This paper, which was a part of a larger study, seeks to empirically assess and analyse overall customer satisfaction (CS) with service quality delivered by mobile telecommunication networks (MTNs) in Ghana. It involves a cross-sectional survey that used a structured questionnaire personally adminis tered to one thousand (1000) individual subscribers selected from four mobile telecom networks in 2008. The findings indicate that irrespective of mo bile telecom network in Ghana, CS is low; neither equal to nor better than desire and expectation of the customers. The National Communication Au thority (NCA), the regulator and policy makers are empirically informed of the general customer dissat isfaction with mobile telecom service in Ghana and should ensure that MTNs in Ghana improve upon their service quality. Overall CS ratings among cus tomers of MTNs in Ghana significantly differ and that relatively, customers of Companies B, C, and D rated their satisfaction with service quality higher than those of Company A. The management of Company A would need to develop strategies toward to deal with their customer dissatisfaction. Further re search should evaluate customer satisfaction with specific services across MTNs in Ghana. The paper contributes to the body of knowledge in the area CS in the Ghana's mobile telecom networks and pro vides important managerial implications. Key words: Customer satisfaction, service quality, SERVQUAL models, mobile telecommunication net works, customer expectation and desire, disconfir mation models a discussion paper on telecom developments and investments in Ghana (Frempong & Henten, February 2004, p.3), the authors noted that "the goals set by gov□ernment have only partly been met – especially with re spect to the development in rural areas – and the quality of service is still low and has even deteriorated on some indicators. There is, therefore, a widespread dissatisfac tion with the general telecom development in Ghana among users as well as policy decision makers and ad ☐ ministrators." In recent times, there has been more cus ☐ tomer complaint about poor service quality which has been reported by the National Communications Authority (NCA) (BIZ Community.com, October 19, 2007). Since the past decade, the industry has witnessed a tre mendous increase in subscriber growth rate for all the mobile telecom operators (ITU, 2008). Though mobile subscribers have increased in Ghana MTNs, it does not provide justification that customers are satisfied with the service quality delivered by mobile telecom networks in Ghana. No study so far, to the best of the researchers' knowledge has been conducted to examine the CS in Ghana's MTNs. So there is the need to empirically assess and analyse the phenomenon for managerial implica tio