**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title | **Comments regarding documents #338r5** |
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| Re: | [TG10 Scenario parameters #338r5] |
| Abstract | [This documents gives comments on the current scenario description in document #338r5] |
| Purpose | [The comments herein are to be used to define the scenarios] |
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**Introduction**

This document contains comments and questions regarding the scenario parameters [1]. The comments are to be used to complete scenario matrix that will be used for the CfFP.

**Comment 1: Upstream and downstream scenario**

We would like to suggest deleting the 3rd scenario (Balanced upstream and downstream) since the upstream traffic is already addressed in the first scenario and the downstream is already addressed in the second scenario.

**Comment 2: Linear topology**

* We should define the position of the PAN coord in the line. We suggest placing the PAN coordinator at the center of the line.
* What is the traffic pattern to be used in a linear topology: Unicast, Multicast, Broadcast? PAN coord to device / device to PAN coord?

We suggest using PAN coord to device, broadcast: for the use case of street lighting of an entire road

**Comment 3: Device to device communication**

We should define the placement of the source and the destination in the D2D communication. We suggest using the case depicted below:

From the upper left corner device to the lower right corner device

 

**Open comments to the group**

**Comment 4: Link failure rates**

The group needs to assign values to the link failure rates of each link describe in figures a) and b).

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|  |  |
| a) | b) |

**Comment 5: Multicast**

The group needs to decide on the placement of the devices belonging to the multicast group.

**Comment 6: Multiple devices to device**

The group needs to decide on the placement of the multiple source devices and destination.

**Comment 7: Number of PAN coordinators**

When we have 3 PAN coordinators in the P2P scenario does this mean that:

* + 1. We still have 1 grid node placement with 3 PAN coordinators and that each device will associate with the most suitable PAN?



* + 1. We have 3 grids of M nodes each and 1 PAN coordinator in each grid? However, in this case in the largest scenario, we would end up with 30000 nodes to simulate.



(M x 3) nodes

* + 1. We have 3 grids of M/3 nodes and 1 PAN coordinator in each grid?



M nodes

In the case where we have 3 grids, how is the grids’ position? E.g.: In the figures above, the PANs are lined up horizontally.

When there are multiple PANs, which devices should be the source and the destination?

We suggest to avoid multicast, broadcast and multiple devices to device traffic patterns in a multiple PAN scenario and to only focus on the D2D unicast case.

**Comment 8: multiple entry/exit point**

How are we supposed to use the multiple entry/exit point?

**Comment 9: mobility**

How many nodes should be mobile if mobility is applied in the P2P scenario? All of them? Only the source or the destination, both? …

**References**

1. 15- 14-0338-05 TG10 Scenario parameters