

KENYA EDUCATION NETWORK (KENET)

Annual Core Data 2022 Questionnaire - Research Institutions

| ١. | a) Date:b) Name of Head of Institution | | | | | | |
|----------|---|--|--|--|--|--|--|
| 2. | a) E-mail Address b) Personal Mobile Number: | | | | | | |
| 3. | Name of Institution:Location | | | | | | |
| 1. | Institution Address | | | | | | |
| ſ | Telephone | | | | | | |
| | E-mail | | | | | | |
| F | Location of Headquarters (HQ) | | | | | | |
| F | Website address | | | | | | |
| 5. 5. | | | | | | | |
| 7. | Type of research institution? (Please tick \square)? | | | | | | |
| | 1 Independent 2 Government 3 University - affiliated 4 Other, | | | | | | |
| | Please specify | | | | | | |
| 3. | What are the main sources of funding for your institution? (Please tick all that apply \square)? | | | | | | |
| | 1 Foundations 2 Government 3 Research contracts 4 Consulting services | | | | | | |
| | 5 Sales of publications Others, please specify | | | | | | |
| ln | nployee /Users data | | | | | | |

E

9. Total Number of Staff (as of October 2022)

| Category | Male | Female | Total |
|--|------|--------|-------|
| Total Full-time researchers | | | |
| Total Visiting / guest researchers | | | |
| Total Graduate students | | | |
| Total ICT staff | | | |
| Total Administrative Staff | | | |
| Other employees e.g temporary or part-time employees | | | |

10. a) What is the tittle of the Head of ICT services in your institution? (e.g., CIO, ICT director, ICT manager)



b) Total number of ICT staff

| ICT Staff | Male | Female | Total |
|---|------|--------|-------|
| Network /System Admin Staff | | | |
| Application developers | | | |
| Webmasters | | | |
| Instructional designers | | | |
| End-user Support (include call center if any) | | | |
| Others | | | |

11. How many years of experience does your senior system/network administrator have?

|] | None | <1 year | 1-2 years | 3-4 years | 4-5 years | 5-7 years | >7 years |
|---|------|---------|-----------|-----------|-----------|-----------|----------|
| | | | Ĺ | Ĺ | | | |

Capacity Development for ICT Staff

12. What training opportunities are available to your junior ICT workforce?

| None | Local ICT | In-house | External | Local vendor |
|------|------------|------------|---------------|--------------|
| | colleges 🗌 | programs 🗌 | consultants 🗌 | training 🔲 |

13. What training opportunities are available to your senior ICT professionals?

| None | Local colleges /universities | Training abroad | External consultants |
|------|------------------------------|-----------------|----------------------|
|------|------------------------------|-----------------|----------------------|

- 14. a) . How many ICT professionals received systems and network administration training in the FY 2021/2022?
 - b) Do you have a budget for training ICT staff?

| 3.7 | 1 4 | N.T. | |
|-----|-----|------|---------|
| Yes | 1 | INO | <u></u> |

- c) If yes, what is the budget? Ksh.____
- 15. How often on average do the ICT staff upgrade their technical skills?

| Never | Every Year | Every 2 years | Every 3 years | Every 4-5 years | >5 years |
|-------|------------|---------------|---------------|-----------------|----------|
| | | | | | |

16. Which areas of training for ICT department are the most critical?

| Area of Training | Please tick □ |
|-------------------------|---------------|
| Systems Administration | 1 🔲 |
| Network Administration | 2 🔲 |
| Application development | 3 🔲 |
| Big Data | 4 🗌 |
| Cyber security | 5 🗌 |
| Wireless networks | 6 🗌 |
| Cloud Computing | 7 🔲 |
| Others, please specify | |

17. a) How many trainings have the network and systems administrators attended in the past year?



