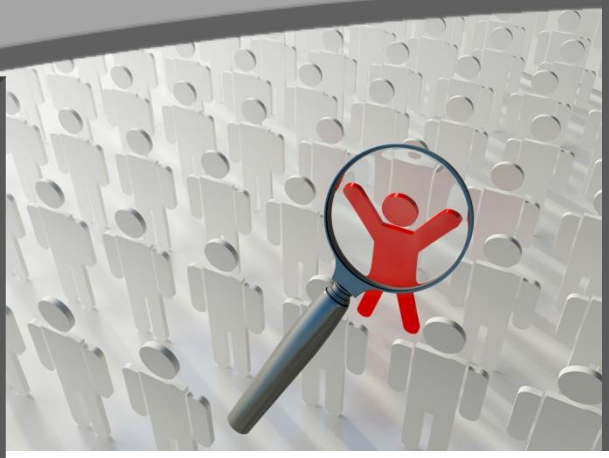
IT - ITeS SSC NASSCOM

GOVERNMENT OF INDIA MINISTRY OF SKILL DEVELOPMENT & ENTREPRENEURSHIP

N·S·D·C National Skill Development Corporation Transforming the skill landscape

QUALIFICATIONS PACK – NATIONAL OCCUPATIONAL STANDARDS FOR IT-BPM INDUSTRY



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What are National Occupational Standards(NOS)?

- NOS describe what individuals need to do, know and understand in order to carry out a particular job role or function
- NOS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding

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Introduction

Qualifications Pack-Application Maintenance Engineer

SECTOR: IT-ITeS

SUB-SECTOR: IT Services

OCCUPATION: Application Maintenance

REFERENCE ID: SSC/Q0201

ALIGNED TO: NCO-2015/ 2512.0701

Application Maintenance Engineer in the IT-ITeS Industry is also known as a Maintenance Engineer.

Brief Job Description: Individuals at this job are responsible for ensuring the availability of an application or product for end users. Such roles provide on-going/ad-hoc support for software products or customized applications aimed towards correction of faults/bugs or improvement of performance

Personal Attributes: This job requires the individual to work collaboratively with users or other teams for resolving issues pertaining to his/her area of work. The individual should be result oriented and should possess skills such as communication, logical thinking etc.

Qualifications Pack For Application Maintenance Engineer

Job Details

Qualifications Pack Code	**SSC/Q0201**		
Job Role	**Application Maintenance Engineer** **This job role is applicable in both national and international scenarios**		
Credits (NSQF)	**TBD**	**Version number**	**1.0**
Sector	**IT-ITeS**	**Drafted on**	**30/04/2013**
Sub-sector	**IT Services**	**Last reviewed on**	**31/03/2018**
Occupation	**Application Maintenance**	**Next review date**	**31/03/2019**
NSQC Approval	**18/06/2015**		

Job Role	**Application Maintenance Engineer** (Maintenance Engineer, Application Support Engineer, System Support Engineer)
Role Description	Individuals at this job are responsible for ensuring the availability of an application or product for end users. Such roles provide on-going/ad-hoc support for software products or customized applications aimed towards correction of faults/bugs or improvement of performance.
NSQF level	7
Minimum Educational Qualifications **Maximum Educational Qualifications**	Diploma in engineering, Bachelor's Degree in Science/Technology/Computers or any graduate course Master's Degree in Science/Technology/Computers
Training (Suggested but not mandatory)	Courses/certifications/technical trainings on specific software applications and their maintenance requirements
Minimum Job Entry Age	18 years
Experience	0-2 years of work experience/internship in Application Maintenance
Applicable National Occupational Standards (NOS)	**Compulsory:** 1. SSC/N0201 (Contribute to the maintenance of software applications) 2. SSC/N9001 (Manage your work to meet requirements) 3. SSC/N9002 (Work effectively with colleagues) 4. SSC/N9003 (Maintain a healthy, safe and secure working environment) 5. SSC/N9004 (Provide data/information in standard formats) 6. SSC/N9005 (Develop your knowledge, skills and competence) **Optional:** Not Applicable
Performance Criteria	As described in the relevant NOS units

Glossary of Key Terms

Definitions

Keywords /Terms	Description
Sector	Sector is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Vertical	Vertical may exist within a sub-sector representing different domain areas or the client industries served by the industry.
Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an industry.
Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of OS.
Sub-functions	Sub-functions are sub-activities essential to fulfill the achieving the objectives of the function.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the knowledge and understanding they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria	Performance Criteria are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	NOS are Occupational Standards which apply uniquely in the Indian context.
Qualifications Pack Code	Qualifications Pack Code is a unique reference code that identifies a qualifications pack.
Qualifications Pack(QP)	Qualifications Pack comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification pack code.
Unit Code	Unit Code is a unique identifier for an OS unit, which can be denoted with either an '**O**' or an '**N**'.
Unit Title	Unit Title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.

