

FRIDAY, 25 AUGUST 2017

National Spatial Planning Data Repository



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& land reform

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Rural Development and Land Reform
REPUBLIC OF SOUTH AFRICA



NSPDR Ecosystem

the problem statement

- South Africa **does not** have a **central repository** that utilises data **for spatial planning**, monitoring and evaluation, and/or coordinating purposes.
- Currently, most departments have **standalone databases** and tools that are being used for planning and reporting purposes.
- Many of these **do not** have **integrated spatial referencing** and some departments rely only on spreadsheets to manage their planning and business processes.
- Information is **not readily accessible** to the relevant users and planning is often **done in isolation**, without taking cognisance of associated needs and impacts from other services.



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the ever increasing urgency

- SPLUMA implementation requires that national, provincial and local spheres of government are required to **develop spatial plans every five years**.
- Also, there is a requirement that municipalities must develop wall to wall land use schemes **within 5 years of SPLUMA** being implemented.
- SPLUMA came into operation on **01 July 2015**.
- So, by **31 June 2020** all municipalities must have wall to wall land use schemes.

NSPDR Ecosystem

the ecosystem in a nutshell



A **digital** ecosystem for national spatial planning that will **enable sharing** of spatial planning information and data across all spheres of government and will **support** key objectives of the **SPLUMA** and the NDP...



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NSPDR Ecosystem enabling SPLUMA

- The system will **facilitate access** to spatial information such as demographic, environmental, general infrastructure, cadastre data that is required for **integrated spatial planning** when developing SDFs and land use schemes.
- E-Lodgement capability to **assist with development applications** process.
- Enable **horizontal** and **vertical alignment** of spatial plans.
- Enable **spatial budgeting** and **spending**.
- Access to **offline spatial information** for remote municipalities.



NSPDR Ecosystem

project objectives

- Improve **integrated planning** by creating an ecosystem for real-time **sharing of spatial data** among various spheres of government, state owned entities and the private sector.
- **Remove subjectivity** from the planning functions, and move towards an **evidence-based approach**.
- To develop mechanisms that will **facilitate effective** and efficient **collaboration** amongst government/sector departments to **foster alignment** of their programs, budgets and processes.



NSPDR Ecosystem the portal for ArcGIS



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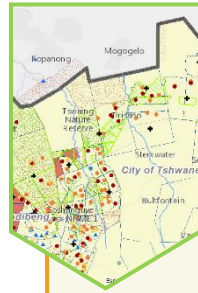
NSPDR Ecosystem

features of the ecosystem



Reference Web Map

- Interactive with Print function
- Add data from Portal / external sources
- Online Analytical Tools and Queries
- Flexible to meet departmental and user needs
- Capacity enhancement to core DRDLR GIS team



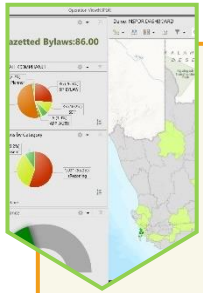
Geoprocessing Tools

- Ability to extract location-specific data
- Various formats to suit user needs
- Download extracted data (avail. offline)
- Data automatically emailed as compressed file
- Expose additional geoprocessing tools to meet department and user needs



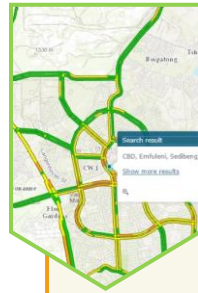
Doc Repository

- Upload spatial data
- Acts, Bylaws and other Documents
- LUMS Applications



Dashboards

- Reporting
- Status of Provinces
- Accessible online
- SPLUMA implementation & compliance
- Interactive Web app



Live Traffic Feed

- Interactive
- Transport Planners
- Impact of traffic
- Add traffic data to reference map or other Web mapping applications



Additional Links

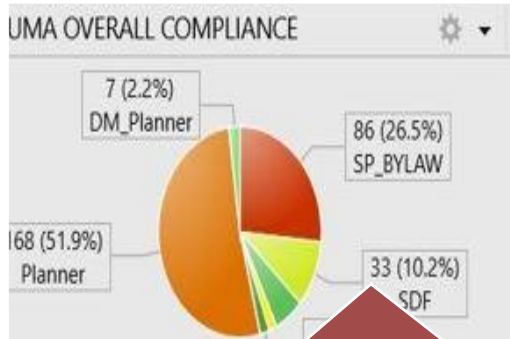
- Government websites
- Synergies



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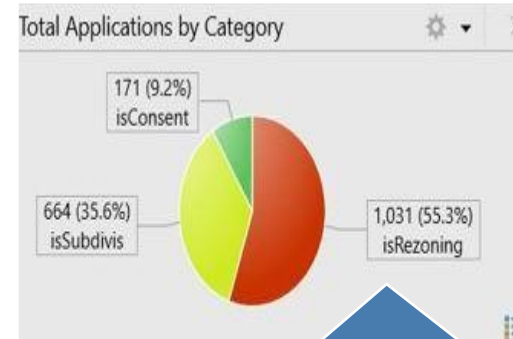
NSPDR Ecosystem dashboards for M&E



