

Comparison security at the interoperation



**ASSIGN
BUSTER**

Comparison security at the Interoperation of 3G and 4G mobile data networks Introduction MOHAMMAD HAFIZI BIN JAINAL (GP01982) , MOHD ARIEFF ADAM B MAHMUD FAUZI (GP01993) 4/20/2013 [The rapid growth and development of mobile systems over the past years has exposed the capability and effective availability of mobile communication and thus paved the way for secure transmission and execution of data. Mobile communications also provide us too many type of connection to access to internet with their few security mechanisms build inside.]

Comparison security at the Interoperation of 3G and 4G mobile data network Introduction The rapid growth and development of mobile systems over the past years has exposed the capability and effective availability of mobile communication and thus paved the way for secure transmission and execution of data. Mobile communications also provide us too many type of connection to access to internet with their few security mechanisms build inside. Many of us do not know what some of the advantages and disadvantages using different type of mobile data networks. Don't know how security they are?

Don't know our data or file will expose outside the route while transferring on the line? Inside all the questioner is it, we still being connected using all this mobile data because its offers us flexibility in our lifestyles, makes us more productive in our jobs, and makes us feel more secure. This is briefly to introduce the comparison security on interoperation between 3G and 4G mobile data networks.

For the future issue, interoperation of 3G and 4G networks would be vital when the networks of the both spectrum need to work with each other. In general, wireless networks integrated vertically and homogeneous, i. . wireless standard of channel access method such as GSM/ UMTS or CDMA were binds by the service provider and the networks from the core to the base station were implemented throughout entirely. In previous, 3G and 2G working by mutual authentication between user and network where applying much integrity protection of signalling commands on the air interface and of course these would be applied the same with the interoperation networks between 3G and 4G. The integrity key cipher from 4G expected to be much higher and secured than the previous legacy.

However it may depends on the frame architecture of the security from the both networks, to be discussed later. The discussion will concentrate on the comparison of the security aspects behind the mobile technology and its applications when the interoperation between 3G and 4G occurs. We identified all relevant 1 roaming and handover cases between 3G and 4G networks and describe the solution for handling the cipher and integrity keys in these case developed by the 3GPP security group, which is the relevant standardisation body.

We will investigate the extension 3G enhancement from this body which is LTE technology. LTE stands for Long Term Evolution and it is the name given to a project within the 3GPP to improve the universal mobile telecommunications standards (UMTS). The guiding principle was to provide 4G security to 4G users whenever possible. The solution is assessed with respect to the security it offers and the signalling load it causes. The

<https://assignbuster.com/comparison-security-at-the-interoperation/>

discovery of new solutions of every addressed problem accordingly, is critical in order to provide the flexibility environment in future with the security in hand. 2