

Seamless Switching in Multiple-SIM Mobile Phone

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At the moment, there are five or six major mobile phone operators providing services in Bangladesh. These operators offer various packages (call rates) to their users and also to attract the new users. All of these packages are different from each other and also differ from operator to operator. Some operator may offer a cheap call rate from 8 am to 12 pm while the other may offer the cheapest package from 12 am to 6 am for regular calls. There are other facilities such as Friends and Family commonly known as FnF, which offers a flat call rate for 24 hours for selected number(s). To enjoy all the available facilities from the various mobile operators, users may use more than one SIM (Subscriber Identification Module), where they can activate a particular SIM at a particular time of the day. But the problem with this approach is that users have to switch off the set and then activate the desired SIM manually. This problem motivated us to use multiple SIM at the same time so that the cheapest traffic operator at the time of call generation can be selected automatically. The idea is to facilitate the mobile phone set with software, which at the time of call generation, checks the database, for call rate as well as the calling number with another database storing the FnF list. For this work, a database of call rate of various operators throughout the day has to be maintained. We have developed an algorithm for selecting the cheapest operator and developed a simulator for that algorithm. According to the proposed algorithm, if the calling number is not in the FnF list, the SIM with the lowest call rate will be activated and the call will be established through that particular SIM's operator. From the simulated results, it is found that the user making a 10–15 calls/day can save upto 20% of his regular bills. This can be a great safe for users making frequent calls and paying big bills.