

ESS Instrument Project Roles and responsibilities

Introduction

This document describes the main roles and responsibilities as part of the UK Instrument project. The descriptions below are not exhaustive but cover the main points required by the team member and should serve as a guide. Where as part of your day to day role you perform other activities and have other responsibilities to those listed below you should assume that these are also required for the instrument project a key example of this would be safety everybody with in the project is responsible for understanding the safety standards that should be adhered to in the delivery and operation of the instruments and ensuring that they work to these standards and practices.

The UK ESS Project Board (Chaired by Andrew Taylor)

Reports to Brian Bowsher

Works alongside ESS ERIC Council and The STFC EB

Overall Governance of the UK ESS project

This will include:

- Monitor the overall progress of the UK-ESS Project;
- Advise the Project Sponsor and Project Manager concerning UK contributions to the project;
- Approve the UK contributions to a balanced budget for the construction of ESS, including the agreement of cash and in-kind contributions;
- Monitor compliance and progress of UK contributions to the construction phase;
- Agree work package proposals (proposed by the Project Office), prior to contract finalisation with ESS;
- Approve the cost plan and monitor UK expenditure;
- Monitor compliance with the STFC Procurement Strategy;
- Ensure effective communication throughout the project, including the active dissemination of progress reports and other outcomes to STFC and ESS management;
- Ensure the engagement of STFC staff and other stakeholders (including BIS, other Research Councils, Science Board and the wider research community, UK industry);
- Receive and monitor reports from individual Working Package oversight committees (to ensure progress and technical development);
- Review the project risk register, monitor risks and advise STFC as appropriate;
- Approve all bids to the contingency (above an agreed level)
- Sign off the ESS-UK Project on completion on behalf of STFC.

The UK Instrument Project Board (Chaired by Robert McGreevy)

Reports to the UK ESS Project Board

Overall Governance of the instrument projects

This will include:

- Advise the Project Sponsor and Project Manager.
- Approve the Project Specification and monitor compliance.

- Approve all changes to the Project Specification (above an agreed threshold level).
- Approve the Project Schedule and monitor progress.
- Approve the Cost Plan and monitor expenditure.
- Approve bids to the contingency funds controlled by Project Board.
- Monitor compliance with Procurement Strategy.
- Sign off the Project on completion on behalf of STFC.

Sponsor (Sean Langridge)

ESS contact (Shane Kennedy, Ken Anderson)

Reports to the UK ESS Instruments Project Board

Overall accountability for the project

This will include:

- Ensuring the agreed scientific and technical specifications are aligned with the larger ESS project.
- Ensuring that the project delivers the science and technical specifications for the instruments that ISIS agree to build.
- Representing the project at both ESS and STFC board level
- Acting as an arbitrator and making decisions above the authority of the project manager
- Ensuring that any changes to the project are correctly managed
- Ensuring the project is correctly resourced both from a staff and financial position.
- Ensuring that risks are correctly managed.
- Removing obstacles from the process
- Ensuring that the project remains a viable proposition
- Initiating reviews
- Management of key stakeholders
- Approving the key project deliverables

Project Manager (Kevin Jones)

ESS Contact (Gabor Laszlo)

Reports to Sponsor Sean Langridge

Responsible for the management and delivery of the overall UK- ESS instrument project

This will include:

- Delivery of the project in line with the Instrument specifications
- Creation and management of project budgets and costs
- Creation and approval of project documentation
- Managing resources and managing staff across sub-projects
- Creation of risk register and management of risks
- Creation and monitoring of project schedule
- Managing changes to the project in terms of time cost and quality

- Reporting of project progress to the project sponsor
- Identification and management of stakeholders
- Issues Log

Loki Lead Engineer (David Turner)

ESS Contact (Clara Lopez)

Reports to Project Manager (Kevin Jones)

Responsible for the technical delivery of the Loki Instrument

This will include:

