

Project topics

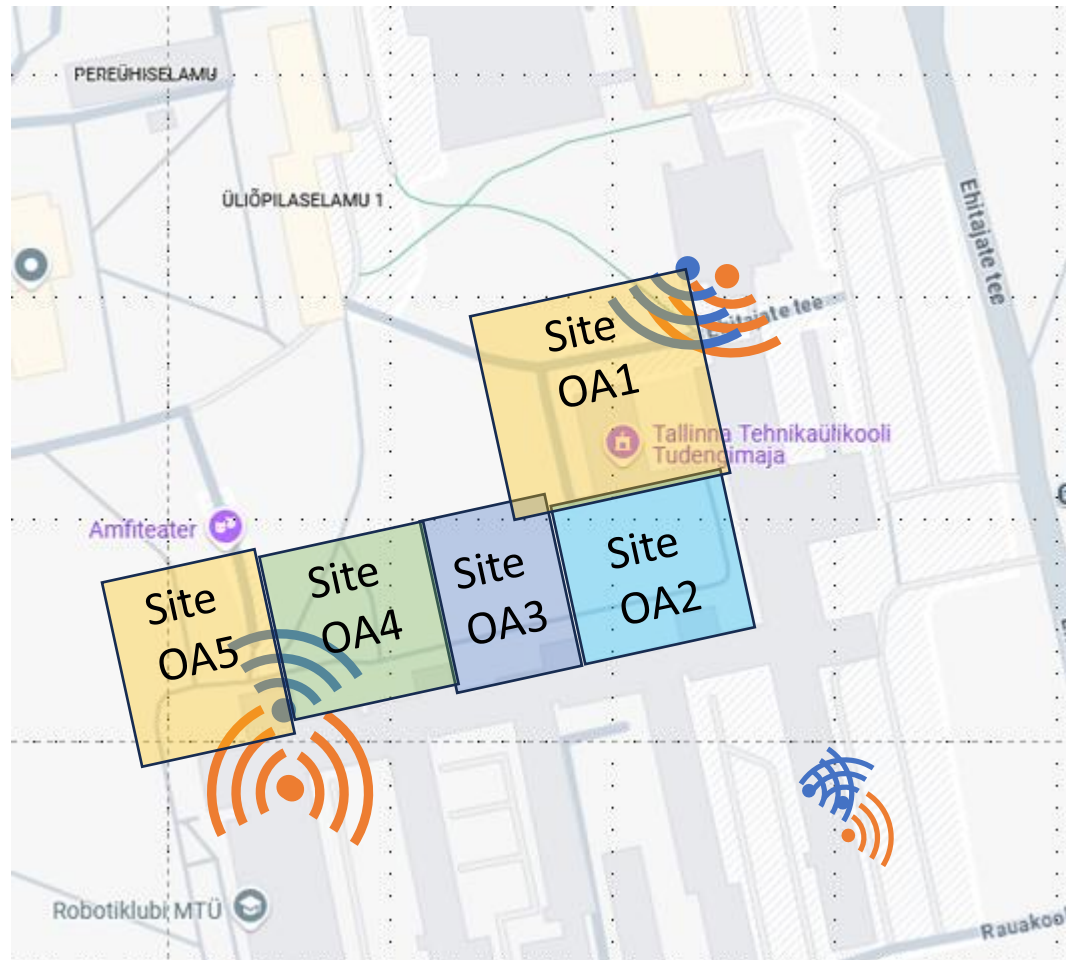
2026

Devices and measurements

- With modem:
 - Measure signals RSRP, RSRQ, SINR of a serving cell (AT commands in QCOM)
 - Measure achieved throughput (iperf server is on IP 192.168.100.2)
 - Measure achieved delay (can ping iperf server or some IP in public network)
 - Record positions in 3 m x 3 m grid, where measurements were done
- With scanner (record positions with GPS):
 - Measure cells and beams (TopN, beams at least members of 2 different cells)
 - RSSI, RSRP, RSRQ, SINR
 - record positions with GPS
 - if GPS does not provide data indoor areas, then record positions on room plan manually



Outdoor areas



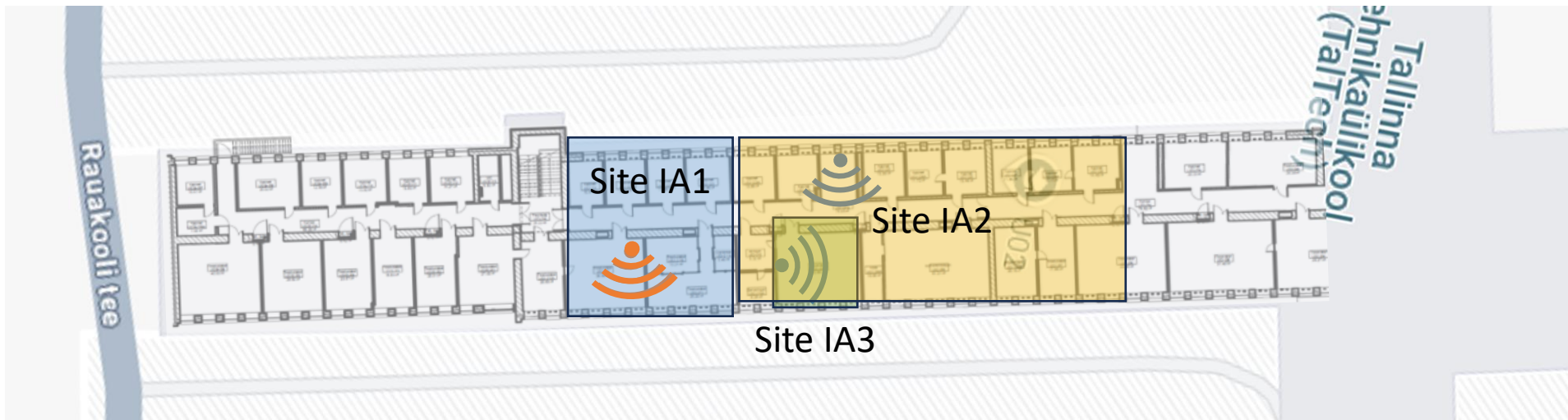
 FR1 RU, n77

 FR2 RU, n258

- FR1 or FR2 with modem
 - Measure signals (RSRP, RSRQ, SINR) of connected cell (and beam)
 - Measure round trip time and throughput UL and DL

Indoor areas

- With scanner FR1 and FR2
 - Measure signals for cells and beams
- With modem FR1
 - Measure signals (RSRP, RSRQ, SINR) of connected cell (and beam)
 - Measure round trip time and throughput UL and DL



Project topic selection in moodle (10 topics)

- FR1 with modem in IA1
Responses: 0
Limit: 1
- FR1 and FR2 with scanner in IA1
Responses: 0
Limit: 1
- FR1 with modem in IA2
Responses: 0
Limit: 1
- FR1 and FR2 with scanner in IA2
Responses: 0
Limit: 1
- With modem in IA3
Responses: 0
Limit: 1
- With modem in OA1
Responses: 0
Limit: 1
- With modem in OA2
Responses: 0
Limit: 1
- With modem in OA3
Responses: 0
Limit: 1
- With modem in OA4
Responses: 0
Limit: 1
- With modem in OA5
Responses: 0
Limit: 1

Save my choice

Project presentation

- 10 minutes presentation

contents

- Presentation
- 1- Objective
- 2- Did you solve any specific problem (if not there is no problem)
- 3- Experiments - actual activities of the project
- 4- Results
- 5- Conclusion