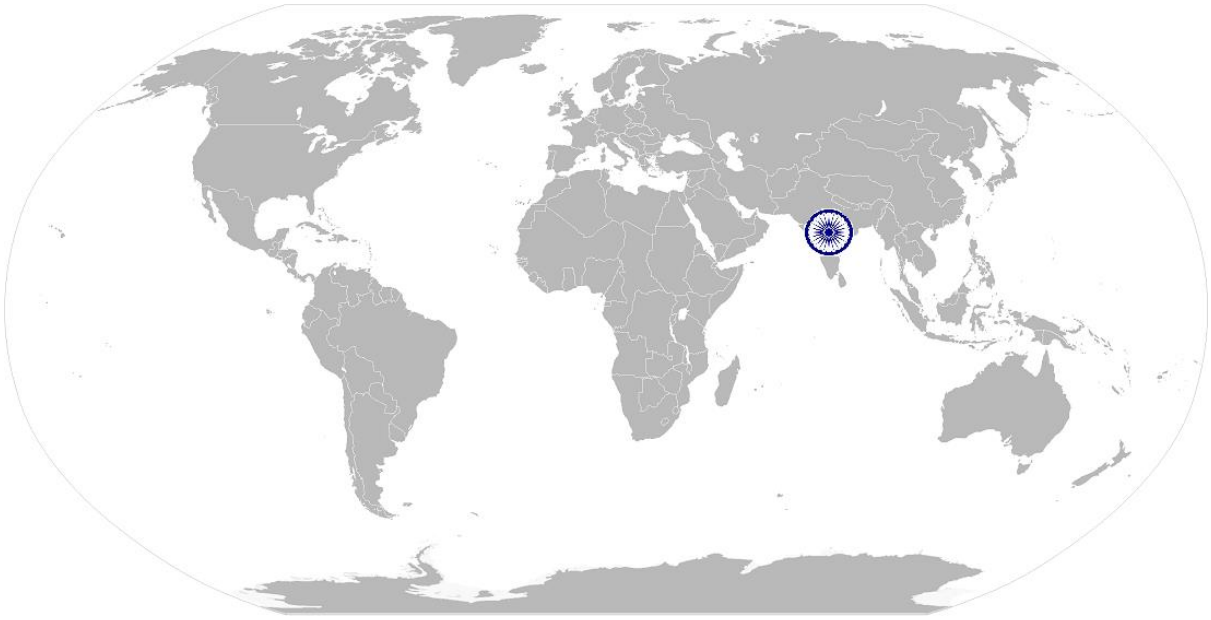
Scope	Scope is the set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on the quality of performance required.
Knowledge and Understanding	Knowledge and Understanding are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard.
Organizational Context	Organizational Context includes the way the organization is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical Knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/Generic Skills	Core Skills or Generic Skills are a group of skills that are key to learning and working in today's world. These skills are typically needed in any work environment. In the context of the OS ,these include communication related skills that are applicable to most job roles.
Helpdesk	Helpdesk is an entity to which the customers will report their IT problems. IT Service Helpdesk Attendant is responsible for managing the helpdesk.

Acronyms

Keywords /Terms	Description
IT-ITeS	Information Technology - Information Technology enabled Services
BPM	Business Process Management
BPO	Business Process Outsourcing
KPO	Knowledge Process Outsourcing
LPO	Legal Process Outsourcing
IPO	Information Process Outsourcing
BCA	Bachelor of Computer Applications
B.Sc.	Bachelor of Science
OS	Occupational Standard(s)
NOS	National Occupational Standard(s)
QP	Qualifications Pack
UGC	University Grants Commission
MHRD	Ministry of Human Resource Development
MoLE	Ministry of Labour and Employment
NVEQF	National Vocational Education Qualifications Framework
NVQF	National Vocational Qualifications Framework
NSQF	National Skill Qualification Framework

