constitution, which mandates that procurement be "fair, equitable, transparent, competitive, and cost-effective" to achieve the scope of work identified in Section 4 below.
- 2.5 The Department has successfully leveraged desktop, server, and online/cloud-hosted GIS portal software to enhance the use of spatial information throughout its operations. Online GIS tools,

3

¹ DFFE Entities currently comprise of the South African National Parks (SANParks), the South African National Biodiversity Institute (SANBI), the South African Weather Service (SAWS), iSimangaliso Wetland Authority and the South African Forestry Company SOC Limited (SAFCOL).

including mobile and desktop data capture applications, web maps, and dashboards, have proven especially beneficial. These user-friendly platforms enable staff and clients, regardless of their GIS knowledge, to engage with spatial data through intuitive visualizations and applications, improving accessibility and interaction with the information.

2.6 The Department intends to continue with an "enterprise" environment that is supported with GIS enterprise licenses, technical support, continuous updates, and GIS training, as this "enterprise" approach allows for scalability.

3. OBJECTIVES

3.1. The DFFE and entities require access to annual enterprise GIS software and licences as well as training, support and maintenance to ensure seamless operations and support of all current applications for a period of three (3) years, as well as the support for all existing and/or legislatively mandated spatial applications.

4. SCOPE AND EXTENT OF WORK

4.1. The successful service provider must supply GIS software and licences to be compatible with the DFFE's current GIS architecture and ensure seamless operations of the current DFFE applications. This will include GIS software for desktop, servers, for cloud/online, and on-premise environments, along with enterprise support. The service will also include formal GIS training through certified courses (virtual/e-learning and/or classroom) over a period of three (3) years, as well as the support and maintenance of all existing spatial applications/systems.

4.2. **Detailed services required:**

4.2.1. Annual Desktop Software and Licence

4.2.1.1. The service provider must provide GIS desktop software licences that have a user-friendly interface with the ability to explore, visualize and analyse spatial data, are compatible with various data formats and have the ability to support advanced analytical tools.

Table 1: The following levels of GIS licensing and capabilities are required:

SOFTWARE LICENCES		QUANTITY	
•	Basic level (create and share maps and apps, perform basic spatial analysis, access ready to use data)	•	250 for the duration of the contract
•	Standard level (basic capabilities plus advanced editing and data management, manage and analyse	•	200 for the duration of the contract

SOFTWARE LICENCES	QUANTITY
imagery and raster data)	
Advanced level (standard capabilities plus comprehensive analysis using big data, run artificial intelligence workflows, automate processes and workflows, create production ready cartography)	100 for the duration of the contract

Table 2: The desktop software licences must have the following capabilities:

DESI	KTOP SOFTWARE CAPABILITIES
•	Spatial Analysis Toolset for Desktop GIS
•	Publisher Toolset for Desktop GIS
•	Data Interoperability
•	Geostatistical Analysis Toolset for Desktop GIS
•	Professional Map Production Toolset for Desktop GIS
•	Network Analysis
•	Data Reviewer
•	Workflow Management
•	Image analysis
•	Mapping Solution
•	3D Analysis
•	The service provider must have a demonstratable continuous programme of development and improvements to the desktop software offerings.

4.2.2. GIS Server Software and Licence

4.2.2.1. The service provider must provide GIS Server software and licencing with the ability to manage and serve geospatial data efficiently. The server software must have robust security features and support multi-user access and collaboration. Further to this, server software must allow for the publishing of services, hosting of layers, image and raster capability and must have the capability of connected and disconnected deployment. The GIS Server capabilities must include Open Geospatial Consortium (OGC) web services and geoprocessing.

Table 3: The following levels of GIS server licensing capabilities are required.

GIS SERVER SOFTWARE AND LICENCES	QUANTITY IF APPLICABLE
Standard level (basic capabilities, plus web-	- 50 Dependent on deployment per core
based editing using feature services and	
publish geoprocessing services)	

GIS SERVER SOFTWARE AND LICENCES	QUANTITY IF APPLICABLE
Advanced level (standard capabilities plus geostatistical models and spatial analyst capabilities)	50 Dependent on deployment per core

Table 4: The GIS Server software licences must have the following capabilities:

SERVER SOFTWARE CAPABILITIES		
•	Geospatial data management and content management	
•	Collaborating and sharing of data within the organisation	
•	Perform analysis and automation with visualisation tools (applications)	
•	Perform security and monitoring	
•	Product linkage with online environment and desktop	
•	Publish GIS data to an online web-application environment	
•	Real-time data integration and visualization tools	
•	Spatial Analysis Toolset	
•	Publisher Toolset	
•	Geostatistical Analysis Toolset	
•	Professional Map Production Toolset	
•	Network Analysis	
•	Image and raster analysis	
•	Database management tools	
•	Developer Subscription	
•	Data Interoperability and Tracking	
•	Event management tools	
•	The service provider must have a demonstratable continuous programme of development and improvements to the software offerings.	

4.2.3. Cloud/online and On-Premise Licence

4.2.3.1. The service provider must provide GIS Cloud/online and On-Premise licence software, which is accessible from any device with internet connectivity. The environment must allow for feature data sharing and collaboration among users and for flexible solutions that can adapt to our evolving needs.

Table 5: The following licences for role based users are required:

CLOUD/ONLINE AND ON-PREMISE LICENCE		QUANTITY IF APPLICABLE	
•	Online/cloud subscriptions with 15000 cumulative credits	- 6	
•	12 on-premise online subscriptions	 Named users provision as per user role below 	
Name	e Users	Cloud	On-
			Premise
•	View – users that can view data being served	250	300
•	Edit – users that can edit, collect and submit data	200	200
	being served or collected		
•	Create - users that can create, apps and tools for	30	30
	the editing, collection and submitting of data		
•	Mobile- users that can collect and update data in	400	400
	the field		
•	Administrator – users that administer the on-	30	30
	premise environment and can can create,		
	manage, and remove user accounts, assign roles,		
	and set permissions based on user needs,		
	oversee the organization's content, including		
	maps, layers, and applications, ensuring that		
	everything is organized and accessible to the right		
	users, manage licenses and subscriptions,		
	ensuring that users have access to the tools and		
	resources they need, create and manage groups		
	to facilitate collaboration among users, controlling		

CLOUD/ONLINE AND ON-PREMISE LICENCE	QUANTITY IF APPLICABLE
who can view or edit shared content.	

4.2.4. The GIS Online software licences must have the following capabilities listed in Table 6.

Table 6: Online software capabilities

ONLINE SOFTWARE CAPABILITIES

- Map creation and sharing: users can create interactive maps using various basemaps and layers, and share them with specific groups or publicly
- Data visualization: the software capabilities must offer tools for visualizing spatial data in various formats, including heat maps, dashboards, 3D scenes, and custom symbology
- Geospatial analysis: users can perform spatial analysis using built-in tools, such as overlay,
 buffer, and proximity analysis
- Collaborative editing: multiple users can collaborate on maps and data, allowing for real-time updates and teamwork
- Web mapping applications: users can build and deploy custom web apps to showcase maps and data tailored to specific audiences
- Interactive mapping: the software capabilities must enable the creation of interactive maps that combine geospatial data with narrative text, images, and multimedia for effective storytelling
- Data management: users can upload, manage, and share their own datasets, including feature layers and imagery
- Spatial data integration: must supports integration with various data sources, including live data feeds and third-party APIs
- Mobile access: users can access and interact with maps and applications on mobile devices through web browsers or dedicated apps
- Security and sharing controls: administrators can set permissions and sharing settings to control who can view or edit content

ONLINE SOFTWARE CAPABILITIES

- Analysis tools for non-experts: easy-to-use analysis tools make it accessible for users without deep GIS expertise to perform analyses
- Reporting and dashboards: users can create dashboards to visualize data and key performance indicators in real time
- The software capabilities must enable data capture platforms on mobile devices, offering both online and offline modes for in-field data capture, including integration with the online environment
- Location Sharing: Ability to track
- The software capabilities must enable data hub or site functionality to consolidate or link organisational content/webmaps/webapps

4.2.5. Training

- 4.2.5.1. The service provider must offer comprehensive training programs for both desktop, server and online GIS software. The training must be accessible to all users and delivered in a flexible format that accommodates various learning styles, including:
- On-Demand Access: Training resources must be available online, allowing users to access materials from any device with internet connectivity at their convenience.
- <u>Interactive Sessions</u>: The provider must offer live training sessions that facilitate real-time interaction, questions, and collaborative learning among participants.
- Role-Based Training: Training programs must be tailored to different user roles, ensuring that each participant receives relevant instructions based on their specific responsibilities and usage needs.
- <u>Continuous Learning Opportunities</u>: The provider must offer ongoing training and refreshers to help users stay updated on new features and best practices, adapting to our organisation's evolving needs.
- <u>Certification Options</u>: The training program must include certification opportunities to validate user skills and enhance their professional development.

Table 7: Training and capacity

TRAINING AND CAPACITY BUILDING	
GIS Desktop, Server or Online training (in person)	- R150 000 p/a

TRAINING AND CAPACITY BUILDING		
Virtual Campus	- R30 000 p/a	
Discounted Training for all DFFE & Entities Staff	10%	
National ² Conferences/Seminars	6	
International ³ Conferences/Seminars	3	

4.2.6. Premium⁴ Support with Maintenance and Enhancement of System

- 4.2.6.1. The service provider must offer comprehensive support for software licences and applications.
- Minimum requirements for support must ensure that there is a 24-hour turnaround timeframe for all support queries and an eight 8-hour response timeframe to critical systems.
- Application downtown time to be resolved within an RTO of 24 hours and an RPO of 8 hours.
- Time spent in management or support meetings will be allocated from support hours.
- A monthly progress report is required.
- Service provider must be able to provide virtually the required support services in the Western Cape, Gauteng and Kwa-Zulu Natal regions.
- Currently, the Department has various systems and applications developed and
 deployed on the ESRI suite technology, including but not limited to projects
 identified in Annexure C. All existing systems and applications must be seamlessly
 maintained and supported. Annexure C provides a brief description of existing
 systems and the technology stack that these systems are built and maintained.
- Provision of 500 hours per annum to be used for premium support, maintenance, and enhancement to be managed by the DFFE and service provider account manager. The service provider must be able to provide virtually the required premium support services in the Western Cape, Gauteng and Kwa-Zulu Natal regions and physically in Gauteng.
- The service provider must deliver maintenance services for current software licenses and applications/systems. These services must guarantee the ongoing

² National Conferences/Seminars must cater for registration and accommodation.

³ International Conferences/Seminars must cater for registration, accommodation and economy travel.

⁴ Premium Support – Onsite Premium support to provide for support and services over and above standard technical support aligned to professional hours usage

seamless functionality, security, and performance of all existing and new systems, enabling users to work efficiently and effectively and for the DFFE to deliver on its legislative mandates.

5. EXPECTED DELIVERABLES / OUTCOMES

- 5.1. The expected deliverables are detailed in the scope of work (section 4) and summarised as:
 - 5.1.1 **Desktop Software and Licencing** the service provider is to provide three levels of desktop software licences in the number as identified in <u>Table (1)</u> and capabilities as identified in Table (2).
 - 5.1.2 **Server Software and Licencing** the service provider is to provide two levels of server software licences in the number as identified in <u>Table (3)</u> and capabilities as identified in <u>Table (4)</u>.
 - 5.1.3 Online/Cloud and On-premise Software and Licencing the service provider is to provide Online/Cloud and On-premise software licences for role base users in the number as identified in Table (5) and capabilities as identified in Table (6).
 - 5.1.4 **Training** The service provider must offer comprehensive training programs for both desktop, server and online GIS software in the formats identified under section 4.1.4 and to the value as identified in <u>Table (7)</u>.
 - 5.1.5 **Premium Support, Maintenance and Enhancements** The service provider must offer comprehensive support for software licences and applications meeting the criteria and duration as specified and must deliver maintenance and/or enhancement services of the applications/systems identified under section 4.2.6 and <u>Annexure C.</u>

6. PERIOD / DURATION OF PROJECT / ASSIGNMENT

6.1. The software, licences and other services must be available for a duration of three (03) years, the details of which must be stipulated in the SLA/MoA and the signing of the SLA/MoA by both parties is required with the non-negotiable effective start date of the 01 March 2025 for full functionality of the contract.

7. COSTING / COMPREHENSIVE BUDGET

7.1. A comprehensive offer must be provided, inclusive of all costs, expenses, and all applicable taxes.
Note: Travelling costs and time spent or incurred between home and the office of the Project Manager and the DFFE office will not be for the account of the DFFE.

- 7.2. A comprehensive offer must be provided in the same envelope as the technical proposal, inclusive of all disbursement costs, expenses, and VAT (Annexure A Price Schedule /guidance: Service provider must quote for all activities as included in the Pricing Schedule unless indicated otherwise).
- 7.3. DFFE reserves the right to negotiate price with a recommended service provider identified in the evaluation process without offering the same opportunity to any other bidder (s) who have not been recommended.
- 7.4. The validity period is 120 days from the closing date of the bid. The department reserves the right to extend the validity of the bid, where a written letter will be sent through to every bidder that responds to the bid. In terms of procedural fairness, the bidder will be allowed to respond, in writing, to the terms and conditions of the bid and the bid price. Such acceptance of the terms and conditions of the bid and bid price becomes legally binding in the procurement process. Any bidder that did not respond to the extension of the bid validity within the stipulated period in writing **WILL NOT** be considered further for the bid upon expiry of the initial validity period.

8. INFORMATION SESSION

- 8.1. Is the briefing session applicable?
- 8.2. Is it a compulsory briefing session?

YES

YES

8.3. The briefing session will be held as follows:

Date: 12th of February 2025

Time: 10H00 - 11H00

Platform/ Venue: Join the meeting now

Meeting ID: 355 876 846 210

Passcode: yv7Ey9Gy

8.4. Request for clarification of the tender document, questions, or queries, if necessary, must be submitted to the DFFE representative as listed under technical enquiries at least seven (07) calendar days before the stipulated closing date and time of the tender in writing. However, DFFE shall not be liable nor assume liability for failure to respond to any questions and/or queries raised by the bidder.

9. EVALUATION CRITERIA

- 9.1. The evaluation for this bid will be carried out in the following phases:
 - Phase 1: Pre-compliance.

- Phase 2: Mandatory requirement
- Phase 3: Functionality Evaluation
- Phase 4: Price and Preference Points.

9.2. PHASE 1: PRE-COMPLIANCE

- 9.2.1. During this phase, bid documents will be reviewed to determine compliance with SCM returnable documents, tax matters, and whether proof of registration on the Central Supplier Database (CSD) has been submitted with the bid documents at the closing date and time of the bid.
- 9.2.2. The bid proposal will be screened for compliance with administrative requirements as indicated below:

ITEM NO.	ADMINISTRATIVE REQUIREMENTS	CHECK/ COMPLIANCE	
1	Master Bid Document	Provided and bound	
2	Electronic Copy (USB)	Same as the master bid document	
3	SCM - SBD 1 - Invitation to Bid	Completed and signed	
4	Tax Compliance and CSD Registration	Attached CSD registration number/ Proof	
7	Tax Compliance and COD Negistration	of CSD registration and/ or SARS Tax Pin	
5	SBD 3.3 - Pricing Schedule	Completed	
6	SCM - SBD 4 – Bidders Disclosure	Completed and signed	
	SCM - SBD 6.1 - Preference Points Claim		
7	Form in terms of the Preferential	Completed and signed	
	Procurement Regulations 2022		
	In case of bids where Consortia / Joint		
8	Ventures, Consortia/ Joint Venture	JV agreement completed and signed, if	
	agreement signed by both parties must be	applicable	
	submitted with bid proposal		

9.3. PHASE 2: MANDATORY REQUIREMENT

9.3.1. The mandatory requirements will apply, and bidders must submit all requirements indicated hereunder with the bid documents at the closing date and time of the bid. During this evaluation phase, the bidder's responses will be evaluated based on the documents submitted under mandatory requirements.

