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CONFORMITY VERIFICATION OF FIRE ALARM MONITORING SYSTEMS

1. SCOPE

The current Australian Standard AS 1670.3:2018 + A1:2021 specifies the requirements for the monitoring of fire detection and alarm system (FDAS) for the purpose of communication of emergency information fire dispatch centres, and the related monitoring equipment situated at monitored sites.

AS 1670.3 was first published in 1997, revised in 2018, and amended in 2021. All references to AS 1670.3 or "the Standard" in this document exclusively refers to AS 1670.3:2018 + A1:2021.

This document specifies evaluation and recognition requirements of monitoring systems for the purposes of certification by CSIRO's ActivFire® Scheme.

2. REFERENCED DOCUMENTS

Details of the documents referenced by this technical specification are detailed in Table 1.

Table 1 List of documents referenced by this technical specification.

AS 1670.3:2018 + A1:2021	Fire detection, warning, control, and intercom systems – System design, installation and commissioning.
AS 2201.2:2022 Alarm and electronic security systems Part 2: Monitoring centres	
AF-D001	CSIRO's ActivFire® Scheme Document: Rules Governing ActivFire® Scheme
AS/NZS ISO/IEC 17021.1:2015	Conformity assessment – Requirements for bodies providing audit and certification of management systems
AS ISO/IEC 17025:2018	General requirements for the competence of testing and calibration laboratories

3. PRE-EVALUATION AND VERIFICATION

It is the requirement of this specification that in addition to the application requirements of CSIRO's ActivFire[®] Scheme document AF-D001, that following relevant information and documentation is provided:

- 1. The number of monitored sites being monitored by the Monitoring Centre.
- 2. The number of monitored sites with alarm signalling equipment that conform to AS 4428.6-1997.
- 3. The details about the power supply provided to the Monitoring Centre.
- 4. Internal commissioning reports of the Monitoring Centre.
- 5. Quality management manuals of the Monitoring Centre.
- 6. Training records and training manuals for personal of the monitoring centre.

4. TECHNICAL VERIFICATION PROCEDURE

Verification of conformity of fire alarm monitoring, for the purposes of CSIRO's ActivFire[®] Scheme, requires the following activities detailed in Table 2.

 Table 2
 Verification activities require by TS-018 to verify fire alarm monitoring systems for the purposes of certification.

Activity	Description
1	Review of documents and information provided regarding the fire alarm monitoring system.
2	On-site witnessing of the required evaluation activities in accordance with the evaluation schedule of Table 3 and AS 1670.3.
3	Identification of system and component limitations.
4	Ongoing verification of conformity activities required for certification.

5. EVALUATION

5.1. Evaluation schedule

To meet the requirement of AS 1670.3 and this technical specification, the applicant of the fire alarm monitoring system shall supply evidence of conformity covering the requirements described in Table 3 below which includes the requirements of Table 4.1 of AS 1670.3.

Table 3 Evaluation schedule required to demonstrate conformity to AS 1670.
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No	Description	Conformance	Comments
1.	Alarm signalling equipment (ASE)		
1.1.	Clause 2.1 of AS 1670.3 – ASE to conform to AS 4428.6.	The ASE is listed by CSIRO's ActivFire scheme to conform to AS 4428.6:2018 or AS 4428.6 – 1997. The registrant shall provide CSIRO with the ActivFire certification number of the ASE for verification.	Evidence of conformity to AS 4428.6 of monitoring equipment, issued by a laboratory accredited to ISO 17025, and considered acceptable subject to review by CSIRO.
1.2.	Clause 2.1 of AS 1670.3 – Transmission paths between the FDAS and ASE shall be supervised by the ASE.	The registrant shall demonstrate to CSIRO that the transmission paths between the FDAS and ASE is supervised by the ASE through a physical demonstration at CSIRO- chosen site(s).	The registrant shall provide CSIRO with the design documentation of the FDAS of all monitored sites.
1.3.	Clause 2.1 of AS 1670.3 – ASE conforming to AS 4428.6-1997 shall only be installed where the FDAS signals cannot be isolated/disabled at the ASE.	If the ASE is listed to conform to AS 4428.6 – 1997, the registrant shall demonstrate to CSIRO that the ASE has only been installed where the FDAS signals cannot be isolated/disabled at the ASE.	The registrant shall physically demonstrate this to a CSIRO representative and provide CSIRO with the design documentation of the FDAS.
2.	Monitoring centre	· · · · · · · · · · · · · · · · · · ·	·
2.1.	 Table 4.1 of AS 1670.3 - Demonstrate alarm propagation and processing time for each alarm ≤20 s for - a) 30 alarms simultaneously from one or more monitored sites; and b) 5 sequential alarms from separate monitored sites. 	The registrant shall select five different monitored sites consisting of 30 alarm zones or more and physically demonstrate to CSIRO that when an alarm signal is input to the ASE to when the signal is received and displayed at the fire dispatch centre shall not exceed 20 s for simultaneous alarm evens from sites.	Representatives of CSIRO will, from the fire dispatch centre, monitoring centre and a monitored site, record the transfer time.
2.2.	Table 4.1 of AS 1670.3 – Demonstrate the indication of the loss of each telecommunications path at the monitored site within 100 s.	The registrant shall physically demonstrate to CSIRO that an indication is provided within 100 s when there is a loss of each telecommunications path at a CSIRO selected monitored site.	A representative of CSIRO will, from the monitored site, record the indication time.

