



STRENGTHENING SIRE

Tablet-based inspections



OCIMF's new SIRE 2.0 vessel inspection regime will more accurately report on the quality of a vessel and its crew, moving from paper-based to digitalised inspection reporting processes using an intrinsically safe, internationally certified ex-proof tablet device and bespoke software.

Use of the tablet device for conducting inspections will:

- Provide tools that will strengthen governance processes and allow more in-depth inspection reports.
- Provide the inspector with ready access to industry guidance and vessel operator supplied information.
- Support dynamic question allocation allowing a detailed review of equipment, procedures and human based aspects of each allocated question, resulting in more focused inspection report content.
- Enable richer data collection to further improve oversight of vessel safety systems and processes.
- Allow greater transparency for all parties by using GPS tracking, recording the date and time of each response provided and recording the addition and removal of negative observations.
- Allow the inclusion of photographic evidence, where permitted by a port or terminal, to support observations.
- Verify photographs provided by a vessel's operator showing the vessel's physical and cosmetic condition.

The decision to introduce the use of tablets was taken by OCIMF only after the safety and security risks were evaluated and OCIMF was satisfied that they can be managed.

The tablet device was selected after extensive research followed by repeated trial inspections.

The tablet device is:

- Capable of using only the pre-loaded SIRE 2.0 software.
- Locked down using Mobile Device Management software to prevent the use of unauthorised programmes, applications, tools or data transfer connections.
- Fitted with cameras which can only be accessed through the SIRE 2.0 software, but which can be fully and demonstrably isolated if photography is prohibited onboard a vessel, at a terminal or in a port.
- Zone 1/Div 1 certified when using Wi-Fi or Bluetooth, but the tablet can be placed in flight safe mode if required by terminal regulations.

The chosen device is as follows:

- Manufacturer: i.safe MOBILE
- Model: IS930.1
- ATEX Approval: EX-Zone 1/21, II 2G Ex ib IIC T4 Gb, II 2D Ex ib IIIC T135°C Db P6X
- IECEx Approval: EX-Zone 1/21, Ex ib IIC T4 Gb, Ex ib IIIC T135°C Db IP6X
- NEC500 Approval: Class I, II, III Division 1, Groups A B C D E F G T4
- EAC approval: 1Ex ib IIC T4 Gb X Ex, ib IIIC T135°C Db X IP64

Further approvals:

- INMETRO (Brazil)
- KCs (South Korea)
- PCEC (China)
- JNIOOSH (Japan)
- SANS (South Africa)

See Appendix 1 for the full tablet specification sheet.



To ensure the tablets will always comply with safety and security requirements, OCIMF has contracted a specialist company to:

- Develop a Mobile Device and Application Management solution, which, in addition to implementing the necessary security controls to enforce security and safety policies, enables OCIMF to prevent the tablet being used for any purpose other than those permitted as part of the SIRE 2.0 Programme, including:
 - Restricting access to the internet to only the SIRE 2.0 application so it can synchronise with the remote databases.
 - Ensuring photographs taken during an inspection lock to the appropriate section of the report and cannot be transmitted outside of the SIRE 2.0 software.
 - Providing activity logs that demonstrate when the camera is disabled or only available for use by the SIRE 2.0 inspection application, in line with port or terminal regulation.
- Manage tablet replacement or repairs to ensure that approvals and certifications are maintained according to issuing authority and national and/or regional regulations.

SIRE 2.0 inspections are only authorised when conducted by an accredited inspector and performed on an OCIMF approved inspection tablet.



SIRE 2.0 training for inspectors has included comprehensive guidance on the use of the tablet.

The tablet will not be operated if:

- It is physically damaged.
- There is any doubt regarding the integrity of the tablet and continued compliance with Ex standards.
- The tablet hardware/software is malfunctioning.

Before using the tablet camera during an inspection, the inspector will comply with:

- Any restriction imposed by the port and/or terminal authorities.
- Any onboard restriction in accordance with instructions from the Master or contained within company procedures.