SSC/N0201 Contribute to the support and maintenance of software applications

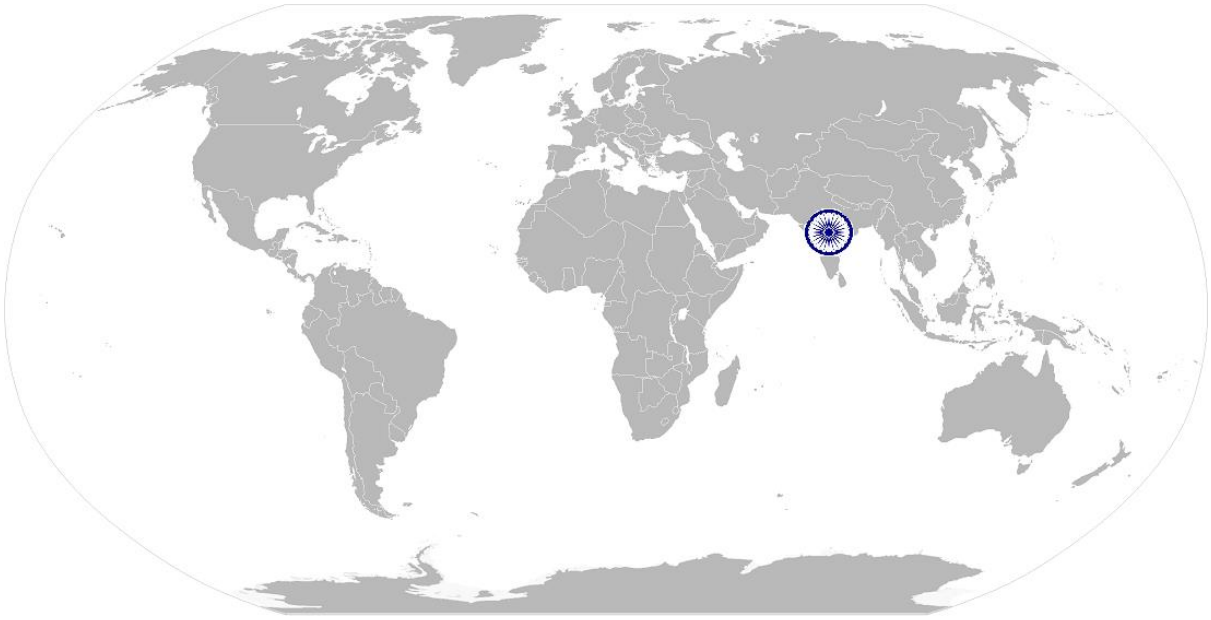
National Occupational Standard



Overview

This unit is about contributing to the support and maintenance of software applications. It involves identifying issues/change requests, identifying immediate solutions/workarounds and contributing to the design, development, testing, documentation and implementation of solutions/changes.

SSC/N0201 Contribute to the support and maintenance of software applications



SSC/N0201 Contribute to the support and maintenance of software applications

Applicable OS Unit

Unit Code	**SSC /N0201**
Unit Title (Task)	**Contribute to the support and maintenance of software applications**
Description	This unit is about contributing to the support and maintenance of software applications. It involves identifying issues/change requests, identifying immediate solutions/workarounds and contributing to the design, development, testing, documentation and implementation of solutions/changes. You are only expected to contribute to the maintenance of software applications within your level of competence and authority. Where you are authorized to design, develop, test, document or implement solutions/changes you are expected to work to the occupational standards covering these tasks.
Scope	This unit/task covers the following: **Tasks**: • bugs • enhancements **Appropriate people**: • line manager • software development team • subject matter experts **Changes** to: • code • environment • configuration **Testing**: • unit testing • functionality testing
Performance Criteria (PC) w.r.t. the Scope	
	To be competent, you must be able to: PC1. monitor systems to identify promptly automated alerts and customer change requests PC2. analyze alerts to accurately identify **issues** PC3. record and acknowledge **issues** and change requests using relevant tools and procedures PC4. access your organization's knowledge base to identify any immediate solutions/workarounds PC5. evaluate the suitability of solutions/workarounds, where available PC6. evaluate new design solutions where immediate solutions/workarounds are not available

SSC/N0201 Contribute to the support and maintenance of software applications

	PC7. agree immediate solutions/workarounds or new design solutions with **appropriate people** PC8. make agreed **changes** to address **issues** where these are within your level of competence and authority PC9. carry out **testing** on the **changes** where these are within your level of competence and authority PC10. refer **changes** outside your level of competence and authority to **appropriate people** PC11. produce documentation, deployment scripts and release notes using standard templates and tools PC12. obtain approval from **appropriate people** to implement immediate solutions/ workarounds and **changes** PC13. co-ordinate the implementation of immediate solutions/workarounds and **changes** in line with your organization's standards and guidelines PC14. obtain advice and guidance from **appropriate people**, where necessary PC15. recommend to **appropriate people** any ways in which support and maintenance procedures can be improved PC16. update your organization's knowledge base with the **changes** PC17. comply with relevant standards, policies, procedures, guidelines and service level agreements (SLAs) when contributing to the maintenance of software applications
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company/ organization and its processes)	You need to know and understand: KA1. your organization's policies, procedures, guidelines and coding standards for the maintenance of software applications KA2. the importance of using specific client agreements, SLAs and management plans when working with customers KA3. different IT applications and the environments in which they are used KA4. limits of your role and responsibilities in relation to maintaining software applications KA5. who to refer problems to when they cannot be resolved KA6. basic operation of ticketing tools , incident tickets, automated system alerts and change requests KA7. the basics of Information Technology Infrastructure Library (ITIL) which apply to service desk and incident management KA8. who to involve when contributing to software maintenance and development KA9. methods and techniques used when working with others KA10. methods, procedures and guidelines for evaluating, testing and implementing changes to software

