

The ExCALIBUR Hardware and Enabling Software (H&ES) Programme:

*Project name and lead institution*

*Principal investigator’s name and affiliation*

Contents

*If your proposal is more than five pages in length, we suggest you include an auto generated table of contents here for convenience.*

# Proposal

*The underlying proposal that you are seeking ExCALIBUR support for, e.g. a testbed system to trial a promising new technology or approach. Some evidence is welcome here that you are aware of other potentially similar systems and projects, which you should be able to differentiate your project from. If your project would build on existing resources or facilities, e.g. extending or repurposing existing hardware then describe these here. We encourage you to find potential users of a testbed before seeking support for it, in particular from the ExCALIBUR and wider UKRI research community, and these people and/or projects should also be listed here.*

# Justification of resources

*Here you should indicate any capital spend you wish to make on hardware and software as part of the project, and any research operations (ResOps) or Research Software Engineering (RSE) costs that you wish to charge to the project. We encourage projects to build on existing teams, e.g. by buying out staff time to act as contractors, rather than seeking to recruit staff specifically for this work. You are encouraged to provide two or three options for the scale of your project, as this will allow the ExCALIBUR H&ES resource allocation panel to make the most efficient use of the available funds.*

|  |  |  |
| --- | --- | --- |
| **Line item** | **Option 1** | **Option 2** |
|  |  |  |
|  |  |  |
| **Total** |  |  |

Table . A summary of the resources requested for this proposal. The costs for the testbed hardware are based on recent quotes and assumed accurate.

*Option 1 description and costs*

*Option 2 description and costs*

*Where you are asking for support for staff acting as contractors to the project, such as RSE effort, please describe the work that the funds requested will support – e.g. porting and optimisation of codes or characterisation of novel hardware performance. You should state how much effort the requested funds will support, and over what timescale. Make it clear whether you are able to resource the work from within existing staff effort, or will have to recruit to a new position. If you already have staff who are working on the project, do they have specific and relevant skills? Most importantly, what digital assets will the project create?*

# Work Packages

*You should break down the work involved in delivering the project into a series of work packages, indicating when these will take place and who will do the work. You should also indicate which financial year(s) the work will occur in – please note that these are tax years rather than academic years, so for example “21-22” would refer to the period from April 2021 to March 2022.*

The Work Packages needed to deliver the project are described in the Table below.

Table 2: Description of the Work Packages

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Work Package number | Cost | Work package description | Contractor Role involved | FY Year of Award |
| WP1 |  |  |  |  |
| WP2 |  |  |  |  |
| WP3 |  |  |  |  |
| WP4 |  |  |  |  |
| WP5 |  |  |  |  |

# Milestones and outputs

*Please list the project’s key milestones (e.g. purchase order placed, mechanical and electrical work completed and availability of testbed system for researchers to use) and deliverables such as physical and digital assets. Projects will be required to report back to the ExCALIBUR H&ES Technical Working Group, so please build this into your planning.*

The Milestones and outputs are given in the Table below

Table 3: The Milestones and Outputs of the Project

|  |  |  |  |
| --- | --- | --- | --- |
| Work Package Number | Month of Delivery | Milestone | Output |
| WP1 |  |  |  |
| WP2 |  |  |  |
| WP3 |  |  |  |
| WP4 |  |  |  |
| WP5 |  |  |  |

# Risk register

*Please describe key risks that you can envisage you may encounter, and how you would propose to deal with them, e.g. handling slippage of equipment delivery or recruitment/retention difficulties.*

The Table below forms the formal project risk register.

Table 4: Risk register

|  |  |  |
| --- | --- | --- |
| Risk number | Risk description | Mitigating actions |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |

# Gantt Chart

*Please provide a Gantt chart illustrating graphically when you expect each work package to take place against the overall project timeline.*

Table 5: Gantt Chart for the Project

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Work Package number** | **Workpackage description** | **Contractor** | **Time line of Project (Month)** | | | | | | | | | | | |
|  |  |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| WP1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| WP2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| WP3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| WP4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| WP5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |