

## **ANNEX 4:**

### **List of software systems to be interfaced with EDMS**

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#### **(1) APPLICATION AND OFFICE AUTOMATION SOFTWARE**

Due to different use requirements, TANROADS staff makes use of different software. The application software currently in use within TANROADS is summarised below:

1. Mac computers uses Mac OS 10.x.x mavericks and IBM compatibles uses Windows XP, 7 , 8 and 10 operating systems with servers using Windows Server 2000, 2003, 2008, 2012 and 2016 Standard Editions;
2. Microsoft Office 2007, 2010, 2011, 2013 and 2016 are deployed on workstations and Macs;
3. The Sophos Protection software package is used as a security solution on all workstations and servers; and
4. There is Firewall on the network to protect the network against intruders.

## **(2) SERVER AND NETWORK CONFIGURATION (IP ADDRESS)**

1. Domain Name: tanroads.go.tz
2. TANROADS Network: 10.8.50.0/23 internal
3. GovNet MPLS: 154.118.228.9/29 and 172.16.14.41/30
4. RCIP WAN: 41.59.251.44/30 LAN: 41.59.254.128/28 VLAN : 212
5. DNS 41.59.61.2
6. Airtel: 41.75.208.25/29: DNS 41.75.208.65
7. ASA Firewall: 10.8.51.10
8. HQ Router: 10.8.51.1
9. HQ1 Router: 10.8.51.11
10. CME Router: 10.8.51.254
11. Active Directory: 10.8.51.2
12. Active Directory Backup: 10.8.51.15
13. Exchange Server: 10.8.51.9
14. Exchange server Public IP 41.59.254.130
15. TIDB Server: 10.8.51.6
16. CDP: 10.8.51.7
17. VMWare Server: 10.8.51.8, 10.8.50.171, 10.8.50.168
18. RMMS: Server: 10.8.51.5
19. RMMS Public IP 41.59.254.129:80 external users (RFB, MoWTC)
20. Sun Server: 10.8.51.13
21. File Server: 10.8.51.45
22. File Server Backup: 10.8.51.14
23. Antivirus Server: 10.8.51.231
24. Antivirus Server Backup: 10.8.51.45
25. E by Epicor Server 10.8.51.12
26. E by Epicor Backup Server: 10.8.50.12
27. E by Epicor ver. 10.1: 10.8.50.185
28. E by Epicor Backup ver. 10.1: 10.8.50.30
29. Active Directory ([www.tanroads.go.tz](http://www.tanroads.go.tz)): 10.8.51.4
30. BMMS Database Server: 10.8.51.28
31. BMMS Application Server: 10.8.51.29
32. E Horizon Server: 10.8.51.19
33. Subnet Mask: 255.255.254.0;
34. Gateway: 10.8.51.11;
35. DNS Primary: 10.8.51.2;
36. Secondary: 41.59.61.2

### **(3) DATABASES AND APPLICATIONS IN TANROADS**

#### **3(a) Databases**

1. Oracle 9i for BMMS
2. Oracle 10g for e Horizon
3. Microsoft SQL ver. 7.0 for e by Epicor
4. SUN System
5. Microsoft SQL 2005 for RMMS
6. Access for RMMS
7. TIDB – Traffic Information Database
8. Microsoft SQL Server 2014
9. Microsoft SQL Server 2016

#### **3(b) Applications**

1. Microsoft Words
2. Microsoft Excel
3. Microsoft PowerPoint
4. Microsoft Project
5. Microsoft Access
6. Microsoft Outlook
7. Adobe Reader
8. E by Epicor 7.2 sp 5
9. Epicor 10.1.600 (ERP10) - Integrated Financial Management System
10. IFMIS – Reporting systems for ERP10
11. FRX for Epicor
12. Crystal Report
13. Sun Financials
14. E Horizon
15. Autocard
16. Archcard
17. MIDAS
18. RMMS – Roads Maintenance Management System
19. HDM4 – Highway Development & Management Tool ver. 4
20. ROMDAS – Roads Measurements Data Acquisition System
21. GIS (ARCMAP) - Geographic Information System
22. BMMS – Bridge Maintenance Management System
23. EMS – Environmental Management System.
24. Weighbridge CCTV Management System.

### **(4) WEB APPLICATION**

1. GMS – Government Mails System
2. TIDB – Traffic Information Database
3. Lawson ver. 9
4. Citi Direct
5. World Bank Client Connection
6. PMIS – Procurement Management Information Syst

# (5) TANROADS NETWORK ARCHITECTURE