No	Description	Conformance	Comments
2.3.	Table 4.1 of AS 1670.3 – Demonstrate the indication of the loss of each telecommunications path at the monitoring centre within 100 s.	The registrant shall physically demonstrate to CSIRO that an indication is provided within 100 s when there is a loss of each telecommunications path at the monitoring centre.	A representative of CSIRO will, from the monitoring centre and monitored site, record the indication time.
2.4.	Table 4.1 of AS 1670.3 – Demonstrate, by records, that the average network reliability for the monitoring centre is not less than 0.9995.	The registrant shall demonstrate to CSIRO by record that the connections between all the ASE and the monitoring centre shall be not less than 0.9995.	Records or reports of timestamped data, logged over a period of at least 7 years, will be required to be submitted for review to support a reliability calculation. If the monitoring centre has been operating for less than 12 months, network reliability may be demonstrated by engineering calculations.
2.5.	Table 4.1 of AS 1670.3 – Demonstrate, by records that the individual network reliability of each monitored site is not less than 0.99.	The registrant shall demonstrate to CSIRO by record that the connections between a CSIRO selected individual ASE and the monitoring centre shall be not less than 0.99.	Records or reports of timestamped data, logged over a period of at least 7 years, will be required to be submitted for review to support a reliability calculation. If the monitoring centre has been operating for less than 12 months, network reliability may be demonstrated by engineering calculations.
2.6.	Table 4.1 of AS 1670.3 – Demonstrate automatic time stamping and recording of data.	The registrant shall physically demonstrate to the CSIRO representative at the monitoring centre the data logging process and that the data logged at the monitoring centre indicating and logging equipment is being time stamped and logged automatically.	-
2.7.	Table 4.1 of AS 1670.3 – Demonstrate that alarm, fault, and isolate signals from CIE can be received and processed.	The registrant shall physically demonstrate to the CSIRO representative at the monitoring centre that the monitoring centre indicating and logging equipment is capable of receiving and processing alarm, fault, and isolate signals from CIE at monitored sites.	-
2.8.	Table 4.1 of AS 1670.3 – Demonstrate that network faults can be received and processed.	The registrant shall physically demonstrate to the CSIRO representative at the monitoring centre that the monitoring centre indicating and logging equipment is capable of receiving and processing network faults.	-
2.9.	Table 4.1 of AS 1670.3 – Demonstrate that clocks are synchronized within one minute.	The registrant shall demonstrate to the CSIRO representative at the fire dispatch centre, monitoring centre and monitoring site that the clocks of the ASE, monitoring centre and fire dispatch centre are synchronised to the same common standard time reference and that the ASE and monitoring centre are synchronised within one minute of the chosen common standard time reference.	Demonstration of conformance to AS 2201.2:2022 will be accepted subject to review by CSIRO.
2.10.	Table 4.1 of AS 1670.3 – Demonstrate by records that the reliability is not less than 0.9995.	The registrant shall demonstrate to CSIRO that reliability of the indicating and logging equipment shall be not less than 0.9995 through records kept by the registrant.	If the monitoring centre has been operating for less than 12 months, network reliability may be demonstrated by engineering calculations.
2.11.	Table 4.1 of AS 1670.3 – Demonstrate the time and date reference of the voice recording equipment.	The registrant shall demonstrate that the monitoring centre has voice recording equipment that has the capability to record and retrieve telephone calls associated with alarm signals consistently. The voice recording equipment shall include a time and date reference.	The registrant shall provide CSIRO with details of the voice recording equipment and physical demonstration.
2.12.	Table 4.1 of AS 1670.3 – Demonstrate the systems and capacity in place to retain records for ≥30 d.	The registrant shall demonstrate to CSIRO that the voice recordings are kept by the registrant for more than 30 days, and that the monitoring has the capacity to do so.	The registrant shall provide CSIRO with details of the voice recording equipment including the equipment capability and provide voice recordings that are more than 30 days from the day of visit to the monitoring centre.