SSC/N0201 Contribute to the support and maintenance of software applications

	KA11. the range of standard tools and templates and their appropriate usage KA12. your organization's knowledge base and how to use and update it KA13. the importance of working in different shifts to meet customer requirements
B. Technical Knowledge	You need to know and understand: KB1. relevant product reference guides or support materials and how to access them KB2. methods and techniques to identify and evaluate workarounds or new solutions KB3. how to develop documentation, deployment scripts and release notes KB4. configuration management and version control techniques for software maintenance/changes KB5. procedures, practices and tools for developing, testing and applying changes to software
Skills (S)	
A. Core Skills/ Generic Skills	**Writing Skills**
	You need to know and understand how to: SA1. complete accurate well written work with attention to detail SA2. communicate with others in writing
	Reading Skills
	You need to know and understand how to: SA3. follow guidelines/procedures/rules and service level agreements
	Oral Communication (Listening and Speaking skills)
	You need to know and understand how to: SA4. listen effectively and orally communicate information accurately SA5. seek clarification and advice from others
B. Professional Skills	**Decision Making**
	You need to know and understand how to: SB1. follow rule-based decision-making processes SB2. identify anomalies in data SB3. make a decision on suitable a course of action or responses
	Plan and Organize
	You need to know and understand how to: SB4. plan and organize your work to achieve targets and deadlines
	Customer Centricity
	You need to know and understand how to: SB5. carry out rule-based transactions in line with customer-specific guidelines/procedures/rules and service level agreements SB6. work effectively in a customer facing environment SB7. check that your own and/or your peers work meets customer requirements

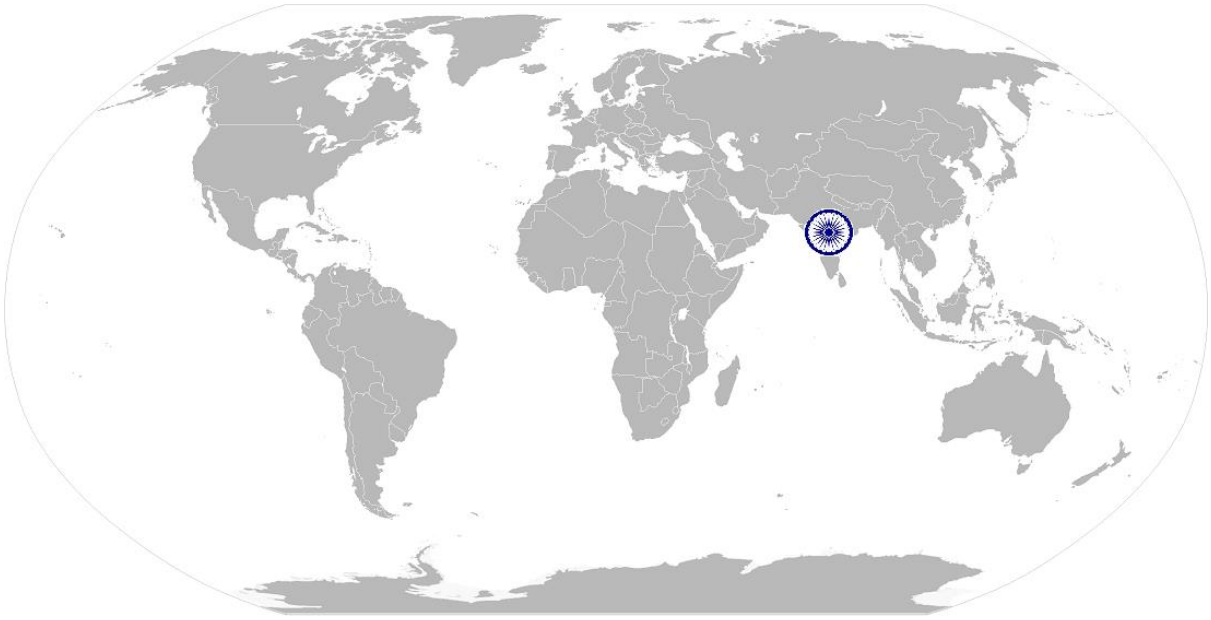
SSC/N0201 Contribute to the support and maintenance of software applications

	Problem Solving
	You need to know and understand how to: SB8. refer anomalies to the supervisor SB9. apply problem-solving approaches in different situations SB10. seek clarification on problems from others
	Analytical Thinking
	You need to know and understand how to: SB11. analyze data and activities SB12. configure data and disseminate relevant information to others SB13. pass on relevant information to others
	Critical Thinking
	You need to know and understand how to: SB14. provide opinions on work in a detailed and constructive way SB15. apply balanced judgments to different situations
	Attention to Detail
	You need to know and understand how to: SB16. check your work is complete and free from errors SB17. get your work checked by others
	Team Working
	You need to know and understand how to: SB18. contribute to the quality of team working SB19. work effectively in a team environment SB20. work independently and collaboratively
C. Technical Skills	You need to know and understand how to: SC1. source control and use coding standards, ticketing tools and utilities/tools SC2. maintain accuracy of data by appropriate usage of IT tools and techniques SC3. identify and refer anomalies in data SC4. store and retrieve information SC5. learn and adapt new technologies SC6. keep up to date with changes, procedures and practices in your field of expertise

