

INNOVATION BY *INDIAN NAVY* TOWARDS COVID-19

1. Certain in-house initiative/ innovation pursued by the Indian Navy, with an aim to contribute to the ongoing efforts toward COVID-19, which could be useful for the IONS nations is being shared for information.

Lifeguard

2. **Item/ Purpose.** Wearable Internet of Things (IOT) enabled device that can monitor patient activity, body temperature and the cell-phone derived GPS location for geo-fencing to enable 24x7 mass monitoring in hospitals/ quarantine locations.

3. **Impact.** Device would be very helpful in keeping track of an infected person and thus would help in preventing community transmission.

4. **Details.** Indian Naval Dockyard has conceptualised a wearable Internet of Things (IOT) enabled device that can monitor patient activity, body temperature and the cell-phone derived GPS location for geo-fencing to enable 24 x 7 mass monitoring in hospitals/ quarantine locations. The on-board sensors in the wearable device will detect body movement and body temperature, while the cell phone app will log device location and report the data every 30 min. In event of a geo-fence break, an immediate alarm will be sounded for prompt action by authorities. This device would be very helpful in keeping track of an infected person and thus would help in preventing community transmission. The proof of concept has been implemented at

Indian Naval Dockyard using wired techniques and is planned to be replicated to an app based platform catering for 100 personnel, which can also be further expanded. This low cost solution (less than INR 500/- for 6 patients) can be replicated easily by any MSME with readily available components that can be sourced locally.

5. The Wearable Internet of Things (IOT) enabled device, as described above, can be manufactured at any Ship Maintenance Facility or Repair Yard. If required by any IONS Nation, drawing could be provided by Indian Navy. Indian Navy could be contacted via email acnsfci@navy.gov.in or through promulgated IONS POC.

