Sensor development templates: Specification Document

(Name of the sensor)

Version xx

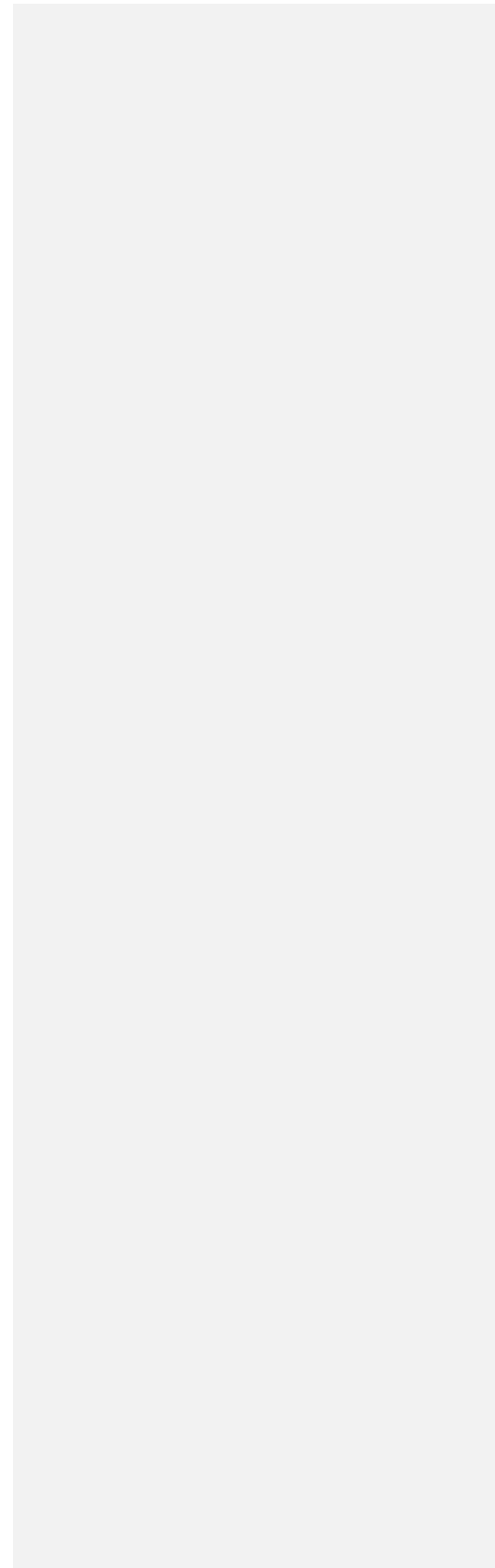Document ID

Authors[1]

[1]Author Affiliation

Year

Version log			
Issue Date	Revision N°	Author	Change
DD.MM.YYYY			Ex: first version/ review by xxx /accepted version

Contents

1   Purpose & Scope

This is the formal specification for the xxx. It presents the current design that has been developed to meet the application / technological requirements with links to detail such as data, models, testing and other considerations that were used to reach key design decision. It is not a scientific paper, it contains only sufficient detail to ensure that a skilled technologist can understand the technology and can evaluate the evidence for design decisions when reviewing or further developing the technology. It should link to all detail available on the current design (such as software code, engineering drawings, manuals etc.) and when complete should provide the basis of an information pack for continued manufacture, application, use or further development of the technology by persons currently unfamiliar with the technology. However, this document should be kept as brief as possible and therefore should hyperlink to this level of detail rather than repeating that here. This will also aid version control and consistency of the documentation.

This specification will not be varied without all relevant parties being involved and a new version of this document being issued by its design authority.

2   Design Authority

Please specify here an individual or body that is responsible for the technology and who can certify that this is the agreed specification to best address the requirements.

3   Specification Overview

Overview of the design / specification

3.1   Status in the design process.

Please see summary of the design process here. Note this process is not linear. For example if at detailed design stage (5) or on testing (7) a failure occurs it may be necessary to reopen the specification at earlier stages e.g. to repeat brainstorming (2) or preliminary design (3). In extreme cases the requirements may need modification (in agreement with stakeholders / users).

Stage	Link to latest at each stage, state "this document", or none if not started yet	Status (e.g. open, started, complete, not started, reopened)
1: Science / Application Review	Requirements document	open
2: Technical Brainstorm / Concept Design	This document	Not started
3: Preliminary Design	None	Not started
4: Component Prototyping	None	Not started
5: Detailed Design	None	Not started
6: Manufacture	None	Not started
7: Test, Optimisation & Documentation	None	Not started
8: Validation / Deployment	None	Not started

4 Requirements

Link to requirements document

5 Design

5.1 Operating principle (e.g. analytical technique)

5.2 Operating details e.g. assay or analytical approach

5.3 Schematics

5.3.1 Method flow diagram

5.3.2 system design (how components work together)

5.4 Components

5.4.1 Analytical components (e.g. detectors, transducers, optofluidic fluidic chip)

5.4.2 Control Electronics, Software & Vehicle Interface

5.4.3 Interfaces

5.4.4 Mechanical / Housings

6 Testing and validation data

6.1 Errata log

This errata document keeps track of any issues (problems) identified during testing and tracks follow up actions.

Statement here about the completeness and maturity of the design for exploitation and state of the invention disclosure form (e.g. rough draft)

OBPS Metadata table (non-journal contribution)

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