| b) | Has the network and systems administrators attended | d any of the KENET | trainings? |
|--------|---|-------------------------|--------------------------------------|
| | V., N. | | |
| c) | Yes No No If yes, please specify the training(s) they have attend | ed | |
| , | | | |
| 18. W | Which trainings would you like the ICT team to underta | ke at KENET? | |
| | Training | Pleas | e tick 🗆 |
| | Cyber Security | 1 | |
| | Systems Administration (Unix/Linux) | 2 | |
| | Network monitoring and management | 3 | |
| | Scalable Campus network design | Δ | |
| | Wireless networks | Ē | |
| | Others, please specify | | |
| Cana | acity Development for Staff | | |
| Capa | etty Development for Stan | | |
| 19. a) | Does the institution use online Webinars for worksho | ps and staff capacity | ouilding? |
| | Yes No No | | |
| | iesino | | |
| b |) If Yes, what particular Webinar platform does the in- | titution use (e.g., Big | BlueButton or Zoom) ? |
| | | | |
| c) | Is there free WiFi available in the institution for the | researchers and staff | for communication and research? |
| C) | Yes No | researchers and starr | tor communication and research. |
| | | | |
| d) | Are you aware that KENET has FREE online cour | ses in Cyber Security | Awareness Course for all staff and / |
| | students? | | |
| | Yes No No | | |
| | | | |
| e) |). If yes, how many of your staff have taken the course | s in the past one mon | h |
| | | | |
| 20. W | What ICT capacity development courses were offered t | staff in the FY 2021 | /2022? |
| | | | |
| 21 W | What leaving management system (IMS) does your | institution was for as | ntinuous staff dovalonment (Please |
| | What learning management system (LMS) does your ck:)? | institution use for co | ntinuous starr development (Please |
| и | CK): | | |
| | 1 Moodle 2 Blackboard 3 None | 4 Other | |
| | | _ | |
| | Please specify | _ | |
| 22 I | s access to Facebook / YouTube allowed during worki | na harrad | |
| 22. 18 | Yes No | ng nours: | |
| | | | |
| 23. W | What is the percentage of staff who need Internet access | s for their daily work | or research? |
| | 750/ 1000/ 500/ 750/ 250/ 500/ 50 | / 250/ | |
| | 75%-100% 50%-75% 25%-50% 59 | %-25% <5% | |
| | | | |

f) Do you offer training to PhD students or other researchers?

Yes No No



| g) Number of Students trained in | n the last one year? |
|----------------------------------|----------------------|
|----------------------------------|----------------------|

Institutional Expenditure

24. Expenditure (extracted from audited accounts and/or management accounts; provide copy of audited accounts for each FY)

| Expenditure | FY 2020/2021 | FY 2021/2022 |
|-------------------------------------|--------------|--------------|
| a. Total Institutional Budget | | |
| b. Total Recurrent Expenditure | | |
| c. Total Capital Expenditure | | |
| d. Annual ICT recurrent Expenditure | | |
| e. Annual ICT capital expenditure | | |
| f. Annual Internet Expenditure | | |
| g. Annual Telephony Expenditure | | |
| h. Total Annual ICT Staff salaries | | |

25. Budget for Digital Infrastructure and Skills Investments

| | FY 2021/2022 | FY 2022/2023 | Projection FY 2023/2024 |
|---|--------------|--------------|-------------------------|
| a). Institutional ICT Infrastructure | | | |
| b). Digital Skills Development for staff (e.g., Staff Development for Research with technology, cloud-based resources and infrastructure, open science) | | | |

26. Gross Salary range for ICT staff with 3 years of experience and average for department

| Salary Ranges | Lowest (KSh) | Highest (KSh) | Average (KSh) |
|-------------------------|--------------|---------------|---------------|
| System Administrators | | | |
| Network Administrators | | | |
| Application Developer | | | |
| Webmasters | | | |
| Instructional designers | | | |
| Head of ICT | | | |

Research ICT Services

27. a) Have you setup a Research Data Repository for your researchers?