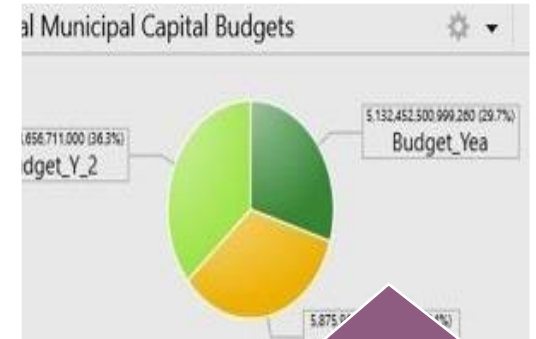
Data from the E-Lodgement tool will provide meaningful information around the development applications



Will help evaluate the efficiency of development application process



Will help track the different types of development applications in specific municipalities



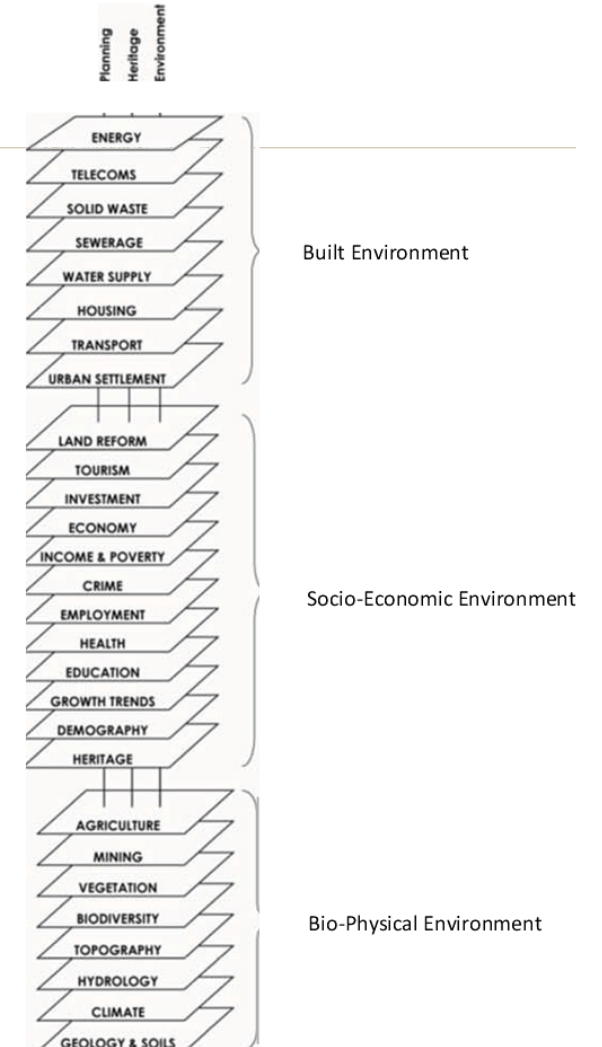
Treasury dashboard monitors key SPLUMA principle related to spatial justice, budgetary spending spatially



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NSPDR Ecosystem datasets available (custodians/vendors)



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challenges regarding spatial data

- Establishing **who are the data custodians** of required datasets
- Getting the data in the **appropriate format**
- Lack of data **standards** or adherence of set standards
- Lack of **metadata**
- Lack of **cooperation** from data custodian
- Assumption that identified data **custodians have the data**
- The lack of **availability of data** or suitable data from smaller municipalities without sufficient capacity

NSPDR Ecosystem

data sharing partnerships

- The **spirit of the Ecosystem**, facilitated by the **Spatial Data Partnership *Protocol***, is one of **data sharing** and **intergovernmental cooperation** in support of **improved spatial planning** and **service delivery**.
- Partnerships with the Ecosystem will result in data custodians/vendors having **access to key national datasets** and information contributions **from multiple participants**.
- **Roles and responsibilities** of data custodians/vendors in managing and maintaining datasets **are articulated** in the *Protocol*.
- The *Protocol* is **anchored in** terms of section 35(1) of the **Intergovernmental Relations Framework Act**, and is guided by the PAIA and SDI Act respectively.



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Welcome to the
e-Learning Portal



COACH advising SKILL
knowledge experience
goal workshop
help training
learning development ability



ABOUT E-LEARNING



COURSES



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NSPDR Ecosystem

the e-learning platform

- The NSPDR **E-Learning Web Portal** is a friendly **online learning tool** within everyone's reach.
- The portal is **dedicated to help** create and achieve a learning environment that **appeals to all learning levels** where the learner can **confidently understand** the training material presented on the platform.
- It allows the learner to **acquire skills faster, retain knowledge longer** and apply their newly gained skills to the real world.
- Below are some of the **key features** of the E-Learning training platform:
 - *MI Dashboard* - graphical representation of training performance
 - *Courses* - access to interactive courses with multimedia support
 - *Assessment* - test your knowledge with the assessment module
 - *E-Survey* - give feedback on your training experience



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targeted end-users

- Municipal senior **management**
- Municipal spatial **planning professionals**
- Municipal **land use** management professionals
- National, provincial and municipal **GIS professionals**
- National and provincial senior management responsible for **M&E**
- **Contributors** and users within the public, private and academic sectors



NSPDR Ecosystem

next steps for the project

***Continue to
engage and
onboard
stakeholders***

***Nationwide
marketing
campaign to
maximise data
custodian
participation***

***User
acceptance
testing of the
Ecosystem and
E-Learning
portal***

***Complete
deployment of
the NSPDR
Ecosystem for
the DRDLR***

***Post-
development
maintenance,
support and
training***



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ELECTRONIC LODGEMENT OF LAND DEVELOPMENT APPLICATIONS

E•Lodgement



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NSPDR E-Lodgement

the problem statement

- Currently many municipalities utilise **manual methods** to process land developments applications.
- These systems are often **not integrated** with broader land use management issues as to yield optimal results.
- These lead to **undue delays** regarding processing time, **haphazard approvals** or dismissals and **incorrect land uses** being allocated to a particular piece of land.



