Help and guidance for Completion of Part 1 of the 'CASS Functional Safety Management Declaration Lodged with CASS-appointed body'

Document History

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DISCLAIMER

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Reference and related documents

The following documents are available from www.cass.uk.net

CASS32	The CASS Functional Safety Management Declaration Lodged with a CASS-appointed Body
CASS33	Help and guidance on CAS32 in general, and on completing Part 1 of CASS32 in particular
CASS34	Help and guidance on completing Part 2 of CASS32
CASS35	Help and guidance on completing Part 3 of CASS32
FSCA Technical Schedules	Section 3 of The CASS Guide. The detailed cross- references to CASS Targets of Evaluation (TOEs) and
	IEC61508 Edition 1 clauses applicable to Functional Safety Capability Assessment (FSCA)

Other Documents, not available from www.cass.uk.net

CASS36	Dossier Receipt from a CASS-appointed body, issued to an Owner who has lodged a Declaration

Abbreviations & Terminology

CASS	Conformity Assessment of Safety-related Systems; an abbreviation for The CASS Scheme Ltd.		
Declaration	CASS32, including any specified attachments.		
E/E/PE	Electrical, Electronic, or Programmable Electronic. A descriptive term with reference to the technology of a safety-		
	related system, as used in IEC61508		
E/E/PES	An Electrical, Electronic, or Programmable Electronic safety-related system		
FSCA	Functional Safety Capability Assessment. A CASS term used for the assessment of a Functional Safety Management		
	system.		
FSM	Functional Safety Management		
Owner	the person, business, partnership or other legal entity who is completing the CASS32 form describing and documenting		
	their Functional Safety Management system		
Part 1	When used alone, this is a reference to the specific Part 1 of the Declaration (CASS32) document		



Part 2	When used alone, this is a reference to the specific Part 2 of the Declaration (CASS32) document		
Part 3	When used alone, this is a reference to the specific Part 3 of the Declaration (CASS32) document		
PES	A Programmable Electronic safety-related System, usually with the emphasis on being 'programmable' or software-		
	based.		
SIL	Safety Integrity Level. An IEC61508 term (q.v.) related to the increasing requirements in terms of performance		
	properties and assessment rigour of a safety system with the increasing levels of risk reduction involved, from 1 (low) to		
	4 (highest)		
TCSL	The CASS Scheme Ltd.		
TOE	Target Of Evaluation. A specific property of a Functional Safety Management system for which the requirements are		
TOL			
	specified in one or more clauses in IEC61508, and for which a demonstration of compliance is required.		

Demonstration of compliance to IEC61508

The process of demonstrating compliance to the standard requires, in principle, that

- a) the scope of IEC61508 activities relevant to an 'owner' is defined
- b) the owner puts procedures in place to manage each of those activities. Overall these constitute his Functional Safety Management system.
- c) the owner performs an assessment and documents his argument by which he intends to claim that his procedures will ensure compliance with the requirements of the standard, when those procedures are appropriately employed.
- d) the owner compiles the evidence from day-to-day corporate management, operational, and project records which confirm that his procedures are being appropriately employed.

The CASS Self-Declaration is designed to help you undertake this process. The Declaration may be used initially as guidance in setting up the necessary Functional Safety Management system (FSM), and as a reference or checklist against which to track progress in establishing an effective FSM.

Owners may wish to use a lodged Declaration of compliance to demonstrate their commitment to the standard to their regulator, their customers, the general public, or internally to their own senior management. End-users may wish to have a statement of a suppliers' FSM lodged as evidence that all those participating in the safety instrumented system lifecycle had FSM as mandated by IEC61508 Part 1 Clause 6. In the event of a supplier ceasing trading or changing hands it is a statement on record of the FSM offered by the supplier.

The confidence placed by any reader in a declaration of compliance becomes dependent on the extent to which the reader trusts the information being provided by the owner. The IEC61508 standard places great emphasis on competency and independence of assessment when making judgements about confidence in matters of safety, and all owners will need to make their own assessment of the extent to which they can establish sufficient confident for their 'readers' through formal lodging of a self declaration with a CASS-appointed Body.

The CASS Scheme Ltd is committed to providing a cost-effective 'best practice' approach to achieving UKAS Accredited Certification of Compliance for those owners who wish to establish reader confidence through the use of Accredited Certification Bodies.

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Introduction to the Declaration

Functional Safety Management is essential for all safety-related systems and for all stages of the overall safety lifecycle (IEC61508 2nd edition Part 1 Figure 2).

All of the requirements of Functional safety Management shown in Part 1 Clause 6 of the standard, and all of the clause's related sections elsewhere in the standard are required to be demonstrated by anyone involved in safety instrumented systems and in any part of the lifecycle if the system is to comply with the IEC61508 group of standards.

The Functional Safety Management Self-Declaration form enables the details of your Functional Safety Management system to be recorded alongside the context in which such safety instrumented system activities take place.

A Declaration held by a CASS-appointed body is made available to the relevant national safety authority upon request by that safety authority. A Declaration will be held for a period of 10 years from the date accepted for filing of the un-audited Declaration.

