



### Appendix 3 – Type Approval Checklist

Section	Evidence Provided? (Y or N)
<b>Section 1</b>	
Section 1.6 Acceptance of Overseas Type Approvals	
Are details of any overseas type approvals applicable to the application provided?	
<b>Section 2</b>	
2.1.1 Application Form – supplied?	
2.1.2 Application Fee – paid?	
<b>Section 3</b>	
Section 3.1 Prosecution Support, prosecution support declaration provided?	
Section 3.2 MTU Identifiers, have the following identifiers been supplied?	
3.2.1 The communications class	
3.2.2 The manufacturer	
3.2.3 The brand name (where a brand name may vary around the world include all brand names likely to be used in the geographical area)	
3.2.4 The model name (where a model name may vary around the world include all brand names likely to be used in the geographical area)	
3.2.5 The model number	
3.2.6 The software version number and date	
3.2.7 The firmware version number and date	
3.2.8 The hardware version number and date	
3.2.9 The antenna type	
3.2.10 The antenna model number and date	
3.2.11 The MCSP providing communications services	
Section 3.3 MTU Responsibilities, have the details for the following responsibilities been provided?	
3.3.1 Manufacturer	
3.3.2 Label or use MTU for an OEM. This includes re-labeling OEM MTUs or reselling. Reselling includes value added reselling. The MTU that is type approved is the final, value-added product and not the original manufacturer's MTU, if enhancements or modifications have been made. For example, if a transceiver is contained within an enclosure, it is the new enclosure including the transceiver that is being type approved	
3.3.3 Distribute	
3.3.4 Sell	
3.3.5 Bench configures the MTU at the warehouse or point of supply	
3.3.6 Install MTU onboard the vessel	
3.3.7 Offer limited warranty	
3.3.8 Offer maintenance and service agreement	
3.3.9 Repair	
3.3.10 Training	
3.3.11 Advertisement	
Section 3.4 Customer Service _____, documentation on customer service supplied?	



Section 3.5 Other Information	
3.5.2 Additional requirements – documentation provided?	
3.5.3 Description of measures against un-authorized disclosure provided?	
3.5.4 Computer attachment, documentation supplied for these criteria?	
<b>Section 4</b>	
Section 4.1 Evidence provided of the following message functionality?	
4.1.1 Transmit mandatory, automatically generated position reports.	
4.1.2 Onboard visible and/or audible alarms for malfunctioning of the MTU.	
4.1.3 Ability to disable non-essential alarms in non-Global Maritime Distress and Safety System (GMDSS) installations.	
4.1.4 Ability to provide comprehensive and transparent communications, which function uniformly within the entire geographic coverage area for that communications class.	
4.1.5 Two-way communications between MCSP and MTU.	
4.1.6 The ability to send and receive free-form Internet email text messages.	
4.2.1 Evidence for support of the following position types provided?	
4.2.1.1 Position fixes latitude and longitude, including the hemisphere of each.	
4.2.1.2 The position fix precision must be to the decimal minute hundredths.	
4.2.1.3 Accuracy of the reported position must be within 100 meters, unless otherwise indicated by an existing regulation or VMS requirement.	
4.2.2 Evidence provided of mechanisms to prevent the following?	
4.2.2.1 Interception and “sniffing” during transmission from the MTU to MCSP via either wireless or terrestrial facilities.	
4.2.2.2 Spoofing, whereby one MTU is fraudulently identifying itself as another MTU.	
4.2.2.3 Modification of MTU identification.	
4.2.2.4 Interference with GMDSS or other safety/distress functions.	
4.2.2.5 Introduction of viruses that may corrupt the messages, transmission, or the VMS system.	
4.2.3 Evidence supplied for specific FFA rule requirements?	
4.2.4 Evidence supplied of automatically generated position reports to FFA provided?	
4.2.5 Evidence supplied of ability to store 100 position fixes provided?	
4.2.6 Evidence supplied of reporting intervals between 5 minutes and 24 hours?	
4.2.7 Evidence of remotely changing poll interval only by authorized user?	
4.2.8 Evidence provided that automatically generated position reports contain the following?	
4.2.8.1 Unique identification of an MTU within the communications class.	
4.2.8.2 Date (year/month/day with century in the year) and time (UTC) stamp of the position fix.	
4.2.9 Evidence supplied of generated position reports in response to the following?	
4.2.9.1 Antenna disconnection	
4.2.9.2 Loss of the positioning reference signals.	
4.2.9.3 Loss of the mobile communications signals.	
4.2.9.4 Security events, power-up, power-down, and other status data.	
4.2.9.5 The vessel crossing a predefined geographic boundary.	
4.2.9.6 MTU status information such as configuration of programming and reporting intervals.	