- 9.3.2. Bidders who fail to comply or meet mandatory requirements will be disqualified and will not be evaluated further.
- 9.3.3. Bidders are required to complete a table below by answering **YES or NO** and attach proof of the document listed in the table below:

REQUIREMENTS		PROOF ATTACHED:	
	YES	NO	
Attendance of Compulsory Briefing Session			
Copies of valid certificates must be attached:			
Key Expert 1 - Project manager with PMBok certification.			
Key Expert 2 - GIS specialist, registered with South African Geomatics Council (SAGC) as a Professional Geo-informatic Practitioner. X			
Key Expert 3 - IT professional with Azure certification.			
Bidders need to submit a copy of the registration certificates requirements for each of the above Key Experts which are provided as specific resources for the project. X			

9.4. PHASE 3: FUNCTIONALITY CRITERIA

- 9.4.1. Only bid proposals that meet the mandatory requirements will be evaluated on functionality criteria.
- 9.4.2. The bidder must score a minimum of **75%**, during Phase 3 (functionality) of the evaluation to qualify for Phase 4 of the evaluation where only points for price and preference points will be considered.
- 9.4.3. The following values/ indicators will be applicable when evaluating functionality:

GUIDELINES FOR CATEGORY CRITERIA FUNCTIONALITY: (GUIDELINES FOR CRITERIA APPLICATION)			
A proposed project proposal for the	Bidders are required to provide a detailed proposal to the requirements as stipulated in section 4	plan which	responds
provision of Desktop, Server, On- Premises/Cloud Online	 A detailed Project proposal as in Section 4 for: Desktop Software and Licencing Server Software and Licencing 	Indicator	Weight

GUIDELINES FOR CATEGORY CRITERIA	FUNCTIONALITY: (GUIDELINES FOR CRITERIA APPI	LICATION)	
software and action plan for the existing system maintenance and enhancements in line with the scope and extent of work for a period of 3 years.	Online/Cloud and On-premise Software and Licencing Training Premium Support Maintenance and Enhancements Proposal must demonstrate how existing projects/system and applications will be		
	maintained. Detailed proposal that demonstrates the scope of work and have met 100% of the required built in capabilities listed in Section 4 linked to: Desktop Software and Licencing Server Software and Licencing Online/Cloud and On-premise Software and Licencing Training Premium Support and Enhancement ** Evidence must be in the format of a table demonstrating the software capabilities.	5	
	Detailed proposal that demonstrates the scope of work and have met 80% of the required built in capabilities listed in Section 4 linked to: Desktop Software and Licencing Server Software and Licencing Online/Cloud and On-premise Software and Licencing Training Premium Support and Enhancement ** Evidence must be in the format of a table demonstrating the software capabilities.	4	20
	Detailed proposal that demonstrates the scope of work and have met 60% of the required built in capabilities listed in Section 4 linked to: Desktop Software and Licencing	3	

GUIDELINES FOR	FUNCTIONALITY, (CHIPFUNES FOR CRITERIA ARR	LICATION	
CATEGORY CRITERIA	FUNCTIONALITY: (GUIDELINES FOR CRITERIA APPLICATION)		
	Server Software and Licencing		
	Online/Cloud and On-premise Software and Licencing		
	Training		
	Premium Support and Enhancement		
	** Evidence must be in the format of a table		
	demonstrating the software capabilities.		
	Detailed proposal that demonstrates the scope of work		
	and have met 40% of the required built in capabilities		
	listed in Section 4 linked to:		
	Desktop Software and Licencing		
	Server Software and Licencing	2	
	Online/Cloud and On-premise Software and Licencing	2	
	Training		
	Premium Support and Enhancement		
	** Evidence must be in the format of a table		
	demonstrating the software capabilities.		
	Section 4 requirements not well understood.	1	
	No information provided	0	
	Bidders must demonstrate a continuous program	mme of dev	elopment
	showing updates to the software and offer	ings with	historical
Bidders must	evidence for the past 10 (ten) years		
demonstrate a	Bidders must provide a detailed timeline or		
continuous programme	roadmap showing updates and enhancements to		Weight
of development showing	the software over the past 10 years. Demonstrating	Indicator	
updates to the software	consistency of updates (e.g., version releases,	illulcator	
and offerings with	feature additions, performance improvements) and		
historical evidence for a	evidence of periodic development activities.		
period of ten years	5 successful GIS software updates implemented within	5	
	the last 10 years	5	15
	4 successful GIS software updates implemented within	4	13
	the last 10 years	+	

GUIDELINES FOR	FUNCTIONALITY: (GUIDELINES FOR CRITERIA APP	I ICATIONI\	
CATEGORY CRITERIA	TONGTIONALITY. (GOIDELINES FOR CRITERIA AFF	LICATION	
	3 successful GIS software updates implemented within	3	
	the last 10 years	3	
	2 successful GIS software updates implemented within	2	
	the last 10 years	2	
	1 successful GIS software update implemented within	1	
	the last 10 years	'	
	No successful GIS software updates implemented	0	
	within the last 10 years		
	Bidder(s) are required to demonstrate that they	have the r	necessary
	resources and technical experience to undertake	ce and suc	ccessfully
	complete the project.		
	Bidder(s) should submit curriculum vitae for the Tell	eam Leader (Key Expert
Experience of Team	1 - Project Manager) proposed to be employed on	the project	
Leader (Key Expert 1 -	Curriculum vitae are to include specific details of		, ,
Project Manager)	Expert 1) including, inter alia, relevant experienc		
Experience in GIS	contactable references, and proven record of	of experienc	e in GIS
Enterprise deployment	Enterprise deployment and project management	la dia atau	\A/-:4
and Project management	Experience of the Key Expert 1 - Project Manager	Indicator	Weight
to be assigned to the	10 Years experience and more	5	
DFFE Support and	8 Years and less than 10 years of experience	4	40
project deployment	6 Years and less than 8 years of experience	3	10
	4 Years and less than 6 years of experience	2	
	2 Years and less than 4 years of experience	1	
	Less than 2 Years of experience or no experience	0	
	Bidder(s) are required to demonstrate that they		-
	resources and technical experience to undertake and	successfull	y complete
	the project.		
Experience of Key Expert	Bidder(s) should submit curriculum vitae for the Key I proposed to be employed on the project.	expert 2 - GIS	Specialist
2 - GIS specialist.	 Curriculum vitae are to include specific details of the GIS Specialist (Key Expert 2) including, inter alia, relevant experience, and to include three 		
Experience in GIS			, ,
Enterprise deployment to	contactable references, proven record of experience		
be assigned to the DFFE	deployment	0.3	

GUIDELINES FOR	FUNCTIONALITY: (GUIDELINES FOR CRITERIA APP	LICATION	
CATEGORY CRITERIA	FUNCTIONALITY. (GUIDELINES FOR CRITERIA APP	LICATION)	
Support and project	Experience of the Key expert 2 – GIS Specialist	Indicator	
deployment	10 Years experience and more	5	
	8 Years and less than 10 years of experience	4	
	6 Years and less than 8 years of experience	3	10
	4 Years and less than 6 years of experience	2	
	2 Years and less than 4 years of experience	1	
	Less than 2 Years of experience or no experience	0	
Experience of Key Expert 3 - IT Professional. Experience in GIS Enterprise deployment to be assigned to the DFFE	 Bidder(s) are required to demonstrate that they resources and technical experience to undertake and the project. Bidder(s) should submit curriculum vitae for the Professional proposed to be employed on the project Curriculum vitae are to include specific details of the Expert 3) including, inter alia, relevant experience contactable references, proven record of experience deployment 	l successfully ne Key Expe t. ne IT Profess n, and to inc	y complete ert 3 - IT sional (Key lude three
Support and project	Experience of the Key expert 3 – IT Professional	Indicator	
deployment	10 Years experience and more	5	
	8 Years and less than 10 years of experience	4	
	6 Years and less than 8 years of experience	3	10
	4 Years and less than 6 years of experience	2	
	2 Years and less than 4 years of experience	1	
	Less than 2 Years of experience	0	
	Bidder(s) are required to demonstrate releval competency of the company for all completed project Bidder(s) should submit full details of reliable contact reference letters and project completion certificates	cts. ctable positi	
The company's experience, track record and knowledge in the management and	Bidders experience in software development, support and systems development in a GIS Enterprise in line with scope and extent of work required with accredited training facilities	Indicator	

GUIDELINES FOR	FUNCTIONALITY: (GUIDELINES FOR CRITERIA APPLICATION)		
CATEGORY CRITERIA	TONOTIONALITY. (GOIDELINES FOR CRITERIA AFF	LICATION	
deployment of a GIS	5 successfully completed enterprise projects with 5 duly		
Enterprise in line with	signed positive reference letters or more within the last	5	35
scope and extent of work	10 years		
	4 successfully completed enterprise projects with 4 duly		
	signed positive reference letters or more within the last	4	
	10 years		
	3 successfully completed enterprise projects with 3 duly		
	signed positive reference letters or more within the last	3	
	10 years		
	2 successfully completed enterprise projects with 2 duly		
	signed positive reference letters or more within the last	2	
	10 years		
	1 successfully completed enterprise project with 1 duly		
	signed positive reference letters or more within the last	1	
	10 years		
	No successfully completed enterprise project	0	
TOTAL POINTS ON FUNCTIONALITY		100	

9.5. PHASE 4: PRICE AND PREFERENCE POINTS

- 9.5.1. The preference point system applicable for this bid is the 80/20
- 9.5.2. For the 80/20 preference point system, the following preference point system will be followed to advance the categories of persons:
 - a. For contracts with a Rand value up to R50 000 000, a maximum of 20 points may be allocated for specific goals as contemplated above, provided that the lowest acceptable tender scores 80 points for price.
 - i. The applicable formula to be used is Ps=80[1-(Pt-Pmin)/Pmin]. Provided:
 - Ps = Points scored for the price of the tender under consideration.
 - Pt = Price of tender under consideration; and
 - Pmin = Price of the lowest applicable tender.
 - ii. total of 20 points may be awarded to a tenderer as follows:
 - 20 points: if the Bidder has more than 50% (fifty percent) by Black people, Women, or people with disabilities

- 0 Points: for 50% and below ownership by stipulated categories of persons
- 9.5.3. The bid will be awarded to a bidder with the highest points on price and Preference Points on condition that they have met all phases of the evaluation criteria and complied with the tender requirements set out in the tender document. However, a contract may be awarded to a tenderer that did not score the highest points by section 2(1) of the PPPFA.
- 9.5.4. A maximum of 20 Points will be allocated for either of the specific goals.

SPECIFIC GOALS	80/20
>50% ownership by Black people, Or	20
>50% ownership by Women, Or	20
>50% ownership by people with Disability	20

- 9.5.5. For service providers to claim preference points the following must be adhered to:
 - a) Submit a complete and signed SBD 6.1,
 - b) Submit a valid B-BBEE Status Level Verification Certificate issued by SANAS, or Accredited Verification Agency, or B-BBEE Certificate issued by CIPC, or a Sworn Affidavit commissioned by the Commissioner of Oaths together with their bids.
 - c) Submit CSD Registration Report or MAAA number

NB: Failure on the part of a tenderer to submit proof or documentation stated above in terms of this tender to claim preference points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

10. BID SUBMISSION REQUIREMENTS

- 10.1. Bidders must ensure that the following submission requirements, which will be needed for evaluation purposes are included in their bid proposal and are as follows:
 - 10.1.1. The bidder must draft a table of contents which will indicate where each document is in the proposal.
 - 10.1.2. The proposal shall consist of one (01) master original document and must clearly indicate the prices on SBD 3.3 and Annexure A (where applicable) for detailed price schedule.
 - 10.1.3. The information in the CV of the proposed Key Expert 1, Key Expert 2, and Key Expert 3 should include relevant experience in the chosen area of expertise.
 - 10.1.4. Project reference specifying the role played by the service provider in the listed projects or assignments.
 - 10.1.5. A detailed project plan with clear indication of who will be responsible for the management of the assignment as well as its execution. The allocation of team members on the assignments should be based on the experience in delivering the scope of work as listed.

- 10.1.6. Standard bidding documents (SBD1, 3.3, 4 and 6.1).
- 10.1.7. Copy of Central Supplier Database (CSD) report or tax pin certificate from SARS.
- 10.1.8. Letter of Authority to sign documents on behalf of the company.

11. LEGISLATIVE FRAMEWORK OF THE BID

11.1. Tax Legislation

- 11.1.1 Bidder must at all-time be compliant when submitting a proposal to DFFE and remain compliant for the entire contract term with all applicable tax legislation, including but not limited to the Income Tax Act, 1962 (Act No. 58 of 1962) and Value Added Tax Act, 1991 (Act No. 89 of 1991).
- 11.1.2 Bidders who make taxable supplies more than R1 million in any 12-month conservative period are liable for compulsory VAT registration, but a person may also choose to register voluntarily provided that the minimum threshold of R50 000 has been exceeded in the past 12-month period.
- 11.1.3 Bidders who meet the above requirement must register as VAT vendors, if successful, within one month of award of the bid.
- 11.1.4 SARS Tax Status Pin requirements / or Central Supplier Database (CSD) number or report must be provided.

11.2. Procurement Legislation

- 11.2.1 Bidders must be cognisant of the legislation and/or standards specifically applicable to the services.
- 11.2.2 Bidders are requested to submit a valid B-BBEE Status Level Verification Certificate issued by SANAS Accredited Verification Agency, or B-BBEE Certificate issued by CIPC, or a Sworn Affidavit commissioned by Commissioner of Oaths together with their bids. The sworn affidavit must be signed by the deponent (Bidder), in the presence of a Commissioner of Oaths where the Commissioner of Oaths must affix his/her signature, together with the stamp of the office, and affix a date on which the signature was affixed. Furthermore, the dates of the deponent and the CoO must correspond.
- 11.2.3 If the application is made by a Joint Venture or Partnership, the accreditation credentials in the name of joined entities must be submitted. Members of the joint venture must meet the requirements of the proposal.
- 11.3. Privacy and Protection of Personal Information Act 4 of 2013

- 11.3.1 Protecting personal information is important to the Department of Forestry, Fisheries, and the Environment. To do so, DFFE follows general principles by applicable privacy laws and the Protection of Personal Information Act 4 of 2013 (POPIA).
- 11.3.2 DFFE's role as the responsible party is amongst others to process personal information for the intended purpose for which it was obtained and in line with legal agreements with its respective/ prospective service providers and third parties.
- 11.3.3 DFFE will process personal information only with the knowledge and authorisation of the bidder/ respondent and will treat the personal information which comes to its knowledge as confidential and will not disclose it unless so required by law or subject to the exception contained in the POPIA.
- 11.3.4 DFFE reserves all the rights afforded to it by the POPIA in the processing of any of its information as contained in this bid and the bidder/respondent is required to comply with all prescripts as detailed in the POPIA relating to all information concerning DFFE.
- 11.3.5 In responding to this bid, DFFE acknowledges that it will obtain and have access to the personal information of the bidder/ respondent. DFFE agrees that it shall only process the information disclosed by the bidder/ respondent in their response to this bid for evaluation and subsequent award of the tender and by any applicable law.

12. SPECIAL CONDITIONS OF THE CONTRACT

- 12.1. On appointment, the performance measures for the delivery of the project will be closely monitored by the DFFE.
- 12.2. The service provider/s will submit monthly progress reports to the Project Manager, within the stipulated date after the end of each month and quarter for the duration of the project. Failure to submit the required reports on time will result in penalties.
- 12.3. The Project Manager shall do the ongoing management of the Service Level Agreement.
- 12.4. Appointed service providers may be subjected to security vetting and screening.
- 12.5. The service provider/s must guarantee the presence of the senior in charge of fieldwork throughout the duration of the contract.
- 12.6. Before the appointment of a resource replacement, the DFFE Project Manager must approve such appointment. If the senior must leave the project, a period of at least one (01) month is required, in which the senior must work parallel with the next person (senior consultant with similar expertise and equal years of experience) appointed and able to transfer skills and knowledge.

- 12.7. All the conditions specified in the **General Conditions of Contract (GCC)** will apply and where the conditions in the special conditions of contract contradict the conditions in the general conditions of contract the special conditions of contract will prevail.
- 12.8. The service provider shall notify the DFFE in writing of all subcontracts awarded under this contract if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the service provider from any liability or obligation under the contract.
- 12.9. The proposals should be submitted with all required information containing technical information.
- 12.10. DFFE reserves the right to reject proposals that are not submitted in the prescribed format or where information presented is illegible or incomplete and will not be evaluated further.
- 12.11. DFFE reserves the right to request such information during the evaluation process of the proposal and the information must be presented within the DFFE stipulated timelines. Failure to do so may lead to disqualification.
- 12.12. A trust, consortium, or joint venture will qualify for Preference Points if their average combined ownership is more than 50% (fifty percent) of ownership on specific goals (e.g., two or more companies claiming preference points, Ownership/ Directorship will be combined and divided by the number of companies to ascertain the preference points).
- 12.13. DFFE reserves the right to request additional information to validate any information submitted by bidders including preference points claimed.
- 12.14. If the DFFE is of the view that a Bidder submitted false information regarding a Specific Goal, the DFFE must inform the Bidder accordingly and allow the Bidder to make representations within 14 (fourteen) days as to why: -
 - 12.14.1.the Tender may not be disqualified, or,
 - 12.14.2.if the Tender has already been awarded to the Bidder, the contract or order should not be terminated
- 12.15. After considering the representations, the DFFE may, if it concludes that the information relating to a Specific Goal is false, disqualify the Bidder or terminate the Contract and if applicable, claim damages from the Bidder.
- 12.16. Poor or non-performance by the bidder will result in the cancellation of contracts/orders.
- 12.17. Please take note that DFFE is not bound to select any of the firms submitting proposals. DFFE reserves the right not to award any of the bids and not to award the contract to the lowest bidding price.
- 12.18. DFFE will not be held responsible for any costs incurred by the service providers in the preparation, presentation, and submission of the proposal.
- 12.19. The Department will consider Company and Individual(s) (Personnel) experience and Qualifications obtained within and outside the Republic of South Africa (RSA). For evaluation

purposes, qualifications obtained outside RSA must be accompanied by the SAQA Certificate of Evaluation (SCoE). The SCoE must indicate the recognition decision taken by SAQA concerning the foreign qualification and the comparability of that qualification with a South African qualification registered on the National Qualification Framework (NQF). Foreign qualifications that are not accompanied by the SCoE will not be considered for evaluation in this contract.