No	Description	Conformance	Comments
2.13.	Table 4.1 of AS 1670.3 – Demonstrate the operation of at least two telephone systems, one radio based.	The registrant shall physically demonstrate to a CSIRO representative that the monitoring centre has two different telecommunication systems capable of voice communications via a public telecommunication network with at least one on a cellular network.	Demonstration of conformance to AS 2201.2:2022 will be accepted subject to review by CSIRO.
2.14.	Table 4.1 of AS 1670.3 – Confirm the existence of two clocks.	The registrant shall physically demonstrate to a CSIRO representative that there are two or more clocks at the monitoring centre.	Demonstration of conformance to AS 2201.2:2022 will be accepted subject to review by CSIRO.
2.15.	Table 4.1 of AS 1670.3 – Confirm the visibility of clock.	The registration shall physically demonstrate to a CSIRO representative at the monitoring centre that at least one of the clocks is permanently mounted and is located at a position where it is visible to all operator at a normal working position.	Demonstration of conformance to AS 2201.2:2022 will be accepted subject to review by CSIRO.
2.16.	Table 4.1 of AS 1670.3 – Confirm the clock has a digital display ≥50 mm.	The registrant shall physically demonstrate to a CSIRO representative at the monitoring centre that the permanently mounted clock is of digital display with numerals of not less than 50 mm in height.	Demonstration of conformance to AS 2201.2:2022 will be accepted subject to review by CSIRO.
2.17.	Table 4.1 of AS 1670.3 – Confirm that clocks are synchronized to within one minute of the time standard.	The registrant shall physically demonstrate to CSIRO representative that the clock(s) in the monitoring centre are synchronised within one minute of the chosen common standard time reference.	Demonstration of conformance to AS 2201.2:2022 will be accepted subject to review by CSIRO.
2.18.	Table 4.1 of AS 1670.3 – Demonstrate that ancillary equipment does not impair the operation of the system.	If applicable, the registrant shall demonstrate to CSIRO that any ancillary equipment shall not impair the operation of the monitoring centre equipment. Design documentation shall be provided to CSIRO.	-
2.19.	Table 4.1 of AS 1670.3 – Demonstrate that stand-by lighting allows the maintenance of normal operations.	The registrant shall physically demonstrate to a CSIRO representative that in the event of the loss of the AC mains, the monitoring centre shall include facilities to provide lighting to maintain normal operations.	-
2.20.	Table 4.1 of AS 1670.3 – Demonstrate that systems and capacity in place to ensure the retention of records for more than ≥7 years.	The registrant shall demonstrate to CSIRO that the records of signals received from ASE, telecommunication link failures, faults within the indicating and logging equipment, actions taken by operators, actions taken by indicating and logging equipment are capable of being retained for more than seven (7) years and retained in a manner that maintains data integrity.	-
2.21.	Table 4.1 of AS 1670.3 – Demonstrate the retention and date stamping of alarm, fault, isolates and test records.	The registrant shall demonstrate to CSIRO that the records of alarm, fault, isolates, and test are time and date stamped, and retained. Sample records shall be provided to CSIRO.	-
2.22.	Table 4.1 of AS 1670.3 – Demonstrate the retention and date stamping of telecommunication link failure records.	The registrant shall demonstrate to CSIRO that the records of telecommunication link failures are time and date stamped and retained. Sample records shall be provided to CSIRO.	-
2.23.	Table 4.1 of AS 1670.3 – Demonstrate the retention and date stamping of monitoring equipment fault.	The registrant shall demonstrate to CSIRO that the records of monitoring equipment faults are time and date stamped and retained. Sample records shall be provided to CSIRO.	-
2.24.	Table 4.1 of AS 1670.3 – Demonstrate the retention and date stamping of operator action records.	The registrant shall demonstrate to CSIRO that the records of operator actions are time and date stamped and retained. Sample records shall be provided to CSIRO.	-

