g The compute accelerator must be able to share data among multiple accelerators in a node by a hardware mechanism. In addition, it is desirable to share data between general-purpose CPUs and accelerators through a hardware mechanism.

h Each compute node is desired to be equipped with NVMe-connected SSD(s) with a physical capacity of 6.0TByte or more.

i The network interface speed for the interconnect of each compute node must be 400Gbps or higher for general-purpose CPU node and 800Gbps or higher for compute acceleration nodes. On a compute accelerator node, the data on the main memory of the compute accelerator device must be directly transferred without any interaction with the general-purpose CPU.

j The group of general-purpose CPU nodes and the group of compute accelerator nodes must be interconnected by a network with a bandwidth of 4.0TB／sec or more.

k Each compute node can communicate with external resources with total bandwidth of 400Gbps or larger.

l Parallel File System (PFS) must be highly reliable with 25PByte or more capacity. PFS must achieve the access performance from the all Compute Nodes with bandwidth of 1.2TB／s or more.

B This system must satisfy the following software specifications :

a A Linux operating system must run.

b Fortran 2003, C11, and C++17 languages must be supported including automatic SIMD vectorization function and OpenMP API (Version 4.5 or higher). For the compute accelerators, Fortran 2003, C11, and C++17 languages must be supported with automatic parallelization function, OpenACC API (Version 2.7 or higher), and OpenMP API (Version 5.0 or higher).

c An MPI-3.1 library must be provided.

d Python language must be supported.

e Highly optimized math libraries and learning libraries must be provided.

f A batch job system must be provided. A job that simultaneously uses both the group of the general-purpose CPU nodes and the group of the compute accelerator nodes must be executed.

g A container system must be provided.

C Overall maximum power consumption except the cooling system must be 5.3 MVA or less. The power capacity, cooling facility, and system assembly are required to be carefully designed so that the system is kept cool even if CPU, memory, and disks are fully and continuously operated. The footprint of entire system except cooling system must be equal to or less than 700 square meters. The footprint of cooling system which is located outdoor must be equal to or less than 500 square meters.

(5) Time limit for the submission of the requested material : 17 : 00 12 December, 2022

(6) Contact point for the notice :
SHIMURA Masaki, Accounting Team, Information Strategy Group, Information Systems Department, The University of Tokyo, 6―2―3 KashiwanoHa Kashiwa-shi Chiba 277―0882 Japan, TEL 080―9452―3828

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４年11月１日

国立大学法人東京大学総長　藤井　輝夫

◎調達機関番号　415　◎所在地番号　13

○第18号

1　調達内容

(1)　品目分類番号　71、27

(2)　導入計画物品及び数量　学習管理システム一式

(3)　調達方法　購入等

(4)　導入予定時期　令和５年度３月以降

(5)　調達に必要とされる基本的な要求要件

A　本システムは、東京大学の正規の授業科目の他､本学構成員に対する各種の研修等、本学における教育・学修活動を支援できること。

B　本システムは、現行の学習管理システムと同等以上の機能、操作性及び処理能力を有すること。

C　本システムは、学務システムなど本学の教育・学修活動を支援する他の情報システムと連携して動作すること。

D　本システムは、IMS Globalが規定する標準規格LTI 1.3 and LTI Advantageに準拠し、同標準規格に準拠する外部のサービスやツールと連携して動作すること。

E　本システムは、パブリッククラウドサービス上に構築するか、学習管理システムの機能を提供するSaaSを用いて動作すること。

F　本システムの障害を未然に防止し、また障害発生時には即時に対応できるサポート体制が提供されること。

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４年12月５日17時00分（郵送の場合は必着のこと。）

(2)　提供先　〒277―0882　千葉県柏市柏の葉６－２－３　東京大学情報システム部情報戦略課会計チーム　志村　正規　電話080―9452―3828

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４年11月１日から令和４年12月５日まで。

(2)　交付場所　上記２(2)に同じ。

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４年11月８日15時00分

(2)　開催場所　Zoomによるオンライン説明会

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。

6　Summary

(1)　Classification of the services to be procured : 71, 27

(2)　Nature and quantity of the services to be required : Learning Management System 1 Set

(3)　Type of the procurement : require

(4)　Basic requirements of the procurement :

A　This system should support education and learning activities at the University of Tokyo, such as various types of training for members of the University, in addition to regular courses.

B　This system should have functions, operability, and processing capability equal to or higher than the current learning management system.

C　This system must work with other information systems that support the University's educational and learning activities, such as the Student Information System.

D　This system shall conform to the standards LTI 1.3 and LTI Advantage specified by IMS Global, and work in conjunction with external services and tools that conform to these standards.

E　The system must be built on top of a public cloud service or work with SaaS, which provides the functionality of a learning management system.

F　A support system shall be provided that can prevent failures of this system in advance and respond immediately in the event of failure.