12.20. The recognition of foreign qualifications is in terms of the South African National Qualifications Framework (NQF) conducted by SAQA. SAQA derives this mandate from the NQF Act, 67 of 2008 (as amended) and performs the function according to the Policy and Criteria for Evaluating Foreign Qualifications within the South African NQF (as amended, 2017). (www.saqa.org.za)"

13. PAYMENT TERMS

13.1. The Service Provider shall provide the Department with a detailed tax invoice with supporting evidence and/or report for deliverables completed. The Department will have 30 (thirty) calendar days after receipt of the tax invoice and supporting evidence to make payment to the Service Provider. Upon receipt of the invoice, the Department will have 7 (seven) calendar days to approve such invoice and relevant evidence and/or report submitted. If the invoice together with the supporting evidence and/or report is approved, the Department shall make a direct payment to the Service Provider within the remaining 23 (twenty-three) calendar days of approval of such invoice and/or report, thus ensuring that payment of invoice is made within the 30 (thirty) calendar days timeframe.

14. TECHNICAL ENQUIRIES

14.1. Should you require any further information in this regard, please do not hesitate to send written enquiries to: Tenders@dffe.gov.za

15. ANNEXURE A - PRICING SCHEDULE

NAME OF THE BIDDER

ANNEXURE A

	Schedule of Payments		
Output	Milestone	Time Period	Total Costs (R) (Incl VAT)
	ArcGIS desktop products – Basic(250), Standard(200) and Advanced(100)		
Year 1 (one))	ArcGIS desktop extensions — Spatial Analyst, 3D Analyst, Network Analyst, Geostatistical Analyst, Publisher Toolset, Professional Map Production Toolset, Data Interoperability, Data Reviewer, Image analysis, Schematics, Workflow Manager, Mapping Solution ArcGIS server-based products — Enterprise — Standard(50) and Advanced(50) ArcGIS Server Extensions - Spatial Analyst, 3D Analyst, Network Analyst, Geostatistical Analyst, Schematics, Image and Raster Analyst, Geospatial data management and content management, Collaborating and sharing of data within the organisation, Perform analysis and automation with visualisation tools (applications), Perform security and monitoring, Product linkage with online environment and desktop, Publish GIS data to an online web-application environment, Real-time data integration and visualization tools, Publisher Toolset, Professional Map Production Toolset, Network Analysis, Database management tools, Developer Subscription (5), Data Interoperability (3), Tracking Analyst (2), Event management tools (2) and Workflow Manager	1 Mar 2025 - 31 Mar 2026	R

	Claudiantina and O. B	mamaiaa I !:			
	Cloud/online and On-P				
	6 Online/Cloud Subscrip		cumulative credits		
	12 Online/On-Premise S				
	Named Users as per	Cloud	On-Premise		
	user roles				
	Viewer	250	300		
	Editor	200	200		
	Create	30	30		
	Mobile	400	400		
	Administrator	30	30		
		•			
	Training:				
	GIS Desktop, Server or	Online training	(in person) to the		
	value of R150 000 p/a				
	Virtual Campus to the va	alue of R 30 00	0 p/a		
	National Conferences/So	eminars – 6 as	per occurrence		
	International Conference	es/Seminars – 3	3 p/a		
	Duraniana Caranasi	unitib Marine			
	Premium Support		tenance and		
	Enhancement of Syste				
	500 hours of premium	support (Profe	essional Services)		
	per annum				
	ArcGIS desktop produ	ıcts – Basic(2	50), Standard(200)		
	and Advanced(100)	(-	,, (3-)		
	, ,				
	ArcGIS desktop exte	ensions – Sp	atial Analyst, 3D	1 Apr 2026	
Year 2	Analyst, Network Analys	t, Geostatistica	l Analyst, Publisher	– 31 Mar	_
(two)	Toolset, Professional		•	2027	R
			Image analysis,		
	Schematics, Workflow M				
	ArcGIS server-based		_		
		•	1		

Standard(50) and Advanced(50)

ArcGIS Server Extensions - Spatial Analyst, 3D Analyst, Network Analyst, Geostatistical Analyst, Schematics, Image and Raster Analyst, Geospatial data management and content management, Collaborating and sharing of data within the organisation, Perform analysis and automation with visualisation tools (applications), Perform security and monitoring, Product linkage with online environment and desktop, Publish GIS data to an online web-application environment, Real-time data integration and visualization tools, Publisher Toolset, Professional Map Production Toolset, Network Analysis, Database management tools, Developer Subscription (5), Data Interoperability (3), Tracking Analyst (2), Event management tools (2) and Workflow Manager

Cloud/online and On-Premise Licence:

6 Online/Cloud Subscription with 15000 cumulative credits12 Online/On-Premise Subscription

Named Users as per	Cloud	On-Premise
user roles		
Viewer	250	300
Editor	200	200
Create	30	30
Mobile	400	400
Administrator	30	30

Training:

GIS Desktop, Server or Online training (in person) to the value of R150 000 p/a

Virtual Campus to the value of R 30 000 p/a

National Conferences/Seminars – 6 as per occurrence International Conferences/Seminars – 3 p/a

	Premium Support with Maintenance and Enhancement of System 500 hours of premium support (Professional Services) per annum ArcGIS desktop products – Basic(250), Standard(200)		
Year 3 (three)	and Advanced(100) ArcGIS desktop extensions — Spatial Analyst, 3D Analyst, Network Analyst, Geostatistical Analyst, Professional Map Production Toolset, Publisher Toolset, Data Interoperability, Data Reviewer, Image analysis, Schematics, Workflow Manager, Mapping Solution ArcGIS server-based products — Enterprise — Standard(50) and Advanced(50) ArcGIS Server Extensions - Spatial Analyst, 3D Analyst, Network Analyst, Geostatistical Analyst, Schematics, Image and Raster Analyst, Geospatial data management and content management, Collaborating and sharing of data within the organisation, Perform analysis and automation with visualisation tools (applications), Perform security and monitoring, Product linkage with online environment and desktop, Publish GIS data to an online web-application environment, Real-time data integration and visualization tools, Publisher Toolset, Professional Map Production Toolset, Network Analysis, Database management tools, Developer Subscription (5), Data Interoperability (3), Tracking Analyst (2), Event management tools (2) and Workflow Manager	1 Apr 2027– 31 Mar 2028	R
	6 Online/Cloud Subscription with 15000 cumulative credits		

	12 Online/On-Premise S	ubscription			
	Named Users as per user roles	Cloud	On-Premise		
	Viewer	250	300		
	Editor	200	200		
	Create	30	30		
	Mobile	400	400		
	Administrator	30	30		
	GIS Desktop, Server or value of R150 000 p/a Virtual Campus to the value of R150 000 p/a Virtual Campus to the value of R150 onferences/Selection of Server	alue of R 30 00 eminars – 6 as es/Seminars – with Main m	00 p/a s per occurrence 3 p/a stenance and	Year 1	
Existing sy	stem maintenance and	support – Anı	nexure C	Year 2	R R
				Year 3	R
				I Cal J	
TOTAL COS	ST EXCLUDING VAT				R
VAT @ 15%	1				R
TOAL COS	T AFTER VAT				R

16. ANNEXURE B - CV TEMPLATE

TO BE COMPLETED BY THE PROJECT LEADER AND PROPOSED TEAM MEMBERS OR EXPERTS

1.	Surname						
2.	Name						
3.	National ID /	Passp	ort Number				
4.	Contact Num	ber					
5.	Email Addres	SS					
6.	Proposed rol	e on t	he project				
7.	Education:						
Yea	ar Completed	Inst	itution		Qualification(s)	obtained	NQF Level
<u> </u>							
<u></u>							
8. Lan	nguage		dicate competence Reading		Speaking	Writing	
1							
9.	Membership	of pro	fessional bodies:				
9. Nar	Membership			,	Year joined	Membersl	nip Number
					Year joined	Membersi	nip Number
				,	Year joined	Membersl	nip Number
Nar	me of profession	onal be	ody		Year joined	Membersi	nip Number
	me of profession	onal be			Year joined	Membersi	nip Number
Nar	me of profession	onal be	ody		Year joined	Membersi	nip Number
Nar	me of profession	onal be	ody		Year joined	Membersi	nip Number
Nar	me of profession	onal be	ody		Year joined	Membersi	nip Number
Nar 10.	me of profession	e.g. C	ody		Year joined	Membersi	nip Number
10.	me of profession	e.g. C	ody		Year joined	Membersi	nip Number
10. 11. Nar	Other skills: (e.g. C	ody		Year joined	Membersi	nip Number

12. Years within the institution:

13. Key experience relevant to the terms of reference: (List specific assignments relevant to the terms of reference)	13.	Key experienc	e relevant to the terms	of reference: (Li	ist specific a	ıssignments ı	relevant to the	terms of refere	nce
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Name of Employer	Name of Client	Role on Assignment	Client Reference (Provide contact person and contact details)	Date from - Date to	Description of key experience as per the requirements of Terms of Reference

14. Professional experience:

Name of Employer	Date from - Date	Reference	Position	Description of duties
	to	(Provide contact person and contact details)		

- 15. Other relevant information (e.g. Publications)
- 16. Contactable References

17. ANNEXURE C - PROJECT INFORMATION FOR EXISTING APPS, TOOLS OR SYSTEMS WITHIN DFFE BRANCHES AND STATUTORY BODIES/ENTITIES

1. Branch: Regulatory Compliance Monitoring (RCM)

The ESI Directorate is within this branch and provides a transversal function to the entire Department.

Description/Introduction: Table 1: Overarching ESRI software products being utilised within the Department.

Name:	Purpose:
ArcGIS desktop software plus	Data capture, spatial analysis and production of cartographic products
extensions to manage daily	
operations (Desktop: Advanced;	
Standard; Basic)	
Survey123	In-field data capture using spatially enabled forms that are accessible
(ArcGIS Online: Field Collection)	on any Android, IOS or Windows device, including smartphones and
	tablets
ArcGIS Web map Applications	Allowing non-GIS persons to be able to work with geospatial data and
	utilize basic analysis tools e.g. create buffers in a web-based
	environment
ArcGIS Reporting	Providing managers with a graphical representation of the spatial data
Dashboards/Experience Builder	being collected, including the inclusion of charts and graphs showing
	various statistics
ESRI ArcGIS Portal and Cloud-	Hosting of web mapping services to feed to the relevant web maps;
hosting	dashboards or for use in ArcGIS desktop software plus extensions to
	manage daily operations (desktop) analyses

1.1 The Environmental Web based Screening tool

Description/Introduction: A web-based tool that uses highly detailed spatial information to generate a screening report to be attached to all environmental impact assessment (EIA) applications. Notice No. 960 in Government Gazette No. 42561, 5 July 2019 states "[The] Minister of Environment, Forestry and Fisheries, hereby give notice that the submission of a report generated from the national web based environmental screening tool, as contemplated in Regulation 16(1)(b)(v) of the Environmental Impact Assessment Regulations, 2014, ...[is] compulsory when submitting an application for environmental authorisation..."

Parameter:	Description:
URL	https://screening.environment.gov.za/screeningtool/#/pages/welcome

Deployed and active since	October 2018
Access control	Openly accessible through the URL (Uniform Resource Locator)
Legislative support to	The Environmental Impact Assessment (EIA) Regulations
	2014, Regulation 16(1)(v) of the Environmental Impact Assessment
	Regulations 2014, as amended whereby a Screening Report is required to
	accompany any application for Environmental Authorisation.
Clients	Biodiversity Community; Competent Authorities (CA): National & Provincial
	(DFFE/DMRE/Provinces); Local Government Departments; General public;
	Environmental Assessment Practitioners (EAP's); developers.
Usage based on reports	Average of 2800+ reports being generated every month.
generated	
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations;
	ESRI Cloud-hosting; ArcGIS Portal; ArcGIS Web maps.

1.2. The South African Protected Areas Register

Description/Introduction: The South African Protected Areas Database (also known as the Protected Area / Conservation Area (PACA) database) contains all the spatial data on South Africa's protected areas. The department is the compiler and custodian of the South African PACA Dataset.

Parameter:	Description:
URL	https://dffeportal.environment.gov.za/portal/apps/webappviewer/index.html?id=7e27f
	116dd194c1f9d446dacc76fe483
Deployed and active since	2012
Access control	Openly accessible through the URL
Legislative support to	Section.10 of the National Environmental Management: Protected Areas Act (Act No.
	57 of 2003) (NEMPAA)
Clients	National; Provincial; Local Government Departments; General public.
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations; ESRI Cloud-
	hosting; ArcGIS Portal; ArcGIS Web maps.

1.3. The Private Nature Reserve Remote Monitoring System

Description/Introduction: The Private Nature Reserve Remote Monitoring (PNRRM) system has been developed by the department to facilitate the monitoring of declared private nature reserves using satellite images.

Parameter:	Description:
URL	Internal hosted system
Access control	Openly accessible via the URL
Deployed and active since	2020
Legislative support to	Clause 10(2) of the Norms and Standards for the Inclusion of Private Nature Reserves
	in the Register of Protected Areas of South Africa, Notice No. R1157, Gazette No.
	41224 of 3 November 2017 (norms and standards developed in terms of S.11 of the
	National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003).
Clients	Biodiversity Community; National; Provincial; Local Government Departments;
	General public.
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations; ESRI Cloud-
	hosting; ArcGIS Portal; ArcGIS Web maps.

1.4. GHG Inventory (sinks data input)

Description/Introduction: Data from the National Land-Cover Dataset is used to calculate the carbon sink data used in the National Greenhouse Gas (GHG) Inventory.

Parameter:	Description:
URL	Internal hosted system
Access control	Openly accessible via the URL
Deployed and active since	2018
Legislative support to	S.2 of the National Greenhouse Gas Emission Reporting Regulations, 2017 (Notice
	No. 275 in Gazette No. 40762 of 3 April 2017). The purpose of these Regulations is to
	introduce a single national reporting system for the transparent reporting of
	greenhouse gas emissions, which will be used - (a) to update and maintain a National
	Greenhouse Gas Inventory; (b) for the Republic of South Africa to meet its reporting
	obligations
Clients	Biodiversity Community; National; Provincial; Local Government Departments;
	General public.
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations; ESRI Cloud-

	hosting; ArcGIS Portal; ArcGIS Web maps.
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1.5. NBA Land-Cover Change data

Description/Introduction: The National Land-Cover Dataset is a primary source of information used in the development of the mandatory National Biodiversity Assessment (NBA). This provides accurate information on the rates and extent of habitat loss across the whole country, and allows the accurate mapping of where changes are occurring in the landscape and the identification of the drivers of change. The NBA is the primary tool for monitoring and reporting on the state of biodiversity in South Africa, and is prepared as part of the SANBI mandate under the NEMBA.

Parameter:	Description:
URL	Internal hosted system
Access control	Openly accessible via the URL
Deployed and active since	2018
Legislative support to	S.50 of the National Environmental Management: Biodiversity Act (Act
	10 of 2004).
	(1) The Minister must promote research done by the Institute and other institutions on
	biodiversity conservation, including the sustainable use, protection and conservation
	of indigenous biological resources.
	(2) Research on biodiversity conservation may include - (a) the collection and analysis
	of information about - (i) the conservation status of the various components of
	biodiversity
Clients	Biodiversity Community; National; Provincial; Local Government Departments;
	General public.
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations; AWS Cloud-
	hosting; ArcGIS Portal; ArcGIS Web maps;20 ArcGISPro and Envi

1.6. Field Data Collection - District Development Model (DDM): EPIP/NRM/ESP & Combined Capture/ Update forms

Description/Introduction: The District Development Model was initiated by President Cyril Ramaphosa in his Budget Speech in 2019. Subsequently, the District Development Model was discussed and adopted by Cabinet, the 2019 Presidential Coordinating Council (PCC), the March 2020 extended PCC and various MINMECs."

Parameter:	Description:

Access control	Closed system – Open to Project managers submitting relevant Project Information
	for which they take responsibility
Deployed and active since	2020
Legislative support to	S.50 of the National Environmental Management: Biodiversity Act (Act
	10 of 2004).
	(1) The Minister must promote research done by the Institute and other institutions on
	biodiversity conservation, including the sustainable use, protection and conservation
	of indigenous biological resources.
	(2) Research on biodiversity conservation may include - (a) the collection and analysis
	of information about - (i) the conservation status of the various components of
	biodiversity
Clients	National and Provincial Government Departments; General public.
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations; ESRI Cloud-
	hosting; ArcGIS Portal; ArcGIS Web maps; Survey 123

1.7. Field Data Collection: District Development Model (DDM): 10 million trees

Description/Introduction: The Department of Forestry, Fisheries and the Environment (DFFE) is currently running the <u>Ten Million Trees Programme</u>. This programme is a national call from the Presidency of the Republic of South Africa with the aim of attaining environmental sustainability and protection, and to realise socioeconomic benefits for South Africans. The Department is calling out all corporate organisations, Government Organizations, Non-Governmental Organisations, Community Based Organisations, Educational Institutions and individuals to take part in planting Ten Million Trees which will be implemented over five years to ensure a green South Africa.