No	Description	Conformance	Comments
2.25.	Table 4.1 of AS 1670.3 – Demonstrate the retention and date stamping of indicating and logging equipment action records.	The registrant shall demonstrate to CSIRO that the records of indicating and logging equipment actions are time and date stamped and retained.	Sample records shall be provided to CSIRO
2.26.	Table 4.1 of AS 1670.3 – Demonstrate that monitoring centre is capable of supplying a no-break supply for 36 h to the indicating and logging equipment.	The registrant shall demonstrate to CSIRO the indicating and logging equipment are capable of being supplied with no-break power supply for a minimum of 36 h. The registrant shall provide CSIRO with design documentation of the power supply to the monitoring centre and that a secondary power source is provided.	Demonstration of conformance to AS 2201.2:2022 will be accepted subject to review by CSIRO.
2.27.	Table 4.1 of AS 1670.3 – Demonstrate that monitoring centre is capable of supplying a no-break supply for 36 h to the voice recording equipment.	The registrant shall demonstrate to CSIRO the voice recording equipment are capable of being supplied with no-break power supply for a minimum of 36 h. The registrant shall provide CSIRO with design documentation of the power supply to the monitoring centre and that a secondary power source is provided.	Demonstration of conformance to AS 2201.2:2022 will be accepted subject to review by CSIRO.
2.28.	Table 4.1 of AS 1670.3 – Demonstrate that monitoring centre is capable of supplying a no-break supply for 36 h to the telephones.	The registrant shall demonstrate to CSIRO the telephones are capable of being supplied with no-break power supply for a minimum of 36 h. The registrant shall provide CSIRO with design documentation of the power supply to the monitoring centre and that a secondary power source is provided.	Demonstration of conformance to AS 2201.2:2022 will be accepted subject to review by CSIRO.
2.29.	Table 4.1 of AS 1670.3 – Demonstrate that monitoring centre is capable of supplying a no-break supply for 36 h to the clocks.	The registrant shall demonstrate to CSIRO the clocks are capable of being supplied with no-break power supply for a minimum of 36 h. The registrant shall provide CSIRO with design documentation of the power supply to the monitoring centre and that a secondary power source is provided.	Demonstration of conformance to AS 2201.2:2022 will be accepted subject to review by CSIRO.
2.30.	Table 4.1 of AS 1670.3 – Demonstrate that monitoring centre is capable of supplying a no-break supply for 36 h to the lightings.	The registrant shall demonstrate to CSIRO the lightings are capable of being supplied with no-break power supply for a minimum of 36 h. The registrant shall provide CSIRO with design documentation of the power supply to the monitoring centre and that a secondary power source is provided.	Demonstration of conformance to AS 2201.2:2022 will be accepted subject to review by CSIRO.
2.31.	Table 4.1 of AS 1670.3 – Demonstrate that monitoring centre is capable of supplying a no-break supply for 36 h to the equipment used to ensure the operation of the required telecommunication links.	The registrant shall demonstrate to CSIRO the equipment used to ensure the operation of the required telecommunication links are capable of being supplied with no-break power supply for a minimum of 36 h. The registrant shall provide CSIRO with design documentation of the power supply to the monitoring centre and that a secondary power source is provided.	Demonstration of conformance to AS 2201.2:2022 will be accepted subject to review by CSIRO.
2.32.	Table 4.1 of AS 1670.3 – Demonstrate that other loads do not impair the operation of the monitoring centre equipment.	If the power source is used to power other loads, the registrant shall demonstrate to CSIRO that the monitoring centre equipment continues to operate under fault, overload and maintenance of other loads or associated wiring. The registrant shall provide CSIRO with design documentation of the power supply to the monitoring centre.	Demonstration of conformance to AS 2201.2:2022 will be accepted subject to review by CSIRO.
2.33.	Table 4.1 of AS 1670.3 – Demonstrate the batteries are installed in accordance with AS 3011.1 or AS 3011.2 as applicable and charged in accordance with manufacturer's specification.	If batteries are used, the registrant shall demonstrate to CSIRO are installed in accordance with AS 3011.1 or AS 3011.2 as applicable and charged in accordance with manufacturer's specification.	-