NSPDR E-Lodgement

electronic lodgement of dev. applications

- **NSPDR will include a facility that enables municipalities to receive, consider and process land development applications:- E-Lodgement**
- E-Lodgement seeks to **address the absence of automated system** that can assist municipalities with processing of land development applications.
- The intention is to **develop and deliver** a facility for the electronic **lodgement, assessment and consideration** of applications through a **secure portal** with an **automated internal workflow**.



NSPDR E-Lodgement

top seven benefits of e-lodgement

1. Application is fully **SPLUMA** compliant
2. **Moving away** from **paper-based** systems
3. **Tracking** application **progress and status**
4. Stores all documentation in a **central repository**
5. **Displays GIS-based location** and status of applications
6. Available on **multiple platforms** (PC, tablet, mobile)
7. Monitoring and evaluation of **data in dashboards**



THE APPLICATION'S MAIN OBJECTIVE

- Is to honour the DRDLR's responsibility in terms of SPLUMA and fully automate the land development application process.

NSPDR E-Lodgement development application phases

In terms of section 16(2) of the SPLUMA Regulations, a land development application will be subjected to what is termed –

- an **administrative** phase;
- a **consideration** phase; and
- a **decision** phase.

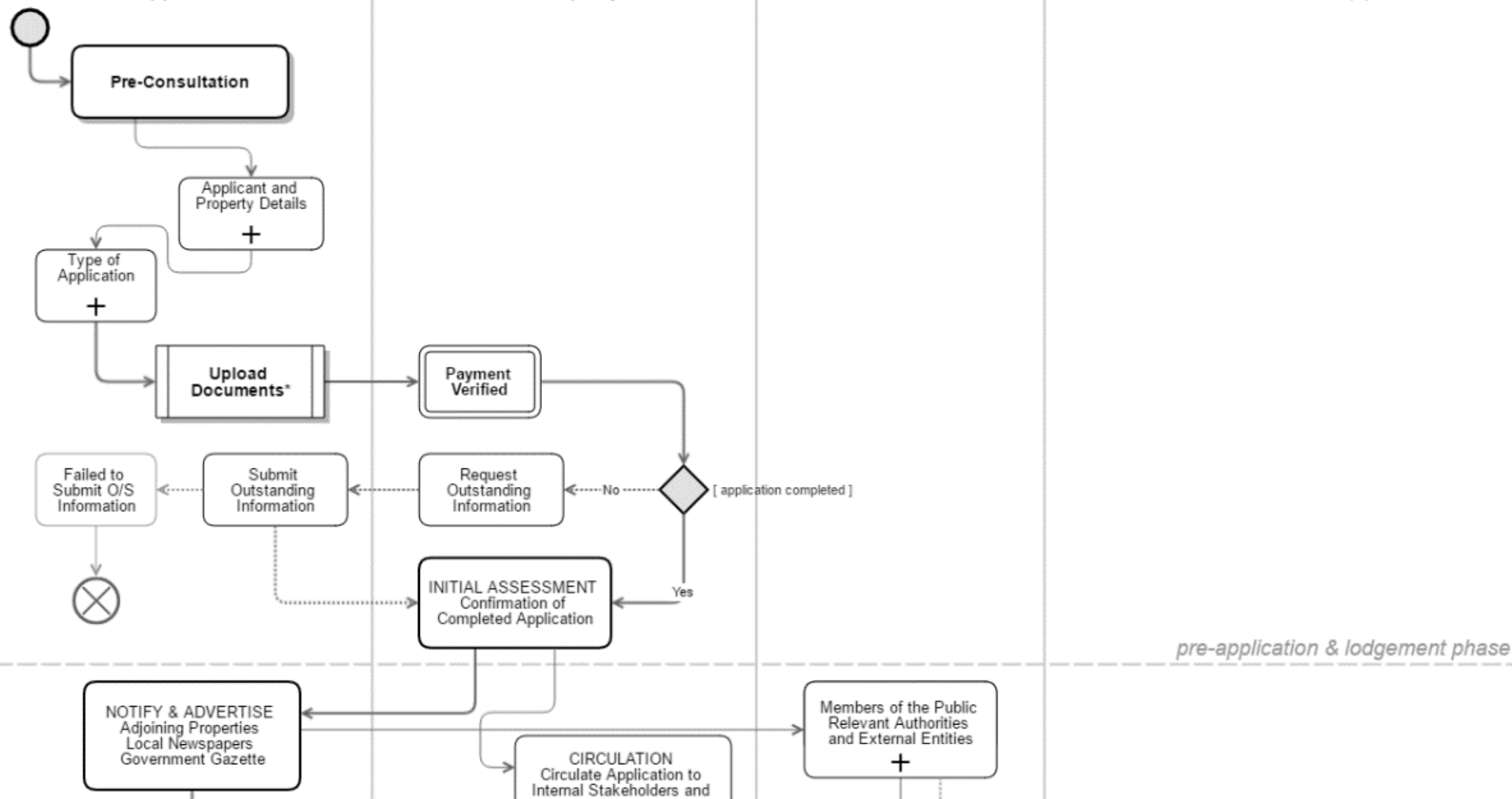
NSPDR E-Lodgement :: Legislated Process

Applicant

Municipality

Third Parties

Decision Maker(s)



pre-application & lodgement phase

120 days

administrative phase

Organs of State (Inter-Governmental Relations)

