Note for Research Councils and Manchester Computing:

Please complete part B (at the end of the form):

Grant Reference Number:

Application for CSAR National Supercomputing Resources

Full guidance on completing this form can be found at:
http://www.csar.cfs.ac.uk/project_management/applying/guide_notes.shtml

Should you require further assistance with this form, then please contact the Helpdesk on 0161 275 5997

Part A – to be completed by the applicant

1) To which research council are you applying for funding: (please tick)

☐ EPSRC ☐ NERC ☐ BBSRC ☐ ESRC ☐ PPARC

2) Project Title:

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3) Your contact details:

Name: ----------

Institution: ----------

Email: ----------

Phone: ----------

4) Class of Project: (please tick)

☐ Class 1 ☐ Class 2 ☐ Class 3

Class 1 – A fully peer-reviewed research project. Applications for class 1 resources should be made using your Research Council's research grant application form along with this application form. **Your case for support should include details of your scientific project and justify your requirement for the chosen resource** (for example, requirement for large memory, large disk, mass storage, large CPU etc.) Work as part of a consortium is preferred. (For more information on consortia, please see: http://www.epsrc.ac.uk/hpc)

Class 2 - A small amount of time, limited to 100 service tokens, is available over 6 months for 'pump-priming' to prepare for a class 1 application. Applications for class 2 time should be made on this form together with a half to one page case for support and sent directly to Manchester Computing.

Class 3 – Class 3 allocations are limited to 500 service tokens and to 1 year. This type of allocation is focussed on providing support for users in new HPC application areas. Trading of resource types shall be restricted to include a mandatory element of training and applications support. Applications for class 3 time should be made on this form together with a half to one page case for support and sent directly to Manchester Computing.

5) Are you planning to carry out this computational work as part of a Consortium?

☐ **YES:** as part of the existing Consortium:
(please give name of Consortium and name of the Principal Investigator)

☐ **YES:** I will be forming a new Consortium:
(please give details)

☐ **NO:** this work is not suitable for a Consortium because:

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6) Project Resources

6.1 Please complete the form at http://www.csar.cfs.ac.uk/cgi-bin/res-calc/calculator.py and provide the printed version of the output along with this application form.

Please note that we will be unable to process your application form without a completed copy of the Resource Calculator form.

Re CSAR training: you may wish to allow for travelling expenses to cover this as well.

Re CSAR support: the recommendation from the Research Councils and CSAR is that one day of support should be allocated for every 5000 CPU hours requested. New users/codes are likely to require more than this guideline and experienced users with experienced codes will require less. Groups who have used this resource have experienced considerable benefits.

6.2 Proposed start date of CSAR use: ---

6.3 Duration: (months) ---

6.4 Expected number of collaborators who will need usernames: ---

7) The Software you intend to use

7.1 Please list the major codes you intend to use against the two categories below:

Own codes: .....

3rd Party applications: .....

7.2 How have you estimated the resources requested?

(e.g. previous CSAR usage – please give CSAR project number)

.....

.....

.....

7.3 Do you plan to carry out further code development: (please tick all that apply)

☐ **NO**

☐ **YES:** wholly within my own group

☐ **YES:** with CSAR support

☐ **YES:** with other support – please specify: .....

7.4 Do you intend to regularly use more than 256 CPUs or 256GB RAM in any one simulation? (NB: Large jobs are given priority on the CSAR supercomputers, and users are encouraged to aim towards running large simulations wherever this suits their research.)

☐ **NO:** I have no need for this type of work because:

.....

.....

.....

☐ **YES:** But, further development of the code(s) is necessary.

Please describe how you intend to develop the codes, indicating any known issues (such as scalability, data management, or visualization requirements):

.....

.....

.....

☐ **YES:** The code(s) are already suitable for this type of work.

Please say how this has been assessed and give details of the largest job currently run:

Largest job:

Machine Type	Number of CPUs	Memory	Disk	Time

7.5 Please estimate as best as you can the profiles of the production jobs you intend to run:

	Largest job	Smallest job
Number of Processors		
Memory (Gb)		
Disk (Gb)		
Time (Hrs)		
% of such jobs		

8) Dissemination

8.1 Will you provide a description of your work and a list of publications for publicity, including the CSAR website and contribute to the CSAR Focus newsletter and the Annual Report?

☐ **YES** ☐ **NO**

8.2 Please describe your dissemination strategy:

9) Other requirements

e.g. software in addition to that currently available, or for moving large amounts of data regularly across the network, or to export magnetic tapes

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10) CSAR is a flexible service and is able to expand and adapt to meet your requirements.

Please describe any specific requirements (over and above the current service limits) that could enhance your research:

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11) Your signature

11.1 I am applying for CSAR National HPC resources as described in this form and I am eligible for Research Council support. I understand that all users of these resources will be required to comply with the conditions of use defined by the Research Councils and the University of Manchester.

Signature: ---

Date: ---

11.2 Are you a permanent member of staff at your institution?

☐ **YES**

☐ **NO:** The form must be countersigned by your Head of Department or Director.

Countersignature: ---

Date: ---

Name: (print) ---

Position: ---

12) Signature of your local Computing Services Director

This application is an appropriate request for National HPC resources and a suitable means of network access to the Supercomputer Centre is available.

Signature: ----------

Date: ----------

Name: (print) ----------

Completion of this form will imply permission for user details to be stored in the Computer Centre's and Research Councils' databases and to be used for mailing, accounting, reporting and other administrative purposes.

Where to send your application:

Class 1

Class 1 applications are peer reviewed. This form should be sent to the appropriate Research Council along with the Research Council's proposal form.

Class 2 and 3

Class 2 or 3 applications should be sent to:

Dr Mike Pettipher
Manchester Computing
University of Manchester
Oxford Road
Manchester
M13 9PL

Part B - Technical assessment (Class 1 applications only)

A technical assessment of your proposal must be obtained from Manchester Computing **prior** to submission to a Research Council. For **new HPC users** the Principal Investigator should submit a draft case for support together with code and test data to **both** the HPCx and CSAR services. The services will run the test code and will report back to you, within two weeks, on the suitability of their service and will provide the technical assessment. You should then decide which service you wish to use and finalise your research proposal. **Experienced HPC users**, confident of the service they require, should submit their research proposal together with the appropriate HPC application form(s) to the service(s) they wish to use, so that a technical assessment can be undertaken. However, they should fully justify their choice of service in the case for support.

After the technical assessments have been obtained, the proposal, together with the research grant application form and the appropriate HPC application form (s) should be sent to the Research Council for processing

Principal Investigator: to be completed ***before*** sending to Manchester Computing

PI Name: .....

Department/Institution: .....

Project Title: .....

New HPC user? Yes/No .....

Technical assessment: to be completed by Manchester Computing

Date Received:

The computing resources requested at ……..can/cannot be provided.

Comments:

Signed:…….Date:…….Position:……