No	Description	Conformance	Comments
2.34.	Table 4.1 of AS 1670.3 – Demonstrate that the power source components are secured against unauthorised access.	The registrant shall demonstrate to CSIRO that the power source components are secured against unauthorised access. The registrant shall provide CSIRO with design documentation of the power supply and physically demonstrate the security system of the power source.	Demonstration of conformance to AS 2201.2:2022 will be accepted subject to review by CSIRO.
2.35.	Table 4.1 of AS 1670.3 – Demonstrate the alarm transmission time to fire dispatch centre is <5 s.	The registrant shall demonstrate to CSIRO that the transmission of alarms and other signals, as required by the fire dispatch centre, shall be received, and acknowledged by the fire dispatch centre within 5 s of processing by the monitoring centre without human intervention. Representatives of CSIRO shall each be present at the fire dispatch centre and the monitoring centre to acknowledge the transmission of alarms and other signals from the monitoring centre.	-
2.36.	Table 4.1 of AS 1670.3 – Demonstrate, by engineering calculation or measurement, the network availability between the monitoring centre and fire dispatch centre is ≥0.9995	The registrant shall demonstrate to CSIRO that the telecommunication path reliability between the monitoring centre and fire dispatch centre is ≥0.9995 either through engineering calculation or measurement.	-
2.37.	Table 4.1 of AS 1670.3 – Demonstrate the protocol acceptance by fire dispatch centre.	The registrant shall demonstrate to CSIRO that the protocol utilised for the transmission of a fire alarm signal between a monitoring centre and a fire dispatch centre is in a format specified by the fire dispatch centre.	-
2.38.	Table 4.1 of AS 1670.3 – Demonstrate the agreed procedure for communication with the fire dispatch centre in the event of a connection failure.	The registrant shall demonstrate to CSIRO that the failure of telecommunications path shall be indicated at both the monitoring centre and the fire dispatch centre within 100 s, and that contingency plans are agreed between the monitoring centre and fire dispatch centre operator for communication of fire alarm signals at times when the telecommunications path between the monitoring centre and the fire dispatch centre is unavailable.	-
2.39.	Clause 2.4.9 of AS 1670.3 – Critical failure response for failure between the ASE and monitoring centre or FDCIE power supply failure signal.	The registrant shall provide the response procedure document for the monitored site for where a fire alarm transmission path fault or total telecommunication path(s) failure between the ASE and monitoring centre or FDCIE power supply failure signal is received at the monitoring centre. The registrant shall also demonstrate to CSIRO the response procedure for the above-described situation.	-
2.40.	Clause 2.7 and Section 4 of AS 1670.3 – Commissioning of the fire alarm monitoring system to confirm the end to end performance and establish baseline data required for future performance validation.	The fire alarm monitoring system shall be commissioned as per AS 1670.3 by the registrant and establish end to end performance and baseline data for future performance validation. These performance and baseline data shall be provided to CSIRO upon request.	
3.	Monitored site	provided to conto upon request.	1
3.1.	Clause 3.1 of AS 1670.3 – General installation of equipment.	The registrant shall demonstrate to CSIRO that the equipment including the ASE and FDCIE at CSIRO selected monitored site are installed in accordance with Clause 3.1 of AS 1670.3.	Documents supplied by the installer of the FDAS including evidence of building surveyor/certifier acceptance, that the equipment was installed in accordance with Clause 3.1 of AS 1670.3 will be accepted subject to review by CSIRO.