SSC/N0201 Contribute to the support and maintenance of software applications

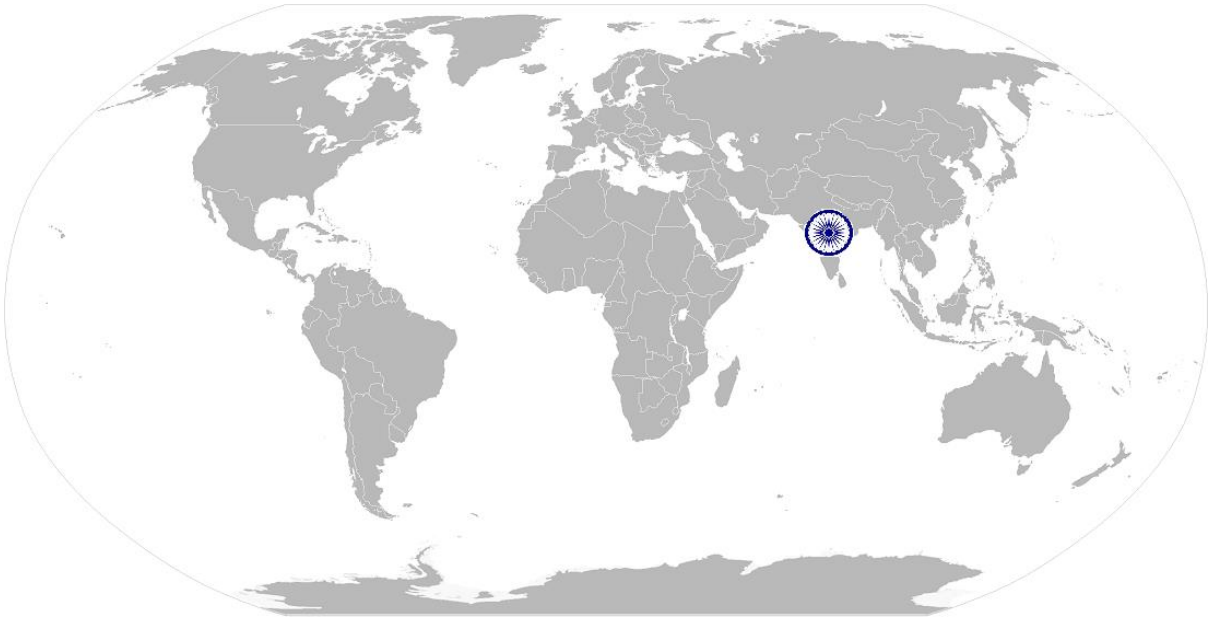
NOS Version Control

NOS Code	SSC/N0201		
Credits (NSQF)	TBD	Version number	1.0
Industry	IT-ITeS	Drafted on	30/04/2013
Industry Sub-sector	IT Services	Last reviewed on	31/03/2018
		Next review date	31/03/2019



SSC/N9001 **Manage your work to meet requirements**

National Occupational Standard



Overview

This unit is about planning and organizing your work in order to complete it to the required standards on time