For a Declaration held by a CASS-appointed body to be accepted all sections of the Declaration must be completed².

The CASS-appointed body makes no warranty concerning the contents of the Declaration nor accepts any liability for its contents. The Declaration is un-audited. There shall be NO reference to a CASS-appointed body certificate for a CASS Functional Safety management Declaration. The document is a self-declaration by the Owner who has completed part 3 and part 2.

On each occasion that a customer of the Owner named above requests a copy of the Functional Safety Management Declaration then the CASS-appointed body will contact the Owner named on page 2 to confirm that the customer making the request is a customer of the Owner and then a copy will be made available on payment of an administration fee to the CASS-appointed body by the customer.

Copies of the Functional Safety Management Declaration requested by a relevant national safety body will be made available free of charge, let or hindrance.

¹ In the United Kingdom a relevant national safety authority would be the Health & Safety Executive.

² Within the report-table The "Systems and procedures in place" column and the "Documentary evidence" column must both be completed for all case but the "Notes" column need only be completed where relevant.

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Understanding the Document Overall

The term "owner" is used to describe the person, business, partnership or other legal entity who is completing the Declaration describing and documenting their Functional Safety Management system.

The completed document will show:

Part 1 will show your contact details, locations at which the various activities are undertaken as well as the location where the CASS Functional Safety Management Declaration is held

Part 2 will show all the activities in the standard in which you are involved, the references to the documented systems which you employ, and the references to the assessments you have made by which you claim and justify that your systems and processes are appropriate to meet the requirements of the standard.

Part 3 will show the evidence of your functional safety management system in operation, with reference to your operational and project implementation records.

In order to understand what is claimed in part 3, a list of all activities in which an owner may participate or be involved is given in PART 2. The owner will have identified as 'Not Applicable' by striking through all activities in which they have no involvement, and will have addressed the list of all activities in which the owner of this Declaration is involved. Thus this is the scope of work covered by the FSM.

The list of activities provided in Part 2 is complete because it covers everything in the standard for safety instrumented systems and it is unlikely that any company or person will undertake them all. Therefore the approach is to strike-through all those activities in which you are not involved, and explicitly address those activities in which you do engage in and/or participate.

As the owner, you will identify the procedure or process used for all activities in which you are involved. For some activities you will have full involvement but for many activities you will only have partial involvement. You should write in the "Comments" section notes to show if you are only partial involved in an activity and completion of the activity is by others.



The process of Completing the Declaration

The diagram opposite shows the approach to filling in the Declaration.

The sequence shown in the diagram proposes that you first identify the scope of your business covered by the Declaration (divisions, departments, locations etc) and then (STEP 2) identify the scope of your activities under the IEC61508 group of standards. You do this by identifying all applicable and non-applicable activities shown in the extensive list in Part 2. For each of the applicable activities, (STEP 3) define by explicit reference the Functional Safety systems and procedures which you employ for that activity, the reference to the assessment you have made by which you are claiming that your systems provide compliance to the standard, and the location at which each of those documents resides.

Subsequently (STEP 4) you can complete section 3 showing the evidence from your operational records that your Functional Safety Management System (FSM) is appropriately used on a day-to-day basis.

The locations shown in these sections should match the locations listed in Part 1.

STEP 1 Fill in Part 1 of the Declaration, giving the details of your business and its locations STEP 2 Note: What is left in Part 2 are the parts of Go through Part 2 and STRIKEthe IEC61508 overall lifecycle in which you THROUGH all parts of the standards that business IS involved. do NOT involve your business. This is the scope of activities that your Functional Safety Management system covers Note: This shows where the documented STEP 3 system can be found, and where the justifi-In Section 2 enter the procedures and syscation/ argument for compliance with the tems for managing each activity, the com-IEC61508 clause requirements is given. pliance assessment report, and the locations for the documents. Note: this shows where the evidence can be STEP 4 found for day-to-day compliance with your Fill in Part 3 giving the evidence of opprocedures erational use and compliance with your Functional Safety Management system (FSM) for all activities shown in Part 2 STEP 5 Give the Declaration to a CASS-appointed body. They will: (i) Complete the rest of Part 1 (ii) Check that all entries are completed (iii) Return the final Declaration to the Owner to make the file secure (read only) (iv) On receipt of the secure file, issue the Owner with a FSM DOSSIER RECEIPT

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Completing The Opening Section

The CASS32 Declaration form is provided by TCSL in Microsoft Word format to support electronic data entry, and electronic submission of results. A reference copy of the empty form in PDF format is available from TCSL for general information. The Owner's completed Declaration should be in a secure format, in which changes are not permitted. A secure 'read only' electronic format for submission and lodging is recommended, and preferred. You will need to submit your complete prepared Declaration for scrutiny by your selected CASS-appointed Body, in order for them to insert a reference number and return it, before securing the completed Declaration.

Paragraphs within boxes are example extracts from the CASS32 Declaration form, for information only. The entries must be made in the Declaration, not in this HELP document.

Details of the CASS-appointed body holding the Declaration.

This section of Part 1 opens with telling the reader of the Declaration where the document is held. Enter the name of the CASS-appointed body you have selected and their address.