No	Description	Conformance	Comments
3.2.	Clause 3.2 of AS 1670.3 – ASE installation.	The registrant shall demonstrate to CSIRO that the ASE at a number of CSRIO selected monitored sites are installed in accordance with Clause 3.2 of AS 1670.3. The sites shall be selected by CSIRO and liaised with the registrant prior to the CSIRO audit.	Documents supplied by the installer of the ASE, including evidence of building surveyor/certifier acceptance, that the ASEs are installed in accordance with Clause 3.2 of AS 1670.3 will be accepted subject to review by CSIRO.
3.3.	Clause 3.3 of AS 1670.3 – Covering door.	If the ASE is installed at a monitored site and is obscured by a door, the registrant shall demonstrate to CSIRO that the covering door of the ASE has been installed in accordance with Clause 3.3 of AS 1670.3	Documents supplied by the installer of the ASE, including evidence of building surveyor/certifier acceptance, that the ASEs are installed in accordance with Clause 3.2 of AS 1670.3 will be accepted subject to review by CSIRO.
3.4.	Clause 3.4 of AS 1670.3 – Power supply equipment (PSE) of equipment at a monitored site.	 The registrant shall demonstrate to CSIRO that the PSE installed at the monitored site is in accordance with Clause 3.4 of AS 1670.3 including but not limited to the following: a. Evidence of conformity that the PSE conforms to AS 7240.4. b. Two power sources are provided. c. The main power source is installed in accordance with Clause 3.4.2 of AS 1670.3. d. The standby power source is installed in accordance with Clause 3.4.4 of AS 1670.3. e. The battery capacity requirement is calculated in accordance with Clause 3.4.4 of AS 1670.3. f. The battery charging current is design in accordance with Clause 3.4.7 of AS 1670.3. g. The batteries in cabinets are installed in accordance with Clause 3.4.7 of AS 1670.3. 	Documents supplied by the installer of the ASE, including evidence of building surveyor/certifier acceptance, that the ASEs are installed in accordance with Clause 3.2 of AS 1670.3 will be accepted subject to review by CSIRO.
3.5.	Clause 3.5 of AS 1670.3 – Installation of combined FDCIE and ASE.	The registrant shall demonstrate to CSIRO that if ASE is located in the same cabinet as the FDCIE, the ASE does not compromise the conformity or operation of the FDCIE, and if the ASE shares the same PSE of the FDCIE, the quiescent and alarm load calculation for the FDAS shall include the ASE requirements.	Documents supplied by the installer of the ASE, including evidence of building surveyor/certifier acceptance, that the ASEs are installed in accordance with Clause 3.2 of AS 1670.3 will be accepted subject to review by CSIRO.
3.6.	Clause 3.6 of AS 1670.3 – Cabling systems at the monitoring site.	The registrant shall demonstrate to CSIRO that the cabling systems installed at the monitoring site for the equipment linked to the ASE and FDCIE is in accordance with Clause 3.6 of AS 1670.3.	Documents supplied by the installer of the ASE, including evidence of building surveyor/certifier acceptance, that the ASEs are installed in accordance with Clause 3.2 of AS 1670.3 will be accepted subject to review by CSIRO.
3.7.	Clause 3.7 of AS 1670.3 – Transmission path supervision.	The registrant shall demonstrate to CSIRO that the transmission paths external to the ASE cabinet is installed in accordance with Clause 3.7 of AS 1670.3.	Documents supplied by the installer of the ASE, including evidence of building surveyor/certifier acceptance, that the ASEs are installed in accordance with Clause 3.2 of AS 1670.3 will be accepted subject to review by CSIRO.
3.8.	Clause 3.8 of AS 1670.3 – Transmission path protection.	The registrant shall demonstrate to CSIRO that the transmission paths of the monitored site for the ASE and FDCIE is installed in accordance with Clause 3.8 of AS 1670.3.	Documents supplied by the installer of the ASE, including evidence of building surveyor/certifier acceptance, that the ASEs are installed in accordance with Clause 3.2 of AS 1670.3 will be accepted subject to review by CSIRO.
3.9.	Clause 4.1 of AS 1670.3 – General requirement for commissioning.	The registrant shall provide CSIRO with the baseline data of all monitored sites and the typical commissioning statement in accordance with AS 1670.3 at the time of evaluation and upon future request.	-

No	Description	Conformance	Comments
3.10.	Clause 4.2 of AS 1670.3 – Commissioning of monitored sites.	The registrant shall demonstrate to CSIRO that commissioning procedures has been developed specified to the monitored site and that the documented baseline data is verified to reflect the fire alarm monitoring system installed and the data recorded is accurate by providing CSIRO with a commissioning report. CSIRO shall verify that the required signal is correctly received at the monitoring centre.	-
4.	Management system		
4.1.	Competency of staff.	The registrant shall provide CSIRO with details of staff training system, evidence that a competency-based training system that is set up, and staff training register showing lists of staff and modules completed.	-
4.2.	Conflict of interest management.	The registrant shall provide CSIRO with the registrant's procedures on how conflicts of interest among personal are identified and managed.	-
4.3.	Quality management system (QMS).	The registrant shall provide CSIRO with details of the registrant's QMS. This could be certification of the business entity to ISO 9001. Additionally, the registrant shall provide CSIRO with details of how the registrant's management ensure that the QMS is followed and continuously improved.	-

5.2. Suitability of External Evidence

Assessment of the suitability of external agencies (laboratory) evidence shall be conducted in accordance with the CSIRO Recognition Framework.

