TSC Category	Technology Road Mapping					
TSC	Internet of Things (IoT) Management					
TSC Description	Interrelate computing devices, equipment and machines data in a networked environment to provide specific solutions					
TSC Proficiency Description	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**	**Level 6**
		EGS-TEM-2004-1.1-1	**EGS-TEM-3004-1.1-1**	**EGS-TEM-4004-1.1-1**	**EGS-TEM-5004-1.1**	
		Apply interfacing techniques in computer system for networking and usage of dashboard information	Analyse the information provided by the network and dashboard in order to apply and sustain the operational needs	Manage operation execution using Internet of Things (IoT) solutions for process improvements	Formulate Internet of Things (IoT) direction and platforms so to drive operational efficiency and effectiveness	
Knowledge		• Knowledge of basic virtual and digital database works • Internet of Things (IoT) system interface • Data Analytics for operating the automation and/or robotics system through system connection • Big data dashboard for task optimisation • Industry 5S approach in integration using IoT	• Basic working principles of virtual and digital database • Internet of Things (IoT) system interface • Data Analytics for operating the automation and/or robotics system through system connection • Big data dashboard for task optimisation • Industry 5S approach in integration using IoT • Knowledge of documentation through IoT • Knowledge of scheduling tools integration with network	• IoT concept and technical knowledge of IoT implementation • Connectivity using sensors, smart devices and other technologies for data collection • Equipment automation • Advanced process control • Security and privacy applications for IoT • IoT guidelines and communication standards	• IoT and the Architecture Reference Model (ARM) • Smart Automation Applications and Technologies • Large-Scale Monitoring and Analytics Applications and Technologies • Data modelling, collection and management • Data Visualisation and Exploration Business Intelligence tool	
Abilities		• Operate the automated tools and system • Interpret the control room and dashboard information • Utilise the system information integration • Interpret automation and robotics system information in a networked environment to dispatch task	• Analyse the automated tools and system so as to perform basic troubleshooting • Perform system information integration to analysis the Big Data • Understand the control models, process control algorithms, strategies behind the automated system	• Design and develop an IoT application in a team-based environment • Establish network security protocol, communication protocol, wireless infrastructure, on-premises solution, switches and integration of the IoT ecosystem in collaboration with technology solution providers	• Formulate strategies for industrial IoT implementation • Conceptualise and articulate a solution making use of IoT • Determine the platforms for storing and managing IoT related information provided in a networked environment	

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		• Perform task to interact with the IoT in an automated environment	• Interpret robotics & network information to schedule construction or maintenance work in a networked environment • Coordinate task to interact with the IoT in an automated environment	• Manage IoT application and automation using smart device • Manage data in IoT Applications		