Analysis of Channel Modelling for 5G mmWave Communication

Reviewer 1: --

1. In several sections sentences have spelling and grammar mistakes, which needs to be corrected.
2. In several sections sentences have space problems, which need to be corrected.
3. Proper sentence construction in several sections to be modified.

| Actual | Suggested |
|--------|-----------|
| Millimeter wave is one of the key-enabling requirements for mission critical situations and 5G channel modelling has been a complex problem work comprises of the analysis of several mmWave NLOS scenario of UMi environment considered NYUSIM uses Time cluster (TC) - spatial lobe The simulator support carrier frequency up to 60 GHz and 73 GHz in NLOS scenario of UMi environment the characteristics of mmWave channel work done in 5G and propose NYUSIM Section IV gives in-depth simulation environment used by researchers in past few decades utilized the Clark’s theory to develop a simulator Wireless World Initiative for New Radio (WINNER) have frequency of 60 and 77 GHz respectively for | Millimeter-wave is one of the key enabling requirements for mission-critical situations, and 5G channel modeling has been a complex problem work comprises the analysis of several mmWave the NLOS scenario of the UMi environment considered NYUSIM uses a Time cluster (TC) – spatial lobe The simulator supports carrier frequency up to 60 GHz, and 73 GHz) in the NLOS scenario of the UMi environment the characteristics of the mmWave channel work done in 5G and proposes an NYUSIM Section IV gives an in-depth simulation environment used by researchers in the past few decades utilized Clark’s theory to develop a simulator Wireless World Initiative for the New Radio (WINNER) have a frequency of 60 and 77 GHz respectively for |
| original text                                                                 | corrected text                                                                 |
|------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| the academia and industry are involved in development                        | academia and industry are involved in the development                           |
| There are very few simulators which are opensource                            | There are very few simulators that are opensource                               |
| out of which the most popular are 3GPP model                                  | out of which the most popular are the 3GPP model                                |
| All these models can be broken down to the 3GPP                               | All these models can be broken down into the 3GPP                                |
| and industries are working on potential bands for 5G                          | and industries are working on potential bands for 5G                            |
| is far much better than 3GPP model (Release 14)                               | is far much better than the 3GPP model (Release 14)                             |
| compare the results with 3GPP model which concludes                          | compare the results with the 3GPP model which concludes                         |
| developed using Continuous Basis Pursuit                                       | developed using the Continuous Basis Pursuit                                     |
| Besides this both LOS and NLOS environment                                    | Besides this both LOS and NLOS environments                                     |
| omni directional) for each individual candidate                               | omnidirectional) for each candidate                                             |
| the academia and industry and are expected to be the suitable                 | academia and industry and are expected to be suitable                           |
| next generation mobile communication but                                      | next-generation mobile communication                                           |
| to the environmental conditions like atmospheric pressure                    | to environmental conditions like atmospheric pressure                           |
| 73 GHz carrier frequencies in UMi NLOS                                        | 73 GHz carrier frequencies in the UMi NLOS                                      |
| In this section a brief overview of path loss                                | In this section a brief overview of the path loss                               |
| distance between transmitter & receiver                                        | the distance between the transmitter & receiver                                 |
| and free space pathloss at reference distance                                | and free space path loss at a reference distance                                |
| the complex amplitude of multi-element antenna                               | the complex amplitude of the multi-element antenna                              |
| and 73 GHz is simulated while scenario is                                    | and 73 GHz is simulated while the scenario is                                  |
| UMi environment with radio bandwidth of 800MHz. Short                        | UMi environment with radio bandwidth of 800MHz. The short                      |
| and atmospheric pressure of 1013.25mbar                                        | and an atmospheric pressure of 1013.25mbar                                      |
| using co-polarization on antenna. Antenna parameters                         | using co-polarization on the antenna. Antenna parameters                        |
| as type of Uniform Linear Array (ULA)                                         | as the type of Uniform Linear Array (ULA)                                       |
| 10° is considered at both transmitter and receiver.                          | 10° are considered at both transmitter and receiver.                           |
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The Fig. 2 and Fig. 3 shows the 3-dimensional power is transmitted from the transmitter. Each realistic feature is not considered in the Fig. 2 shows that 5, 2, 4, and 1 Spatial Lobe transmission of the received signal at the receiver. The Fig. 2 shows that 5, 2, 4 and 1 Spatial Lobes. UMi environment in the SISO system for DPDP scene in both 38 and 60 GHz which is 0.3 nano-seconds, while the absolute propagation frequency for the NLOS scenario of the UMi environment The Fig. 4, 5, and 6 show the directional, Omni-directional Fig. 4 and 5 can be summarized in Table. It considers a set of OPDP over the receiver’s antenna While the smallest received power is observed in wave as it travels from the transmitter to receiver antenna gain in the NLOS UMi environment which is The aim of the study was to carry out extensive simulations study helps model and design 5G channels VII. Acknowledgements

Comments to Editor:

1. After modifying the content, paper can be accepted for possible publication.
Reviewer 2: --

1. Paper should be written in JMCMS Journal format.
2. References and in-text citations are not in JMCMS format. More references should be included and sequentially/adequately arranged, as cited in the text.
3. In many places, sentences are started with abbreviations. When it is introduced for the first time, the full form should be given.
4. Authors need to Modify Abstract and conclusion more appropriately.
5. In section three, sentences end with few numbers of the full stop, which needs to be removed.
6. Conflict of interest regarding article should be mention in the text.

Comments to Editor:

1. After modifying the content, paper can be accepted for possible publication.
Reviewer 3: --

1. Paper should be written in JMCMS Journal format.
2. References and in-text citations are not in JMCMS format. More references should be included and sequentially/adequately arranged, as cited in the text.
3. Authors need to describe the literature survey in introduction section more elaborately
4. The Abstract and conclusion are needed to be Modified in accordance to fulfill the paper aim.
5. Conflict of interest regarding article should be mention in the text.

Comments to Editor:

1. After modifying the content, paper can be accepted for possible publication.

Regards
Editorial Manager

[Note: This is a computer-generated Report hence, no need of any Signature.]