REFERRALS & COMMENTING

Internal Comments
(Municipal Departments)

External Comments
(Organs of State, Relevant Authorities)
(Members of the Public)

Opportunity for Applicant to
Respond to Comments and
Provide Further Information
and/or Specialist Reports

PREP. ASSESSMENT
Process Internal/External
Comments, as well as
Applicants Response(s)

Apply for Extension to
Commenting Period

[assessment completed]
No

Yes

Planning
Assessment
Report

Category 1

Category 2

Site Inspection /
Public Participation

Apply for
Intervener
Status

Municipal Planning
Tribunal (MPT)

[AO refers
application to
MPT]

Authorised
Official (AO)

Intervener
Represented at
Hearing
(if so granted)

Intervener
Status
Granted

Yes

Municipality
Represented
at Hearing

Objector

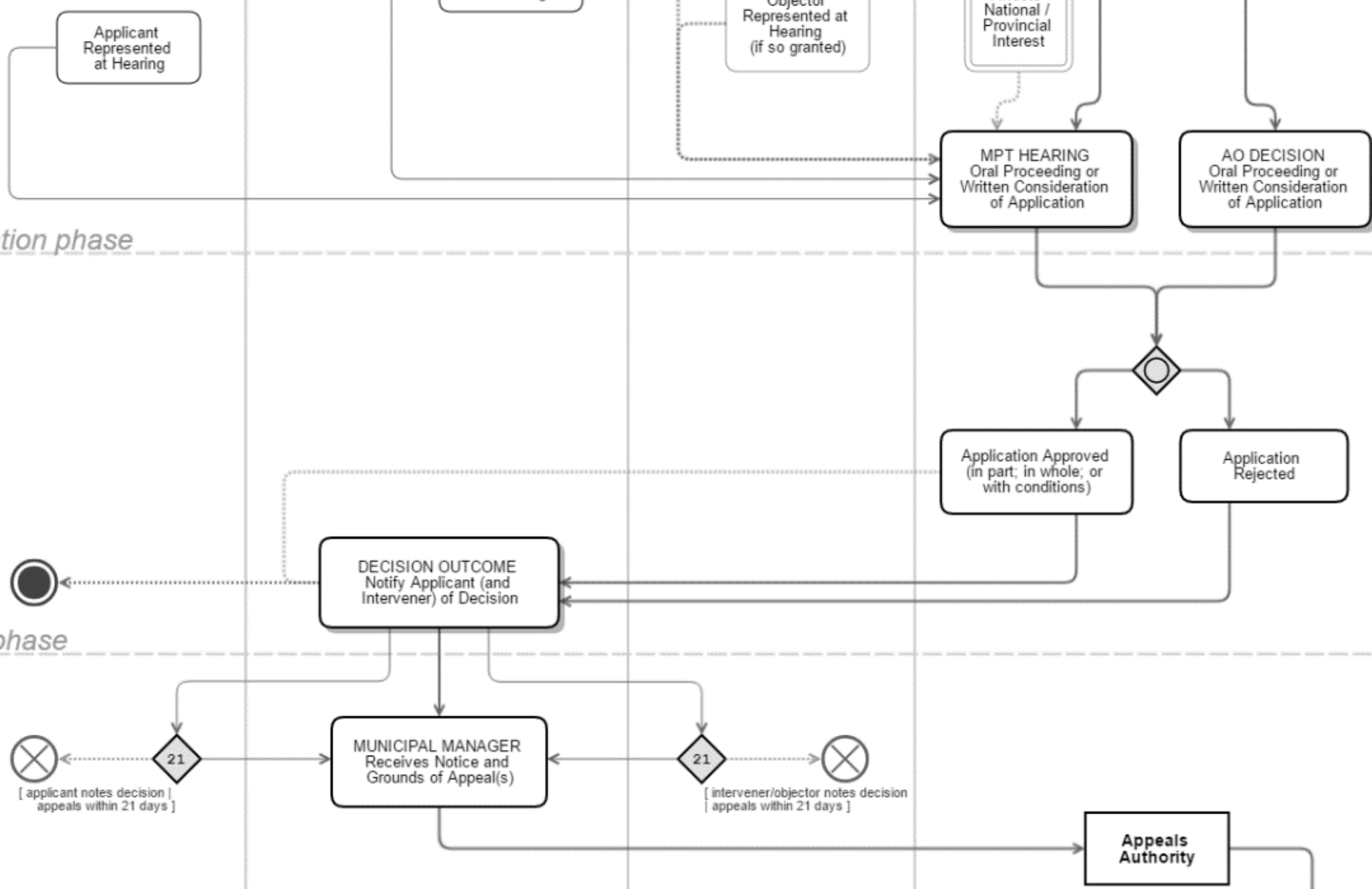
Affects

90/120 days

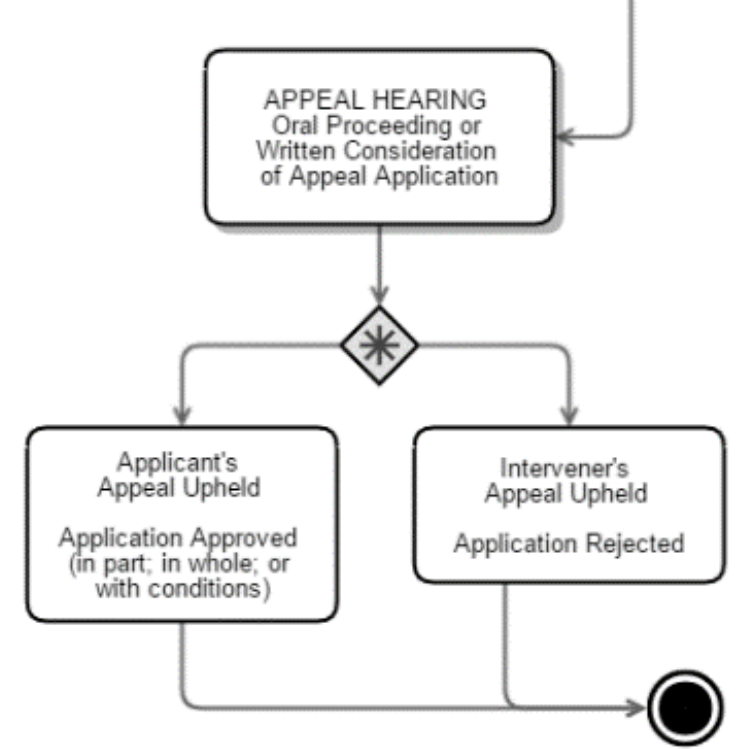
consideration phase

30 days

decision phase



appeals phase (where applicable)



NSPDR E-Lodgement pre-consultation / account setup

- This will be a public facing portal where applicants can register as users.
- This is an action taken by applicants ahead of E-Lodgement.
- Users will have access to municipal-specific documents.
- Municipal officials will manage their public profile (notify recipients of new applications, manage documents and so on.)

NSPDR E-Lodgement create application – applicant details

Create Application (Application ID: 1)

Type of Applicant: ☒ Individual ☐ Legal Entity ☐ Other

Description of application

Applicant Details

First Name(s)

Surname

ID Number

Company Registration Number

Company Name

Representative

Street Address

Postal Address

Email

Contact Details

Land Line

Home Tel.

Cell

Fax

Cancel

Save

Back

Next



NSPDR E-Lodgement property details

Property Details

Property 1

Property 2

Select Additional Property

Erf No

SG Code

Farm Name

Street Address

Allotment

Farm No

Ward Number