SSC/N9001 **Manage your work to meet requirements**

Applicable NOS Unit

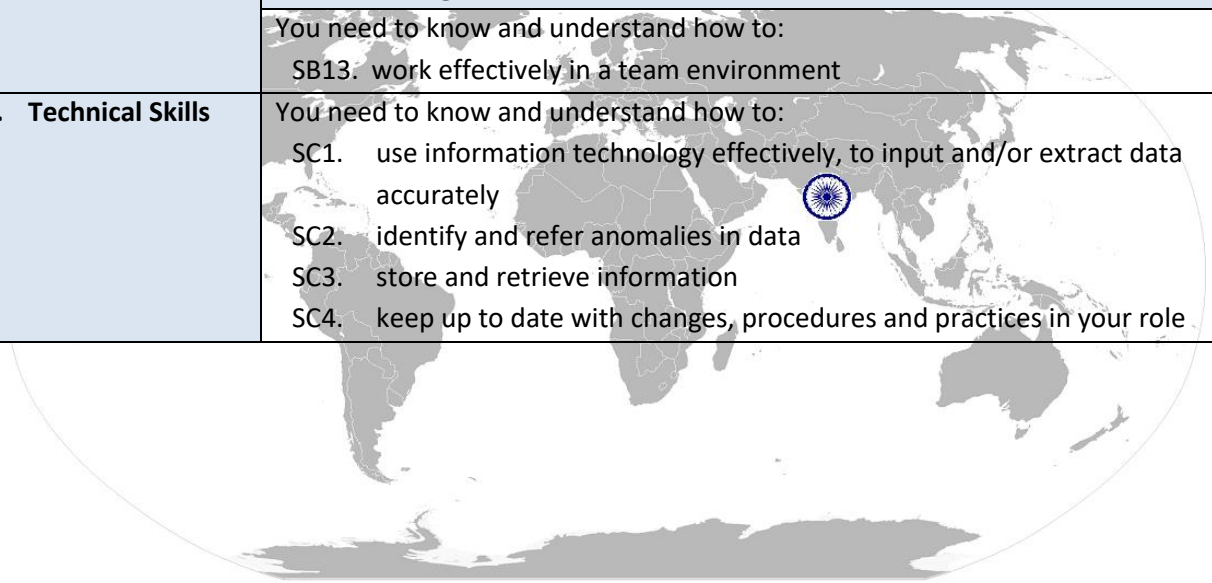
Unit Code	**SSC/N9001**
Unit Title (Task)	**Manage your work to meet requirements**
Description	This unit is about planning and organizing your work in order to complete it to the required standards on time.
Scope	This unit/task covers the following: **Work requirements**: • activities (what you are required to do) • deliverables (the outputs of your work) • quantity (the volume of work you are expected to complete) • standards (what is acceptable performance, including compliance with Service Level Agreements) • timing (when your work needs to be completed) **Appropriate people**: • line manager • the person requesting the work • members of the team/department • members from other teams/departments **Resources**: • equipment • materials • information
Performance Criteria (PC) w.r.t. the Scope	
	To be competent on the job, you must be able to: PC1. establish and agree your **work requirements** with **appropriate people** PC2. keep your immediate work area clean and tidy PC3. utilize your time effectively PC4. use **resources** correctly and efficiently PC5. treat confidential information correctly PC6. work in line with your organization's policies and procedures PC7. work within the limits of your job role PC8. obtain guidance from **appropriate people**, where necessary PC9. ensure your work meets the agreed **requirements**
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company/ organization and its processes)	You need to know and understand: KA1. your organization's policies, procedures and priorities for your area of work and your role and responsibilities in carrying out your work KA2. limits of your responsibilities and when to involve others KA3. your specific work requirements and who these must be agreed with KA4. the importance of having a tidy work area and how to do this KA5. how to prioritize your workload according to urgency and importance and the benefits of this

SSC/N9001 **Manage your work to meet requirements**

	KA6. your organization's policies and procedures for dealing with confidential information and the importance of complying with these KA7. the purpose of keeping others updated with the progress of your work KA8. who to obtain guidance from and the typical circumstances when this may be required KA9. the purpose and value of being flexible and adapting work plans to reflect change
B. Technical Knowledge	You need to know and understand: KB1. the importance of completing work accurately and how to do this KB2. appropriate timescales for completing your work and the implications of not meeting these for you and the organization KB3. resources needed for your work and how to obtain and use these
Skills (S)	
A. Core Skills/ Generic Skills	**Writing Skills**
	You need to know and understand how to: SA1. complete accurate work with attention to detail
	Reading Skills
	You need to know and understand how to: SA2. read instructions, guidelines, procedures, rules and service level agreements
	Oral Communication (Listening and Speaking skills)
	You need to know and understand how to: SA3. ask for clarification and advice from line managers SA4. communicate orally with colleagues
B. Professional Skills	**Decision Making**
	You need to know and understand how to: SB1. make a decision on a suitable course of action
	Plan and Organize
	You need to know and understand how to: SB2. plan and organize your work to achieve targets and deadlines SB3. agree objectives and work requirements
	Customer Centricity
	You need to know and understand how to: SB4. deliver consistent and reliable service to customers SB5. check that your own work meets customer requirements
	Problem Solving
	You need to know and understand how to: SB6. refer anomalies to the line manager SB7. seek clarification on problems from others