- Overall technical responsibility for delivery of Loki instrument to the agreed project specification
- Management and tracking of the Loki project budgets and costs
- Creation and approval of instrument technical documentation
- Managing Loki Design staff
- Creation of risk register and management of technical risks
- Creation of project schedule and monitoring the progress of the instrument in line with the schedule
- Managing changes to the project and identification of the impact in terms of time cost quality
- Reporting of project progress to the project manager
- Identification and management of stakeholders
- Ensuring the instrument is reviewed in line with ISIS review procedure
- Ensure the instrument is designed in line with agreed ESS design standards
- Ensure instrument integrates with ESS facility
- Responsible for the safety

Loki Lead Scientist (Andrew Jackson)

Reports to Project Manager (Kevin Jones)

Responsible for the Scientific delivery of the Loki Instrument

This will include:

- Responsibility for the scientific specification and science case
- Responsibility for the overall instrument layout
- Overall scientific responsibility for delivery of Loki instrument to the agreed project specification
- Ensuring the engineering design will deliver the scientific specification
- Creation and approval of instrument scientific documentation
- Selection of key beamline technologies (detectors/monitors/etc)
- Management of key stakeholders in the scientific community (STAP/Advisory panel)
- Scientific commissioning (Hot Commissioning)

- Managing changes to the project and identification of the impact to science case
- To provide scientific expertise to the beamline and balance cost with science case
- Responsible for the safe operation of the instrument and for ensuring the instrument is designed in such a way that the instrument can be operated safely.

FREIA Lead Engineer (Jim Nightingale)

ESS Contact (Clara Lopez)

Reports to Project Manager (Kevin Jones)

Responsible for the technical delivery of the FREIA Instrument conceptual design

This will include:

- Overall technical responsibility for delivery of FREIA instrument technical design to the TG2 review
- Management and tracking of the FREIA project budgets and costs
- Creation and approval of instrument technical documentation required for both the ISIS review and the TG2 review
- Managing FREIA Design staff
- Creation of risk register and management of technical risks
- Creation of project schedule and monitoring the progress of the instrument in line with the schedule
- Managing changes to the project and identification of the impact in terms of time cost quality
- Reporting of project progress to the project manager
- Identification and management of stakeholders
- Ensuring the instrument is reviewed in line with ISIS review procedure
- Ensure the instrument is designed in line with agreed ESS design standards
- Ensure instrument can be integrated with ESS facility

FREIA Lead Scientist (Hanna Wacklin)

Reports to Project Manager (Kevin Jones)

Responsible for the Scientific delivery of the Loki Instrument

This will include:

- Responsibility for the scientific specification and science case
- Responsibility for the overall instrument layout
- Overall scientifically responsibility for delivery of Freia instrument to the agreed project specification
- Ensuring the engineering design will deliver the scientific specification
- Creation and approval of instrument scientific documentation
- Selection of key beamline technologies (detectors/monitors/etc)

- Management of key stakeholders in the scientific community (STAP/Advisory panel)
- Scientific commissioning (Hot Commissioning)
- Managing changes to the project and identification of the impact to science case
- To provide scientific expertise to the beamline and balance cost with science case
- Responsible for the safe operation of the instrument and for ensuring the instrument is designed in such a way that the instrument can be operated safely.

Vespa Lead Engineer (Lorenzo Di Fresco/Mo Chowdhury)

Reports to Project Manager (Kevin Jones)

Responsible for the technical delivery of the FREIA Instrument conceptual design

This will include:

- Overall technical responsibility for delivery of Vespa instrument technical design to the TG2 review
- Management and tracking of the Vespa project budgets and costs
- Creation and approval of instrument technical documentation required for both the ISIS review and the TG2 review
- Managing FREIA Design staff
- Creation of risk register and management of technical risks
- Creation of project schedule and monitoring the progress of the instrument in line with the schedule
- Managing changes to the project and identification of the impact in terms of time cost quality
- Reporting of project progress to the project manager
- Identification and management of stakeholders
- Ensuring the instrument is reviewed in line with ISIS review procedure
- Ensure the instrument is designed in line with agreed ESS design standards
- Ensure instrument can be integrated with ESS facility

