

Proposal No. 29
(Proposal details for the R&D scheme of USOF)

Subject: Positioning Location Accuracy

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| Problem Statement | Optimising location accuracy while minimizing number of BLE Beacons. |
| Problem Description | User Location can be accurately determined upto 1-2 meter by placing adequate Bluetooth Low Energy (BLE) Beacons in the indoor environment. .Positioning of Beacon strongly affects the quality of localisation. Beacon density and placement of beacons controls the accuracy of the localisation. Fixed beacon placement such as uniform and very dense placement are not always feasible. Apart from that, in noisy to very noisy environments beacon signals get affected very much. The problem is to find out ideal beacon density in different kinds of building structure so that user location can be accurately localized with minimal error and with minimum number of beacons. |
| Future Expectations | Locate user with less number of beacons |

Format of Response

Companies / organizations / institutions / individuals developing enabling technologies / modules / components / subsystems / products are required to respond in the format provided in Annexure-A, on the DOT website ([link address provided- refer “format of response”](#))