POLICY 046/2016 RAADSBELEID

MUNICIPALITY DAWID KRUIPER MUNISIPALITEIT

SUBJECT/ONDERWERP: **IT-DISASTER RECOVERY PLAN**

REFERENCE/VERWYSING: **6.1.3.B**

RESOLUTION NR/BESLUIT NO: **17.14/11/2016 (CM)**   DATE/DATUM: **25 November 2016**

PURPOSE: This plan defines roles, responsibilities, processes and actions required to minimize the impact that a disaster would have on the operations of council being supported by IT resources.

PHILOSOPHY AND PRINCIPLE
Dawid Kruiper Municipality uses IT resources to assist in achieving objectives related to:

❑   Processes and activities of service delivery to the community.
❑   Processes required for the administration of the organization.

This plan serves as a basis for operations of the IT disaster recovery teams in the event that a disaster has been declared in terms of the IT Disaster Recovery Policy and thereby minimize the effect of such disaster on Council not achieving its objectives.

DEFINITIONS
Disaster   -   Unforeseen situation that arises and if not managed will result that Council cannot achieve its objectives because employees are unable to perform their regular roles and responsibilities through the non-availability or -functioning of IT-resources.

Disastrous events   -   Disasters happen during one or more of the following events that impact on IT-resources

        1.   Natural disaster
        (a)   Fire
        (b)   Floods
        (c)   Storms
        (d)   Epidemic

        2.   Man made disaster
        (a)   War
        (b)   Accidents
        (c)   Technology failure

IT Resources   -   Includes IT -system, -equipment, -technology and -personnel.

IT Disaster Recovery   -   Documented processes and procedures that must be followed to
Plan (IT-DRP)   minimize the risk associated with a disaster

IT Disaster Recovery Centre (IT-DRC)	-	A facility other than the normal place from which IT-resources, operations and processes are driven and managed to which these are diverted should a disaster cause the normal place to be inadequate, unavailable or inaccessible.
Business Continuity Plan	-	A plan being developed within each business unit that provides information on the impact a disaster will have on the unit and the maximum timeframes of recovery to minimize disruptions

DETAIL PLAN

1.   **Declaration of a disaster**

The Municipal Manager will declare an event a disaster when

1.1.   One or more IT resources are non- functional,
1.2.   The building or facility utilized for council processes is not available for an extended period of time.

The event will impact seriously against council achieving its objectives

Process

Objective	Actions / Considerations
1. Confirm the nature of the disruption	➢ What has happened? ➢ When did it occur? ➢ Who and how many business units are affected? ➢ What IT resources are affected? ➢ Which systems and/or services are affected? ➢ How potentially serious is it? ➢ What is the estimated duration of the problem? ➢ Who else has been informed (Media Officer, Comms, stakeholders
2. Decide whether the IT-DRP should be invoked. (The decision will be based upon the information provided)	➢ How long resources(Human and other) will be unavailable ➢ Whether the staff are required to support the Critical / Important Business Activities ➢ Whether the Area is currently responding to external incident ➢ Inform staff that the IT-DRP is being invoked or put staff on standby or invoke agreed manual systems to ensure that the service can continue to operate. ➢ If the decision is made not to invoke the plan, continue to monitor the situation until such time as normal service is resumed
3. Specific actions or considerations if the disruption is due to non-availability of Key Staff	➢ Change of job functions for some staff (to support the critical business activities) ➢ Suspend less time critical parts of the business ➢ Offer overtime ➢ What resources can be re-allocated ➢ Consider out sourcing some services if possible until ready to restore them. ➢ Arrangements/contracts to hire / borrow / purchase replacement resources from suppliers ➢ Protective measures for resources e.g. not having all resources at one site/shop/office

2.   Disaster recovery teams with roles and responsibilities

2.1.   **Senior Management team**

Objective:
To make high level decisions on the continuation of business processes and authorize the sourcing of resources during a disaster.

