

## Safe rescue - Usability assessment protocol

### Metrics

*Effectiveness:* Success rate. Success rate will be measured for all tasks

*Efficiency:* Time spent to fulfill each task. Time will be measure for actions

*User satisfaction:* Users' level of satisfaction with the system. This will be measured based on entire user experience.

### Tasks - Health Bracelet

#### Task 1

Status: Knowing that the device is active.

[Constant white led light]

#### Task 2

Action: Attaching the bracelet to the wrist. (BAKUT personnel)

#### Task 3

Status: Synch with the tracker.

[Not specified] -

#### Task 4

Status: Knowing that the device is measuring pulse.

[Blinking white led light]

#### Task 5

Action: Attaching the bracelet to the victim's wrist.

#### Task 6

Status: Knowing the health status of the victim.

[Blinking led light, green means he is alive, yellow means irregular pulse, no pulse]

### Tasks - Personal tracker

#### Task 1

Status: Knowing that the device is active.

[Constant white led light]

#### Task 2

Action: Attaching the device to the helmet.

#### Task 3

Action: Hitting the emergency button to inform the center regarding the emergency situation.

#### Task 4

Status: Knowing that there is an emergency.

[Buzzing sound in first 5 second, increasing the pitch after 5 seconds]

#### Task 5

Action: Turning an existing alarm into silent mode.

#### Task 6

Status: Knowing that the device is in silent mode.

[Not specified]

#### Task 7

Action: Cancelling an alarm.

*Task 8*

Action: Detaching the device from the helmet.

*Task 9*

Status: Knowing that the device is in sleep mode.

[Not specified]

*Task 10*

\*Status: Low battery

[Audial warning-not specified]

*Task 11*

\*Status: Knowing that the device is fully charged.

[Blinking led light turns into continuous led light]

**User satisfaction questionnaire**

*Scaling items are from 1: Strongly Disagree to 5 Strongly Agree*

1. I think that I would like to use this system frequently.
2. I found the system unnecessarily complex.
3. I thought the system was easy to use.
4. I think that I would need the support of a technical person to be able to use this system.
5. I found the various functions in this system were well integrated.
6. I thought there was too much inconsistency in this system.
7. I would imagine that most people would learn to use this system very quickly.
8. I found the system very cumbersome to use.
9. I felt very confident using the system.
10. I needed to learn a lot of things before I could get going with this system.

Brooke, J. (1996). SUS-A quick and dirty usability scale. *Usability evaluation in industry*, 189(194), 4-7.