Celtic-Plus Proposers Day
20th June 2017, Helsinki

Pitch of the Project Proposal
Real Time Ray Tracing for 5G

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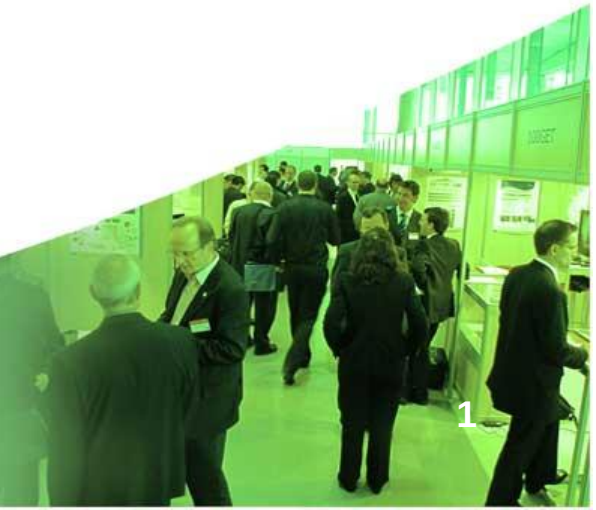
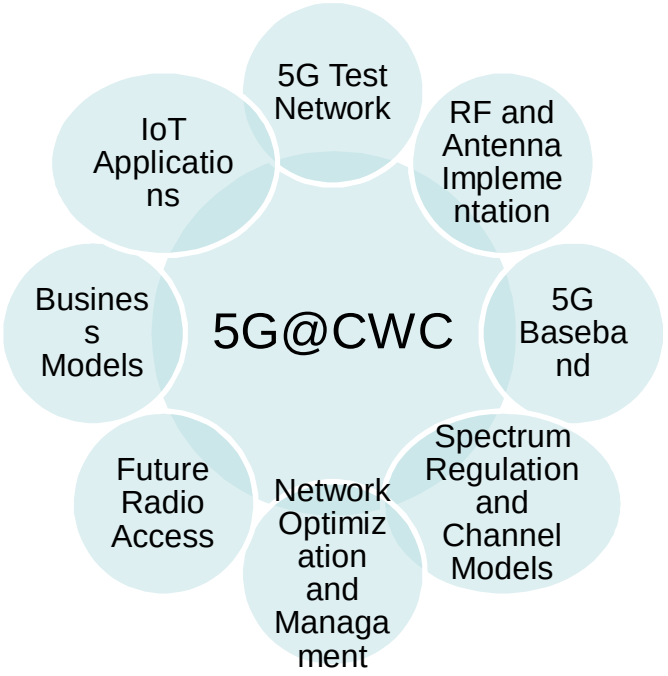


Teaser

- Enable 5G connectivity, service and vertical application targets
- High capacity links at mm-waves and above require better real-time channel models
- Ray-tracing boosted by accelerated computation is a potential enabler
- Requires collecting information of the environment and data analytics
- Major innovation and business potential

