(4) Basic requirements of the procurement :

A The system consists of a large storage system, data transfer servers, working servers for users, computing servers, job management servers, gateway servers etc., which are placed at the Institute for Cosmic Ray Research (Kashiwa, Chiba), and a data transfer server with a medium-size storage system which is place at the KAGRA Observatory, the Institute for Cosmic Ray Research (Hida, Gifu).

B The large storage system must satisfy the following specifications.

a It has a logical capacity of 3.2 PiB or more as an actual available data storage area available to the users. (Note : PiB means 2 to the power of 50 bytes)

b This system consists of a high-speed storage system and a low-speed storage system. The high-speed storage system should have a speed of at least 1500 MiB／s for writing and 1500 MiB／s for reading in continuous file I／O from each node (file size : approximately 320 MB). The high-speed storage system should have at least 2.0 PiB or more as an actual available data storage area. The low-speed storage system should have 1.2 PiB or less as an actual available data storage area. It is also possible to configure the entire large storage system with only the high-speed file system.

c It can manage 0.5 billion files or more simultaneously. It has a quota function.

d It has redundancy capability in a RAID 6 equivalent configuration. Power supply, fan and RAID controller must be redundancy.

e The data area must be uniformly accessible from each node of the system.

C The servers which are installed at the Institute for Cosmic Ray Research (Kashiwa) must meet the following hardware requirements.

a The system must have at least two gateway servers that users use to login from the Internet.

b The system must have at least 4 working servers where users can work and submit computing jobs. All users must be able to connect to the large disk array and the computing servers from any of the working servers.

c The system must have at least two dedicated data sending／receiving servers. Each sending／receiving server must have at least three network interfaces. Each interface must be separated to restrict the access for secure operation.

d The compute server must have at least two Intel Xeon Gold 6338 or equivalent or higher Intel Xeon processors per node. The total number of cores must be at least 512 cores.

e A job management server must be provided.

f If it is necessary, the system can have disk management servers (including a metadata server-like one) to manage the data area of the disk array. In this case, the disk management servers should be redundant with two or more servers.

D The servers to be installed at the Institute for Cosmic Ray Research (Kashiwa) should provide the following software environment.

a A Linux or UNIX compliant operating system.

b Job management system.

c C, C＋＋, and Fortran 90 compilers.

E The server which is installed in the KAGRA Observatory of the Institute for Cosmic Ray Research (Hida) should meet the following requirements.

a The server should consist of one data sending／receiving server with a logical capacity of 200 TiB or more as an effectively usable data storage area. The server should have at least three network interfaces. Each interface must be separated to restrict the access for secure operation.

b Operating system should be a Linux or UNIX compliant operating system.

c C, C＋＋, and Fortran 90 compilers should be installed.

F The system should have the following functions.

a Continuous operation 24 hours a day, 365 days a year is possible.

b The system must have an uninterruptible power supply and shall automatically and safely terminate the system in the event of a power failure.

G Support for implementation, migration, maintenance, investigation of failures and operating conditions, changes in various settings, user support such as workshops and program consultations must be provided.

H A maintenance system should be in place to promptly respond to replacements in the event of hardware failure, and to upgrade the operating system, compilers, and libraries to fix the problems.

I The installation requirements such as installation area and floor load capacity should be fully considered.

(5) Time limit for the submission of the requested material : 17 : 00 22 December, 2023

(6) Contact point for the notice : MATSUI Shoji, Contract Team, Kashiwa General Administration Office, The University of Tokyo, 5―1―5 KashiwanoHa Kashiwa-shi Chiba 277―8581 Japan, TEL 04―7136―3486

資料提供招請に関する公表

次のとおり物品の導入を予定していますので、当該導入に関して資料等の提供を招請します。

令和５年11月21日

国立大学法人奈良先端科学技術大学院大学

学長　塩﨑　一裕

◎調達機関番号　415　◎所在地番号　29

○第１号

１　調達内容

(1)　品目分類番号　14

(2)　導入計画物品及び数量　全学情報環境システム　一式

(3)　調達方法　借入

(4)　導入予定時期　令和７年度４月以降

(5)　調達に必要とされる基本的な要求要件

A　本学が現在保有する情報処理環境に接続し、本学の学生・教職員が日々の活動において常時利用できるクライアント機能を有すること。

B　利用者全員に対して、ネットワーク経由で情報処理環境を提供する機能、および、モバイルコミュニケーション環境を提供する機能を有すること。

C　本学のネットワーク管理に使用され、必要な管理情報について収集・解析を行う機能を有すること。

D　授業において教材や資料を提示する機能を有すること。

２　資料及びコメントの提供方法　上記１(2)の物品に関する一般的な参考資料及び同(5)の要求要件等に関するコメント並びに提供可能なライブラリーに関する資料等の提供を招請する。

(1)　資料等の提供期限　令和５年12月22日17時15分（郵送の場合は必着のこと。）

(2)　提供先　〒630―0192 奈良県生駒市高山町8916―19　奈良先端科学技術大学院大学管理部会計課契約係　近藤雄一郎

電話0743―72―5041

メールアドレスkeiyakukakari@ad.naist.jp

３　説明書の交付　本公表に基づき応募する供給者に対して導入説明書を交付する。

(1)　交付期間　令和５年11月21日から令和５年12月22日まで。

(2)　交付場所　上記２(2)に同じ。郵送・メール添付可。

４　説明会の開催　本公表に基づく導入説明会を開催する。

(1)　開催日時　令和５年11月28日14時00分

(2)　開催場所　オンライン開催のため、参加希望者は事前連絡のこと。

５　その他　この導入計画の詳細は導入説明書による。なお、本公表内容は予定であり、変更することがあり得る。