Yes 1 No 2

- b). If yes, what platform are you using?
- 28. a). Do you subscribe to any research analytics tool (e.g.? Elsevier SciVal)

Yes 1 No 2

b) If yes, how often do you generate research productivity reports for your faculty and senior leadership?

Monthly $\square 1$ Quarterly $\square 2$ Annually $\square 3$ Never $\square 4$

Other (Specify):



- 29. How many research papers have been published by your institution in the last five years (2018-2022)
- 30. Do you train users on the use of electronic resources available for research?

Yes 1 No 2

31. a) Do your researchers use advanced research computing (e.g., HPC or Grid Infrastructures, research data storage etc.) and scientific applications or appliances available through Institutional ICT directorates or through KENET research ICT services?

| Yes No | Do not know |
|--------|-------------|
|--------|-------------|

b) If yes, please select the advanced research computing services you use from the list below

| Research Computing Services | Please tick |
|---|-------------|
| i. KENET Virtual LAB (Research Computing) | 1 🔲 |
| ii. HPC access at the Centre for High Performance Computing in South Africa | 2 🔲 |
| iii. Research data storage | 3 🔲 |
| iv. Software (R, MATLAB, Scilab, GNU Octave, Jupyter Notebook) | 4 🔲 |

Others, (Please specify)

Institutional ICT Infrastructure

32. Do you have a backup generator for all ICT equipment at your institution?

| Yes 1 | No 2 |
|-------|-------------|
|-------|-------------|

- 33. If yes, what is the capacity (in KVA) of the generator at your location?
- 34. Do you have solar power (or other renewable energy) at your campus?

| Yes 1 | No | 2 |
|-------|----|---|
|-------|----|---|

- 35. If yes, what is the capacity (in kW) of the renewable energy source at your location?
- 36. Do you have UPS equipment (distributed or centralized) for all networked ICT equipment and office computers PCs?

Yes 1 No 2

- 37. Do you have air-conditioning equipment for your server room?
- 38. What was the size of your institutional wireless LAN in terms of total number of wireless network access points in July 2022? _____
- 39. Do you have a VoIP gateway on your PBX (SIP/E1)?

Yes 1 No 2

40. Is your institution network segmented using VLANs for the different areas of the institution or is it one flat network?

41. Does your institution have a firewall installed at all your campuses?

Yes ☐ 1 No ☐2



| 42. Do you plan to upgrade, refresh, or renew your campus ICT infrastructure in the next 12 months? |
|---|
| Yes1 No2 |
| 43. If yes, how are you planning to finance the upgrade/refresh/renewal? |
| 1 CAPEX (as ICT CAPEX) |
| 2☐ OPEX (as ICT OPEX) |
| Others, please specify |
| |
| Information Systems (ERP and Learning Management Systems (LMS) |
| 44. Has your institution implemented an ERP/ Integrated business system or individual business applications? |
| 1 ERP/Integrated business system |
| 2☐ Individual business applications 3☐None |
| |
| Others, please specify |
| 45. If your institution implemented an ERP/Integrated business system, |
| a) What is the product name of the ERP/Integrated business system? |
| |
| |
| b) Which year was the ERP//Integrated business system acquired? |
| 46. Is the Implementation of an ERP/Integrated business system complete? |
| Yes No No |
| 47. To what extent is ERP/Information system implementation completed? 81%-100% 61%-80% 41%-60% >40% |
| 6170-10070 0170-0070 4170-0070 74070 |
| 48. Which ERP modules have been completed and are fully operational? |
| 1 Finance Management Module |
| 2 ☐ Student Admission, Registration & Student Management 3 ☐ Academics and Exam module |
| 4 Procurement Module |
| 5 Human Resources Management |
| 6 Others, please specify |
| 49. To what extent does your ERP/Information system meet institutional business requirements or delivers value for money? |
| 81%-100% 61%-80% 41%-60% >40% |
| 50. How frequently do you experience problems with your ERP/Information Systems? 1□Daily |
| 2 Once per week |
| 3 ☐ Once per month 4 ☐ Hardly 5 ☐ Others, please specify |
| 4 Hardly 5 Others, please specify |