Roles and responsibilities
- Authorize the establishment of IT-DRC
- Identify locations other than the normal location of business to be equipped with resources that link to the IT-DRC from which mission critical operations can be continued in the event that business processes cannot be performed from the normal place of business.
- Declare an event a disaster in accordance with Council policy.
- Communicate with Council, community and other stakeholders during a disaster
- Ensure that the IT-DRP is carried out successfully
- Make decisions on the placement of personnel either at the IT-DRC, other business offices or working from home.
- Make decisions on the re-establishing of affected business units
- Authorize the sourcing of necessary resources

Team and contact information

Name	Position	Tel number	Email
D Ngxanga	Municipal Manager	0543387001	manager@kharahsi.gov.za
C Newman	Director Corporate Services	0543387003	corp@kharahais.gov.za
G Bovu	Director Community Services		
P Viviers	Director Planning and Development Services		
H Auret	Director Electro Mechanical Services		elec@kharahais.gov.za
J Kock	Director Civil Engineering Services		

2.2.   **IT Management Team**
Objective:
Provide assistance and give direction where necessary to IT-DRP teams and communicate to senior management.

Roles and responsibilities
- Establishment of a IT-DRC
- Engagement and servicing of SLA with key suppliers and vendors where applicable
- Ensure the IT-DRC is operational

- Request senior management team to declare an event a disaster
- Communicate IT related teams on decisions from Senior management team
- Implement the IT-DRP and support IT-DRP teams
- Provide Senior management with information for the placement of personnel either at the IT-DRC, other business offices or working from home.
- Recommend the sourcing of affected resources
- Activate SLA with key suppliers and vendors
- Report on activities to Senior management team

Team and contact information

Name	Position	Tel number	Email
J Marais	IT Manager	0543387059	it.manager@kharahais.gov.za
K Arends	Systems Administrator	0543387060	sysadmin@kharahais.gov.za

2.3. **Systems/ Software Support team**
Objective:
Provide baseline applications and systems at the IT-DRC and support business units during a disaster to minimize the impact of such on those units.

Roles and responsibilities
- Ensure systems and applications on secondary servers at the IT-DRC are updated and operational.
- Ensure processes are in place for switch over to the IT-DRC with minimal effort
- Ensure backups are made in accordance with backup policy.
- Assess the impact of the disaster on access to servers and applications
- For each affected business unit establish in accordance with the BCP:

  o The minimum application and software required for operations
  o The time frame for re-configuration and access to servers

- Upload backups where applicable
- Revert access to applications to the IT-DRC when applicable
- Re- establish systems and application at main server room.
- Revert access back to main server room and or business unit offices after facility is repaired and declared safe.

Team and contact information

Name	Position	Tel number	Email
K Arends	Systems Administrator	0543387060	sysadmin@kharahais.gov.za
E May	Assistant Administrator	0543387060	it.asstadmin@kharahais.gov.za

2.4. **Hardware Support Team**

Objective

Providing baseline servers and IT related equipment at the IT- DRC and support business units effected by a disaster to minimize the impact of such on the units.

Roles & responsibilities

- Configure and maintain server hardware at the IT-DRC
- Configure and Maintain backup PC's and printers at IT-DRC for use during disaster
- Assess damage to IT related equipment at affected business units when disaster strikes.
- For each affected business unit establish in accordance with the BCP:

    o The minimum IT related equipment required for operations
    o The time frame for re-configuration and placement hardware

- Where and when applicable the re-allocation of undamaged IT related equipment to temporary offices
- Where and when applicable placement of backup IT related equipment
- Request and sourcing the replacement of damaged IT related equipment
- Configuration, installation and placement of new or repaired IT related equipment
- Configuration, installation and placement of IT related equipment back to normal working environment once facilities are repaired and declared safe.

Team and contact information

Name	Position	Tel number	Email
J Marais	IT Manager	0543387059	it.manager@kharahais.gov.za
C Mouton	Asst technician	0543387111	snrtech@kharahais.gov.za

2.5. **Network Support Team**

Objective:

Providing baseline communication at the IT-DRC and support business units with communication during a disaster to minimize the effect of such on those units.