Parameter:	Description:
URL	https://survey123.arcgis.com/share/863bdd53fbea45208e8b2177445e011b
Deployed and active since	2020
Access control	Openly accessible via the URL
Legislative support to	Global commitment.
Clients	National; Provincial; Local Government Departments; General public.
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations; ESRI Cloud-
	hosting; ArcGIS Portal; ArcGIS Web maps; Survey 123

Field Data Collection: EPIP Audit (sub portion of the DDM)

Parameter:	Description:
Access control	Closed system. Open to Project managers submitting relevant Project Information
	for which they take responsibility
Deployed and active since	2020
Legislative support to	S.50 of the National Environmental Management: Biodiversity Act (Act 10 of 2004).
	(1) The Minister must promote research done by the Institute and other institutions on
	biodiversity conservation, including the sustainable use, protection and conservation
	of indigenous biological resources.
	(2) Research on biodiversity conservation may include - (a) the collection and analysis
	of information about - (i) the conservation status of the various components of
	biodiversity
Clients	DFFE
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations, ESRI Cloud-
	hosting, Portal, ArcGIS Web maps; Survey 123

Field Data Collection: FMIS (Facilities Management Information Systems)

Parameter:	Description:
Access control	Closed system – Open to Project managers submitting relevant Project Information
	for which they take responsibility
Deployed and active since	2022
Legislative support to	Mapping of the DFFE Facilities & Monitoring of relevant standards aligned with the
	DFFE policies.
Clients	DFFE
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations, ESRI Cloud-
	hosting, Portal, ArcGIS Web maps; Survey 123

Field Data Collection: Compliance Inspection System

Parameter:	Description:
Access control	Closed system. Open to Project managers submitting relevant Project Information

Parameter:	Description:
	for which they take responsibility
Deployed and active since	In dev phase
Legislative support to	Improving compliance with related environmental legislation remains a key area of
	focus for Legal Authorisations and Compliance Inspectorate. This is done through
	continued implementation of various interventions aimed at ensuring that we deal
	effectively with the growing trend of non-compliance and non-adherence to the
	existing environmental legislative framework.
Clients	DFFE
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations; ESRI Cloud-
	hosting; Portal; ArcGIS Web maps; Survey 123.

1.8. Enforcement Work

Description/Introduction: In giving effect to NEMA Act, for the compliance and enforcement. GIS is used to provide supporting information for the accurate identification or confirmation of the Infringements and the Locality. This information is used as evidence in court.

Parameter:	Description:
Access control	Not for public but GIS analytical tools are used for identification or confirmation of the
	infringements (where and when).
Deployed and active since	2010
Legislative support to	As per NEMA Law
Clients	National; Provincial; Local Government Departments; General public.
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations; ESRI Cloud-
	hosting; ArcGIS Portal; ArcGIS Web maps.

2. Branch: Oceans and Coasts

2.1. The Oceans and Coastal Information Management System (OCIMS)

Description/Introduction borne through Operation Phakisa and initiated in 2015. To date, the OCIMS has established knowledge tools for marine spatial planning, maritime domain awareness, search and rescue, water quality and harmful algal bloom monitoring. Those tools are used daily by stakeholders across Government Departments, industry, and civil society. Many of the tools are mentioned in this document and without which, OCIMS would not be able to fulfil its purpose.

Parameter:	Description:
URL	https://ocims.environment.gov.za
Access control	Not for public but GIS analytical tools are used for identification or confirmation of the
	infringements (where and when).
Deployed and active since	2015
Legislative support to	the Marine Spatial Planning Act (Act no. 16 of 2018)
Clients	National; Provincial; Local Government Departments; General public.
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations; ESRI Cloud-
	hosting; ArcGIS Portal; ArcGIS Web maps.

2.2. Coastal Viewer

Description/Introduction: The Coastal Viewer was launched in 2014 by the DFFE and contains information regarding the Coastal Public Property (CPP) and Coastal Protection Zone (CPZ), as defined in the Integrated Coastal Management Act (Act no. 24 of 2008). The spatial data and information provided aims to support decision making processes by making data available to non-specialists. Users may find the data useful to support their work in facilitating coastal access, protecting sensitive coastal ecosystems and protecting people, property and economic activities that may be affected by dynamic coastal processes.

Parameter:	Description:
URL	https://mapservice.environment.gov.za/Coastal%20Viewer/
Access control	Openly accessible via the URL
Deployed and active since	2014
Legislative support to	Integrated Coastal Management Act (Act no. 24 of 2008)
	Protected Areas Act (Act no. 57 of 2003)
	Marine Living Resources Act (Act no. 18 of 1998)
Clients	National; Provincial; Local Government Departments; General public; Environmental
	Assessment Practitioners; Surveyors; Town Planners; etc.
Usage based on Google	An average of 150 sessions per month in 2023
Analytics	
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations; ESRI Cloud-
	hosting; ArcGIS Portal; ArcGIS Web maps.

2.3. Boat-based whale watching

Description/Introduction: Since 2011, permitting of boat-based whale watching and white shark cage diving operations has been carried out by the Department; after completion of a comprehensive and lengthy allocation

process. Permits were allocated in terms of section 13 of the Marine Living Resources Act, 1998 (MLRA) and were renewable annually for a period of five (5) years. Thus, permitting of BBWW and WSCD is recognized as a significant tool to promote conservation of species such as whales, dolphins and sharks while supporting sustainable, nature-based tourism. Since 2020, there has been a transition from paper-based logbook submissions by permit holders to the use of an ESRI Survey123 form that operators use to capture their species sightings information and submit to DFFE. Extensive engagements have been conducted with stakeholders in this regard and the paperless format is widely supported. The electronic submission format will soon be integrated into the permit conditions.

Parameter:	Description:
URL	The access to data; web maps and dashboards is currently restricted to DFFE
	Oceans and Coasts scientists and permit/species management officials.
Access control	33 named users (to increase based on permits issued)
Deployed and active since	2020
Legislative support to	Marine Living Resources Act (Act no. 18 of 1998)
Clients	Boat-based whale watching permit holders; DFFE Oceans and Coasts scientists and
	permit/species management officials.
Usage based on permit	9 active permit-holding operators; 2044 records submitted in total
holders	
Software dependencies	Survey123; ESRI Cloud-hosting; ArcGIS Portal; ArcGIS Web maps; ArcGIS
	Dashboards.

2.4. Water Quality

Description/Introduction: The purpose of the Water Quality Decision Support Tool (DeST) is to provide support to coastal managers' decision-making processes by providing a consolidated view of in-situ sources of water quality data. In-situ data is typically gathered by government, municipalities, Non-Government Organisations (NGOs) and research organisations in support of various objectives. For example, the DFFE monitors water quality at various locations, the Wildlife and Environment Society of South Africa (WESSA) monitors beaches to see if they comply with Blue Flag requirements, Local municipalities monitor beaches, bays and harbours to ensure water is safe for usage, NGOs monitor areas of interest to ensure that their environment is being safeguarded for the public.

Parameter:	Description:
URL	https://dea-

	surveys.maps.arcgis.com/apps/dashboards/0e8d8f071d284f81a1605ae0a44cc887
Access control	Openly accessible via the URL
Deployed and active since	2018
Legislative support to	Integrated Coastal Management Act (Act no. 24 of 2008)
	Marine Living Resources Act (Act no. 18 of 1998)
Clients	National; Provincial; Local Government Departments; General public; etc.
Usage based on permit	1178 samples collected
holders	
Software dependencies	Survey123; ESRI Cloud-hosting; ArcGIS Portal; ArcGIS Web maps; ArcGIS
	Dashboards.

2.5 Marine Spatial Planning

Description/Introduction: By developing a Marine Spatial Planning decision-support tool, DFFE will be able to fulfil its legislative mandate and governance requirements outlined in the Marine Spatial Planning Act (Act no. 16 of 2018) (2018) and MSP Framework (2017) in line with national objectives of economic growth and sustainable development as outlined in the National Development Plan (NDP).

Parameter:	Description:
URL	https://ocims.environment.gov.za/msp/
Access control	Openly accessible via the URL
Deployed and active since	2018
Legislative support to	Marine Spatial Planning Act (Act no. 16 of 2018)
Clients	National; Provincial; Local Government Departments; General public; etc.
Usage	On average, 50 sessions per month
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations; ESRI Cloud-
	hosting; ArcGIS Portal; ArcGIS Web maps.

2.6 Phytoplankton monitoring

Description/Introduction: Phytoplankton counts are undertaken by aquaculture stakeholders and are recorded for long term monitoring purposes. This supports aquaculture and fisheries facilities.

Parameter:	Description:
URL	https://dea-
	surveys.maps.arcgis.com/apps/dashboards/faae4b5ca2f845eaafa64c22711f46eb

Access control	Openly accessible via the URL
Deployed and active since	2022
Legislative support to	Marine Living Resources Act (Act no. 18 of 1998)
Clients	Aquaculture facilities, DFFE and CSIR officials
Usage based on samples	949 samples collected
collected	
Software dependencies	Survey123; ESRI Cloud-hosting; ArcGIS Portal; ArcGIS Web maps; ArcGIS
	Dashboards

2.7 TOPS species movement reporting

Description/Introduction: The purpose of this decision-support tool is to manage the movement of TOPS species within permitted facilities. These facilities serve to treat/rehabilitated injured/sick animals and where possible, release them back into the wild. Animals that are unfit for release either remain in permanent captivity or are humanely euthanised if circumstances require.

Parameter:	Description:
URL	https://dea-
	surveys.maps.arcgis.com/apps/dashboards/a556d93637ad4ba09a0b51a8fec16b49
Access control	Openly accessible via the URL
Deployed and active since	2023
Legislative support to	Biodiversity Act (Act no. 10 of 2004)
Clients	DFFE TOPS species management officials, external facilities handling TOPS
	species
Usage based on facilities	8 facilities with over 1000 TOPS species being managed
Software dependencies	Survey123; ESRI Cloud-hosting; ArcGIS Portal; ArcGIS Web maps; ArcGIS
	Dashboards

2.8 Avian Influenza outbreak

Description/Introduction: In August 2021, the Western Cape Government (WCG) veterinary services noted a new strain of avian influenza (AI) affecting coastal bird colonies, resulting in mass fatalities. While it was not declared a disaster, the Provincial Disaster Management Centre (PDMC) was activated in September 2021 to coordinate the response, in the interest of public health and safety. Between October and November 2021, approximately 18,388 birds had died as a result of the AI outbreak. Of these mortalities, 17,926 were Cape Cormorants Phalacrocorax capensis, an Endangered species that is endemic to Southern Africa. The multitude

of stakeholders suddenly engaged in response activities resulted in a need to formalise a coherent reporting structure that could incorporate locational information to monitor the spread of the outbreak.

Parameter:	Description:
URL	https://dea-
	surveys.maps.arcgis.com/apps/dashboards/608a9c99f45c4be38bd7240cd853c113
Access control	Openly accessible via the URL
Deployed and active since	2021
Legislative support to	Disaster Management Act (Act no. 57 of 2002)
Clients	National, provincial, and local Government Departments, parastatals, NGOs, NPOs
	and others involved in the response effort
Usage based on affected	2198 affected birds reported
birds reported	
Software dependencies	Survey123; ESRI Cloud-hosting; ArcGIS Portal; ArcGIS Web maps; ArcGIS
	Dashboards.

2.9 Generalised mapping

Description/Introduction: ESRI's ArcGIS desktop software plus extensions to manage daily operations desktop software is extensively used by practitioners at Oceans and Coasts and Fisheries. The current active users are approximately 20 officials using the software for various purposes, including, but not limited to:

- Preparing maps for Gazettes
- Support to Legal Services, particularly regarding compliance and enforcement
- Spatial planning decision support
- Planning of cruises
- Scientific research and publications

3. Branch: Forestry

3.1. Spatial data management of natural and commercial forests

Description/Introduction: The spatial data management of natural and commercial plantation forest in the Department of Forestry, Fisheries, and the Environment (DFFE) involves the collection, analysis, and maintenance of geospatial information related to commercial plantation and natural forest areas across South Africa.

Description:
Internal system
Access is granted only to relevant personnel, including forest managers, GIS
technicians, and Planners of commercial Forestry.
2005
Supported by the National Forest Act, 1998 (Act No. 84 of 1998), which mandates the
protection, sustainable management, and development of forests in South Africa. The
Act provides a framework for the use of spatial data in monitoring forest resources and
ensuring legal compliance.
Directorate: State Forest Land Management, Directorate: Woodlands and Indigenous
Forest Management (D: WIFM), forest managers, and environmental compliance
units. External clients include forestry companies, environmental consultants, and
researchers.
Depends on GIS platforms like ArcGIS for mapping, analysis, and data visualization.
40
Depends on GIS platforms like ArcGIS for mapping, analysis, and data visualization.

3.2. Forest Resource Protection

Description/Introduction: Providing mapping support to Forestry Resource Protection such as 3.1. Management of Fire Protection Registered boundaries across South Africa 3.2. Mapping of Fire burn scars and statistics of fire damages 3.3. Mapping of protected areas under s12(1)(c) processes, license applications and litigation processesgation 3.4. Support litigation processes through monitoring and mapping in line with National Forest Act, EIA's and environmental Applications.

Parameter:	Description:
URL	Internal System
Access control	Based on request of data
Deployed and active since	2005
Legislative support to	1. National Forests Act, 1998 (Act No. 84 of 1998): governing forest resource
	protection. and Sustainable Forest Management, Protection of Trees, Forest Law
	Enforcement and Declaration of Protected Areas.
	2. National Veld and Forest Fire Act, 1998 (Act No. 101 of 1998) speaks to Fire
	Protection Associations (FPAs) and Duties to Prevent Fires.
Clients	Directorate: Forest Resource Protection Woodlands and Indigenous Forests

	Management (WIFM).
	2. Non-governmental Organizations (NGOs) and Researchers and Academic
	Institutions.
	3. Companies: Forestry South Africa; CSIR.
Usage	Depends on GIS platforms like ArcGIS, for mapping, analysis and data visualization.
Software dependencies	Depends on GIS platforms like ArcGIS, for mapping, analysis and data visualization.

3.3. Global Forest Watch

Description/Introduction: An online platform providing near real-time data on forest cover, deforestation, and forest degradation. It integrates satellite data with GIS to support forestry protection efforts, illegal logging tracking, and the management of forest resources.

3.4. Integrated National Forest Resource Information System (INFRIS):

Description/Introduction: An internal system developed to consolidate all forestry spatial data in one platform. It supports forest inventory management, resource tracking, and forest health assessments, providing critical data for sustainable forest management decisions and regulatory compliance.

3.5. Forestry Licence tracking System (FORLTS)

Description/Introduction: Essential for managing and monitoring the issuance and compliance of forestry licenses, ensuring sustainable forest management practices through the issue of license to applicants regarding cutting of trees and destruction of natural forest.

Parameter:	Description:
URL	http://webapps.daff.gov.za/forlatsDev/ (internal)
	Collect Earth: http://www.openforis.org/tools/collect-earth.html (external)
Access control	Role-based access control (RBAC) with authentication (username/password) and
	role assignments given to Forestry Resource Protection unit.
Deployed and active since	The date the application or platform was deployed from Department of Agriculture
	(DARLD)
Legislative support to	Supported by the National Forests Act, 1998 (Act No. 84 of 1998).
	National Environmental Management Act, 1998 (Act No. 107 of 1998).
Clients	Internal: D: FRO; WIFM; forest managers; environmental compliance units. External:
	Forestry companies; NGOs; researchers; government agencies.
Usage	Reports related to forest health monitoring; plantation boundaries; deforestation

	trends; forest inventory; environmental impact assessments and compliance.
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations; Global Forest
	Watch and Integrated National Forest Resource Information System (INFRIS).

3.6. Forestry Protection Association Management Registration Systems (FPARMS)

Description/Introduction: For emergency measures as outlined in Section 22 of the National Forest Act.

3.7. National Forest Inventory (NFI)

Description/Introduction: Requires Section 7 of the National Forest Act as indicated above.

4. Branch: Waste

4.1. SAWIS

Description/Introduction: The SAWIS revamp project utilises the GIS licences for the registering and identification of waste related activities. In addition. SAWIS is mandated through Section 60 of NEMWA and regulated through the National Waste Information Regulations, 2012.

Parameter:	Description:
URL	SAWIS
Access control	Closed to industry users and waste reporting
Deployed and active since	2022
Legislative support to	National Waste Information Regulations, 2012
Clients	Internal Closed to industry users and waste reporting
Software dependencies	Portal, AGOL, Webmap services, Integrated to SAWIC system

5. Branch: Environmental Programmes

Description/Introduction: The Branch - Environmental Programmes (EP) is responsible for implementing the DFFE mandate through the Expanded Public Works Programme (EPWP) approach. As a public employment intervention, the EPWP contributes towards addressing unemployment, poverty, and inequality. EP liaises with other branches of the department and, where possible, ensures the implementation of policy commitments through the labour-intensive EPWP approach. In its implementation activities.

