

## **For consideration under COVID -19 Initiatives by NITs**

### **Title: Social Distancing Sensor**

Category: Personal Protective Care and Equipment

#### **OUTCOME:**

The COVID-19 affected persons can spread the novel corona virus to other persons by coughing or sneezing out a droplets. If the other person breathe in these droplets from an affected person, they can also catch the COVID-19. Therefore, the government issued a measure that everyone has to keep minimum 2 meters distance between one another, which is called Social Distance. Maintaining the social distancing in a country like India with second largest population in the world will be challenging. But once people started following this habit of social distancing, they can easily stop spreading COVID-19 and thereby we can save many lives. To help people, we are developing a social distancing sensor wristband which will alarm when a person violate the minimum safe distance.

The wristband sensor works like a Bluetooth beacon, which will have a small Bluetooth radio transmitter with speaker, powered by batteries. These small hardware devices incessantly transmit Bluetooth low energy signals every half of the second and waits to receives the signal from nearby device in the another half of the second. This will be designed as a rechargeable device with minimum of 4 days of battery life and waterproof. In addition to distance sensor, we are aiming to include additional sensors like temperature sensor and heart beat sensor.

**Expected Time-line:** 3 -6 months

**Remarks:** Funding requirement -Rs. 50,000/-

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