Roles & responsibilities

- Configure and maintain network to IT-DRC.
- Maintain redundancy on council's LAN and WAN for failover.
- Configure and Maintain backup network and communication equipment at IT-DRC for use during disaster
- Assess damage to LAN and WAN infrastructure and equipment.
- For each affected business unit establish in accordance with the BCP:

    o The minimum communication resources required
    o The time frame for re-establishing communication

- Switch to failover or activate temporary communication to either main servers or IT-DRC, where and when applicable

- Request and sourcing of damaged equipment.
- Configuration and installation of equipment new equipment
- Configuration and installation of equipment and re-establishing communication to normal working environment once facilities are repaired and declared safe.
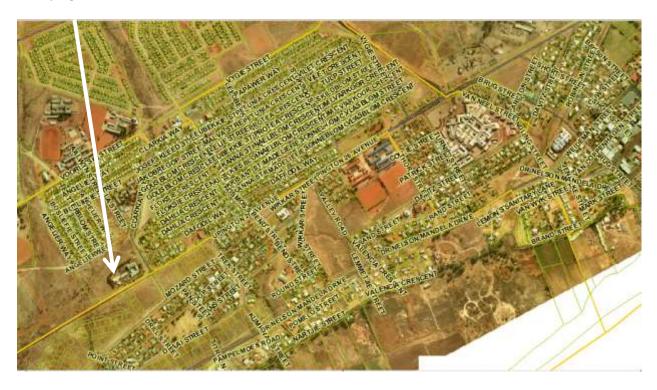
Team and contact information

Name	Position	Tel number	Email
J Marais	IT Manager	0543387059	it.manager@kharahais.gov.za
L Schreiner	Asst Network technician	0543387111	netteltech@kharahais.gov.za

3.   IT Disaster Recovery Centre (IT-DRC)

Location

The centre is located on erf 6073, corner of Upington 26 Street and Clarkia Way Progress Upington.

Equipment
Servers
BIQ, IMIS, Itron, Email, Firewall, NAS
Switches
Routers
Communication
Sytems

4. **Backup locations**
    ➢ KHM municipal offices
        o   Server room NAS server (192.168.0.112)
            ▪   BIQ
            ▪   IMIS
            ▪   Itron
            ▪   CashFlow
            ▪   Other

        o   Safe Finance (Tapes)
            ▪   BIQ

    ➢ IT-DRC
        o   Nas Server
            ▪   TBA
            ▪   TBA

        o   Tapes
            ▪   BIQ

5. **Key Suppliers, their roles and responsibilities**

Resource	Supplier	Contact information	Roles and Responsibilities
IBM Server	IBM SA		✓ Supply AS400 Server
BIQ system	Quill Associates	012 345 3796 082 880 0015 danie@biq.co.za	✓ Restore system ✓ Assistance to IT Staff
Prepaid electricity	Itron Metering	021 928 1700 083 446 0516	✓
IMIS	TGIS	054 331 3898 082 774 4894	✓
Firewall	URB	054 337 6555 083 707 7997	✓
Email	URB	054 337 6555 083 707 7997	✓

6. **Classification of affected resources**
    In order to give preference to IT resources most critical for business continuity, non-operational IT resources affected by the disaster are classified in accordance with the Business Continuity Plan as follows:

CLASSIFICATION / TIME TO REPAIR	COLOR CODE	DESCRIPTION
Critical / (12 hours)	Red	IT-related processes and activities that are mission critical in achieving the Councils objectives and cannot be delayed or stopped
Essential / (36 Hours)	Orange	IT-related processes and activities required to reach Councils objectives but can be delayed for a short period
Important / (Soonest)	Yellow	IT related processes and activities required to reach Councils objectives but can be delayed temporarily by using alternative methods
Value Adds / (Soonest)	Green	IT related processes and activities required to reach councils objectives but can be delayed for longer periods.

7.   Documentation and reporting
The process of the disaster will be documented in 3 phases.

1.   Inception phase
When an event is triggered that could be classified as a disaster a report of the devent is completed to the Senior management team that will assist in

➤   Declaring the event a disaster
➤   Initiating their roles and responsibilities.

2.   Recovery Phase
Once the IT-DRP is activated and all resources are placed to minimize the effects thereof a report/s are tabled to Senior Management Team for

➤   Information on processes completed,
➤   Further decision making on resources and
➤   Authorizing processes or acquisitions of resources as applicable

3.   Completion Phase
A final report is tabled to Senior Management Team when it is declared that effected facilities are safe to continue with normal business operations that

➤   IT resources are replaced and
➤   Normal operations are restored,

All reports are filed and a SWOT analysis is done that will assist in improving on processes and procedures of this plan.

REPEALS
Any previous policy or procedure prior to this policy is hereby recalled.