Any photographs taken will not include:

- Any people.
- Any document or logbook unless to specifically support a documented observation.
- Any document or logbook displaying personal or company specific information.
- The port facilities.
- Terminal facilities except:
 - The marine loading arm or hose connection inboard of the ship's rail and then only to include sufficient detail to support an observation relating to the ship/shore interface under the joint control of the ship's crew and terminal.
 - The means of access to the vessel and then only to include sufficient detail to support an observation relating to safe access under the control of the ship's crew.
- Anything that the Master states is restricted in accordance with documented company procedures.

Inspectors will not:

- Use personal intrinsically safe mobile phones, tablets, or computers outside the main accommodation block during a SIRE 2.0 inspection.
- Use any personal electronic device to record still images, video footage or audio files while onboard a vessel to conduct a SIRE 2.0 inspection.

Supporting documentation carried by inspectors will include:

- **Tablet certification** – To provide details of the Ex rating to which a tablet had been designed and manufactured (also clearly marked on the tablet itself).
- **Ports and Terminals letter** – To provide details of the specific tablet device issued to an inspector along with a request for the terminal and/or port representatives to inform the inspector of any restrictions on the use of the tablet camera.
- **Master letter** – To provide details of the specific tablet device issued to an inspector along with a request for the Master to inform the inspector of any restrictions on the use of the tablet camera during the inspection.
- **Rules for the use of the Tablet Camera and Voice Recorder** – Provides details of how the tablet camera and voice recorder should be used during an inspection, including the compliance with any port or terminal restrictions.

Compliance:

OCIMF has developed several processes to monitor compliance with safeguards documented in this factsheet.

For any queries or information from terminal operators on the use of tablets on their site, please contact sire2.0@ocimf.org

Appendix 1



< IS930.1 >

i.safe MOBILE



ATEX approval: EX-Zone 1/21
Ⓜ II 2G Ex ib IIC T4 Gb
Ⓜ II 2D Ex ib IIIC T135°C Db IP6X



IECEx approval: EX-Zone 1/21
Ex ib IIC T4 Gb X
Ex ib IIIC T135°C Db IP6X



NEC500 approval:
Class I, II, III Division 1
Groups A B C D E F G T4



EAC approval:
1Ex ib IIC T4 Gb X
Ex ib IIIC T135°C Db X IP64

Further approvals: INMETRO (Brazil) | KCs (South Korea) | PCEC (China) | JNIOOSH (Japan) | SANS (South Africa)

TECHNICAL FEATURES

Operating system	Android™ 10
Processor	SDM660 Octa-Core (Kryo Gold-Quad cores 2,2 GHz; Kryo Silver-Quad cores 1,8 GHz)
Memory	4 GB RAM 64 GB internal memory microSD memory up to 128 GB
Frequencies	2G GSM: 850/900/1800/1900 MHz 3G WCDMA: UMTS B1/2/4/5/8 4G LTE-FDD: B1/2/3/4/5/7/8/12 with MFBI B13/14/17/20/25/ 26/28A/28B/29/30/66 4G LTE-TDD: B38/B39/B40/B41 4G LTE-SCDMA: B34/B39
Dimensions	size: 237 x 156 x 22 mm weight: 890 g
Display	8" Gorilla Glass® 3. generation 1200 x 1920 pixels
Battery	8400 mAh
Camera	13 MP AF rear camera 5 MP FF front camera
Connections	WiFi 2,4 GHz + 5 GHz: IEEE 802.11 a/b/g/n/ac/e/k/r/h with max. 8 connections hotspot Bluetooth® 5 GPS, A-GPS, Glonass, Beidou, Galileo Near Field Communication
Types of protection	IP68 dust-/waterproof MIL-STD-810H usable from -20 °C to +60 °C

FURTHER FEATURES



SOS key for loneworker protection
LWP ready (third party application required,
based on country specific regulations)



2 freely programmable keys



Usable with gloves



Accelerometer, gyroscope, magnetic,
temperature and humidity, proximity sensors



Magnetic charger port

SET CONTENT

Tablet with integrated battery, Hand Strap, i.safe PROTECTOR 2.0 Type C USB Cable, i.safe PROTECTOR 3.0 USB Magnetic Charger Cable, Power Adapter universal, Display Protection Foil, Quick Start Manual and Safety Instructions

Please visit our website and you will find more detailed information, as well as an overview of compatible accessories.

WWW.ISAFE-MOBILE.COM

Model M93A01

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More information



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