A registered copy of this completed self-assessment report ("The Declaration") is held at:

CASS-appointed body: [insert the name of the CASS-appointed body here]
Address: [insert the address of the CASS-appointed body here]

To enable the CASS-appointed body to locate the Declaration, the name of the owner of the Declaration comes next followed by the reference number given to you by the CASS-appointed body for your Declaration. The "owner" of the Functional Safety Management Self-Assessment Declaration may be a business or a person or other legal entity and is the business, person or other legal entity who has completed the form. So the "owner" is the one whose Functional Safety Management system is written down and documented in Parts 3 and 2 of the Declaration.

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Name of Owner making the declaration: [If it is your Functional Safety Management documented in the Declaration then

write your name here]

CASS-appointed body reference number: [The CASS-appointed body inserts its reference number here]

A Functional safety Management Declaration is held for 10 years from the date of filing so the next line shows the date upon which the completed Declaration was accepted which is the start date for the 10 year period. The CASS-appointed body will enter the date of acceptance into the Declaration, and return the Declaration to the Owner to be secured in a read-only version. The secured read-only version is then returned by the owner and a Registered proof of acceptance will be provided by the CASS-appointed body via a separate Dossier Receipt (CASS36)

Date accepted for filing un-audited: [The CASS appointed body writes the date of acceptance of the report here]

The CASS-appointed body makes no warranty concerning the contents of the Declaration nor accepts any liability for its contents. The Declaration is un-audited. There shall be NO reference to a CASS-appointed body certificate for a CASS Functional Safety management Declaration. The document is a self-declaration by the Owner who has completed part 3 and part 2.

On each occasion that a customer of the Owner named above requests a copy of the Functional Safety Management Declaration then the CASS-appointed body will contact the Owner named on page 2 to confirm that the customer making the request is a customer of the Owner and then a copy will be made available on payment of an administration fee to the CASS-appointed body by the customer.

Copies of the Functional Safety Management Declaration requested by a relevant national safety body will be made available free of charge, let or hindrance.

In the **Introduction** section, complete the 4th paragraph:

The Owner may advise their customers that a "CASS Functional Safety Management Declaration is lodged with [insert CASS-appointed body name here] under the CASS-appointed body scheme."

The CASS-appointed body may offer additional services. Such additional services are offered not by CASS but by the certification body themselves and so are independent of the CASS scheme. Therefore it is the certification body that will instruct you concerning what may be shown and stated to your own clients about their certification products.

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Completing Part 1

Part 1 now gives the details of the owner of the Declaration. The term "owner" is used to describe the person, business, partnership or other legal entity who is completing the form describing and documenting their Functional Safety Management system.

The opening part of this is self-explanatory.

PART 1: BASIC DETAILS OF THE OWNER OR BUSINESS

Date: [Date on which the information given in part 3 and part 2 of the Declaration was completed as correct and true information]

The Date is the date for which the information in part 3 and part 2 was completed. The Declaration is not intended to stop you from improving your Functional Safety Management systems and so there is a date at which the statements made were true. This is the relevant "Date" in this "Part 1" section.

If an "owner" is a business or company then the "Owner Name" is then the Company name and the "Owner address" is the address for the Head Office for the safety instrumented systems part of the business. Likewise, the telephone number is the telephone number for the Head Office for the safety instrumented systems part of the business. A partnership would write the same basic information as a company or business. If the "owner" is an individual then the name, address and telephone number of the individual are written in these sections.

Owner Name:

Owner address:

Phone number:

A company is a legal entity. For a company or business the form also asks for the company's registration number and the address of the registered

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office.

Where the owner is a company:

Company registration number: [All legal entities with a company registration number must enter their registration details

here - If the owner is not a company then leave this line blank]

Company Registered Address: [All registered legal entities must enter their registered address here - If the owner is not a

registered legal entity such as a company then leave this line blank]

A company, business, partnership (and sometimes even an individual) may have more than one location at which the activities covered by the IEC61508 group of standards take place. In the table the owner of the Declaration must list the addresses and contact details for each location. The locations in this section are those of the owner of the Declaration. If the owner is partially involved in an activity on a customer's site it is not necessary to list all the customers, it is only necessary to list the owner's location from where those activities are managed.

If there are more than three locations it will be necessary for the table to be extended to show ALL of the locations.

It is likely that different activities in the IEC 61508 safety instrumented system lifecycle are located in different places. Therefore for each location the safety lifecycle phase numbers are shown in the final row of the table. The safety lifecycle numbers are those that are shown in IEC 61508 2nd edition and on page 18 of IEC 61508 2nd edition you can find the lifecycle diagram showing the names of each of the lifecycle stages and their phase numbers.

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Enter the Owner addresses at which functional safety activities are undertaken, and which are covered by this Declaration, into the Part 1 Table.

The format of the table is:

	Location 1	Location 2	Location 3
Address			
Telephone:			
Safety lifecycle activities			
undertaken at this location			
identified by lifecycle number using IEC 61508 2nd edition			
Part 1 Figure 2 "Overall			
Safety Lifecycle"			

For guidance on completing Parts 2 and 3 of the Declaration, please refer to CASS34 and CASS35 respectively.