Zoning

Single Residential Zones

Owner 1

Owner 2

Owners Details

Title

[Select]

Initial

First Name(s)

Surname

ID Number

Company Registration Number

Company Name

Representative

Add Owner

Cancel

Save

Back

Next



NSPDR E-Lodgement view application status

View Application

Applicant Details

Attachments

Property Details

Type of Applicant: ☐ Individual ☒ Legal Entity ☐ Other

Applicant Details

Application status

Creating

First Name(s)

John

Surname

Soup

ID Number

6505081155082

Company Registration Number

3365 / 365 / 225 / 25

Company Name

AA Development

Representative

Proper Developer

Street Address

4 Crus

Postal Address

P.O. Box 123, Midrand, 0000

Email

johnsoup@aa-development.com

Work

011 555 8899

Home

012 356 9889

Cell

087 985 6565

Fax

012 356 9845

Cancel

Save



NSPDR E-Lodgement managing the application process

- This will be a public-facing portal.
- The steps followed here are completed by municipal officials.
- Each municipality will deal with applications lodged for their region.
- Applicants can view the status of their application based on the process.

NSPDR E-Lodgement upload documents (from the public viewer)



Upload Application Documents (Application ID: 1)

Attachments:

File Name	Date	Description	URL
Receipt of Payment	18/07/2017	Proof Payment	Link

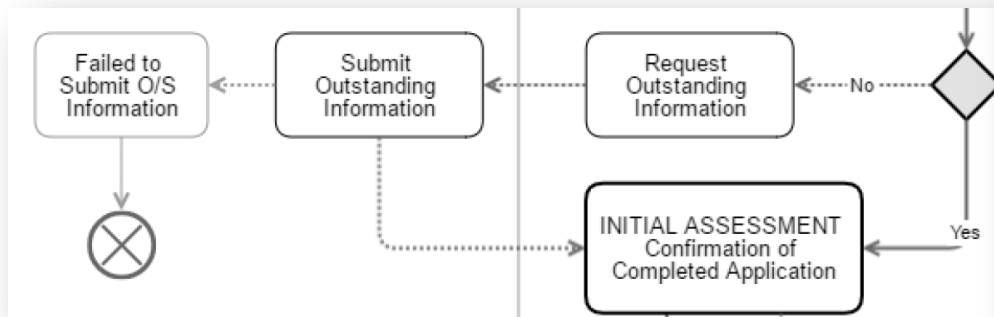
Required Documents

- ☒ Receipt of Payment
- ☐ Power of Attorney
- ☐ EIA executive
- ☐ Site Plan
- ☐ List of Adjoining Owners

Add Attachment Remove Attachment Remove All Attachments

Cancel Back Save Submit

NSPDR E-Lodgement request outstanding documentation



Request Outstanding Documentation

Select Group:

Contact Person:

Name	Surname	Designation	Organization	Telephone	Email	Street Address	Postal Address
No Items to Display							

☐ Send Email ☐ Send Letter

Email Sender:

Email Subject:

Email Template:

Email Text:

Select Attachment:

File Name	Date	Description	URL
No Items to Display			

Next step will be displayed here

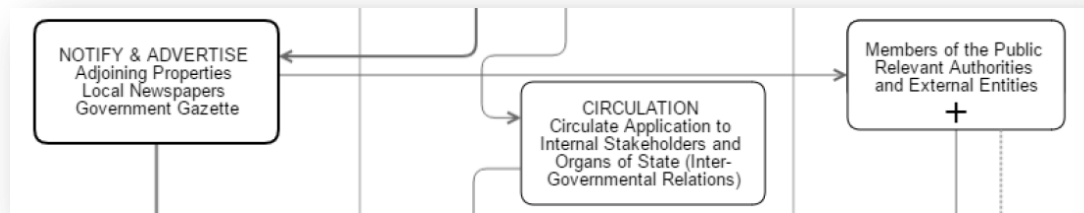
Next Step:



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NSPDR E-Lodgement instruct applicant to advertise



Instruct Applicant to Advertise

Select Group:

Contact Person:

Name	Surname	Designation	Organization	Telephone	Email	Street Address	Postal Address
No Items to Display							

☐ Send Email ☐ Send Letter

Email Sender:

Email Subject:

Email Template:

Email Text:

Select Attachment:

File Name	Date	Description	URL
No Items to Display			

Next step will be displayed here

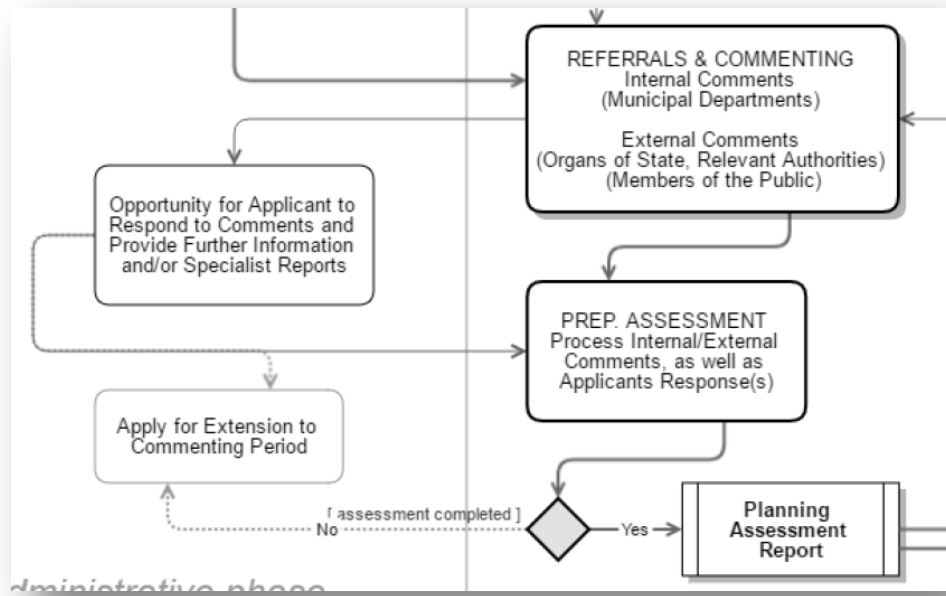
Next Step:



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NSPDR E-Lodgement referrals and commenting: receive internal comments



Referrals and commenting: Receive internal comments

Select Group:

Related Contacts:

Name: Surname:

Telephone: Email:

Street Address: Postal Address:

Organization: Designation:

Attachments:

File Name	Date	Description	URL
No Items to Display			

Next step will be displayed here

Next Step:



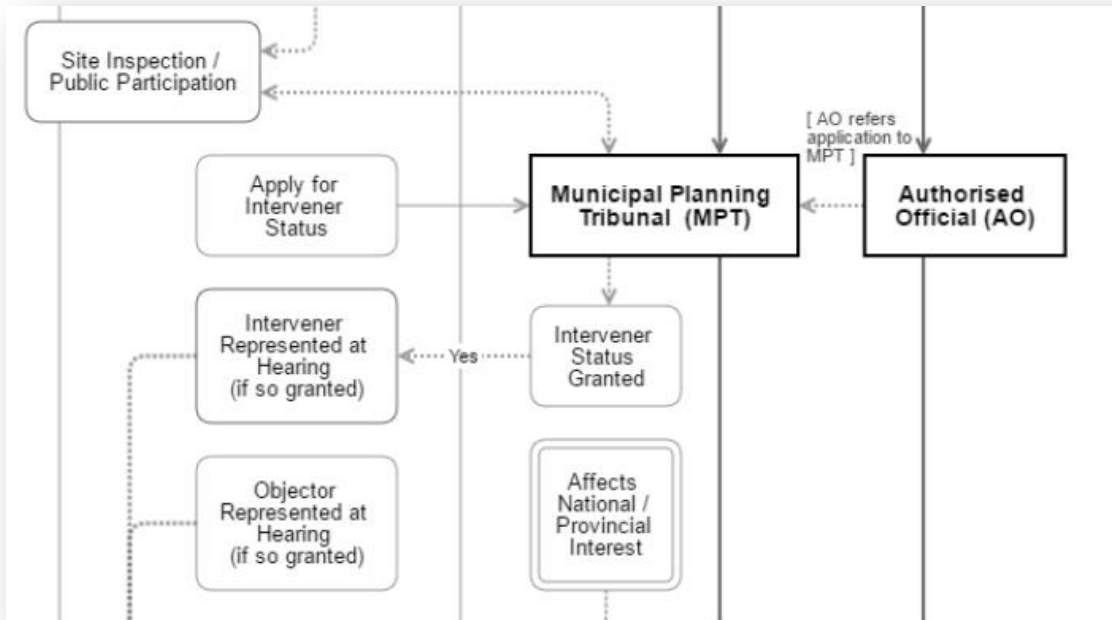
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has the intervener status been granted?



