

Part III

New Directions in the Development of Cognitive Radio Networks

The field of cognitive radio networks is still very much a new and evolving field of modern technology. As cognitive radio networks evolve, some recently-introduced and highly-significant analytical tools (such as queueing theory) and techniques (such as cooperative diversity) are being explored in order to achieve an improved overall network performance and productivity for cognitive radio networks. Furthermore, new works are focussing on how cognitive radio networks are interacting with and/or influencing some of the other newly-developing technologies such as the fifth-generation and the internet-of-things networks. In some cases, the influence of cognitive radio networks on such other emerging technologies are already well established while in other cases, the impact is not yet fully exposed. In this part of the book, new concepts that explore possible/ongoing interactions between cognitive radio networks and other emerging technologies are discussed. Some useful and exciting ideas for further development and eventual implementation of the cognitive radio network are proposed.