Testing Strategy

[Project Name]

*Purpose of document*

*To explain in a summarised fashion what is to be tested, why, when, where, how and by who - before testing takes place. This should include an articulation of all preparatory activities and enablers/predecessors required before testing begins*.

Approvals

|  |  |  |
| --- | --- | --- |
| **Role** | **Name(s)** | **Date signed** |
| Project Sponsor | *e.g. Name &*  *Title* | *DD/MM/YYYY* |
| Senior User |  |  |
| Senior Supplier |  |  |

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Version Control

|  |  |  |  |
| --- | --- | --- | --- |
| **Version number** | **Description of version change** | **Date** | **Author** |
| *e.g. v0.1* | *Initial draft* | *DD/MM/YYYY* | *Name* |
|  |  |  |  |
|  |  |  |  |

# Testing objective(s)

*This should provide information on the objectives of testing, and how they link with/enable the overall project objectives (which should have been outlined in the project’s PID or Brief)*

# Scope of testing

*What’s in, what’s out, why?*

*Reference the solution design if appropriate*

# Stakeholders

*Identify which stakeholders will be involved with testing, why, to what level, what their interest is, highlight the testing stage(s) they need to be involved with and why*

# Testing approach

*What methodology and disciplines will you be applying to manage/control the testing and why? Think about testing methodology and typical testing stages – e.g. system, integration, acceptance, operational, regression. State which stages are you covering and what’s in scope, which stages will not be covered and why. Is testing being done iteratively/in phases or all in one go? Are there any particular steps/activities to be undertaken that need to be highlighted? What methods will be employed when testing and why? Will both positive and negative testing be covered? What boundaries will be set? Will point in defined ranges be used? What relevant standards and practices will you factor into testing activities?*

# Testing pre-requisites

*What needs to be in place before testing begins? E.g. resources, environments*

# Testing plan / timeline

*Summary of testing timeline, including stages and key milestones / activities*

*What key stages and deliverables will you be including in test plans and why?*

# Testing Stages

*If you are unsure of testing terminology mentioned below, please contact the Testing team in Informatics for advice.*

## Static

*This refers to written information about the change being made, whether project document of testing related document. Ensure that the documents are quality assured by parties (stakeholders) with a vested interest in the change being made and/or will be affected by the change. Ensure all parties are on the same page before proceeding with making changes and undertaking the testing / validation of the changes.*

## Unit

*Testing individual elements to make sure they work*

*Include sanity / smoke testing to ensure system is ready to be tested before proceeding to next stage.*

## Systems

*Testing a combination of elements (e.g. software) to make sure they work together. This is an opportunity to identify errors/defects early on and correct them before users attempt testing – this is particularly important if users’ availability is constrained, the last thing you want are premium resources sat unable to test because of errors that could have been captured by developers during system testing.*

## Integration

*Testing the system’s interaction with upstream and downstream systems and infrastructure that enables the end to end solution that the project is trying to deliver*

## User acceptance

*Allowing users to test that the system will perform the functions they need it to – whilst ensuring that the project’s solution design is adhered to so to avoid deviating from the scope of testing and the project’s objective. (Where users highlight that the solution does not meet their needs and those needs are not represented in the solution design, this should be addressed through project change control and raised via the project manager.)*

*Acceptance testing should include end-to-end and regression testing, to ensure that the user’s view of upstream and downstream activities linked to the main solution being tested continue to work as expected and the main solution fits within overall process/operations.*

## Production verification

*e.g. performance, peak, load*

*If the system you are changing has a high volume of users, it is best to make sure that the system can cope with peak times of use and can still perform quickly with the included change and is not adversely affected to the extent that it causes the system to crash or time out.*

*The same method of testing could be used for paper based (non IT) processes; for example, ensuring that users can still perform their role without adverse impact or delay including during peak periods. Testing could drive out extra needs that may not have been anticipated earlier.*

# Resourcing needs

*Define what resources you need, from where, how much effort and why required. This is particularly important if those resources need to be secured from other areas and a lead time is applicable (e.g. 6 weeks’ notice required to obtain clinical staff time)*

# Communication plan

*Define how you will be communicating with all stakeholders involved in testing, when, why, how, where, for what. Include communications with any other interested parties who are not necessarily direct stakeholders, but should be informed of what is taking place with testing as it could have an indirect impact on their role and responsibilities that you may not have anticipated.*

# Testing roles and responsibilities

*Please define the key testing roles and responsibilities to show who must do what, when, why and how the roles should interact together to avoid overlap*

# Risks

*Summarise any risks that threaten the success of testing stages and explain what you intend to do to mitigate/monitor the risks. Highlight any risks that require the Project Manager to provide direction.*

# Constraints

*Highlight any constraints on the testing that could threaten its success or impact project delivery. Constraints should be raised to the Project Manager, so they can also monitor from an overall project perspective and report progress to Project Board/Project Sponsor/departmental managers as appropriate*

# Dependencies

*Highlight any dependencies external to the testing that could threaten its success. Identify who owns or is responsible for those dependencies and what is being done to mitigate / monitor / lessen the impact of those dependencies. Dependencies should be raised to the Project Manager, so they can also monitor from an overall project perspective and report progress to Project Board/Project Sponsor/departmental managers as appropriate*

# Assumptions

*Highlight any assumptions made where factual information is not available. Explain how you will take action to validate those assumptions / turn them into fact and highlight any risks associated with those assumptions being incorrect and the impact any incorrect assumptions could have on this project’s delivery/objective/desired outcome.*

*Assumptions should be raised to the Project Manager, so they can also monitor from an overall project perspective and report progress to Project Board/Project Sponsor/departmental managers as appropriate*

# Issues

*Highlight any issues and what actions will be taken to resolve them. Issues should be highlighted to the Project Manager, so they can also monitor from an overall project perspective and report progress to Project Board/Project Sponsor/departmental managers as appropriate*