GIS is extensively used by practitioners under the Environmental Programmes branch for various purposes including but not limited to Project Prioritisation and decision support, Planning, implementation, coordination and monitoring of projects under the following focus areas:

- Working for Water.
- Working on Fire.

- Working for Wetlands.
- Working for Land.
- Working for the Coast.
- Working on Waste.
- Biodiversity Economy.
- Greening and open space management.
- People and Parks.
- Youth Empowerment and development.

5.1. National Invasive Alien Plant Survey (NIAPS)

Description/Introduction: The National Invasive Alien Plants Survey (NIAPS) contains database on the range & abundance of the 14 most widespread & abundant invasive alien terrestrial plants surveyed across the RSA in 2023 and totalling 4 million ha. The database is in raster file format and its uncompressed size is 7GB. The department is the compiler and custodian of the database.

Parameter:	Description:
URL	https://dffeportal.environment.gov.za/portal/home/item.html?id=17de13c509ef4d3caf
	279d84e77312c3
Access control	Openly accessible via the URL
Deployed and active since	2023
Legislative support to	Chapter 5 of the National Environmental Management: Biodiversity Act (Act No. 10 of
	2004) (NEMBA) Section 11 (m) (ii) co-ordinate and implement programmes for the
	prevention, control or eradication of listed invasive species.
	The White Paper on Conservation and Sustainable Use (2023) has a policy objective
	with the aim to prevent the introduction, establishment and spread of potentially
	harmful alien species, and control and eradicate, where feasible, invasive species
	which threaten ecosystems, habitats and species with an expected output of holistic,
	integrated, and prioritized control, management and eradication programmes for
	invasive species.
Clients	National; Provincial; Local Government Departments; General public.
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations; ESRI Cloud-
	hosting; Portal; ArcGIS Web maps.

5.2. Historical invasive alien plant clearing data

Description/Introduction: The database contains data on 24-years' worth of historical invasive alien plant clearing totalling 76,000 treatment sites (polygons) with a median size of 5 ha. It contains attributes for area, species, density, workload, date and cost for every treatment and covers an area of 2,7 million ha. The department is the compiler and custodian of the database.

Parameter:	Description:
URL	https://dffeportal.environment.gov.za/portal/home/item.html?id=3adfaf359f92427cbb
	7d9f6a29bf0aad
Access control	Openly accessible via the URL
Deployed and active since	2023
Legislative support to	Chapter 5 of the National Environmental Management: Biodiversity Act (Act No. 10 of
	2004) (NEMBA) Section 11 (m) (ii) co-ordinate and implement programs for the
	prevention, control or eradication of listed invasive species.
	The White Paper on Conservation and Sustainable Use (2023) has a policy objective
	with the aim to prevent the introduction, establishment and spread of potentially
	harmful alien species, and control and eradicate, where feasible, invasive species
	which threaten ecosystems, habitats and species with an expected output of holistic,
	integrated, and prioritized control, management and eradication programs for invasive
	species.
Clients	National; Provincial; Local Government Departments; General public.
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations; ESRI Cloud-
	hosting; Portal; ArcGIS Web maps.

5.3. Water Information Management System (WIMS)

Description/Introduction: The Water Information Management System is a system utilized by the Working for Water programme for the management of Alien Invasive species clearing tasks, monitoring and reporting of Project Progress. This system contains a Database with polygons of all areas of alien invasive species clearing projects across all Provinces and entities. Provinces under the Working for water programme utilise ESRI-GIS software for spatial data analysis, project planning, preparing spatial data for Alien Invasive species clearing maps and to support response to Legal queries particularly regarding areas of Invasive Species cleared.

Parameter:	Description:
URL	Desktop application
Access control	Closed system. Open to Provincial users capturing and submitting relevant Project

	Information for which they take responsibility.
Deployed and active since	2000
Legislative support to	National Environmental Management: Biodiversity Act (NEMBA), 2004 (Act 10 of
	2004).
	National Environmental Management Act (NEMA), 1998 (Act 107 of 1998).
	National Water Act, 1998 (Act No. 36 of 1998).
Clients	National; Provincial departments and entities.
Usage	116 active system users
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations; Portal;
	Survey123

5.4. FIRE WEB (Incident information Management System)

Description/Introduction: Working on Fire supports the prevention and control of wildland fires to enhance the sustainability and protection of life, poverty and the environment through the implementation of aspects of Integrated Fire Management (IFM) practices, which includes supporting Fire Protection Associations (FPAs) under the National Veld and Forest Fire Act of 1998. The Fire Web system used by Working on Fire for fire incident information management and reporting.

Parameter:	Description:
URL	https://workingonfire.firewebapp.com/user/login
Access control	Openly accessible via the URL
Deployed and active since	2018
Legislative support to	The National Veld and Forest Fires Act of 1998.
	Disaster Management Act, 2002 (Act No. 57 of 2002).
Clients	Working on Fire; Fire Protection Associations (FPAs) and umbrella FPAs; National
	and Provincial departments.
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations; ArcGIS Web
	maps; Survey123

5.5. Project Management Information System (PMIS system)

Description/Introduction: The Project Management Information System is a system under the Environmental Programmes (EP) for the management, monitoring and reporting of Projects under the following focus areas:

- Working for Land
- Working for Waste
- Working for the coast

- Biodiversity Economy
- Greening and open space management
- People and Parks.
- Youth Empowerment and development

Parameter:	Description:
URL	DEA: EPIP (dffe.gov.za)
Access control	Openly accessible via the URL
Deployed and active since	2018
Legislative support to	National Environmental Management Act, 1998 (Act No.107 of 1998).
	National Environmental Management Act: Biodiversity Act, 2004 (Act No. 10 of 2004),
	National Environment Management Act: Protected Areas Act, 2003 (Act No. 57 of
	2003,
	National Environmental Management Act: Waste Act, 2008 (Act No. 59 of 2008).
	National Environmental Management Act: Integrated Coastal Management Act, 2008
	(Act No. 24 of 2008).
	National Parks Amendment Act, 2001 (Act No. 54 of 2001).
Clients	National; Provincial departments and entities.
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations; Portal;
	ArcGIS Web maps; Survey123

6. Branch: South African National Parks (SANParks)

Description/Introduction: SANParks makes extensive use of GIS and spatially enabled applications for biodiversity conservation and protected area management. The GIS power users are all trained on and extensively use the suite of Esri desktop products. This suite of software products is used for cartography, basic mapping and spatial data management as well as more advanced applications such as spatial analysis and integration with other applications, such as the widely used R statistical package, and data sources such as Esri's Living Atlas. Less GIS literate users, mostly middle and senior managers, make use of spatially enabled applications through ArcGIS Online in order to make informed management decisions.

6.1. SANParks GIS Base Data Repository

Description/Introduction: A repository of the most current and correct spatial datasets for SANParks. This includes all layers that is needed to run a protected area, e.g. roads, rivers, management units, vegetation types, land use and land cover, recreation facilities, etc. These layers are developed and maintained to be ready to

use for mapping, both hard copy and digital, and spatial analysis. These layers are used on a daily basis for local use as shapefile and feature layers as well as shared through apps and web maps with management for decision making by park personnel.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to SANParks
	staff.
Deployed and active since	2018
Legislative support to	Integrated Coastal Management Act (Act no. 24 of 2008)
	Marine Living Resources Act (Act no. 18 of 1998)
	Protected Areas Act (Act no. 57 of 2003)
	Spatial Planning Land Use Management Act (Act no. 16 of 2013)
	NEMPA, and NEMBA
Clients	SANParks GIS users
Usage	72 named users
Software dependencies	The GIS data repository requires access to both a web accessible front end, current
	using Esri ArcGIS Online (AGOL) as well as a robust spatial data back end. This spatial
	data repository needs to be able to allow for multi user editing, multiple data formats,
	including non-spatial data formats such as pdf and Microsoft Word documents and
	easy integration with analytics and modeling packages such as R, Jupyter Notebooks
	and other Al driven packages.
	The ability to share with external users such as researchers and other stakeholders is
	currently done manually through shapefiles, tables or map products but easy to use
	web based data sharing is being developed.
	Multiple AGOL web maps, apps and dashboards pull their data from this repository.
	Changing this core component means that all downstream processes will have to be
	re-engineered and users retrained.

6.2. SANParks Desktop GIS

Description/Introduction: SANParks has dedicated GIS Technicians as well as other staff that require the use of a robust, comprehensive and intuitive desktop GIS program, Currently uses ArcGIS Pro is used for this. GIS technicians rely heavily on ArcGIS Pro, and its extensions, to perform day-to-day tasks. These tasks range from basic data viewing to data creation and maintenance through data editing tools and producing various products.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to SANParks
	staff.
Deployed and active since	2006
Clients	Openly accessible via the URL
Usage	72 named users and 25 permanent concurrent license users (additional ad hoc
	users)
Software dependencies	Data creation and maintenance tasks need to include data conversions/
	interoperability from other spatially enabled data sources such as dwg and raster
	layers. Basic editing of standalone shapefiles through to more complex multiuser
	workflows using feature classes is done. Though limited use is currently made of
	network datasets and 3D feature classes the need to this type of data and analysis is
	growing. A key requirement is the ability to directly access and publish to ArcGIS
	Online.
	Spatial products range from basic maps to advanced cartographic tourism products,
	both as hard copy and digital products. Many of the basic datasets needs to be further
	analyzed using image analysis or various spatial statistic or analysis tools to meet the
	reporting requirements.
	Other platforms, whether open source or proprietary platforms, do not have similar and
	the immediate/direct link between an offline- and online platform like ArcGIS Online
	does. For the past, nearly 20 years, ArcGIS is well rooted in everyday tasks and we
	are planning to roll-out even more products to Parks/Project users to better equip
	ourselves with the lates technology. ESRI too spends a lot of their resources to keep
	us current and up to date with the latest technology that we have access too. A lot of
	resources have been spent to train staff over the years, and to develop and implement
	ArcGIS products- having to redo current systems on different platforms would mean
	that it's an investment wasted.

6.3 Biodiversity Social Programmes (BSP)

Description/Introduction: One of the biggest SANParks users is Biodiversity Social Programmes (BSP), which provide GIS support for the Expanded Public Works (EPWP) programmes across SANParks, which have about 70 active projects currently, each requiring spatial solutions. BSP has deploying AGOL-based systems such as the Planned vs Actual Dashboards for tracking contract status, Project Specific Web Applications for real-time

project insights, and mobile apps utilizing Survey123 and Field Maps for field inspections and data collection. These systems service the geospatial needs of a team of 150 people.

6.3.1 Field Inspection tools:

Description/Introduction: All paper based WfW, WfE and WfWetlands inspections are being transitioned to Survey123. ArcGIS makes it easy to integrate systems. Quick Capture is able to create unique tracklog for each site visit, and makes capturing information more efficiently as well as allowing certain information to be carried to the Survey123 form where the rest of the information is capture. The Survey report is then sent and Microsoft Power Automate triggers a sequence that Creates a MS Word report, saves it as a pdf, attaches it to an email and then sends it to the Project Staff. The information for each survey is then shared aback to project staff and relevant users via Web. Applications and Dashboards which. This sequence is created and stored on ArcGIS Online but monitoring/updates/maintenance happens from ArcGIS Pro

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to BSP
	managers and officials.
Deployed and active since	2023
Legislative support to	National Environmental Management: Biodiversity Act (NEMBA), 2004 (Act No. 10 of
	2004)
Clients	WfW; WfE and WfWetlands Field Staff; Project Management and Upper
	Management - National Scale
Usage	32 named users and 88 viewers (this number is set to increase as the application
	gets rolled out to more users)
Software dependencies	Currently this system is fully hosted on the Esri ArcGIS Online Cloud-hosting platform
	(AGOL) but the data is being transitioned to an in-house hosted ArcGIS Portal with an
	ArcGIS Server and a Spatial datastore. This deployment will allow for more effective
	storage of large amounts of spatial data whilst maintaining the data management
	functionality of the AGOL platform. Data versioning, distributed access to a central
	spatially enabled datastore that also allows for the upload and storage of common non
	spatial document formats such as pdf, jpeg, Microsoft Word and Microsoft Excel files
	is the main consideration. Additionally, the AGOL platform allows for quick and easy
	creation of custom apps and data collection through the use of Survey123, and Instant
	Apps.
	Using the ArcGIS Pro desktop application base data for these tools are created and

updated and data from these tools are used in these desktop applications for further
spatial analysis.
Sharing data to non-GIS literate managers is also a main requirement which is
currently covered by the use of ArcGIS Web maps and ArcGIS Dashboards. The
streamlined integration between the data store, data collection apps, reporting and
Web mapping is essential to the smooth and effective functioning of this workflow.
Manual upload of the vast amounts of information generated by each project would
result in duplication of effort, possible loss of information and reduced productivity is
such a distributed environment.

General Tracklog:

Description/Introduction: The need has been identified to have a uniform application that is able to capture tracklogs for field visit/mapping exercises. Quick Capture is able to capture tracklogs, collect general comments and photo's that we are able to tie-into the tracklog. This information is then shared back to users via Web Maps and Applications where the information, comments and photos can be viewed from and maps be export/printed.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to BSP
	managers and officials.
Deployed and active since	2024
Legislative support to	National Veld and Forest Fire Act, 1998 (Act No. 101 of 1998)
Clients	All Cape Cluster Staff
Usage	4 named users and 30 viewers
Software dependencies	ArcGIS Online and ArcGIS Pro is able to perform change analysis with out of the box
	tools. These tools fast track the monitoring and mapping of active fires. The burnt
	areas are then shared on Web Applications and Dashboards that form part of planning
	session and field post-fire field assessments. Without ArcGIS Online applications,
	different platforms, and sequences would need to be developed and shared. Currently,
	the Fire Monitoring is setup and able to detect and digitize fires. Mobile Applications
	allow field operators to capture fires spotted which links directly back to ArcGIS Online.
	ArcGIS is able to connect field data directly to Web Apps for users to view and interact
	with their data without manual intervention. Future expansion plans include the
	development of an integrated workflow management tool that not only accounts for

Cape Cluster Fire Mapping and Monitoring:

Parameter:

Description/Introduction: The Table Mountain and Agulhas NP have had a number of fires up until recently and it overlapped with the preparation for the 2024-25 fiscal year. The purpose of the Fire Monitoring was to connect to Online Resources that are able to help identify fires so that we can digitize the extent of the burnt areas. The information is then shared via Web- and Mobile Applications where Planning happens.

Description:

URL	Restricted
Access control	The access to data, web maps and dashboards is currently restricted to BSP Cape
	Cluster staff.
Deployed and active since	2024
Clients	Field Staff; Project Management and Upper Management - National Scale
Usage	32 named users and 100 viewers
Software dependencies	Currently this system is fully hosted on the Esri ArcGIS Online Cloud-hosting platform
	(AGOL) but the data is being transitioned to an in-house hosted ArcGIS Portal with an
	ArcGIS Server and a Spatial datastore. This deployment will allow for more effective
	storage of large amounts of spatial data whilst maintaining the data management
	functionality of the AGOL platform. Data versioning, distributed access to a central
	spatially enabled datastore that also allows for the upload and storage of common non
	spatial document formats such as pdf, jpeg, Microsoft Word and Microsoft Excel files
	is the main consideration. Additionally, the AGOL platform allows for quick and easy
	creation of custom apps and data collection through the use of Survey123, and Instant
	Apps.
	Using the ArcGIS Pro desktop application base data for these tools are created and
	updated and data from these tools are used in these desktop applications for further
	spatial analysis.
	Sharing data to non-GIS literate managers is also a main requirement which is
	currently covered by the use of ArcGIS Web maps and ArcGIS Dashboards. The
	streamlined integration between the data store, data collection apps, reporting and
	Web mapping is essential to the smooth and effective functioning of this workflow.
	Manual upload of the vast amounts of information generated by each project would
	result in duplication of effort, possible loss of information and reduced productivity is
	such a distributed environment.

Baseline data verification

Description/Introduction: The need has been identified to create a uniform data verification tool for the WfW Baseline Planning process. This tool links a mobile application with Interactive and Dynamic Web Apps and Dashboards. When doing planning, Projects Staff are able to view current and past IAP information and can capture new information. Historic information is used for comparison and evaluation and the new information is shared via a Dashboard that summarizes/quantifies work required. This is a uniform method and is able to more effectively transfer data to the Baseline Planning tool.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to BSP
	managers and officials.
Deployed and active since	2023
Legislative support to	National Environmental Management: Biodiversity Act (NEMBA), 2004 (Act No. 10 of
	2004)
Clients	WfW Field Staff; Project Management - National Scale
Usage	6 named users and 50 viewers
Software dependencies	The baseline data verification tool allows for immediate updates to users as well as for
	a centralized space where new data collected is stored and processed from. ArcGIS
	Online makes managing the data and application easy. Retraining and development
	of new sequences on other platforms would also be time consuming.

