{Workstream}

FUNCTIONAL SPECIFICATION

ABAP custom development – Enhancements (Transactions and Apps)

{WRICEF ID Description}

{Organisation / Project Name}

Role and Reason for Approval

Role	Reason for Approval
Author	The author is signing to confirm that this document has been prepared in accordance with the programme document management process, that relevant input from any contributory authors has been included and that an appropriate review/editing process has been conducted.
SAP Solution Lead or Architect	The SAP Solution Lead or Architect is signing, on behalf of the Workstream, to confirm that this Functional Specification meets the Acceptance Criteria expected of it and assigned to it in the Deliverable Quality Log.
SAP Development Lead or Manager	The SAP Development Lead or Manager is signing, on behalf of the Development Team, to confirm that this Functional Specification meets the Acceptance Criteria expected of it and assigned to it in the Deliverable Quality Log.

Note. Master copy of this document, with signatories, is held on Solution Manager

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1 Context

1.1 Business Background

Explain the business scenario that requires the development.

1.2 Why is SAP standard not appropriate or sufficient?

Generally we want to keep the system as standard as possible, so each custom development requires a justification.

1.3 Alternative Approaches Considered

Sometimes a number of different approaches are possible to meet a requirement. If that is the case, outline what the other options were, and why they were rejected in favour of this one.

1.4 Out of Scope

If functionality has been considered and decided to be out of scope for the development, then please record it here.

1.5 Assumptions

If the proposed design relies on any assumptions, please state them here.

1.6 Dependencies

If the proposed design has dependencies on other developments or configuration, please state them here.

1.7 Links

Provide any links here to further relevant information (e.g. from SAP Help, SCN, SAP Notes).

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2 Solution Design

This template may be used to specify:

- New custom applications or transactions.
- Major enhancements to SAP standard applications or transactions, for example adding custom fields. For simple enhancements that don't involve changes to the data model or user interface, use the Enhancements (simple) template instead.

2.1 Data Model

If new database tables are required, or extensions to standard tables, then specify the requirements here. You may prefer to explain the requirements in high-level terms here, and then work directly with the developer or development lead to agree the detail. But if going into detail…

- For each field a Data Element is required. This defines what the data actually means in business terms, and carries the text descriptions and long text (F4 help). Existing, SAP standard data elements should be used as the first choice. Where a new data element is required, then the descriptions, long text, data type, length, fixed values or foreign keys need to be defined.

Enhancements to other Data Dictionary objects may be specified here too.

2.2 User Interface

If changes to a SAP standard UI are required, then provide screenshots marked up with the changes required - for example what fields are to be added and where. Also explain here, or as part of How to Test, how the developer can access the screens in the standard application or transaction. If you know of a BAdI or other enhancement point to facilitate the changes, then reference it here too.

For entirely new applications, UI technologies available in Business Suite are:

- SAPGUI (Dynpro) – e.g. for any programs to be run in batch
- Web Dynpro and Floorplan Manager (FPM) applications. FPM is a framework built on top of Web Dynpro.
- Web UI – for CRM; also used by some other solutions.
- SAP UI5 – e.g. Fiori Apps

Consider which technology will be most appropriate – the project/customer may have a policy to follow which determines this, or check with the development lead.

Please provide a mock-up of the new application's screens. As well as design of the screens, it is also important to consider:

- Is any dynamic screen behaviour required? This typically sets the visibility, read-only or mandatory properties of the UI elements. E.g. if field 'a' has a value 'x', then make fields 'b', 'c' and 'd' read-only, and make field 'e' mandatory.
- How will the user navigate between screens?

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- For simple input fields, does the value need to be validated? Can a value-help be assigned?
- Can tooltips or input prompts be used to help and guide the user?

A prototyping tool such as SAP Build (for UI5) or iRise may be used to mock-up a design. The developers should follow UI best practice to keep the screens user-friendly and consistent. So either involve a developer in the prototyping; or provide the mock-up as guidance, and be aware that some of the design details may change in implementation.

2.3 Enhancement Logic

Changes to existing SAP applications may be made using enhancement techniques such as BAdIs or User Exits. Specify here the enhancement points to be changed and the logic required. Create a new subsection for each enhancement to be made, if one than one is required.

Enhancement Spot	
BAdI Definition	
Method	

2.4 Application Logic

For new applications, specify the business logic here. The developer will then build and structure the required ABAP following the development guidelines. There is no need to specify names or details of development objects such as classes or transaction codes.

2.5 Flow Diagram

Please illustrate any complex logic requirements with a flow diagram.

2.6 Validation and Error Handling

As far as possible the application should actively prevent the user from taking an invalid course of action, for example by:

- Using dropdown lists and radiobuttons to restrict input to valid choices
- Making irrelevant fields read-only or hidden
- Keeping buttons inactive unless their functions are relevant at that moment

However sometimes it will be necessary to provide error or warning messages. Please provide the text of any such messages (short and long), and details of when the message should be raised.

2.7 Authorizations

Authorizations are used to restrict what data and actions a user has access to.

If your application logic involves reading from database tables, then please consider if the data selection should be restricted by authorization objects - for example by an org unit.

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If this is a new Application that maintains a business object, then there may be different options to create, change, display or delete the object. Such actions should be governed by authorizations – for example it should be possible to provide display access without any ability to make changes. If the data object is standard, then an existing authorization object may exist for it; otherwise a new custom object may be required.

2.8 Extension of Associated Objects for Interfaces, Data Migration and Reporting

If a standard business object has been extended with custom fields, then there may be related objects for Interfaces, Data Migration or Reporting, which also should be extended. Consider if that's true for each of the following, and if so state the object the extend.

2.8.1 IDOC

2.8.2 APIs: e.g. BAPI, RFC or Web Service

2.8.3 LSMW

2.8.4 Analytics Data Model (HANA Live or CDS Views)

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3 How to Test

If this is an enhancement to a standard application, then please provide some guidance and/or test data to help the developer unit test the development. This can be included here or in a separate document.
The developer will need to test repeatedly, so where appropriate provide instructions to reverse the actions performed so the test may be run again, or explain how to create new input data to the test.

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