- There appears to be 2 Data Facilities located at Kew: Is an appliance proposed at both DC locations or should the site be treated as one with one Appliance?

  The site should be treated as one with one appliance.

- There is no reference to application data within your sizing sheet? Can you confirm application count and size? (e.g. Exchange, SQL, Oracle etc…) and whether they are physical or virtual?

  All data is specified within the sizing sheet. It is not possible to provide the granular detail requested.

- What Hyper-V Versions are in use?

  Microsoft Hyper-V 2012R2

- Reference the non-dedupable data in your spreadsheet – Can you confirm what this data is? Are you proposing to send it to data de duplication storage?

  It is JPEG images as specified on the spreadsheet. It will be backed up using the same method, but we expect de duplication and compression to be poor.

- How was the 240TB Appliance sized?

  After a period of market engagement.

- Have National Archive made a decision on which Public Cloud? This will potentially impact on the technology and associated cost for the long term retention/archive of data into the cloud?

  The potential solutions have been specified in the tender.

- Tape – Plans to keep existing tape until Cloud is defined? What Tape Libraries, generation of tape drive and how many drives? Requirements for legacy re stores? What backup software and version is currently deployed?

  The existing configuration will remain in situ for a short period of time to enable restores. We currently use Veritas NetBackup 7.6.

- The cloud we use is our own private, UK based, cloud – would this be considered?

  The solution must allow archiving to public cloud providers including Amazon Web Services and Microsoft Azure and all necessary licensing and hardware must be included.

- Would the local backup be hosted in your data centre and then replicated to our private cloud?

  The solution must allow archiving to public cloud providers including Amazon Web Services and Microsoft Azure and all necessary licensing and hardware must be included.

- Would it be possible to know the location of your data centres to make sure we can connect 8 x 10GbE optical ports as required.

  TNA will provide required connectivity between data centres, both are located on-site.

- The Live Hyper V VMS states 155 clients on 12 hosts. Can you confirm that this is 155 OS? If so are these work stations or servers as this will affect licensing prices?

  There is a mixture of workstation and server operating systems

Operating Systems	Count
Server	140
Workstation	15
Grand Total	155

- Would the backup of the VMS need to be granular?

  Yes

- Are you looking for dual systems with replication between Data Centre1 and Data Centre2 to provide access following loss of site?

  We are looking for a service for backup as specified. We are not looking to provide replication for availability.

- How far apart are the 2 DCs?

  Both DC's are located on-site, connected by 10Gbp/s fibre.

- The embedded spreadsheet has retention figures, however there is no mention about performance – What is the desired Recovery Time Objective for each of the systems

  We have recovery time objectives for each of our services allowing us to prioritise recovery.

  For some of our most critical services the recovery time objective is 24 hours. As we have specified all data as being held in a secondary data centre on-site we do not anticipate any issues recovering within these timescales.

	Days
EDRMS	1
Email	1
Intranet	1

- What is the desired backup window for each of the systems mention in the spreadsheet?

  Backups are to be performed outside of normal operational hours 10pm-6am

- What connectivity is available to Public Cloud to enable archiving?

  We have a 1GBp/s WAN link.

- Do you need to have backups encrypted (onsite/in cloud)?

  Data located on site may not be encrypted. Data in the Cloud must be encrypted.

- Do the Physical Servers have access to the shares on the File Storage or would we need to provision proxy/gateway systems to protect the File Storage?

  The solutions specified within the tender include appliances which can back-up our systems directly.

- What applications are in use on the physical servers and what level of granularity would be needed for data recovery (Server/Filesystem/File/DB/Record/etc)?

  We have a range of applications in use on physical servers including Exchange and SQL Server. We must be able to recover individual files from a physical server.

- Is the cost of Cloud infrastructure/services out of scope for this tender?

  The solution must allow archiving to public cloud providers including Amazon Web Services and Microsoft Azure and all necessary licensing and hardware must be included.

  Cloud storage is out of scope.

- Is all the equipment located in the same DC or spread across multiple locations?

  The proposed architecture is included in the tender.

- What do you currently use for backup and do you need to migrate existing data to the new solution?

  We currently use Veritas NetBackup 7.6.

  We anticipate this to be a completely new installation with no migration of data.

- Can TNA advise if they wish to retain their existing backup software (potentially EMC Networker, Symantec NetBackup, Asigra Cloud Backup, etc.) backup servers and client software and just replace the backend storage appliance and provide a path to backup storage in 'the cloud'. Or, do TNA wish to replace their complete backup / restore infrastructure, including backup software, backup appliances and storage?

  As specified 'The requirement is for a backup solution including a local backup appliance and all software required.'

  We currently use Veritas NetBackup 7.6. Current software licensing does not allow for functionality required in the proposed solution and therefore new software licenses will need to be included for Veritas Netbackup if this software is selected by the supplier.

We can accommodate virtual or physical servers required to host the backup software within our existing infrastructure.

A backup appliance must be included as part of the tender.

Cloud storage does not need to be included. However, the solution must allow archiving to public cloud providers including Amazon Web Services and Microsoft Azure and all necessary licensing and hardware must be included.

- If the answer is to replace the existing software, please advise what connectivity and bandwidth is available from the clients to the backup appliance(s).

10Gbp/s

- Can TNA also advise what SLA's they are working to. How long is the backup window and what is the restore SLA and is there a priority list for restores?

We have recovery time objectives for each of our services allowing us to prioritise recovery.

For some of our most critical services the recovery time objective is 24 hours. As we have specified all data as being held in a secondary data centre on-site we do not anticipate any issues recovering within these timescales.

	Days
EDRMS	1
Email	1
Intranet	1

- Can you let us know what software products you are currently using to back up the current estate. If possible please provide the vendor and version of the SW used?

Veritas NetBackup 7.6

- Are you planning to stick with the current back up SW products? If not do you have a preferred backup SW solution?

We have narrowed our SW and Hardware selection to EMC Data Domain / Networker, Veritas NetBackup and Asigra.

- Is it possible to arrange a meeting or call with the IT team to ensure we put forward a solution that is fully tailored to your requirements?

At the moment, we request that all questions are submitted in writing.