WfW Baseline Planning

Description/Introduction: In the past, we have had GIS Technicians received planning documents from which planning data was extracted to create static maps that was then shared back to Projects. ArcGIS now allows for the easy transfer and sharing of planning data. Rstudio is used to extract and process planning data, as well as to draw information from the WIMS database. This Plan vs Actual Data is then shared and each Project has a dedicated Web Application. Projects can then view their planning information, as well as Contract Status, which is an algorithm which categories certain information. This information is also made available on Field Maps.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to BSP

	managers and officials.
Deployed and active since	2022
Legislative support to	National Environmental Management: Biodiversity Act (NEMBA), 2004 (Act No. 10 of
	2004)
Clients	WfW Field Staff; Project Management - National Scale
Usage	6 named users and 50 viewers
Software dependencies	Baseline planning information is shared via Desktop and Mobile Applications. Updates
	are directly pushed to AGOL from ArcGIS Pro. The data is also managed via ArcGIS
	Pro. This goes for attribute tables, layer groups, symbology and more. Roughly 20
	layers are all updated and shared at once. ArcGIS online is, so far, the online Complete
	Solution, that can do this. Other platforms would cover certain aspects but not all.
	Thus, switching to other platforms we'd lose certain functionality and practical uses
	that comes with ArcGIS.

Mapping Invasive species of Concern

Description/Introduction: BSP has species specific project that aims to capture and monitor the presence and status of these invasive species of concern. The current projects are Maderia Vince spp. (GRNP EDRR). Data Collections tools are set up to capture data in-field and this data is directly linked to Web Applications and Dashboards that highlight heat spots and summarized information. This requires no manual editing and happens as soon as new records are submitted. These maps then highlight areas of importance and informs the planning process.

Parthenium (in Kruger National Park) This project has dedicated resources that map the occurrence of the spp. across the entire Park. The information is then shared via ArcGIS Online Web Apps which have Hotspot and further details on the data collected. The data is also made available on Planning Applications.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to BSP managers and officials.
Deployed and active since	2022
Legislative support to	National Environmental Management: Biodiversity Act (NEMBA), 2004 (Act No. 10 of 2004)
Clients	GRNP EDRR & KNP Parthenium Project Staff - Project Specific
Usage	10 named users and viewers

Software dependencies	Other mapping platforms are already setup for the more general, well known species.
	We are able to create a specific tool but still connect it with other online resources.
	Certain processes are able to happen immediately as soon as new records are
	submitted. ArcGIS online is a key part in sharing and receiving data which not many
	platforms are able to do.

Guides

Description/Introduction: We have started using Story Maps to Showcase some of the AGOL applications. These are also informative story maps that project staff can use as a guide on "how to use or apply" the applications. One guide has been setup and a few more a planned to be created and shared Nationally.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to BSP
	managers and officials.
Deployed and active since	2022
Clients	BSP - National Scale
Usage	2 named users and 50 viewers
Software dependencies	Help guides shared via Story Maps are new but it makes sharing informative and
	dynamic information easy. PDF documents take more time to update, maintain and
	share whereas story maps are immersive, able to store Web Maps directly on the
	interface, able to handle animations and be stored on a central place for anyone to
	access- like the BSP Info Hub.
	Having such an easy to use and dynamic interface that allows non developers to
	quickly and easily create and update Story Maps is key for this application.

Mapping Tool

Description/Introduction: A dedicated mapping tool setup on Quick Capture. User buttons are created to allows users to quickly collect points, lines or polygons that is used to map landscape features or vegetations types.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to BSP
	managers and officials.

Deployed and active since	2024
Clients	BSP - National Scale
Usage	10 named users and 50 viewers
Software dependencies	Quick Capture allows for quick standardized data collection to happen, which feed into
	a centralized viewer in real time (connectivity permitting). This tool available to all BSP
	staff with minimal upload and update administration needed. Creating the Quick
	Capture data sheets are also easy, intuitive and can be done with no coding.
	Re-creating the applications, data storage and to re-train staff will not be ideal.

BSP WfE Activity sheet

Description/Introduction: For the WfEcosystems project, we received a specific requirement to map each individual ecosystem intervention. This data then needed to be linked back to Monitoring and Planning applications. Quick Capture is being used for quick data collection and highly detail Survey123 Connect is used to collect comprehensive detail about the interventions.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to BSP
	managers and officials.
Deployed and active since	2022
Legislative support to	National Environmental Management: Biodiversity Act (NEMBA), 2004 (Act No. 10 of
	2004)
Clients	Field Staff; Project Management and Upper Management - National Scale
Usage	12 named users and 25 viewers
Software dependencies	There's has been a lot of time and resources dedicated to setting up this
	comprehensive mapping and IAP observation workflow. Survey123 records and
	spatial areas mapped in-field are shared directly with users with minimal administrative
	overhead. To develop, retrain, and starting a new process will be very time
	consuming.

IAP Observation Tool

Description/Introduction: A Survey123 based tool for WfW Field- and Project staff, that is used for field-operations to capture IAP observations. This detailed sequence captures observation types, habitat, list of invasive plants. This information is then shared and made part of monitoring and planning purposes.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to BSP
	managers and officials.
Deployed and active since	2022
Legislative support to	National Environmental Management: Biodiversity Act (NEMBA), 2004 (Act No. 10 of
	2004)
Clients	Field Staff; Project Management and Upper Management - National Scale
Usage	2 named users and 25 viewers
Software dependencies	This tool has been set up with Survey123 connect which allows more advanced data
	collections to be created. The data is still synced back to a central space (hosted
	feature service) and the shared as either an informative report(out of the box function
	of Survey123) as well as being put on ArcGIS Web Maps.

Bio-control Tool

Description/Introduction: Specific tools are setup to collect information on the Release, Monitor and Capturing of BioControl species. This tool captures information such as Habitat, Host Weed Abundance and Activities.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to BSP managers and officials.
Deployed and active since	2022
Legislative support to	National Environmental Management: Biodiversity Act (NEMBA), 2004 (Act No. 10 of 2004)
Clients	Bio-Control Specific Parks
Usage	3 named users and 10 viewers
Software dependencies	This tool has also been set up using Survey123 Connect as a quick easy to use interface that requires little to no coding to create advanced features. The ability for end users to work offline and sync later is key.

Contractor Summary

Description/Introduction: These Dashboards show summarized data about active Contractors. Project Staff are then able to review performance of each as it highlights the average days each contact works in each of the WfW Projects. Updates are made directly from ArcGIS Pro.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to BSP
	managers and officials.
Deployed and active since	2022
Clients	BSP WfW Project Management - National Scale
Usage	18 named users and 50 viewers
Software dependencies	This allocation is aimed at managers and decision makers and leverages information
	produced by other applications in the workflow. The ability to pull information from
	multiple sources and pull it together in a dynamic dashboard that is easy for non-GIS
	users to interpret is essential. The ability to change and customize this application
	quickly and with minimal coding and administrative overhead is a further advantage.

NBAL/Contractor Summary

Description/Introduction: NBAL and Contractor Summary Dashboards are linked to the data from the Baseline Planning Sequence. These dashboards put in context the current status of each contract for every project. The algorithm assigns Status Values, depending on specific criteria. We then show resources planned for and being applied for each status. This is an important tool to Monitor current work progress for Project Management and Upper Management. Updates are also made directly from ArcGIS Pro.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to BSP
	managers and officials.
Deployed and active since	2022
Clients	BSP WfW Project Management - National Scale
Usage	18 named users and 50 viewers
Software dependencies	Without ArcGIS, Static reports take time and are usually done once a quarter or month-
	end. Dashboard updates happen multiple times a week to keep Project Management
	up to date. It is also linked to Contract Management/Generation which allows us to
	monitor trends and pick up on early warning signs before things go back.

Project Status

Description/Introduction: The Project Status Dashboard, unlike the Contract/ NBAL status, shares the overall progress for each project. The sequence collects planning information and measures it against work completed. Project Management Staff and Upper Management are then able to monitor work trends.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to BSP
	managers and officials.
Deployed and active since	2022
Clients	BSP WfW Project Management - National Scale
Usage	18 named users and 50 viewers
Software dependencies	Without ArcGIS, Static reports take time and are usually done once a quarter or month-
	end. Dashboard updates happen multiple times a week to keep Project Management
	up to date. It is also linked to Contract Management/Generation which allows us to
	monitor trends and pick up on early warning signs before things go back.

BSP Info Hub

Description/Introduction: The BSP Info Hub uses ArcGIS Experience Builder. All Dashboards, Web Applications, Story Maps and other info are share from here. Each Project has a direct link to their Web Applications- we do not need to share web url's to staff to view online applications.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to BSP managers and officials.
Deployed and active since	2021
Clients	BSP - National Scale
Usage	32 named users and 100 viewers
Software dependencies	ArcGIS Online Experience Builder is versatile and allows for non-web developers to easily created a "Website like" data platform. Without this, the multiple number of Web Applications links (which are over 50) would have to be shared another way which could cause problems.

WfW IAP Status

Description/Introduction: The WIMS database stores all information relevant to contracts put out to field. Some of this information is important to Project staff but we cannot share login detail directly to the database. We there extract Species information via Rstudio and share it via Web Applications and Dashboards. Users are able to interact with the data to view trends or historic data. Some improvements are scheduled to made to the current setup. It will form part of the planning system as it will look at estimating future workload and resources required.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to BSP
	managers and officials.
Deployed and active since	2022
Legislative support to	National Environmental Management: Biodiversity Act (NEMBA), 2004 (Act No. 10 of
	2004)
Clients	BSP - National Scale
Usage	4 named users and 50 viewers
Software dependencies	Species maps are very complicated because there could easily be 15 to 20 different
	types per NBAL. Therefore, the use of static maps to shows this detailed information
	are not viable. Other GIS platforms do not have similar functions and it would time
	consuming to re-create current systems.

6.3.2 Park Planning:

Description/Introduction: Geospatial solutions are also deployed by the SANParks Park Planning department where their team of 9 dedicated users are responsible for everything from developing park management plans with associated spatial development analysis (as per National Environmental Management: Protected Areas Act, 2003 (Act No 57 of 2003) (NEMPAA), National Environmental Management: Integrated Coastal Management Act No. 24 of 2008 and World Heritage Convention Act No. 49 of 1999), to keeping and maintaining the SANParks land administration database. An important component of the work they do is to make up to date spatial park planning information easily available to the more than 42 senior managers of the national parks through web maps and dashboards. The Park Planning department is also instrumental in providing geospatial support and services to external local and national processes such as Bioregional plans.

GEF 7 biodiversity stewardship sites

Description/Introduction: A database of all biodiversity stewardship sites for the GEF 7 project in SANParks, as well as a web map showing these sites within the boundary for this project.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to Park
	Planning managers and SANParks staff.
Deployed and active since	2023
Legislative support to	National Environmental Management: Biodiversity Act (NEMBA), 2004 (Act No. 10 of
	2004)
Clients	SANParks GEF 7 users
Usage	3 named users and 10 viewers
Software dependencies	This is for a globally funded project with tight deliverables that require an easy to use,
	dynamic interface to an online application that can be used by all relevant
	stakeholders. These stakeholders are widely distributed and of varying GIS skill levels.
	Thus, the interface needs to cater for these wide range of requirements.

Rhino range expansion

Description/Introduction: An online application used to determine suitable areas for rhino range expansion in South Africa.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to Park
	Planning managers and SANParks staff.
Deployed and active since	2022
Legislative support to	National Environmental Management: Biodiversity Act (NEMBA), 2004 (Act No. 10 of
	2004)
Clients	SANParks Park planning users
Usage	3 named users and 10 viewers
Software dependencies	All maps and data are currently used in the ArcGIS suite of products. From ArcGIS
	Pro for detailed desktop data management and spatial product development to online
	sharing of information with all internal stakeholders. This is part of an internationally
	funded program.

Mega living landscapes

Description/Introduction: To map and project future expansion visions for protected areas through the SANParks 2040 vision of Mega living landscapes. This mega living landscape project will feed in to South Africa's commitment to the global 30/30 goal of 30% of conserved area by 2030.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to Park
	Planning managers and SANParks staff.
Deployed and active since	2023
Legislative support to	National Environmental Management: Biodiversity Act (NEMBA), 2004 (Act No. 10 of
	2004)
Clients	SANParks GIS users & Management
Usage	6 named users and 50 viewers
Software dependencies	As the concept of mega living landscapes is rooted in the spatial understanding and
	planning of conservation compatible land uses having a robust and dynamic GIS
	backbone is essential for the successful implementation of this program.
	This project requires rigorous spatial analysis and remote sensing tools to create the
	foundational information needed for this vision. Access by SANParks decision makers
	to correct and dynamic information displayed both spatially and statistically is essential
	for evidence-based decisions. As this project expands the ability to easily link with
	outside data sources will become important. Sharing data and information with key
	stakeholders through quick and easy to use processes is also a main requirement.

Biodiversity offset and carbon credit sites

Description/Introduction: An online management tool showing all the biodiversity offset and carbon credit receiving sites within the area of influence of SANParks. This enables evidence based decision making on issues such as developments and offsets.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to Park
	Planning managers and SANParks staff.
Deployed and active since	2024
Legislative support to	National Environmental Management: Biodiversity Act (NEMBA), 2004 (Act No. 10 of

	2004)
Clients	SANParks Park planning users
Usage	3 named users and 10 viewers
Software dependencies	The ability to easily and quickly maintain and change the spatial database and
	associated web based products by non-developers to ensure this tool is up to date
	and usable by non-GIS managers.

Land Register

Description/Introduction: This online tool maintains all the cadastral areas that makes up the various national parks within SANParks. The spatial land parcel layers are stored with its gazette numbers where relevant but includes land managed but yet to be proclaimed. This information is used as a key information source during park planning processes, park expansions, EIA applications and by park managers and senior staff for decision making purposes.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to Park
	Planning managers and SANParks staff.
Deployed and active since	2006
Legislative support to	Integrated Coastal Management Act (Act no. 24 of 2008).
	Marine Living Resources Act (Act no. 18 of 1998).
	Protected Areas Act (Act no. 57 of 2003).
	Spatial Planning Land Use Management Act (Act no. 16 of 2013).
	Marine Spatial Planning Act (Act no. 16 of 2018).
	NEMPA and NEMBA.
Clients	SANParks Park planning users; Park managers; scientists (both internal and
	external) and SANParks decision makers.
Usage	3 named users and 50 viewers
Software dependencies	Sharing data and information with key stakeholders through quick and easy to use
	processes is a main requirement. This project includes workflows, models & templates
	to keep this key information up to date.

6.3.3 Conservation Services

Description/Introduction: Biodiversity conservation is one of the core mandates of SANParks and without the capacity to view and analyse spatial data many of the biodiversity monitoring programs within national parks

would have to be outsourced or halted. There are currently 11 power users of GIS for biodiversity management with an additional ad hoc user that make frequent use of the software. Monitoring programs included alien species monitoring, forest cover analysis, water quality and quantity and even underwater videography. Fire mapping is an important part of effectively managing the national parks and by tracking the fuel load and fire patterns is essential for the safety of infrastructure and people. All the animal census data collected in the parks need to be analysed spatially in order to monitor trends in species distribution and densities. Data capture applications such as Quick capture and Survey 123 are being rolled out to streamline the data capture process. This information is then shared on an internal web application to facilitate the dissemination of this information with park management. Without the ability to do such analysis the multi million rand annual investment in such activities would be wasted and the mandate of SANParks severely undermined. Spatial products also form the basis for most of the research happening in the parks. Products range from developing vegetation and habitat maps, soil maps, areas of change and animal distribution maps to name a few. In smaller parks it is especially important to have a good grasp of what is happening at various locations within the park at any given time as this guides most management interventions. For example, using image analysis to map vegetation biomass and surface water availability over time allows changes in resource availability to be proactively followed. This enables management to intervene before a crisis point is reached.

The analytical power of spatial data is harnessed most prominently for anti-poaching efforts within parks. GIS is used to identify poaching and snaring hotspots, assess risk and inform patrol efforts. It is also monitor and track rhino populations, identify high use areas by rhino and allows for management interventions to enhance the habitat suitability of these areas.

A more recent use for GIS has been in facilities management of especially Kruger National Park as well for Environmental Compliance programs. Through the use of dashboards, the development footprints, maintenance plans and prioritisation of such infrastructure planning is being used for better management of park infrastructure. This also allows for an integrated Infrastructure management and Environmental compliance plan to be put in place. Using data capture applications, the environmental audit processes within Kruger National Park is being streamlined.

Conservation Services

Description/Introduction: The Garden Route Park Management has identified the need to use ArcGIS to create, share, and manage park infrastructure, compartment statuses and information about recreational areas. Web Applications and Field Maps mobile apps are used for Park Rangers who assess the conditions of roads and provide feedback to Planning. Park staff use the Web Application to view relevant and up to date information.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to SANParks
	staff.
Deployed and active since	2023
Clients	GRNP Park Rangers, and Park Management - Park Specific
Usage	2 named users and 10 viewers
Software dependencies	The GRNP Land Application shares a large amount of detailed information about the
	entire Garden Route National Park via Web Applications and Mobile Applications.
	Users are able to interact and shuffle through a number of layers. ArcGIS Online
	makes updating easy as the direct update shares with all parties thus, it's a better
	option than to create and share static maps to all frequently.

