5G Challenges and Mitigations Quick Reference Table

CHALLENGE	RECOMMENDED MITIGATION
Ill-defined enterprise 5G use case	Create a team, representative of the whole enterprise, to plan for 5G integration Ensure board buy-In
Connection to new 5G cores (responsible for network security) for international roaming will be required on both ends of the communication to ensure the advertised security benefits Communicating through a mix of 5G networks and LTE, 3G, and 2G networks (rather than all-5G) exposes the 5G network to the same vulnerabilities of the legacy network	Clearly define the use case as a basis for security planning and additional security protocols Build 5G security protocols off existing 4G security standards
A dearth of 5G-related technical expertise in the enterprise	Evaluate availability of applicable talent and augment or train as needed
Appropriate network-wide risk management practices will take time to develop and may trail the introduction of the network Service providers face increased demand for, and spreading of, maintenance costs and investment decisions across multiple network generations – this will likely lead to 5G rollout delays	Use the determination of the enterprise use case to create an optimum adoption timetable Understand the limitations of service providers and third parties
5G services currently lack the support hardware required to take advantage of its added security and will continue to be accessed through less secure LTE, 3G, and 2G user equipment	Build 5G security protocols off existing 4G security standards Develop a workable threat identification plan
Decoupling hardware and software suppliers will introduce further complexity and associated risk The internet of things will become synonymous with the Radio Access Network (RAN), introducing new security 'back doors'	Create an employee 5G use policy Develop a connected devices integration plan Develop a workable threat identification plan
5G hardware will be vulnerable to the introduction of malware during manufacture	Understand the limitations of service providers and third parties Employ thorough hardware vetting and standards enforcement
Network Slicing Insufficient security patch management	Develop a patch management plan

For further details, please visit the BENS 5G – A Guide to Secure Adoption by Business webpage.