g Each node must be equipped with one or more SSDs of 150 GByte or larger in total.
h The Subsystem must operate with peak load consuming 350 kW electric power or less.
i The Subsystem must have the software stack shown in Item D.

C Subsystem C
a The Subsystem C must be a highly-parallel supercomputer composed of multiple computer nodes. Hereafter, the computer node, or the node in short, is defined as a computer system composed of 48 or more CPU cores and a main memory shared by them.
b The theoretical peak performance on double-precision floating point of each node must be 2 TFLOPS or higher, and the total sum of them in all nodes of the Subsystem must be 32 TFLOPS or higher.
c The CPU core should have the 64-bit IA32 instruction set architecture.
d Each node must have the main memory of 3 TiByte or larger, and the total main memory capacity of the Subsystem must be 48 TiByte or larger.
e The aggregate peak bandwidth of the main memory access in each node must be 200 GByte／sec or higher.
f The theoretical peak injection bandwidth of each node to inter-node interconnect must be 20 GByte／sec or higher, and the bi-section bandwidth of the Subsystem-wide interconnect must be the product of the injection bandwidth and the number of nodes in the subsystem.
g Each node must be equipped with two or more SSDs of 2 TByte or larger in total and capable of RAID-1 configuration.
h The Subsystem must operate with peak load consuming 20 kW electric power or less.
i The Subsystem must have the software stack shown in Item D.

D Software stack
a Automatic parallelizing compilers for Fortran2003, C99, and C＋＋2003, or their successors, must be provided. These compilers must support OpenMP version 3.1 or later.
b Java SE7 platform or its successor must be provided.
c The communication library MPI version 3.1 or later must be provided.
d A Linux operating system of kernel 3.0 or later must be provided.
e A job scheduler with the following functionality must be provided.
① Each user group has its own job queue.
② Each user group has three attributes of usable resource amount namely minimum amount, standard amount (upper limit usable for a job) and maximum amount (upper limit usable for all jobs belonging to the user group in total).
③ A job must be judged executable only if the following conditions, where used amount for a group is the total amount of resources used by all executing jobs belonging to the group included that to be used by the job in question for the group to which the job belongs, reserved amount for a group is the margin from its used amount to its minimum amount, and available amount is the difference between the total resource amount of the subsystem and the sum of used amounts for all groups.
・If the available amount is less than the sum of reserved amounts for all groups, the job is judged executable only if the used amount of its group does not exceed the minimum amount.
・If the available amount is not less than the sum of reserved amounts for all groups, the job is judged executable only if the used amount of its group does not exceed the maximum amount of the group. If two or more jobs satisfy this condition but all of them do not at the same time, arbitration of jobs from different groups must be performed based on fair-share scheduling.
④ Jobs in a queue must be prioritized by a combined metric of the submission time and fair-share among users, and the weights of two factors must be able to be adjustable.
⑤ The following three policies to choose a job to run from the prioritized waiting jobs defined ④ above must be available so that one of them can be chosen for a job queue.
・FCFS policy with which the job of highest priority among all waiting jobs is chosen.
・Passable policy with which the job of highest priority among those which are runnable with respect to the resource they need is chosen.
・Backfill policy with which the job of highest priority among those which will not prevent another job, whose priority is highest among all jobs but whose required resource is not available, from starting on its estimated time of start.
⑥ The job scheduler must be capable of interactive run and interactive debug of jobs.
f A wide spectrum of application software and numerical/scientific libraries such as those included in the current supercomputer system must be provided.

E Storage Subsystem
a The total capacity of disk arrays must be 24 PByte or larger.
b The aggregate data transfer bandwidth between the Storage Subsystem and the Subsystems A, B and C must be 150 GByte/sec or higher.

F Other Requirements
a The supercomputer system must be connected to the campus LAN through Ethernet of 100 Gbps or higher.
b User management functions capable of accounting, collecting usage statistics, and authenticating users ' access in a unified manner must be provided.
c A power-cap function to keep the operational electric power not to exceed a certain limit under the capacity of electricity facility.

(5) Time limit for the submission of the requested material : 17 : 00　14 January, 2015
(6) Contact point for the notice : Yutaka Kosuge, Accounting Section, Information Management Department, Kyoto University, Yoshida-Hommachi Sakyo-ku Kyoto-shi 606―8501 Japan, TEL 075―753―7403

## 意見招請に関する公示

次のとおり調達物品の仕様書案の作成が完了したので、仕様書案に対する意見を招請します。

平成26年12月1日
国立国会図書館関西館総務課長　遊佐　啓之

◎調達機関番号　001　◎所在地番号　26

1　調達内容
(1) 品目分類番号　71、27
(2) 調達件名及び数量　ＮＤＬデジタルアーカイブシステム機器等の賃貸借（保守）・導入　１式

2　意見の提出方法
(1) 意見の提出期限　平成26年12月22日午後５時00分（郵送の場合は必着のこと。）
(2) 提出先　〒619―0287 京都府相楽郡精華町精華台８－１－３　国立国会図書館関西館総務課　阿部　　泰　電話0774―98―1240