Evidence of conformity, in the form of endorsed test reports written in English, are required to be submitted in full. Where test reports were originally produced in a language other than English, suitable translations may be supplied in addition. Submitted external test reports must provide sufficient detail to describe the product being evaluated in full and in detail and establish that an evaluation schedule was designed and applied to each component submitted to the external agency.

External evidence can only be accepted where verification between the product submitted for evaluation and the specimens in the endorsed test report is considered a critical requirement. Where external reports do not provide sufficient product identification, additional evaluation to specified requirements may be required.

5.3. Certificates of Conformity

Certificates, such as those published by a Conformity Assessment Body, do not provide direct and sufficient detail for the purposes of evaluation for conformity in accordance with this technical specification.

5.4. Reporting

The conformity evaluation report shall include relevant information specified as follows:

- a) A statement of conformity with reference to CSIRO-TS018 and unambiguous designation that all systems have been evaluated in accordance with this technical specification.
- b) All other information in accordance with the reporting requirements of Australian Standard AS ISO/IEC 17025:2018.

6. ONGOING VERIFICATION OF CONFORMITY

6.1. Ongoing verification of conformity activities

To maintain ongoing certification with CSIRO's ActivFire[®] Scheme, the certified fire alarm monitoring alarm systems shall be subject to an initial post-certification audit within 6 months of the Certificate of Conformity issue date.

Upon successful completion of the initial post-certification audit, the fire alarm monitoring alarm systems shall be audited every 12 months from the date of completion of the initial post-certification audit. CSIRO's ActivFire[®] Scheme shall develop an audit schedule for the fire alarm monitoring system and it shall include the activities in Table 4.

Activity	Description	Comments
1	Demonstrate that the average network reliability of the monitoring centre is not less than 0.9995 and that the individual network reliability is not less than 0.99.	Records in either reports or in a data logger format that meet the requirements of AS 1670.3 to be provided to CSIRO.
2	Demonstrate that alarm propagation and processing time is ≤20s.	A few monitored sites shall be selected by CSIRO, and the registrant shall demonstrate that from when an alarm signal is input to the ASE to when the signal is received and displayed at the fire dispatch centre does not exceed 20 s.
3	Demonstrate that the records are automatically being time stamped.	Physical demonstration to a CSIRO representative that the data logged at the monitoring centre are being logged automatically and time stamped.
4	Demonstrate that alarm, fault, isolate signals from CIE, and network faults can be received and processed.	Physical demonstration to a CSIRO representative that the monitoring centre and its indicating and logging equipment are capable of receiving and processing alarm, fault, isolate signals from CIE at monitored sites, and network faults.
5	Demonstrate that there have been no changes to the following equipment: Clocks Voice recording equipment Communication equipment Power supply equipment	Written confirmation is to be provided to CSRIO that there have been no changes to the equipment. This shall be confirmed by a visual inspection conducted by a CSIRO representative.
6	Review of response procedure document.	CSIRO to review the response procedure document. Any changes to the document shall be documented and be demonstrated to CSIRO that staff of the monitoring centre have been updated on the procedure.
7	Competency of staff.	The registrant shall provide CSIRO with details of the set up and use of a competency-based staff training system and staff training register showing lists of staff and modules completed.
8	Conflict of interest management.	The registrant shall provide CSIRO with the registrant's procedures on how conflicts of interest among personal are identified and managed.
9	Quality management system (QMS).	The registrant shall provide CSIRO with details of the registrant's QMS. This could be certification of the business entity to ISO 9001. Additionally, the registrant shall provide CSIRO with details of how the registrant's management ensure that the QMS is followed and continuously improved.

Table 4 Audit schedule required to demonstrate ongoing conformity.

6.2. Reporting

An audit report shall be provided upon completion of a successful audit and include relevant information specified as follows:

- a) A statement with reference to CSIRO-TS018 and unambiguous designation that all activities have been evaluated in accordance with this technical specification.
- b) All other information in accordance with the reporting requirements of Australian Standard AS ISO/IEC 17021.1:2015.

7. **REVISION HISTORY**

Version:	1
Issued date:	01-Feb-2024
Authorised by:	Executive Officer, CSIRO Verification Services - ActivFire [®] Scheme

Document version no:	Issued date:	Change description
1	01 Feb 2024	New Document