SSC/N9001 **Manage your work to meet requirements**

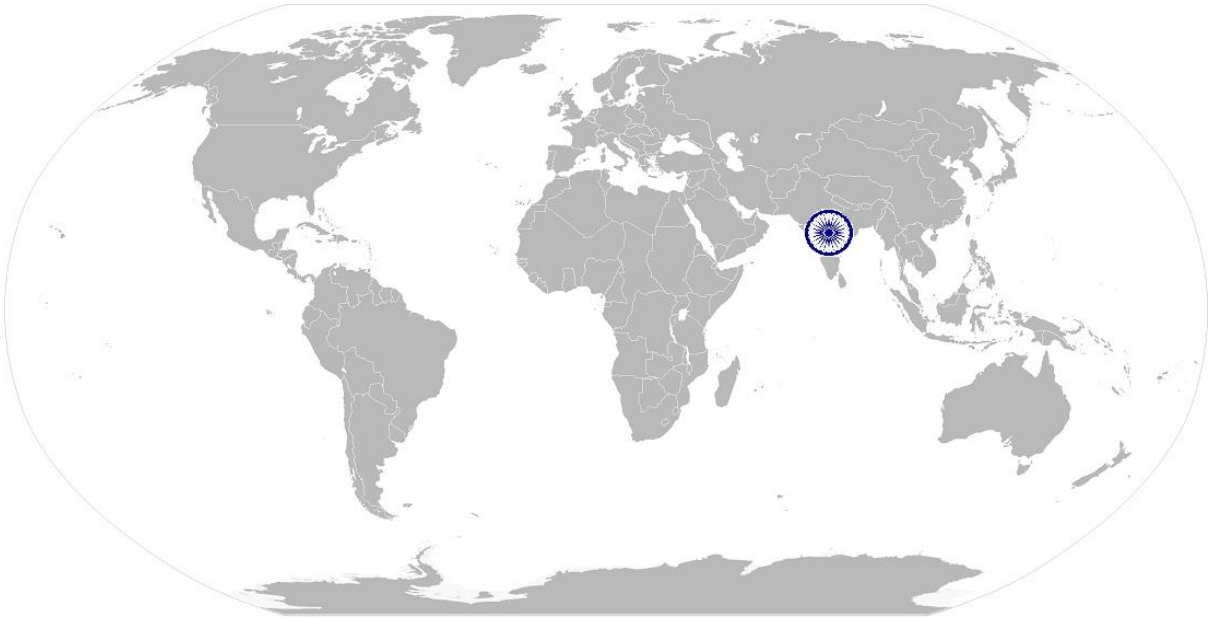
	Analytical Thinking
	You need to know and understand how to: SB8. provide relevant information to others SB9. analyze needs, requirements and dependencies in order to meet your work requirements
	Critical Thinking
	You need to know and understand how to: SB10. apply judgments to different situations
	Attention to Detail
	You need to know and understand how to: SB11. check your work is complete and free from errors SB12. get your work checked by peers
	Team Working
	You need to know and understand how to: SB13. work effectively in a team environment
C. Technical Skills	You need to know and understand how to: SC1. use information technology effectively, to input and/or extract data accurately SC2. identify and refer anomalies in data SC3. store and retrieve information SC4. keep up to date with changes, procedures and practices in your role



SSC/N9001 **Manage your work to meet requirements**

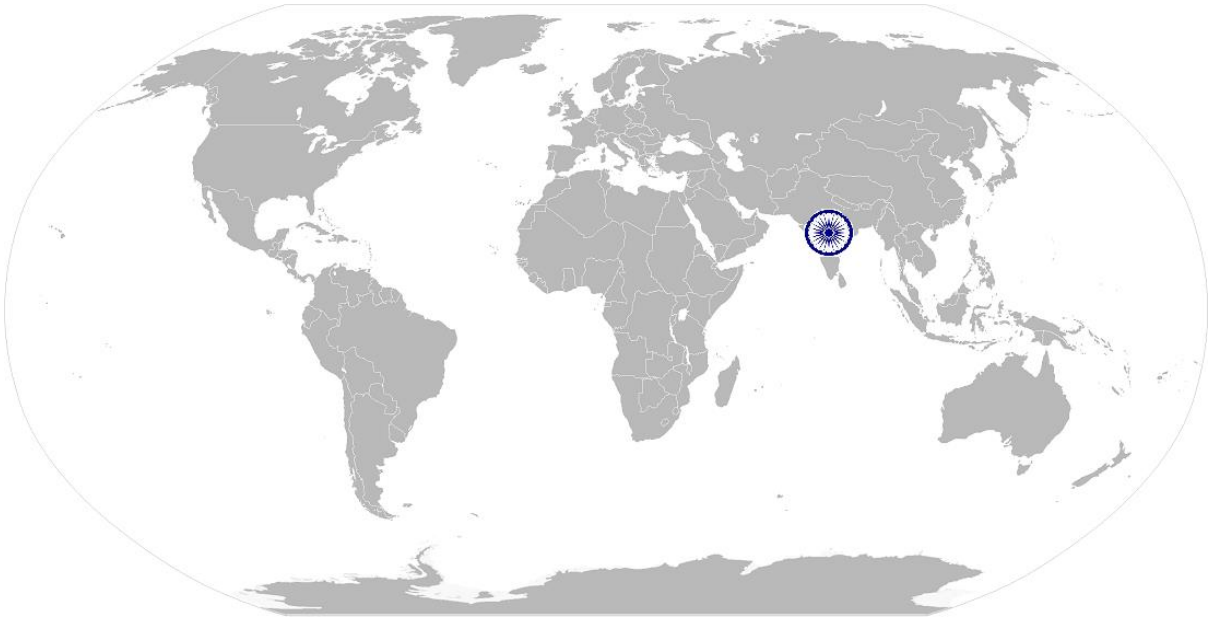
NOS Version Control

NOS Code	SSC/N9001		
Credits (NSQF)	TBD	Version number	1.0
Industry	IT-ITeS	Drafted on	30/04/2013
Industry Sub-sector	IT Services	Last reviewed on	31/03/2018
		Next review date	31/03/2019



SSC/N9002 **Work effectively with colleagues**

National Occupational Standard



Overview

This unit is about working effectively with colleagues, either in your own work group or in other work groups within your organization.