4.2.9.7 When an MTU is powered up, it must automatically re-establish its position reporting function without manual intervention.	
<b>Section 5</b>	
Section 5.2 Identifiers, are the following identifiers provided?	
5.2.1 Monitor or terminal model number and date	
5.2.2 Monitor or terminal manufacturer	
5.2.3 Monitor or terminal software type, version and manufacturer.	
<b>Section 6</b>	
Section 6.1 Text messaging, evidence provided for the following sections?	
6.1.1 Text messaging from vessel to shore with a minimum supported message length of 1kb.	
6.1.2 User interface must support an 'address book' capability and a function permitting a "reply" to a received message without re-entry of the senders e-mail address.	
6.1.3 A confirmation of delivery function is required such that a user can ascertain whether a specific message was successfully transmitted via the satellite system to the MCSP e-mail server(s).	
6.1.4 Onward delivery to FFA must be reliable and make use of features such as SMTP retries and delivery confirmation to ensure a reliable transport path exists for text messages sent from the vessel to FFA.	
6.1.5 The user interface must provide the ability to review by date order, or by recipient, messages that were previously sent. The terminal must support a minimum message history of 20 messages - commonly referred to as an 'Outbox' or 'Sent' messages display.	
6.1.6 Text messaging from shore to vessel with a minimum supported message length of 1kb. Attachment support is not required.	
6.1.7 The user interface must provide the ability to review by date order, or by sender, all messages received. The terminal must support a minimum message history of 20 messages - commonly referred to as an 'Inbox'.	
6.1.8 Negative delivery notifications must be sent to the originator where delivery to the terminal could not be completed for any reason. Such Non Delivery Notification must include sufficient information to uniquely identify the message that failed and the cause of failure (i.e., mobile number invalid, mobile switched off etc.).	
<b>Section 6.2 Electronic Forms</b>	
Evidence provided that E-MTU supports 20 plus user selectable E-forms?	
Evidence provided that E-forms are updateable over the air?	
Evidence provided that the following minimum requirements are satisfied?	
6.2.1 A form is defined as: (a) 1–40 characters describing the form, (b) Delivery address (i.e., e-mail or other network identifier), (c) Form number as defined by FFA to uniquely identify the form, (d) Form version number (numeric with one decimal place; i.e., 1.2), and (e) a collection of 1–30 fields and associated logic rules.	
6.2.2 Each field (within a form) is defined by the following elements. Except where noted, all elements of the field definition are mandatory: (a) Label (0 to 40 characters, alpha numeric), (b) Context Help Text (0 to 200 characters, alpha numeric), (c) Type (Either; enumeration, numeric, alpha, alphanumeric or Boolean), (d) Default Value, (e) Optional/Mandatory/Hidden/ Logic indicator, (f) Min/Max values (for numeric fields only) in range 0.000 to 999,999, (g) Decimal places (for numeric fields only) 0–3, and (h) Min/Max characters (for alpha/alphanumeric fields only).	



6.2.3 Up to 100 code/value/help text pairs (enumerations only) must be provided, where codes are defined as 1– 20 alphanumeric characters, values are 1–80 alphanumeric characters and help text is 0–200 characters. Such fields are typically used to permit a user to select from a range of options (i.e., geographic areas, gear types, fish species). Codes are used to compress the form data for efficient transmission. Help text would typically be displayed only when the user selects a specific value from the enumeration.	
6.2.4 Form Validation	
6.2.5 State Information	
6.2.6 Inclusion of VMS Position Report	
6.2.7 Delivery Format for Form Data	
<b>Section 7</b>	
Section 7.1 General and 7.2 Marine Use, durability and reliability in a marine environment – evidence provided?	
Section 7.3 Operating Temperatures, evidence provided for operating range?	
Section 7.4 Physical Mounting Requirements, evidence of suitable mounting provided?	
Section 7.5 E-MTU Terminal, exposure level to marine environment – documentation supplied?	
Section 7.6 Security	
7.6.1 Demonstrated tamper resistance and tamper evident?	
7.6.2 Evidence supplied that not is not reasonably possible to interfere with the normal operation of the unit via the terminal?	
<b>Section 8</b>	
Section 8.2 Installation guide is part of type approval, installation guide provided?	
Section 8.3 Mounting the MTU box, evidence provided that fixing for MTU are suitable for a marine environment?	
Section 8.4 The E-MTU Terminal, evidence provided that fixing for E-MTU are suitable for a marine environment?	
Section 8.5 The Antenna(s)	
8.5.1 Mounting, evidence supplied that the antennae and mountings meet this criteria?	
8.5.2 The Antenna(s) Cable(s), evidence supplied that the antennae cables meet this criteria?	
Section 8.6 The Power Supply, evidence supplied that the power supplies meet this criteria?	
<b>Section 10</b>	
Section 10.3 Interoperability	
Demonstrated interoperability with all MTUs in the same communications class?	
Section 10.4 Submission	
Same class MTU supplied?	
Communications service supplied?	
Section 10.5 Litigation Support	
Evidence of support in legal cases supplied?	
Section 10.8 Identifiers, are the following details provided?	
10.8.1.1 Communications class, including medium, protocol, and frequency of the	