Has the Intervener Status been granted?

Please select your next step based on whether intervener status has been granted

Next Step:

Yes

No

Cancel

Continue



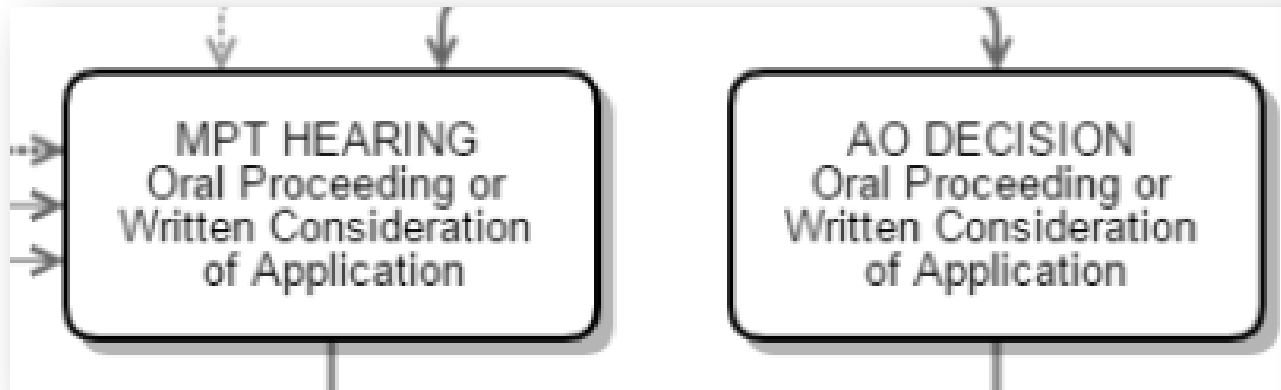
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MPT hearing or, oral proceedings or, written consideration of the application

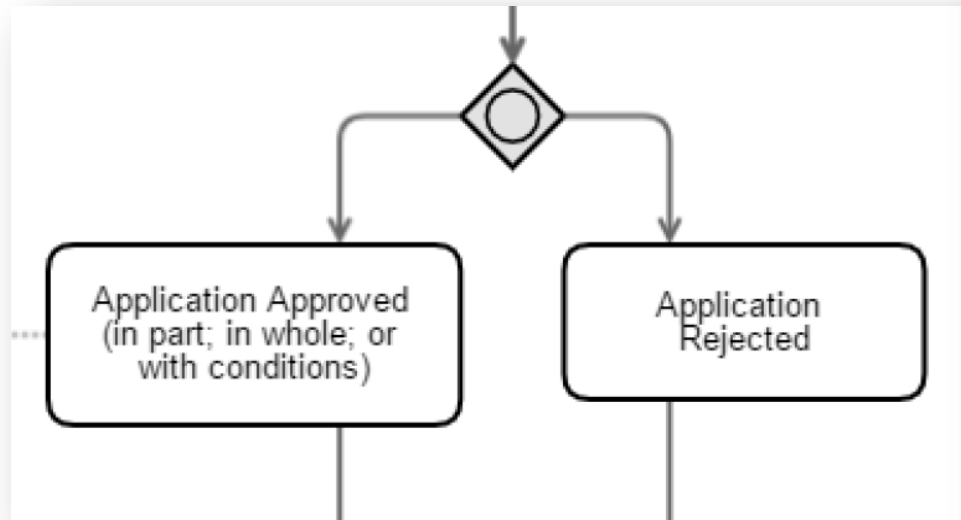


MPT Hearing, or, Oral Proceedings, or, Written Consideration of the application

The application is under consideration

Next Step:

NSPDR E-Lodgement decision outcome: application approved in part, in whole or with conditions



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Decision Outcome: Application approved in part, whole or, with condition

Select Group

Contact Person

Name	Surname	Designation	Organization	Telephone	Email	Street Address	Postal Address
No Items to Display							

☐ Send Email ☐ Send Letter

Email Sender

Email Subject

Email Template

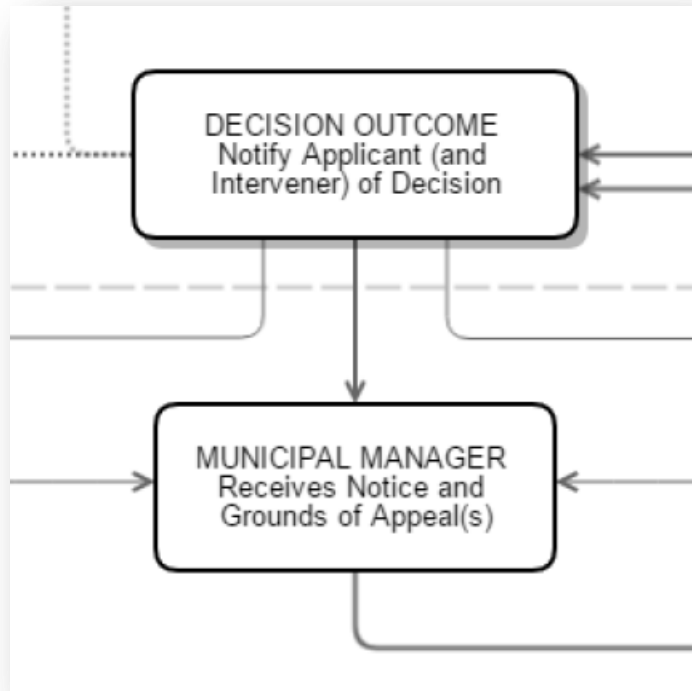
Email Text

Select Attachment

File Name	Date	Description	URL
No Items to Display			

Next Step:

NSPDR E-Lodgement decision outcome: decision of application?