Kruger NP Park Management hub

Description/Introduction: The Kruger National Park has a range of departments that use GIS and spatial data for management decisions. For ease of use by park management an online Management has been created where applications created by the various department can be viewed. This includes park infrastructure, environmental management and biodiversity information. This hub brings together Web Applications, dashboards and field data collection apps to view relevant and up to date information.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to SANParks
	staff.
Deployed and active since	2023
Clients	KNP GIS users and Park Management - Park Specific
Usage	4 named users and 15 viewers
Software dependencies	The KNP management hub shares a large amount of detailed information about the
	entire Kruger National Park via Web Applications and Mobile Applications. Users are
	able to interact and shuffle through a number of layers. ArcGIS Online makes updating
	easy as the direct update shares with all parties thus, it's a better option than to create
	and share static maps to all frequently.

Kruger NP Park wildlife census

Description/Introduction: To create; map; analyze and share annual Wildlife census information with scientists and decision makers. This informs management actions on issues such as offtakes and removals, water provision and vegetation management. This uses a mixture of traditional GIS methods and online based field mapping applications.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to SANParks
	staff.
Deployed and active since	2022
Clients	KNP GIS staff, Park Conservation staff and Park Management - Park Specific
Usage	2 named users and 8 viewers
Software dependencies	As the wildlife census is mainly a spatial data exercise so the ability to quickly and
	efficiently work with spatial data and share the resulting information is key as this then
	impacts downstream decisions, such as removals, which may have a limited window
	during the year in which to be completed.

Environmental Management and Spatial planning

Description/Introduction: This tool feeds into the KNP Management hub and is used as an Environmental management and EIA support tool. Various information sources provide details on land ownership, park zonation, concessions and infrastructure both in, but mostly around park. This is used for decision making on appropriate actions and comments in terms of development activities.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to SANParks
	staff.
Deployed and active since	2022
Clients	KNP GIS staff, Park Conservation staff and Park Management - Park Specific
Usage	4 named users and 8 viewers
Software dependencies	This tool relies on the spatial database for KNP to pull the most recent and up to date
	information required for this tool. Due to the range of users of the KNP data shapefiles
	are used to make sharing with external stakeholders easier. Extensive use is made of
	desktop editing to keep the main shapefiles up to date. These shapefiles are then used

to update the online feature datasets that feed into the online web maps and apps.
Field data collection apps such as Survey123 are used to collect many of the base
datasets.

Infrastructure Management

Description/Introduction: This tool brings together maintenance, asset management, record keeping. These would include all roads, buildings and structures which are all captured with relevant attributes. This is then shared as both shapefiles and online web map.

Parameter:	Description:
URL	Restricted
Access control	The access to data; web maps and dashboards is currently restricted to SANParks
	staff.
Deployed and active since	2023
Clients	SANParks GIS staff; Technical services and Park Management
Usage	2 named users and 10 viewers
Software dependencies	This tool relies on the spatial database for KNP to pull the most recent and up to date
	information required for this tool. Extensive use is made of desktop editing to keep the
	main shapefiles up to date. These shapefiles are then used to update the online
	feature datasets that feed into the online web maps and apps. Field data collection
	apps such as Survey123 are used to collect many of the base datasets.

7. Branch: South African National Biodiversity Institution (SANBI)

Description/Introduction: The South African National Biodiversity Institute (SANBI) contributes to South Africa's sustainable development by facilitating access to biodiversity data, generating information and knowledge, building capacity, providing policy advice, showcasing and conserving biodiversity in its national botanical and zoological gardens

7.1. Amalgamated National CBA & ESA Layer

Description/Introduction: This is a consolidated map of all systematic biodiversity plans for the provinces and marine realm. It's a single layer that reflected important biodiversity areas in the country and widely used national, regional and global reporting.

Parameter:	Description:
URL	Internal
Access control	Open Access
Deployed and active since	2021
Clients	DFFE; National and Provincial departments; conservation agencies; SANBI; Higher learning institutions; private sector.
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations; Story Map; Dashboard.

7.2. Biodiversity Priority Areas Map

Description/Introduction: Composite map that shows across the terrestrial, freshwater, and marine realms important biodiversity priorities. The map reflects the latest publicly available spatial datasets that is scientifically objective and credible. The biodiversity priority areas map serves as a foundational spatial input products to various local and national spatial products. Some of the products that utilize the priority areas map includes, Strategic Environmental Assessment (SEA), land or sea-use prioritization, national web based Environmental Screening Tool and other national assessments.

Parameter:	Description:
URL	BGIS
Access control	Open Access
Deployed and active since	2013
Clients	DFFE; National and Provincial departments; conservation agencies; SANBI; Higher learning institutions; private sector.
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations; Story Map; Dashboard.

7.3. SANBI Enterprise Geospatial Information Management (EGIM)

Description/Introduction: In terms of the Biodiversity Act (Act 10 of 2004), SANBI is legally mandated to manage biodiversity information. The effective management of biodiversity information underpins research, decision-making, policy advice, and monitoring of conservation effectiveness. A platform to create, manage, and share geospatial content, such as maps, data, and applications, securely within the SANBI infrastructure. Enhances collaboration by integrating geographic data across multiple SANBI departments, streamlines workflows, and enables SANBI to leverage their geospatial data effectively for decision-making, planning, and resource management.

Parameter:	Description:
URL	Biodiversity Geographic Information System (BGIS):
	https://bgismaps.sanbi.org/portal/home/
	AGOL: https://sanbi.maps.arcgis.com/home/index.html
	Biodiversity Advisor: http://biodiversityadvisor.sanbi.org
Access control	Both named user login and content shared with the public
Deployed and active since	2005
Clients	DFFE; National and Provincial departments; conservation agencies; SANBI; Higher
	learning institutions; private sector; Global organisations.
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations; Esri Enterprise;
	Portal for ArcGIS.

7.4. National Biodiversity Offset Register

Description/Introduction: A national inventory of development projects that triggered the need for biodiversity offsets. Spatial layers of biodiversity offset sites as well project development footprints are created.

Parameter:	Description:
URL	Closed system, registration online
Access control	Open Access
Deployed and active since	2016
Clients	DFFE; National and Provincial departments; conservation agencies; SANBI; Higher
	learning institutions; General public.
Usage	SANBI Projects (see list below)
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations; ArcGIS Portal;
	AGOL.

SANBI Projects: Additional Projects/Programs.

Biodiversity Stewardship spatial distribution map for South Africa;

Screening Tool (Biodiversity Theme - Aquatic & Terrestrial);

Natural resource management (Invasive Alien Species mapping);

South African Inventory of Inland Aquatic Ecosystems;

National Wetland Map Project;

National Offsets Register;

EIA Data Requests from the Screening Tool;

Natural Capital Accounts (NCA);

National Vegetation Map (under the VEGMAP Project);

Natural Resource management (Invasive Alien Species mapping);

Strategic Water Source Areas

Mapping Enviro Champs Activities

National Biodiversity Assessment (NBA)

National Ecosystem Classification System (SA-NEC)

Ecosystem assessments

State of the Environment Report

Medium Term Strategic Framework (MTSF)

Red List of Ecosystems & Protection Level:

- Terrestrial.
- Freshwater,
- Marine &
- Prince Edward

Wetland Monitoring Plan mapping

GEF 8 Thriving people and nature

GEF 7 Biodiversity Economy

Mapping of the distribution of invasive alien species:

- Mapping of the category 1a invasive alien species polygons for eradication
- Mapping the distribution of the species on risk analysis
- Mapping the footprint of the detection and eradication of invasive alien species by SANBI"

National Report on the Impacts of GMOs on Biodiversity

SBAPP Regional Project on Ecological Condition

Multidimensional Biodiversity Index Project

Sustainable Development Goals Reporting (South Africa has committed to achieve the UN SDGs)

Kunming-Montreal Global Biodiversity Framework (linked to the UN Convention on Biological Diversity

to which South Africa is signatory)

Key Biodiversity Areas Project

Global Ecosystem Atlas contributions

UNCCD Reporting on degradation

OECMs

Protected Area database

Strategic Environmental Assessment (SEA)

Spatial targets for Strategic Results Framework

River Maintenance and Management Plans
Water User Licenses

8. Branch: iSimangaliso

Description/Introduction: The iSimangaliso Wetland Park Authority is the implementer of DFFE's Expanded Public Works Programmes ("Working For / On" Programmes / EPWP/ NRM) namely: the Working for Water Project and Working for Wetlands Project. ArcGIS Pro and ArGIS Desktop (ArcMap) and Working for Water information Management Systems (WIMS) apps are used during Planning, Implementation, Reporting, Monitoring and Evaluation of the above projects. These projects aim to eradicate and control the spread of alien plants in protected areas as well as to rehabilitate disturbed wetlands and other water bodies. These projects clear between 35,000 to 99,000 hectares of alien pants, rehabilitate between 2000 to 2170 cubic meters of rehabilitated soil while benefiting about 99 contractors and about 1188 beneficiaries per annum.

8.1. The Working for Water Project/Programme

Description/Introduction: Invasive Alien Plants Control (Planning; Implementation; Reporting; Monitoring and Evaluation).

Parameter:	Description:
URL	Internal platforms
Access control	internal
Deployed and active since	1997/1998 Financial Year
Legislative support to	National Environmental Management Act, No. 107 of 1998 (NEMA), as amended.
	National Environmental Management: Biodiversity Act, No. 10 of 2004.
	National Water Act, No.36 of 1998 (NWA).
	Protected Areas Act (Act no. 57 of 2003).
	Conservation of Agricultural Resources Act, No. 43 of 1983.
	National Heritage Resources Act, No. 25 of 1999.
	Hazardous Substance Act [Act No. 15 OF 1973] and Regulations.
Clients	DFFE
Usage	14 Project active areas namely:
	Coastal Forest Reserve.
	2. Eastern Shores.
	3. Eastern Shores Rehabilitation.
	4. Estuary.
	5. False Bay.

	6. Futululu;
	7. Maphelane;
	8. Ozabeni;
	9. uMkhuze;
	10. Western Shores North;
	11. Western Shores Rehabilitation;
	12. Western Shores South;
	13. Famine Weed Control;
	14. Route Maintenance.
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations;
	TIFF/LZW Compression;
	Mr SID Encoder Extensions ;
	Working for Water Information Management System (WIMS).
	Working for Water Information Management System (WIMS).

8.2 The Working for Wetlands Project/ Programme

Description/Introduction: Wetland Rehabilitation (through Earth Works and Stump Removal)

Parameter:	Description:		
URL	Internal		
Access control	Accessible only to iSimangaliso Biodiversity Department & DFFE Officials		
Deployed and active since	2014		
Legislative support to	National Environmental Management Act, No. 107 of 1998 (NEMA), as amended.		
	National Environmental Management: Biodiversity Act, No. 10 of 2004.		
	National Water Act, No.36 of 1998 (NWA).		
	Protected Areas Act (Act no. 57 of 2003).		
	Conservation of Agricultural Resources Act, No. 43 of 1983.		
	National Heritage Resources Act, No. 25 of 1999.		
	Hazardous Substance Act [Act No. 15 OF 1973] and Regulations		
Clients	DFFE		
Usage	2 Project areas:		
	1. Eastern Shores		
	2. Western Shores		
Software dependencies	ArcGIS desktop software plus extensions to manage daily operations;		
	Working for Water Information Management System (WIMS)		

THE NATIONAL TREASURY

Republic of South Africa



GOVERNMENT PROCUREMENT:
GENERAL CONDITIONS OF CONTRACT

July 2010

GOVERNMENT PROCUREMENT

GENERAL CONDITIONS OF CONTRACT July 2010

NOTES

The purpose of this document is to:

- (i) Draw special attention to certain general conditions applicable to government bids, contracts and orders; and
- (ii) To ensure that clients be familiar with regard to the rights and obligations of all parties involved in doing business with government.

In this document words in the singular also mean in the plural and vice versa and words in the masculine also mean in the feminine and neuter.

- The General Conditions of Contract will form part of all bid documents and may not be amended.
- Special Conditions of Contract (SCC) relevant to a specific bid, should be compiled separately for every bid (if (applicable) and will supplement the General Conditions of Contract. Whenever there is a conflict, the provisions in the SCC shall prevail.

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General Conditions of Contract

1. Definitions

- 1. The following terms shall be interpreted as indicated:
- 1.1 "Closing time" means the date and hour specified in the bidding documents for the receipt of bids.
- 1.2 "Contract" means the written agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
- 1.3 "Contract price" means the price payable to the supplier under the contract for the full and proper performance of his contractual obligations.
- 1.4 "Corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution.
- 1.5 "Countervailing duties" are imposed in cases where an enterprise abroad is subsidized by its government and encouraged to market its products internationally.
- 1.6 "Country of origin" means the place where the goods were mined, grown or produced or from which the services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 1.7 "Day" means calendar day.
- 1.8 "Delivery" means delivery in compliance of the conditions of the contract or order.
- 1.9 "Delivery ex stock" means immediate delivery directly from stock actually on hand.
- 1.10 "Delivery into consignees store or to his site" means delivered and unloaded in the specified store or depot or on the specified site in compliance with the conditions of the contract or order, the supplier bearing all risks and charges involved until the supplies are so delivered and a valid receipt is obtained.
- 1.11 "Dumping" occurs when a private enterprise abroad market its goods on own initiative in the RSA at lower prices than that of the country of origin and which have the potential to harm the local industries in the

RSA.

- 1.12 "Force majeure" means an event beyond the control of the supplier and not involving the supplier's fault or negligence and not foreseeable. Such events may include, but is not restricted to, acts of the purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- 1.13 "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any bidder, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the bidder of the benefits of free and open competition.
- 1.14 "GCC" means the General Conditions of Contract.
- 1.15 "Goods" means all of the equipment, machinery, and/or other materials that the supplier is required to supply to the purchaser under the contract.
- 1.16 "Imported content" means that portion of the bidding price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or his subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs such as landing costs, dock dues, import duty, sales duty or other similar tax or duty at the South African place of entry as well as transportation and handling charges to the factory in the Republic where the supplies covered by the bid will bemanufactured.
- 1.17 "Local content" means that portion of the bidding price which is not included in the imported content provided that local manufacture does take place.
- 1.18 "Manufacture" means the production of products in a factory using labour, materials, components and machinery and includes other related value-adding activities.
- 1.19 "Order" means an official written order issued for the supply of goods or works or the rendering of a service.
- 1.20 "Project site," where applicable, means the place indicated in bidding documents.
- 1.21 "Purchaser" means the organization purchasing the goods.
- 1.22 "Republic" means the Republic of South Africa.
- 1.23 "SCC" means the Special Conditions of Contract.
- 1.24 "Services" means those functional services ancillary to the supply of the goods, such as transportation and any other incidental services, such as installation, commissioning, provision of technical assistance, training, catering, gardening, security, maintenance and other such

obligations of the supplier covered under the contract.

1.25 "Written" or "in writing" means handwritten in ink or any form of electronic or mechanical writing.

2. Application

- 2.1 These general conditions are applicable to all bids, contracts and orders including bids for functional and professional services, sales, hiring, letting and the granting or acquiring of rights, but excludingimmovable property, unless otherwise indicated in the biddingdocuments.
- 2.2 Where applicable, special conditions of contract are also laid down to cover specific supplies, services or works.
- 2.3 Where such special conditions of contract are in conflict with these general conditions, the special conditions shall apply.

3. General

- 3.1 Unless otherwise indicated in the bidding documents, the purchaser shall not be liable for any expense incurred in the preparation and submission of a bid. Where applicable a non-refundable fee for documents may be charged.
- 3.2 With certain exceptions, invitations to bid are only published in the Government Tender Bulletin. The Government Tender Bulletin may be obtained directly from the Government Printer, Private Bag X85, Pretoria 0001, or accessed electronically from www.treasury.gov.za

4. Standards

- 4.1 The goods supplied shall conform to the standards mentioned in the bidding documents and specifications.
- 5. Use of contract documents and information; inspection.
- 5.1 The supplier shall not, without the purchaser's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the supplier in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 5.2 The supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC clause 5.1 except for purposes of performing the contract.
- 5.3 Any document, other than the contract itself mentioned in GCC clause 5.1 shall remain the property of the purchaser and shall be returned (all copies) to the purchaser on completion of the supplier's performance under the contract if so required by the purchaser.
- 5.4 The supplier shall permit the purchaser to inspect the supplier's records relating to the performance of the supplier and to have them audited by auditors appointed by the purchaser, if so required by the purchaser.

6. Patent rights

6.1 The supplier shall indemnify the purchaser against all third-partyclaims of infringement of patent, trademark, or industrial design rights arising from use of the goods or any part thereof by the purchaser.

