

$T_4=[0.1160 \ 0.0117 \ 0.1310 \ 0.0687 \ 0.9310 \ 0.8688]$

So, N_5 is the best choice for network selection.

The simulation result is shown in Figure 2.

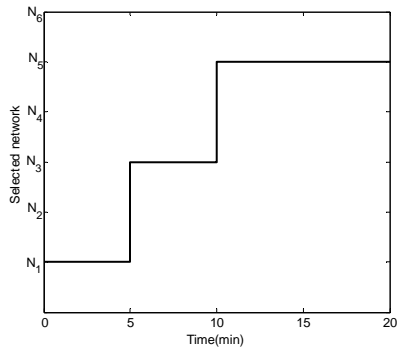


Figure 2 Network selection result

Through above simulation scene, analysis that:

1 Network selection is first to determine whether there is jam in the environment. With jam, the objective function value of the anti-jamming network is significantly higher than other network, because the other networks can't guarantee the reliability of signal transmission. Only the anti-jamming network can be used for communication.

2 Without jam, The main factors affecting the network selection are business QoS and user preference. Low-speed voice business and high-speed multimedia business select narrowband network and broadband network, according to their QoS requirement and user preferences.

3 For the selected same type network, we consider the network load, make the access probability of low network load network larger than others. It is good for network load balancing, and it can reduce the rate of network congestion.

IV. CONCLUSION

In satellite heterogeneous network communication, how use choose more suitable network to communicate and meet their own demands is a key technology. The network selection algorithm proposed by this paper makes a best network selection results for users and network, according to different business QoS requirements under different environments and user preferences, and it also take the network load into account to contribute to the network load balancing. The simulation results verify the correctness and validity of the algorithm.

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