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EKA OCHE OGBAJI* (ogbajieka@yahoo.com) and **A Edu.** *Mathematical Model for Market Competition in the Telecommunication Industries in Nigeria.* Preliminary report.

This model was formulated by using some basic assumptions and the method of linearization was used to investigate the stability of the system and the data that has been used in this research has been obtained from national communication commission (NCC). Thus secondary data has been employed to achieve the objectives of the study from the year 2016 to 2018. The Lotka-Volterra competition model was used to analyze the competition for market supremacy among the three Nigerian telecommunication companies namely; MTN, AIRTEL and GLO. Firms market shares have been used to refer the competition among them. Estimation of market equilibrium and testing of stability has been performed in this study. The research result shows that MTN will be superior company in the long term and the study provides valuable information to the players for strategic planning and also for making informed decisions. (Received January 09, 2020)