mobile communications technology.	
10.8.1.2 Trade name of the service.	
10.5.1.3 Company name.	
10.8.1.4 Corporate headquarters.	
10.8.1.5 Principal business.	
10.8.1.5 Parent and subsidiary companies, if applicable	
10.8.1.6 Name and locations of principal terrestrial facilities, e.g., downlinks, gateways, switches, and operation centres.	
10.8.2.1 Satellite: MCSP must provide adequate orbit types, constellation size, and coverage footprint to provide comprehensive coverage of the VMS fishery for which application is made	
10.8.2.2 Cellular: MCSP must provide adequate coverage footprints, tower distribution density, tower locations, and protocols required to provide comprehensive coverage of the VMS fishery for which application is made.	
10.8.2.3 Radio: MCSP must provide adequate coast stations, locations, antennas, and antenna size to provide comprehensive coverage of the VMS fishery for which application is made.	
10.8.2.4 Approved or pending approval MTU(s) supported.	
10.8.3.1 Operate principal terrestrial facilities	
10.8.3.2 Operate principal wireless facilities	
10.8.4.1 Direct sales	
10.8.4.2 Indirect/distributor/channel sales	
10.8.4.3 Billing	
10.8.4.4 Account management	
10.8.4.5 Customer service	
10.8.4.6 Technical support	
10.8.4.7 Public affairs	
10.8.4.8 Advertising	
Section 10.9 Messaging, evidence provided for support of the following messaging functions?	
10.9.1.1 Automatically generated position reports	
10.9.1.2 Event-driven position reports	
10.9.1.3 Safety and distress alerts and messages	
10.9.1.4 Email text messages	
10.9.1.5 Ability to remotely create new message-types	
10.9.1.6 Email forms	
10.9.2.1 Ability to perform two-way messaging	
10.9.2.2 Ability for FFA to initiate communications to vessels, either individually or by originator-defined groups of vessels.	
Section 10.10 Position Data Formats and Transmission, evidence provided for the following automatically generated position reports?	
10.10.1 Position fix latitude and longitude, including the hemisphere of each.	
10.10.2 The precision of the position fix shall be to the decimal minute hundredths.	
10.10.3 Accuracy of the position fix must be within 100 meters, unless otherwise indicated by an FFA requirement.	
10.10.4 Unique identification of an MTU within the communications class.	
10.10.5 Date (year/month/day with century in the year) and time (UTC) stamp of the position fix.	
10.10.6 Date (year/month/day with century in the year) and time (UTC) when the	



