E　The hardware of the product must be highly reliable and the continuous and stable operation of the system must be possible.

F　Total power requirements for the system including air-conditioning must be less than 3 MVA.

G　Type I subsystem

a　Type I subsystem must consist of multiple nodes. Theoretical peak performance of each node must not be less than 3.0 TFLOPS and the capacity of main memory on each node must not be less than 64 GiB. However, in the case of adding an accelerator such as the GPU into the subsystem, the performance or capacity of them must not be included in this total.

b　Total throughput of data transfer from one node to another within a server must not be less than 200 Gbps.

c　In addition to the main memory of DRAM chips, storage class memory (SCM) may be desirably incorporated.

d　The subsystem must be connected to the academic information network (SINET5), to the system network, and to the campus network (NICE5) with a speed equal to 10 Gbps or more.

e　The subsystem must be accessed from the HPCI system.

f　Run-time power management system must be provided. Moreover, appropriate job-scheduling by learning power consumption for each job may be desirably provided. Furthermore, limit value of power used by the subsystem may be desirably changed by 12 hours.

g　Fortran, C, and C++ compilers, Python, R, and Ruby interpreters, and Java development and runtime environment must be provided. Moreover, Fortran, C, and C++ compilers equipped with automatic parallelization and OpenMP 4.0 API must be also provided.

h　MPI-3.0 standard-compliant message passing library for Fortran, C, C++, and Python must be provided.

i　By virtualization of physical hardware like CPU and main memory, appropriate functionality of computing resources to users' request must be allocated.

H　Type II subsystem

a　Type II subsystem must consist of multiple nodes. Theoretical peak performance of each node must not be less than 33.5 TFLOPS and the capacity of main memory on each node must not be less than 384 GiB.

b　Total throughput of data transfer from one node to another within a server must not be less than 200 Gbps.

c　In addition to the main memory of DRAM chips, storage class memory (SCM) may be desirably incorporated.

d　The subsystem must be connected to the academic information network (SINET5), to the system network, and to the campus network (NICE5) with a speed equal to 10 Gbps or more.

e　The subsystem must be accessed from the HPCI system.

f　Run-time power management system must be provided. Moreover, appropriate job-scheduling by learning power consumption for each job may be desirably provided. Furthermore, limit value of power used by the subsystem may be desirably changed by 12 hours.

g　Fortran, C, and C++ compilers, Python, R, and Ruby interpreters, and Java development and runtime environment must be provided. Moreover, Fortran, C, and C++ compilers equipped with automatic parallelization and OpenMP 4.0 API must be also provided.

h　Parallel computing platform and application development on GPU must be provided.

i　MPI-3.0 standard-compliant message passing library for Fortran, C, C++, and Python must be provided.

j　By virtualization of physical hardware like CPU, main memory, GPU, GPU memory, appropriate functionality of computing resources to users' request must be allocated.

I　Type III subsystem

a　Type III subsystem must consist of one node or more. The total capacity of the main memory of the subsystem must not be less than 48 TiB.

b　The subsystem must be connected to the academic information network (SINET5), to the system network, and to the campus network (NICE5) with a speed equal to 10 Gbps or more.

c　Fortran, C, and C++ compilers, Python, R, and Ruby interpreters, and Java development and runtime environment must be provided. Moreover, Fortran, C, and C++ compilers equipped with automatic parallelization and OpenMP 4.0 API must be also provided.

d　MPI-3.0 standard-compliant message passing library for Fortran, C, C++, and Python must be provided.

e　By virtualization of physical hardware like CPU and main memory, appropriate functionality of computing resources to user's request must be allocated.

J　The storage subsystem must provide file services for Type I, II, and III subsystems, and total capacity for storage must not be less than 60 PB. In detail, the total capacity of the hard disk must not be less than 30 PB, and the total capacity of the cold storage consisting of the magnetic tape, etc. must not be less than 30 PB.

(5)　Time limit for the submission of the requested material : 17 : 00　27 April, 2018

(6)　Contact point for the notice : Kanda Naoko, Contract Division, Financial Affairs Department, Nagoya University, Furo-cho Chikusa-ku Nagoya-shi 464—8601 Japan, TEL 052—789—5527

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。

平成30年3月16日

国立大学法人三重大学長　駒田　美弘

◎調達機関番号　415　◎所在地番号　24

○第１号

１　調達内容

(1)　品目分類番号　22、31

(2)　導入計画物品及び数量　放射線部門診断システム　一式

(3)　調達方法　購入等

(4)　導入予定時期　平成30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　高性能ＰＥＴ装置またはＳＰＥＣＴ装置であること。

Ｂ　全身のＭＲＩ／ＭＲＡ撮像の他、高速画像処理が可能な、先進的アプリケーション有した高性能ＭＲＩ装置であること。

Ｃ　高性能マルチスライスＸ線ＣＴ装置であること。

Ｄ　フラットパネルディテクタ（ＦＰＤ）を搭載したＸ線ＴＶ透視装置であること。

Ｅ　フラットパネルディテクタ（ＦＰＤ）を搭載した乳房用Ｘ線装置であること。

Ｆ　円滑な検査遂行に必要な周辺機器およびソフトウエアを有すること。

Ｇ　既存の放射線情報システム（ピー・エス・ピー社製）、病院情報管理システム（日本アイ・ビー・エム社製）と接続し、画像情報、オーダ情報等の通信ができること。

Ｈ　システムを設置するための工事を含むこと。

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　平成30年５月１日17時00分（郵送の場合は必着のこと。）

(2)　提供先　〒514—8507 三重県津市栗真町屋町1577　三重大学財務部契約チーム　谷辻　正徳　電話059—231—5320