Organisation Profile



Smart City - Traffic, infrastructure

eHealth

Robotics

Energy

Learning & education

Industrial applications

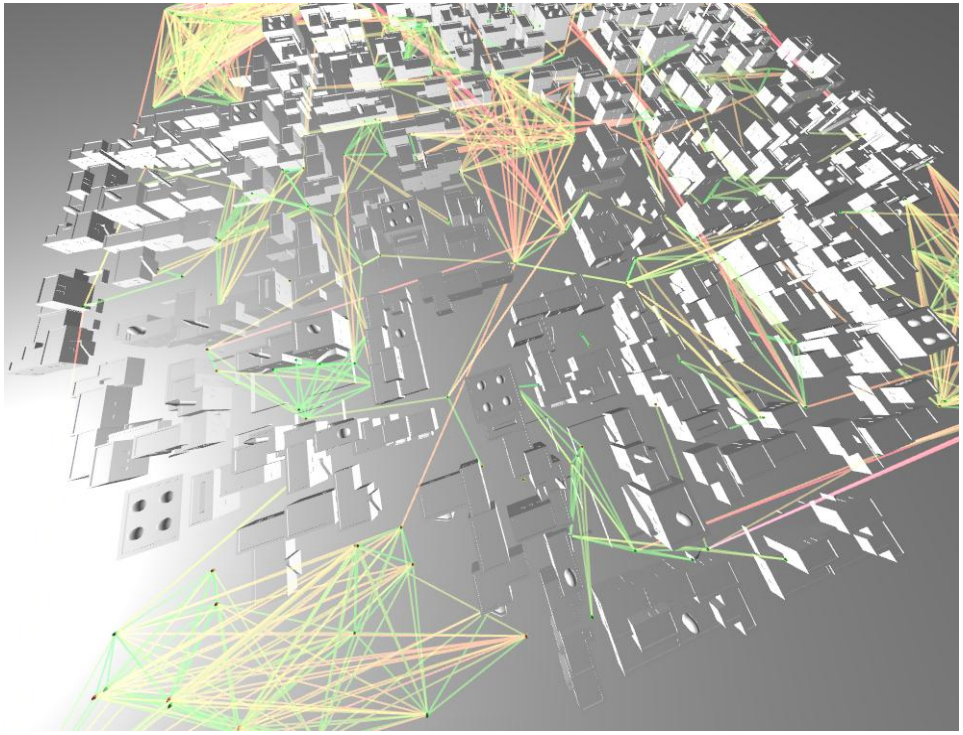
Building automation

Gaming, Entertainment Infotainment

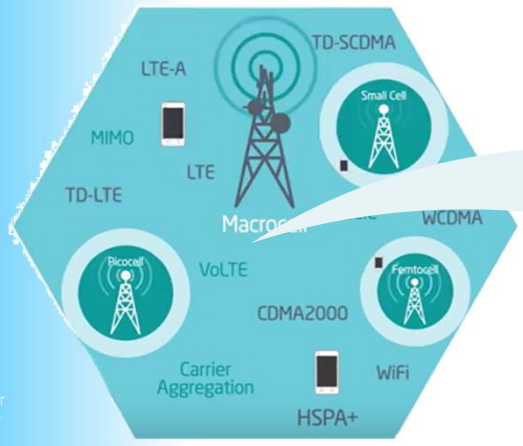
Commerce/finance

Proposal Introduction (1)

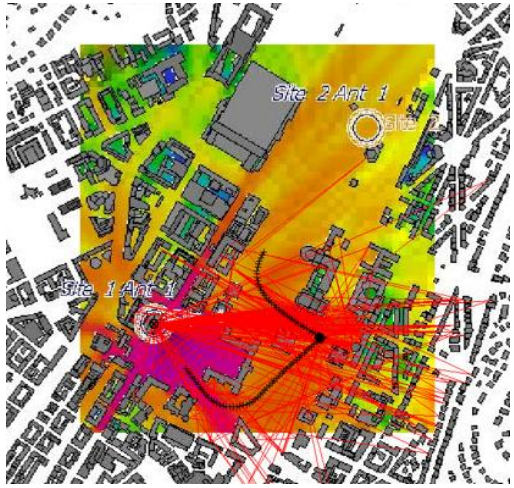
- Target: enabling wireless connectivity by real-time ray tracig based channel learning
- Use cases: 4G, 5G, 6G etc.
- Technical aspects:
  - Efficient computation and acceleration
  - (Bayesian machine) learning and data fusion
  - Electromagnetic modeling of environments



Proposal Introduction (2)



- Technological (R)evolution towards 5G systems



Optimized manually

Project

Optimized through modelling

Hand-made, slow turn around

From months to minutes

Fast, easy to use and better predicted performance service

Tentative Finnish Partners

Further discussions on-going

Contact Info

For more information and for interest to participate please contact:

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