| 51. | What is t issues? | he extent of your re | eliance on vendor/sup | oplier support o | n resolution of ERP/Infor | mation System(s) |
|---------------|---|--|--|--|--|---|
| | | 81%-100% | 61%-80% | 41%-60% | >40% | |
| 52. | Was your | r staff trained to dev Yes 1 | velop and maintain th | e integrated adn | ninistrative information sys | tems/ERP? |
| 53. | Is the intick□)? | nstitution data avai | lable from the comp | outer-based info | rmation system/ERP of t | he Institution (Please |
| 54. | What is t | Yes | No dor who implemented | d or support you | ar ERP/Computer-based s | ystem |
| | | | from ERP/MIS are in osted in the private, c | | titution? blic cloud? | |
| | , , | | rstems hosted in the c | | | |
| 57. | Where ar | e your information | systems servers (ERI | | ted? ution Server Room (tick) | Public/Community Cloud (tick) |
| | C | omputer-based info | rmation system /FR | | , , | • |
| | | | mination system / ER | Р | 1 | 2 |
| | L | MS | imadon system / Ext | P | 1 1 | 2 2 |
| 58. | Do you | MS Others | identity database (sh | | | 2 |
| | Do you systems l | MS others have a centralized ike ERP, LMS, Librate Yes | identity database (sh rary Catalogue? | ared user datab | 1 | 2 |
| Су | Do you systems l ber Sec | have a centralized like ERP, LMS, Library Curity and Bu | identity database (shrary Catalogue? No siness Continupproved ICT policies | ared user datab | 1 | ur users into Internal |
| Су | Do you systems l ber Sec Does you plan, bus | have a centralized ike ERP, LMS, Library and But ar institution have a liness continuity pla | identity database (sh rary Catalogue? No siness Continuation approved ICT policies n)? | ared user datab | ase) for authenticating you | ur users into Internal |
| Cy 59. | Do you systems l ber Sec Does you plan, bus | have a centralized ike ERP, LMS, Library and But ar institution have a liness continuity pla | identity database (shrary Catalogue? No siness Continupproved ICT policies n)? No No No No No No No No No No | ared user datab | ase) for authenticating you | ur users into Internal |
| Cy 59. | Do you systems l ber Sec Does you plan, bus a). Do you | have a centralized like ERP, LMS, Library and But ar institution have a liness continuity playes under the like | identity database (shrary Catalogue? No siness Continupproved ICT policies n)? No ecovery plan for the s | ared user datab | ase) for authenticating you | ur users into Internal |
| Cy 59. | Do you systems l ber Sec Does you plan, bus a). Do you | have a centralized ike ERP, LMS, Librate ERP, LMS, Librate Eurity and But ar institution have a siness continuity plate Yes ou have a disaster recovery offsite backup site FREE Offsite stor | identity database (shrary Catalogue? No | uity and procedure every? es can run on the databases ve or Dropbox) | ase) for authenticating you manuals (e.g., ICT security in your institution? | ur users into Internal |

ii) _



| ۵١ | If wee | where | 10 | VOU | DR | cite | hosted? |
|----|-----------|-------|----|------|--------------|------|---------|
| Q. | . II ves. | where | 18 | vour | D Γ | Site | nostear |

| | $\overline{}$ | D:00 | | C 1 | | |
|---|---------------|-----------|----------|--------|---------|-------|
| 1 | | Different | location | of the | institi | 1f10n |
| | | | | | | |

- 2 KENET data center
- 3 External Public Cloud
- 4 Other _____

e) What is the total monthly cost of operating your full-fledged disaster recovery sites (e.g., servers, communication costs, colocation etc) KES _____

61. Which of the following KENET cloud services are you aware of?

| Cloud Service | Please tick □ |
|------------------------------|---------------|
| Disaster recovery | 1 🔲 |
| Colocation | 2 🔲 |
| Virtual Private Server (VPS) | 3 🔲 |
| Domain hosting | 4 🔲 |
| Web Hosting | 5 🗌 |
| Research cloud | 6 🗌 |