Vespa Lead Scientist (Daniele Colognisi)

Reports to Project Manager (Kevin Jones)

Responsible for the Scientific delivery of the Loki Instrument

This will include:

- Responsibility for the scientific specification and science case
- Responsibility for the overall instrument layout
- Overall scientific responsibility for delivery of Vespa instrument to the agreed project specification
- Ensuring the engineering design will deliver the scientific specification
- Creation and approval of instrument scientific documentation
- Selection of key beamline technologies (detectors/monitors/etc)
- Management of key stakeholders in the scientific community (STAP/Advisory panel)

- Scientific commissioning (Hot Commissioning)
- Managing changes to the project and identification of the impact to science case
- To provide scientific expertise to the beamline and balance cost with science case
- Responsible for the safe operation of the instrument and for ensuring the instrument is designed in such a way that the instrument can be operated safely.

Instrument specific design engineers (Anton Orszulik, Federico Masi, William Halcrow, Ben Withers, Phil Sanderson, John Elmer, Simon Cooper)

Reports to Lead Engineer (David Turner, Jim Nightingale or Lorenzo di Fresco)

Responsible for the Engineering delivery of instrument sub-components or assemblies

This will include:

- Delivery of complete sub-assemblies or assemblies to the instrument projects as defined in work packages by the lead engineers
- Delivery as per the project plan and in-put to the project plan where there is variation
- Delivery within the constraints of the agreed budget reporting where there is variation
- Ensuring components follow the ISIS design division review process
- Creation of all appropriate technical documentation/calculations/ drawings
- Selection of key beamline technologies (detectors/monitors/etc)
- Management of key stakeholders
- Ensure the component is designed in line with agreed ESS design standards
- Ensure component can be integrated with ESS facility

Motion Control Lead Engineer (Nick Webb)

Reports to Project Manager (Kevin Jones)

Responsible for the technical delivery of the motion control solutions for all beamlines

This will include:

- Overall technical responsibility for delivery of motion control work where agreed with the lead engineer
- Management and tracking of the sub-project budgets and costs
- Creation and approval of instrument technical documentation required for both the ISIS review and the TG2 review
- Managing motion control Design staff
- Creation of risk register and management of technical risks
- Creation of project schedule and monitoring the progress of the instrument in line with the schedule
- Managing changes to the project and identification of the impact in terms of time cost quality
- Reporting of project progress to the project manager

- Identification and management of stakeholders
- Ensuring the instrument is reviewed in line with ISIS review procedure
- Ensure the instrument is designed in line with agreed ESS design standards
- Ensure instrument can be integrated with ESS facility
- Testing a validation of motion control solutions

Remote Handling Engineer (Mark Woollett)

Reports to Project Manager (Kevin Jones)

Responsible for the technical delivery of the remote handling solutions for all beamlines

This will include:

- Overall technical responsibility for delivery of remote handling solutions work where agreed with the lead engineer
- Management and tracking of the sub-project budgets and costs
- Creation of risk register and management of technical risks
- Creation of project schedule and monitoring the progress of the instrument in line with the schedule
- Managing changes to the project and identification of the impact in terms of time cost quality
- Reporting of project progress to the project manager
- Identification and management of stakeholders
- Ensuring the instrument is reviewed in line with ISIS review procedure
- Ensure the instrument is designed in line with agreed ESS design standards
- Ensure instrument can be integrated with ESS facility
- Testing a validation of remote handling solutions

Detectors (Nigel Rhodes/Davide Raspino)

ESS Contact (Richard Hall-Wilton)

Reports to Project Manager (Kevin Jones)

Responsible for the technical delivery or validation of detector and monitor solutions. This will dependant on the detector technology and/or partner

This will include:

- Where it is agreed that ISIS will deliver the detector technology, responsible or delivery of the full detector delivery this will include
 - Management and tracking of the sub-project budgets and costs
 - Creation of risk register and management of technical risks
 - Creation of project schedule and monitoring the progress of the instrument in line with the schedule

- Managing changes to the project and identification of the impact in terms of time cost quality
- Reporting of project progress to the project manager
- Ensuring the detector is reviewed in line with ISIS review procedure
- Ensure the instrument is designed in line with agreed ESS design standards
- Ensure instrument can be integrated with ESS facility
- Testing and validation of detector solutions
- Where it is agreed that a partner will deliver the detector technology, responsible for overseeing and reporting to the project on all of the below parameters.
 - Management and tracking of the sub-project budgets and costs
 - Creation of risk register and management of technical risks
 - Creation of project schedule and monitoring the progress of the instrument in line with the schedule
 - Managing changes to the project and identification of the impact in terms of time cost quality
 - Reporting of project progress to the project manager
 - Ensuring the detector is reviewed in line with ISIS review procedure
 - Ensure the instrument is designed in line with agreed ESS design standards
 - Ensure instrument can be integrated with ESS facility
 - Testing and validation of detector solutions
- Design and delivery of monitor solutions
 - Management and tracking of the sub-project budgets and costs
 - Creation of risk register and management of technical risks
 - Creation of project schedule and monitoring the progress of the instrument in line with the schedule
 - Managing changes to the project and identification of the impact in terms of time cost quality
 - Reporting of project progress to the project manager
 - Ensuring the detector is reviewed in line with ISIS review procedure
 - Ensure the instrument is designed in line with agreed ESS design standards
 - Ensure instrument can be integrated with ESS facility
 - Testing and validation of monitor solutions

CAD Manager (Nick Moloney)

ESS Contact (Henrik Lindblad)

Reports to Project Manager (Kevin Jones)

Responsible for the working methods, selection of CAD software and CAD support

This will include:

- Selecting the software, we will work in for Mechanical, Electrical and Plant design
- Ensuring we have the correct software and hardware to design the beamlines
- Liaising with ESS to ensure the ISIS designs are integrated into ESS
- Creating a document describing working methods
- Ensuring that ISIS are working to the appropriate ESS standards
- Reporting of project progress to the project manager

- Identification and management of stakeholders
- Ensuring ISIS staff have the correct level of CAD support and training

Chopper Lead Engineer (Peter Galsworthy)

Reports to Project Manager (Kevin Jones)

ESS Contact Erik Neilson

Responsible for the technical delivery of the remote handling solutions for all beamlines

This will include:

- Overall technical responsibility for delivery of Chopper solutions
- Management and tracking of the sub-project budgets and costs
- Creation of risk register and management of technical risks
- Creation of project schedule and monitoring the progress of the instrument in line with the schedule
- Managing changes to the project and identification of the impact in terms of time cost quality
- Reporting of project progress to the project manager
- Identification and management of stakeholders
- Ensuring the instrument is reviewed in line with ISIS review procedure
- Ensure the instrument is designed in line with agreed ESS design standards
- Ensure instrument can be integrated with ESS facility
- Testing a validation of Chopper solutions

ESS Integration Engineer (Clara Lopez)

Reports to ESS NSS Project lead (Shane Kennedy)

Responsible for ensuring the UK designed instruments integrate with the ESS facility

This will include:

- Providing up to date ESS design information to the project Leads
- Create and maintain instrument skeleton
- Check instrument interfaces with ESS facility
- Represent ESS on design reviews
- Ensure the correct people at ESS are engaged with the instrument
- Update ISIS with latest schedule information
- Managing changes to the project and identification of the impact in terms of time cost quality from ESS
- Identification and management of ESS stakeholders
- Ensuring the instrument is reviewed in line with ESS review procedure
- Ensure the instrument is designed in line with agreed ESS design standards
- Ensure instrument integrates with ESS facility