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Document Title : Annexure-Q -Specification of Kavach (The Indian Railway ATP)- KAVACH Station Master Operation and Indication Panel (SM-OCIP) Requirements			Amdt-1



GOVERNMENT OF INDIA
(भारत सरकार)
MINISTRY OF RAILWAYS
(रेल मंत्रालय)

Annexure -Q

KAVACH

Station Master Operation and Indication Panel (SM-OCIP) Requirements (Amdt-1)

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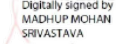
SIGNAL & TELECOM DIRECTORATE
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MANISH KUMAR GUPTA 2024.07.16 12:45:15 +05'30'	RAVINDRA NATH SINGH	MADHUP MOHAN	Digitally signed by MADHUP MOHAN SRIVASTAVA		Page 1 of 4
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Amdt	Date of issue	Amendment
Amdt-1	03.07..2024	Cluase 2.6 (iii) – Modified as “Sub - System faults information Station KAVACH Manual SOS generated information shall be displayed as follows (Line-2 shall display “ SOS GENERATED ”) and Cancelled (Line-3 shall display “ SOS CANCELLED ”) and SOS messages shall disappear after 30 second.”

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Q.1 Introduction

This document describes the SM-OCIP requirements to be used for the purpose of Stationary KAVACH System.

Q.2 Requirements

Q.2.1 SM-OCIP shall provide the following

- i. LED Indications
- ii. Switches
- iii. LCD Panel
- iv. Buzzer
- v. 6 digits counter which are updated on SOS pressing
- vi. Station Master's key.

Q.2.2 It shall provide the following LED Indications on the Console

	LED Name	Color	Description
1	HEALTH OK	GREEN	Indicates Station KAVACH Healthy
2	HEALTH FAIL	RED	Indicates Station KAVACH Un Healthy
3	SOS	RED	When SOS generated from Station

Q.2.3 It shall provide the following switches on the Console.

S.No	Switch Name	Color	Description
1	COMMON	BLACK	Common switch to press along with SOS switch
2	CANCEL	BLUE	To cancel the SOS from station
3	SOS	RED	To generate SOS from Station
4	TSR-Ack	YELLOW	To acknowledge TSR

Q.2.4 SM-OCIP shall not allow switches functionality without SM-KEY insertion in-to SM-OCIP.

Q.2.5 A 4 Line×20 Characters (Minimum) LCD panel shall be provided on the console for Stationary KAVACH for display purpose.

Q.2.6 The SM-OCIP shall display the following information on LCD:

- i. Station ID KMS Key Index, TSR Count along with the Station KAVACH OK or FAIL. (**Line-1** shall display the “**ID:00531 KI:XX T:XX**” , **Line-4** shall display the “**STN KAVACH OK/SYSTEM LINK FAIL**”).
- ii. Software checksums of all modules along with the Application data

checksum shall be display On Pressing COMMON button, after 1 minute it shall clear the LCD display.

- iii. Sub - System faults information Station KAVACH Manual SOS generated information shall be displayed as follows (Line-2 shall display “**SOS GENERATED**”) and Cancelled (Line-3 shall display “**SOS CANCELLED** ”) and SOS messages shall disappear after 30 second.

- Q.2.7 Stationary KAVACH shall blink SOS LED in SM-OCIP console when manual SOS is generated.
- Q.2.8 Stationary KAVACH shall drive Buzzer in SM-OCIP console when manual SOS is generated
- Q.2.9 Stationary KAVACH shall increment the Electromechanical non-resettable counter after pressing the manual SOS.

Q.3 Installation of SM-OCIP

The station KAVACH shall be installed in the station Relay Room of the station and the SM-OCIP shall be mounted on Station Master’s table or a nearby wall such that it is accessible and visible to the Station Master. 12 Core signaling cable shall be used for button, counter & power supply. 10 pair PIJF cable shall be used for communication portion. The typical SM-OCIP looks like the below diagram

