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5G Simulation Framework

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2018 (English) Independent thesis Advanced level (degree of Master (Two Years)),  
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**Abstract [en]**

From the first generation, 1G, to the fourth generation, 4G, the development and technological advancements in telecommunications network systems have been remarkable. Faster and better connections have opened up for new markets, ideas and possibilities, to that extent that there now is a demand that surpasses the supply. Despite all these advancements made in the mobile communications field most of the concept of how the technology works and its infrastructure has remained the same. This however, is about to change with the introduction of the fifth generation (5G) mobile communication.

With the introduction of 5G much of the technology introduced will be different from that of previous generations. This change extends to include the entire infrastructure of the mobile communications system. With these major changes, many of the tools available today for telecommunications network evaluation do not really suffice to include the 5G network standard. For this reason, there is a need to develop a new kind of tool that will be able to include the changes brought by this new network standard.

In this thesis a simulation framework adapted for the next generation telecommunication standard 5G is set to be developed. This framework should include many of the characteristics that set 5G aside from previous generations.

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