position report is received at the MCSP.	
10.10.7 Date (year/month/day with century in the year) and time (UTC) stamp when the position report is sent to FFA.	
10.10.8 MTU status information, such as configuration of programming and reporting intervals, power save modes, antenna disconnection, and power-up/ power down, and loss of positioning signal.	
Section 10.11 Special Identified Position Reports	
Evidence supplied for specially identified position reports?	
10.11.1 Loss of the positioning reference signals	
10.11.2 Loss of the mobile communications signals	
10.11.3 Security events and other status data	
10.11.4 The vessel crossing a predefined geographic boundary	
10.11.5 10.11.5 Automatically generated position reports sent to FFA from the MCSP must be in a format compatible with FFA vessel monitoring software.	
Section 10.12 Queries	
Evidence supplied for the following queries?	
10.12.1.1 Vessels presently located within a geographic area (for example, defined by a circle or a rectangle, used by fisheries patrol vessels for operations)	
10.12.1.2 Vessels that are members of an FFA defined logical grouping (For example, grouped by fish type, gear type, or region of home port)	
10.12.4.1 Reprogramming or reconfiguring position reporting features.	
10.12.4.2 Determining current position.	
10.12.4.3 Extracting feature states, such as sensor status.	
Section 10.13 Position Intervals	
Evidence supplied for support of remotely programmed reporting intervals?	
Section 10.14 Latency	
Evidence supplied for Latency between position fix and FFA of MCSP?	
Section 10.15 Terrestrial Connectivity	
Evidence supplied for the following connectivity's?	
10.15.1.1 Redundancy of terrestrial facilities and network connectivity between MCSP and FFA, such that backup circuits or alternate network types automatically replace the primary in the event of failure without any manual intervention.	
10.15.1.2 Two-way communications for delivery and acceptance of data from MCSP to FFA and back, supporting messages, position reports, queries and administrative functions.	
10.15.1.3 Auto-forwarding or auto-delivery of messages without the need for retrieval by FFA.	
10.15.1.4 Geographically transparent communications from FFA to the MTU, such that FFA seamlessly performs communication functions without a need to take additional steps to accommodate the geographic region where the vessel is fishing.	
10.15.2 Evidence provided of Latency between MCSP and FFA?	
10.15.3 Evidence of mechanism provided to ensure reasonable protection against the following?	
10.15.3.1 Tampering or interception, including the reading of passwords and data.	
10.15.3.2 Interception and “sniffing” during transmission from the MCSP to FFA via either wireless or terrestrial facilities.	
10.15.3.3 Spoofing, whereby one MTU is fraudulently identifying itself as another MTU.	



10.15.3.4 Modification of MTU identification.	
10.15.3.5 Interference with Global Maritime Distress and Safety System (GMDSS) or other safety/distress functionalities.	
10.15.3.6 Introduction of viruses that may corrupt the messages, transmission, or the VMS system.	
10.16.1 Evidence provided for the following wireless features?	
10.16.1.1 Redundancy of wireless facilities and network connectivity between MTU and FFA, such that backup circuits or alternate network types automatically replace the primary in the event of failure without any manual intervention.	
10.16.1.2 Geographically transparent communications to and from FFA and the MTU, such that FFA seamlessly performs communication functions without a need to take additional steps to accommodate the geographic region where the vessel is fishing	
10.16.1.3 Durability and reliability in a marine environment, without signal degradation or other loss of integrity from adverse meteorological conditions.	
10.16.2 Evidence provided of reasonable mechanisms to prevent the following?	
10.16.2.1 Interception and “sniffing” during transmission to and from the MCSP and MTU via either wireless or terrestrial facilities.	
10.16.2.2 Spoofing, whereby one MTU is fraudulently identifying itself as another MTU.	
10.16.2.3 Modification of MTU identification.	
10.16.2.4 Interference with GMDSS or other safety/distress functionalities.	
10.16.2.5 Introduction of viruses that may corrupt the messages, transmission, or the VMS system.	
10.17.1 Evidence provided on Customer service?	
10.17.2 Evidence of measures for the protection of the following provided?	
10.17.2.1 Prevent unauthorised access to data and configuration information by MCSP employees and third parties.	
10.17.2.2 Authorise fishermen access to account info and to enhance the MTU configuration for personal messages, if they pay for the costs of personal messages and configuration changes do not affect the integrity of VMS operations.	
10.17.2.3 Send the MTU email, poll or remotely reconfigure the MTU for position reporting changes upon FFA request.	
10.17.2.4 Keep an audit trail of actions taken by Customer Service.	
10.17.3 Evidence provided that 10.17.2 applies to single and a group pf MTUs?	
10.17.4 Service level agreements clarify constraints (if any) on the geographic territory, personnel availability, and escalation procedures for problem resolution covered by such services?	
10.17.5 Evidence of provision of assistance in the resolution of communication anomalies and finding their cause provided?	
10.17.6 Provided documented MTU commissioning procedures for FFA vessels?	
10.17.7 Provided documented account and service activation procedures?	
10.17.8 Provide documented and secure MTU configuration strategy or procedures for vessels monitored singly or grouped by fleet?	
10.17.9 Evidence provided to support this section?	
<b>Section 12 - TEST PLAN</b>	
Appendix 1 - Test plan completed?	