Data Protection Section

62. Have you ever heard of the Data Protection Act (DPA), 2019? i.e. the law which provides for the protection of personal data/information.

| Yes 🗌 | No 🗌 |
|-------|------|
|-------|------|

63. Are you aware of the Data Protection Act, 2019 and how it will affect your institution

|--|

64. Is your institutions complaint with the Data Protection Act 2019?

| _ | | | |
|---|-----|-----|--|
| | Vac | NT. | |
| | res | INO | |

65. Has your institution registered as a Data Controller with the Office of the Data Protection Commissioner?

66. Are you aware of the right to privacy as guaranteed under the constitution of Kenya 2010?

67. Are you aware of the legal requirements that apply to you/your institution for processing sensitive and non-sensitive personal data?

| Yes | No 🗌 |
|-----|------|
|-----|------|

- 68. How would you like KENET to assist you in implementation of the Data Protection Act 2019?
 - 1 Develop data protection policy templates
 - 2 Conduct capacity building/awareness sessions on the Act
 - 3 Assist in implementing the Data Protection Act for your institution
 - 4☐ Others Please Specify



| 69. What are the sources of the personal data your institution collects? | | | |
|---|-----------|-----------------|------------|
| 4 T 1' '1 1 | | | |
| 1 ☐ Individuals | | | |
| 2 Government agencies | | | |
| 3 Private Companies | | | |
| 4 Others | | | |
| Specify | | | |
| 70. Are you aware of the data subject rights? | | | |
| Yes No No | | | |
| 71. Do you have the following policies in place | | | |
| Policy | Yes | No | |
| Data Protection Policy (A policy that governs how your institution processes | 1 🗍 | 2 | |
| personal information in accordance to the Data Protection Act 2019) | • 🗀 | | |
| Privacy Policy (A policy that informs persons whom you collect their personal | 1 🗍 | 2 | |
| data, how the data will be processed and stored.) | ' 🗀 | | |
| 72. Does your institution? (Please tick) | | Yes | No |
| | | | |
| Process biometric data? | | 1 📗 | 2 🔲 |
| Use video-audio surveillance and/or facial recognition systems | | 1 | 2 📗 |
| Handle sensitive data such as health related data | | 1 | 2 📗 |
| Use personal data for direct marketing | | 1 | 2 🗌 |
| Have any data protection training needs | | 1 | 2 📗 |
| Provide data protection training to employees | | 1 | 2 |
| Make available privacy and data protection policies and notices? | | 1 | 2 |
| Review privacy and data protection policies and notices to ensure they can understood? | be easily | 1 🔲 | 2 🗌 |
| 73. What threats if any has your institution encountered when complying with the D 1 The potential of data tampering by third parties/our staff 2 Bureaucracy in registration 3 The possibility of eavesdropping and Data Theft 4 Password-Related Threats 5 Unauthorized Access to data/information | DPA? [Ple | ase tick all tl | nat apply] |
| 6 Data subject related issues | | | |
| 7 None | | | |
| 6 Others | | | |
| | | | |
| Specify | | | |
| 74. How does your institution assess data related risks? [Please tick all that apply] | | | |
| 1 The potential of data tampering by third parties/our staff | | | |
| 2 Bureaucracy in registration | | | |
| 3 The possibility of eavesdropping and Data Theft | | | |
| 4 Password-Related Threats | | | |



| 75. And how d | oes it mitigate these ris | sks? [OPEN] | |
|----------------|--|---|---------|
| | 2 We have a data p 3 Data subjects mu 4 We deploy of date 5 Others | e data protection act protection policy ast sign against a consent form befo ta loss prevention software and firev | |
| Name of ICT Di | irector | Signature | Stamp |
| Name of CEO _ | | _ Signature | _ Stamp |

THANK YOU FOR YOUR TIME

END.