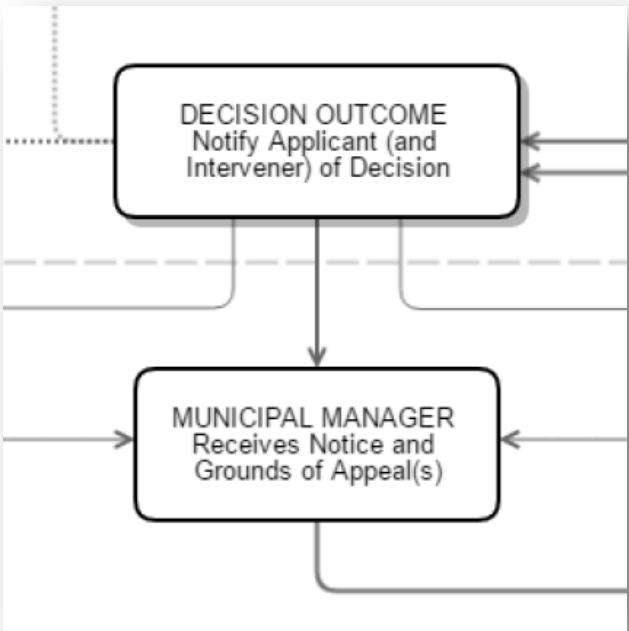
Decision of Application

Has a decision been made on the application

Next Step:

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appeal received: send to municipal manager



Please note that the Documents will be filled in from E-Lodgement screens; also note the screen name changing

Appeal Received: Send to Municipal Manager

Select Group	ContactPerson		
Related Contacts	ContactPerson	<button>Add Recipient</button>	
Name	Tshepo	Surname	Bambi
Telephone	0322232020	Email	tshepobambi@org.com
Street Address	34 Thapelo Avenue, Earth	Postal Address	P.O Box 123, 0000
Organization	Tshepo Org	Designation	Centurion

Attachments:

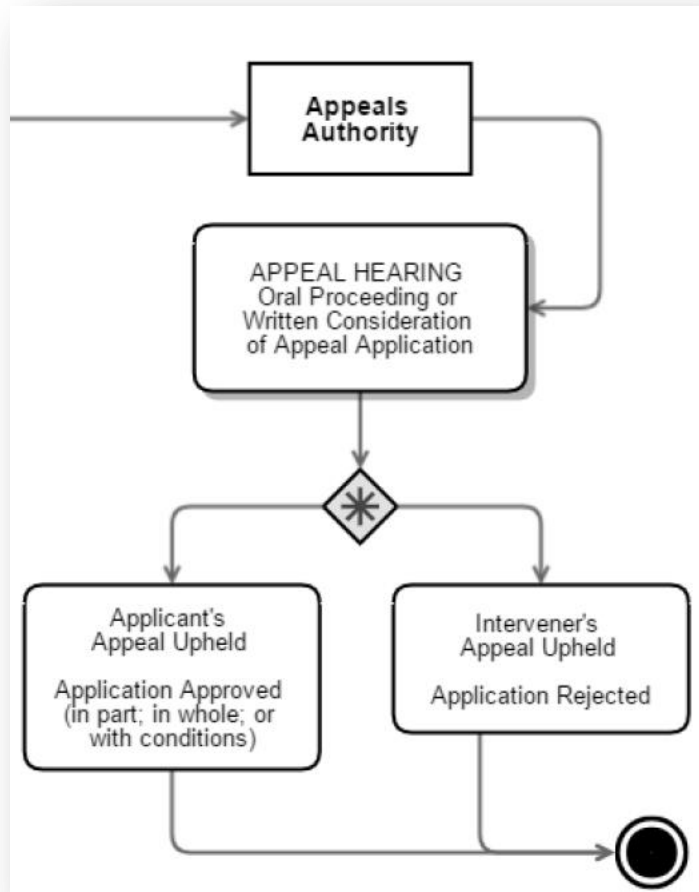
File Name	Date	Description	URL
No Items to Display			

Add Attachment Remove Attachment Remove All Attachments

Next Step:

Next step will be displayed here

NSPDR E-Lodgement final decision of application



Final Decision of Application

Please select the next step based on what the final decision on the application was

Next Step:

Application Approved

Application Rejected

Cancel

Continue



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NSPDR E-Lodgement in conclusion and wrapping up

- The NSPDR E-Lodgement is a **web-based application** that handles all land development applications electronically.
- It is built on a **workflow** that **follows** the **application process** of a land use or spatial development application **step-by-step**.
- The workflow **supports** Spatial Planning and Land Use Management Act (**SPLUMA**) compliancy.
- The **electronic management** of applications **enables** the move away from paper-based systems so that **progress** can be easily monitored.
- All **documentation** that has been attached to an application, is **stored in a central repository**.
- All modules leverage **Esri ArcGIS software** which is the **industry standard** at most





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**THANK
YOU!**

Jonathan Cleary
Project Manager
Esri / Agizo JV