University of Edinburgh
Job Description: Deputy Director for Research and Operations

1. Job Details
Job title: Deputy Director for Research and Operations
School/Support Department: School of Physics
Unit (if applicable): NeSC & eSI
Line manager: Directors of NeSC & eSI

2. Job Purpose
The job holder is responsible for leading and managing the Research, E-Infrastructure and Development (RED) division in order to develop Edinburgh’s e-Science research profile and is also responsible for the coordination and day-to-day management of NeSC, eSI and their research projects in order that they combine synergistically in an environment that delivers e-Science research and services. Under the leadership of the Directors of NeSC and eSI and in conjunction with the other Deputy Directors the job holder must develop e-Science in Edinburgh and play a leading and coordinating role for UK e-Science.

3. Main Responsibilities

1. Lead and manage the RED division including plan for its development and organise its work so that it delivers high-quality e-Science results and services.  
   Approx. % of time: 15%

2. Plan and manage the operations of NeSC and its associated projects so that the working environment is conducive to effective e-Science, so that staff have acceptable working conditions and so that best use is made of resources (staff, finances, equipment and plant) to deliver NeSC’s goals and commitments. This includes chairing the Centre’s Steering Group. 
   Approx. % of time: 25%

3. Lead e-Science projects to directly develop e-Science methods and applications and to communicate e-Science. 
   Approx. % of time: 30%

4. Represent NeSC in meetings within the University, Nationally & Internationally in order to develop e-Science, collaborative research, standards, technology transfer and the reputation of Edinburgh and UK e-Science. 
   Approx. % of time: 20%

5. Undertake personal research and lead PhD students in their research in order to advance e-Science; and publish the results of this work. 
   Approx. % of time: 10%

4. Planning and Organising
Develop the business plan and strategy of the RED division so that it advances e-Science, builds its research reputation and has a cohort of effective staff. Ensure the financial integrity of NeSC. Plan and implement procedures that address coordination and resource sharing issues that span all three divisions of NeSC. Plan and organise the NeSC share of major collaborative research projects. Plan the UK presence at international e-Science events and organise the development of those plans.

5. Problem Solving
Identify the crucial issues in e-Science research projects and lead staff to find timely and good quality solutions which are then well reported. Consider the conflicting proposals for ITC strategy in NeSC and steer the ITC staff towards a solution that is overall fair, safe and consistent with NeSC’s goals and the requirements of the three divisions. Develop agreed solutions for the ineluctably conflicting requirements for space and facilities within NeSC. Assess the requirements and technical options for international standards and lead a multinational standards team towards a useful set of standards, communicating the basis for this choice of standard effectively.
6. Decision Making

In conjunction with the Directors, the job holder will identify the strategic targets for NeSC research. The job holder will decide, often as an immediate response in negotiations, when it is appropriate for NeSC to take on commitments or roles in UK e-Science research. The job holder will identify the staff required for projects and establish recruiting programmes for staff required for a project; selecting technically able staff who are also able to work well in multi-site and multi-disciplinary teams, and allocate responsibilities and work to those in the RED division.

The job holder will identify the need for procedures, decisions and discussions necessary to develop smoothly integrated and efficient work among all the varied aspect of NeSC and its associated projects. The job holder will conduct discussions and plan meetings in order to resolve issues and will communicate the operational decisions to all relevant staff. This will include ensuring that line management functions are being met and that due care is given to the health, safety and working conditions of staff. The job holder will identify the issues that require further discussion in the steering groups, and will organise its agenda and chair its meetings so that these are resolved thoughtfully as well as in a timely manner.

The job holder will identify the requirements for communications and meetings as outreach to other e-Scientists, industry and those who have not yet engaged with e-Science. The job holder will schedule events and decide their content and contributors (senior staff from academia and industry) and then lead the programme of work to implement, deliver and follow up those events.

7. Key Contacts/Relationships

These are:

- The other researchers with whom NeSC works, including senior staff at other UK universities, in companies, in international organisations and in UoE, with whom mutual respect of capabilities and dependencies on mutual delivery must be developed.
- Staff in research organisations and funding agencies in the UK and elsewhere Developing with them trust and professional working relationships.
- Colleagues in international organisations with whom the job holder must develop mutual respect for technical judgement and commitments.
- Colleagues in both research and administration roles within the UoE with whom formal working relationships must be maintained.
- Staff in NeSC with whom effective communications and many negotiations are needed.

8. Knowledge, Skills and Experience Needed for the Job

The job holder must have:

- A degree in computer science or cognate discipline.
- A PhD in Computing Science and cognate discipline and preferably additional research or industrial experience developing greater breadth.
- In depth knowledge of distributed computing theory and practice.
- In depth experience of high-quality software engineering.
- In depth experience of project and staff management.
- Broad knowledge of the ITC industry.
- Excellent communication and organisation skills.
- Good administrative skills.
- Well-honed time management and strong self-motivation.
- Confidence and calm thoughtfulness that enables well-judged decisions under pressure.
- Good interpersonal skills with all levels of staff in all organisations, across cultures and disciplines.
9. Dimensions
The current turnover of NeSC and its associated budgets is £1.5 million per year. There are 37 staff at present for which the Deputy Director of Operations has to consider. This is set to expand by approximately 10 in the next 4 months. The RED division currently consists of 12 research engineers. The job holder is currently responsible for 5 projects and two PhD students. The job holder is required to maintain working relationships with approximately 200 senior practitioners worldwide.

10. Job Context and any other relevant information
The work of NeSC and eSI is on a National and International stage. Expectations, demands and vulnerability to public criticism of failures are much higher than in a normal academic context.