7. Performance security

- 7.1 Within thirty (30) days of receipt of the notification of contract award, the successful bidder shall furnish to the purchaser the performance security of the amount specified in SCC.
- 7.2 The proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete his obligations under the contract.
- 7.3 The performance security shall be denominated in the currency of the contract, or in a freely convertible currency acceptable to the purchaser and shall be in one of the following forms:
 - (a) a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the purchaser's country or abroad, acceptable to the purchaser, in the form provided in the bidding documents or another form acceptable to the purchaser; or
 - (b) a cashier's or certified cheque
- 7.4 The performance security will be discharged by the purchaser and returned to the supplier not later than thirty (30) days following the date of completion of the supplier's performance obligations under the contract, including any warranty obligations, unless otherwise specified in SCC.

8. Inspections, tests and analyses

- 8.1 All pre-bidding testing will be for the account of the bidder.
- 8.2 If it is a bid condition that supplies to be produced or services to be rendered should at any stage during production or execution or on completion be subject to inspection, the premises of the bidder or contractor shall be open, at all reasonable hours, for inspection by a representative of the Department or an organization acting on behalf of the Department.
- 8.3 If there are no inspection requirements indicated in the bidding documents and no mention is made in the contract, but during the contract period it is decided that inspections shall be carried out, the purchaser shall itself make the necessary arrangements, including payment arrangements with the testing authority concerned.
- 8.4 If the inspections, tests and analyses referred to in clauses 8.2 and 8.3 show the supplies to be in accordance with the contract requirements, the cost of the inspections, tests and analyses shall be defrayed by the purchaser.
- 8.5 Where the supplies or services referred to in clauses 8.2 and 8.3 do not comply with the contract requirements, irrespective of whether such supplies or services are accepted or not, the cost in connection with these inspections, tests or analyses shall be defrayed by the supplier.
- 8.6 Supplies and services which are referred to in clauses 8.2 and 8.3 and which do not comply with the contract requirements may be rejected.
- 8.7 Any contract supplies may on or after delivery be inspected, tested or

analyzed and may be rejected if found not to comply with the requirements of the contract. Such rejected supplies shall be held at the cost and risk of the supplier who shall, when called upon, remove them immediately at his own cost and forthwith substitute them with supplies which do comply with the requirements of the contract. Failing such removal the rejected supplies shall be returned at thesuppliers cost and risk. Should the supplier fail to provide the substitute supplies forthwith, the purchaser may, without giving the supplier further opportunity to substitute the rejected supplies, purchase such supplies as may be necessary at the expense of the supplier.

8.8 The provisions of clauses 8.4 to 8.7 shall not prejudice the right of the purchaser to cancel the contract on account of a breach of the conditions thereof, or to act in terms of Clause 23 of GCC.

9. Packing

- 9.1 The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing, case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.
- 9.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract, including additional requirements, if any, specified in SCC, and in any subsequent instructions ordered by the purchaser.

10. Delivery and documents

- 10.1 Delivery of the goods shall be made by the supplier in accordance with the terms specified in the contract. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.
- 10.2 Documents to be submitted by the supplier are specified in SCC.

11. Insurance

11.1 The goods supplied under the contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in the SCC.

12. Transportation

12.1 Should a price other than an all-inclusive delivered price be required, this shall be specified in the SCC.

13. Incidental services

- 13.1 The supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC:
 - (a) performance or supervision of on-site assembly and/or commissioning of the supplied goods;
 - (b) furnishing of tools required for assembly and/or maintenance of the supplied goods;
 - (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods;

- (d) performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the parties, provided that this service shall not relieve the supplier of any warranty obligations under this contract; and
- (e) training of the purchaser's personnel, at the supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied goods.
- 13.2 Prices charged by the supplier for incidental services, if not included in the contract price for the goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the supplier for similar services.

14. Spare parts

- 14.1 As specified in SCC, the supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the supplier:
 - (a) such spare parts as the purchaser may elect to purchase from the supplier, provided that this election shall not relieve the supplier of any warranty obligations under the contract; and
 - (b) in the event of termination of production of the spare parts:
 - (i) Advance notification to the purchaser of the pending termination, in sufficient time to permit the purchaser to procure needed requirements; and
 - (ii) following such termination, furnishing at no cost to the purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.

15. Warranty

- 15.1 The supplier warrants that the goods supplied under the contract are new, unused, of the most recent or current models, and that theyincorporate all recent improvements in design and materials unless provided otherwise in the contract. The supplier further warrants that all goods supplied under this contract shall have no defect, arising fromdesign, materials, or workmanship (except when the design and/ormaterial is required by the purchaser's specifications) or from any act or omission of the supplier, that may develop under normal use of the supplied goods in the conditions prevailing in the country of finaldestination.
- 15.2 This warranty shall remain valid for twelve (12) months after thegoods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the contract, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise in SCC.
- 15.3 The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.
- 15.4 Upon receipt of such notice, the supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective goods or parts thereof, without costs to the purchaser.
- 15.5 If the supplier, having been notified, fails to remedy the defect(s)within the period specified in SCC, the purchaser may proceed to take

such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights which the purchaser may have against the supplier under the contract.

16. Payment

- 16.1 The method and conditions of payment to be made to the supplier under this contract shall be specified in SCC.
- 16.2 The supplier shall furnish the purchaser with an invoice accompanied by a copy of the delivery note and upon fulfillment of other obligations stipulated in the contract.
- 16.3 Payments shall be made promptly by the purchaser, but in no case later than thirty (30) days after submission of an invoice or claim by the supplier.
- 16.4 Payment will be made in Rand unless otherwise stipulated in SCC.

17. Prices

17.1 Prices charged by the supplier for goods delivered and services performed under the contract shall not vary from the prices quoted by the supplier in his bid, with the exception of any price adjustments authorized in SCC or in the purchaser's request for bid validity extension, as the case may be.

18. Contract amendments

18.1 No variation in or modification of the terms of the contract shall be made except by written amendment signed by the parties concerned.

19. Assignment

19.1 The supplier shall not assign, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.

20. Subcontracts

20.1 The supplier shall notify the purchaser in writing of all subcontracts awarded under this contracts if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the supplier from any liability or obligation under the contract.

21. Delays in the supplier's performance

- 21.1 Delivery of the goods and performance of services shall be made by the supplier in accordance with the time schedule prescribed by the purchaser in the contract.
- 21.2 If at any time during performance of the contract, the supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the goods and performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, its likelyduration and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at his discretion extend the supplier's time for performance, with or without the imposition of penalties, in which case the extension shallbe ratified by the parties by amendment of contract.
- 21.3 No provision in a contract shall be deemed to prohibit the obtaining of supplies or services from a national department, provincial department, or a local authority.
- 21.4 The right is reserved to procure outside of the contract small quantities or to have minor essential services executed if an emergency arises, the

- supplier's point of supply is not situated at or near the place where the supplies are required, or the supplier's services are not readily available.
- 21.5 Except as provided under GCC Clause 25, a delay by the supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of penalties, pursuant to GCC Clause 22, unless an extension of time is agreed upon pursuant to GCC Clause 21.2 without the application of penalties.
- 21.6 Upon any delay beyond the delivery period in the case of a supplies contract, the purchaser shall, without canceling the contract, be entitled to purchase supplies of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any goods delivered later at the supplier's expense and risk, or to cancel the contract and buy such goods as may be required to complete the contract and without prejudice to his other rights, be entitled to claim damages from the supplier.

22. Penalties

22.1 Subject to GCC Clause 25, if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, a sum calculated on the delivered price of the delayed goods or unperformed services using the current prime interest rate calculated for each day of the delay until actual delivery or performance. The purchaser may also consider termination of the contract pursuant to GCC Clause 23.

23. Termination for default

- 23.1 The purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part:
 - (a) if the supplier fails to deliver any or all of the goods within the period(s) specified in the contract, or within any extension thereof granted by the purchaser pursuant to GCC Clause 21.2;
 - (b) if the Supplier fails to perform any other obligation(s) under the contract; or
 - (c) if the supplier, in the judgment of the purchaser, has engaged in corrupt or fraudulent practices in competing foror in executing the contract.
- 23.2 In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms and in such manner as it deems appropriate, goods, works or services similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods, works or services. However, the supplier shall continue performance of the contract to the extent not terminated.
- 23.3 Where the purchaser terminates the contract in whole or in part, the purchaser may decide to impose a restriction penalty on the supplier by prohibiting such supplier from doing business with the public sector for a period not exceeding 10 years.
- 23.4 If a purchaser intends imposing a restriction on a supplier or any

person associated with the supplier, the supplier will be allowed a time period of not more than fourteen (14) days to provide reasons why the envisaged restriction should not be imposed. Should the supplier fail to respond within the stipulated fourteen (14) days the purchaser may regard the intended penalty as not objected against and may impose it on the supplier.

- 23.5 Any restriction imposed on any person by the Accounting Officer / Authority will, at the discretion of the Accounting Officer / Authority, also be applicable to any other enterprise or any partner, manager, director or other person who wholly or partly exercises or exercised or may exercise control over the enterprise of the first-mentioned person, and with which enterprise or person the first-mentioned person, is or was in the opinion of the Accounting Officer / Authority actively associated.
- 23.6 If a restriction is imposed, the purchaser must, within five (5) working days of such imposition, furnish the National Treasury, with the following information:
 - (i) the name and address of the supplier and / or person restricted by the purchaser;
 - (ii) the date of commencement of the restriction
 - (iii) the period of restriction; and
 - (iv) the reasons for the restriction.

These details will be loaded in the National Treasury's central database of suppliers or persons prohibited from doing business with the public sector.

- 23.7 If a court of law convicts a person of an offence as contemplated in sections 12 or 13 of the Prevention and Combating of Corrupt Activities Act, No. 12 of 2004, the court may also rule that such person's name be endorsed on the Register for Tender Defaulters. When a person's name has been endorsed on the Register, the person will be prohibited from doing business with the public sector for a period not less than five years and not more than 10 years. The National Treasury is empowered to determine the period of restriction and each case will be dealt with on its own merits. According to section 32 of the Act the Register must be open to the public. The Register can be perused on the National Treasury website.
- 24. Anti-dumping and countervailing duties and rights
- 24.1 When, after the date of bid, provisional payments are required, or antidumping or countervailing duties are imposed, or the amount of a provisional payment or anti-dumping or countervailing right isincreased in respect of any dumped or subsidized import, the State is not liable for any amount so required or imposed, or for the amount of any such increase. When, after the said date, such a provisional payment is no longer required or any such anti-dumping or countervailing right is abolished, or where the amount of such provisional payment or any such right is reduced, any such favourable difference shall on demand be paid forthwith by the contractor to the State or the State may deduct such amounts from moneys (if any) which may otherwise be due to the contractor in regard to supplies or services which he delivered or rendered, or is to deliver or render in terms of the contract or any other contract or any other amount which

may be due to him

25. Force Majeure

- 25.1 Notwithstanding the provisions of GCC Clauses 22 and 23, the supplier shall not be liable for forfeiture of its performance security, damages, or termination for default if and to the extent that his delay inperformance or other failure to perform his obligations under the contract is the result of an event of force majeure.
- 25.2 If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the purchaser in writing, the suppliershall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the force majeure event.

26. Termination for insolvency

26.1 The purchaser may at any time terminate the contract by giving written notice to the supplier if the supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.

27. Settlement of Disputes

- 27.1 If any dispute or difference of any kind whatsoever arises between the purchaser and the supplier in connection with or arising out of the contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.
- 27.2 If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the purchaser or the supplier may give notice to the other party of his intention to commence with mediation. No mediation in respect of this matter may be commenced unless such notice is given to the other party.
- 27.3 Should it not be possible to settle a dispute by means of mediation, it may be settled in a South African court of law.
- 27.4 Mediation proceedings shall be conducted in accordance with the rules of procedure specified in the SCC.
- 27.5 Notwithstanding any reference to mediation and/or court proceedings herein,
 - (a) the parties shall continue to perform their respective obligations under the contract unless they otherwise agree; and
 - (b) the purchaser shall pay the supplier any monies due the supplier.

28. Limitation of liability

- 28.1 Except in cases of criminal negligence or willful misconduct, and in the case of infringement pursuant to Clause 6;
 - (a) the supplier shall not be liable to the purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the supplier to pay penalties and/or damages to the purchaser; and

(b) aggregate liability of the supplier to the purchaser, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.

29. Governing language

29.1 The contract shall be written in English. All correspondence and other documents pertaining to the contract that is exchanged by the parties shall also be written in English.

30. Applicable law

30.1 The contract shall be interpreted in accordance with South African laws, unless otherwise specified in SCC.

31. Notices

- 31.1 Every written acceptance of a bid shall be posted to the supplier concerned by registered or certified mail and any other notice to him shall be posted by ordinary mail to the address furnished in his bid or to the address notified later by him in writing and such posting shall be deemed to be proper service of such notice
- 31.2 The time mentioned in the contract documents for performing any act after such aforesaid notice has been given, shall be reckoned from the date of posting of such notice.

32. Taxes and duties

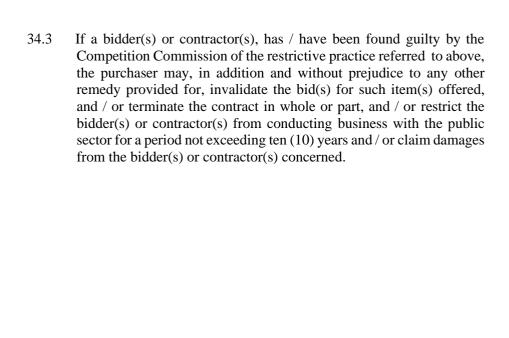
- 32.1 A foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the purchaser's country.
- 32.2 A local supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted goods to the purchaser.
- 32.3 No contract shall be concluded with any bidder whose tax matters are not in order. Prior to the award of a bid the Department must be in possession of a tax clearance certificate, submitted by the bidder. This certificate must be an original issued by the South AfricanRevenue Services.

33. National Industrial Participation (NIP) Programme

The NIP Programme administered by the Department of Trade and Industry shall be applicable to all contracts that are subject to the NIP obligation.

34 Prohibition of Restrictive practices

- 34.1 In terms of section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, an agreement between, or concerted practice by, firms, or a decision by an association of firms, is prohibited if it is between parties in a horizontal relationship and if a bidder (s) is / are or a contractor(s) was / were involved in collusive bidding (or bid rigging).
- 34.2 If a bidder(s) or contractor(s), based on reasonable grounds or evidence obtained by the purchaser, has / have engaged in the restrictive practice referred to above, the purchaser may refer the matter to the Competition Commission for investigation and possible imposition of administrative penalties as contemplated in the Competition Act No. 89 of 1998.



Js General Conditions of Contract (revised July 2010)



DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT

Head Office Only		
Date Received Safetynet Capture Safetynet Verified: BAS/LOGIS Capt BAS/LOGIS Auth Supplier No.		
BAS/LOGIS Capt BAS/LOGIS Auth		

BAS ENTITY MAINTENANCE FORM

The Director General

I/We hereby request and authorise you to pay any amounts, which may accrue to me/us to the credit of my/our account with the mentioned bank.

I/we understand that the credit transfers hereby authorised will be processed by computer through a system known as "ACB - Electronic Fund Transfer Service", and I/we understand that no additional advice of payment will be provided by my/our bank, but that the details of each payment will be printed on my/our bank statement or any accompanying voucher. (This does not apply where it is not customary for banks to furnish bank statements).

I/we understand that the Department will supply a payment advice in the normal way, and that it will indicate the date on which the funds will be made available on my/our account.

This authority may be cancelled by me/us by giving thirty days notice by prepaid registered post.

Please ensure information is validate as per required bank screens.

I/We understand that bank details provided should be exactly as per record held by the banks.

I/We understand that the Department will not held liable for any delayed payments as a result of incorrect information supplied.

incorrect information	supplied.				
Company / Personal Details					
Registered Name					
Trading Name					
Tax Number					
VAT Number					
Title:					
Initials:					
Full Names					
Surname					
Persal Number					
	Address Detail				
	Physical	Postal			
Address					
(Compulsory if Supplier)					
Postal Code	 	 			
Fusiai Cou c					
	New Detail				
New Supplier information Update Supplier information					
Supplier Type:	Individual Department Company Trust CC Other (Specify	Partnership			
Department Number	П				

Supplier Account Details (To be Verified by the bank)						
(Please note that this account MUST be in the name of the supplier. No 3rd party payments allowed).						
Account Name						
Account Number Branch Name Branch Number						
Bank screen info ABSA-CIF screen FNB-Hogans system on the CIS4/CUPR STD Bank-Look-up-screen Nedbank- Banking Platform under the Client Details Tab						
Account Type Cheque Account Savings Account Transmission Account Bond Account Other (Please Specify)						
ID Number						
Passport Number Company Registration Number *CC Registration *Please include CC/CK where applicable Bank Stamp Bank Stamp						
	Supplier Contact Details					
Home Are Fax Are Cell		xtension xtension xtension				
Email Address Contact Person:						
Supplier Signature Print Name						