SSC/N9002 Work effectively with colleagues

Applicable NOS Unit

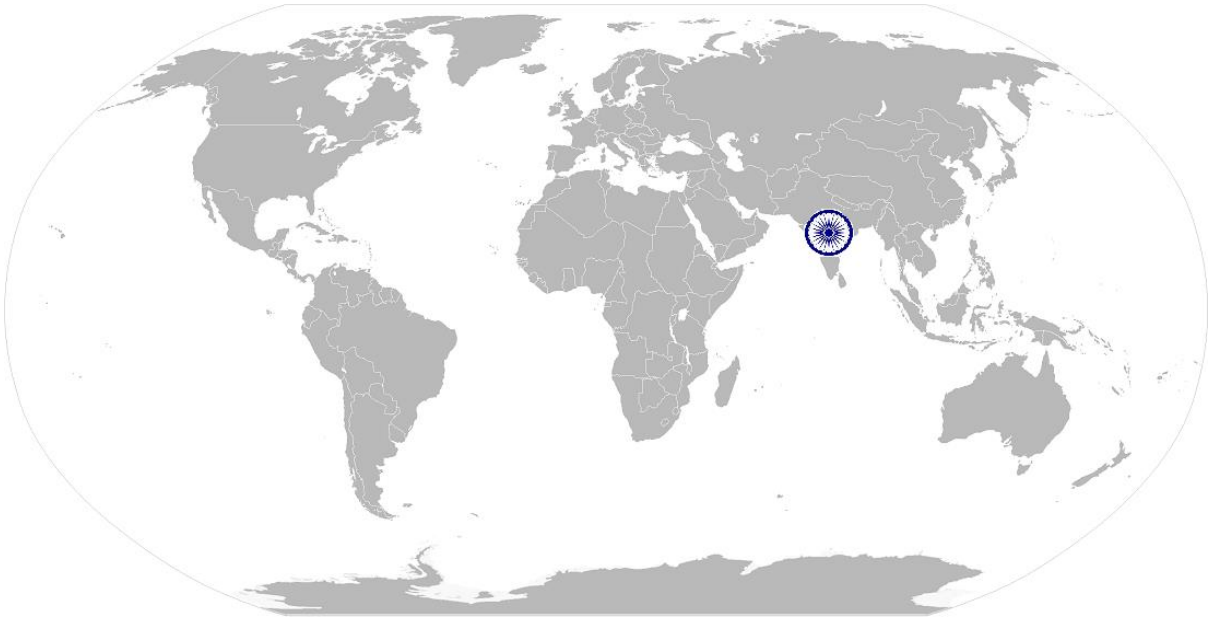
Unit Code	**SSC/N9002**
Unit Title (Task)	**Work effectively with colleagues**
Description	This unit is about working effectively with colleagues, either in your own work group or in other work groups within your organization.
Scope	This unit/task covers the following: **Colleagues**: • line manager • members of your own work group • people in other work groups in your organization **Communicate**: • face-to-face • by telephone • in writing
Performance Criteria (PC) w.r.t. the Scope	
	To be competent, you must be able to: PC1. communicate with **colleagues** clearly, concisely and accurately PC2. work with **colleagues** to integrate your work effectively with them PC3. pass on essential information to **colleagues** in line with organizational requirements PC4. work in ways that show respect for **colleagues** PC5. carry out commitments you have made to **colleagues** PC6. let **colleagues** know in good time if you cannot carry out your commitments, explaining the reasons PC7. identify any problems you have working with **colleagues** and take the initiative to solve these problems PC8. follow the organization's policies and procedures for working with **colleagues**
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company/ organization and its processes)	You need to know and understand: KA1. your organization's policies and procedures for working with colleagues and your role and responsibilities in relation to this KA2. the importance of effective communication and establishing good working relationships with colleagues KA3. different methods of communication and the circumstances in which it is appropriate to use these KA4. benefits of developing productive working relationships with colleagues KA5. the importance of creating an environment of trust and mutual respect in an environment where you have no authority over those you are working with KA6. where you do not meet your commitments, the implications this will have on individuals and the organization
B. Technical	You need to know and understand:

SSC/N9002 **Work effectively with colleagues**

Knowledge	KB1. different types of information that colleagues might need and the importance of providing this information when it is required KB2. the importance of understanding problems from your colleague's perspective and how to provide support, where necessary, to resolve these
Skills (S)	
A. Core Skills/ Generic Skills	**Writing Skills**
	You need to know and understand how to: SA1. complete accurate, well written work with attention to detail SA2. communicate effectively with colleagues in writing
	Reading Skills
	You need to know and understand how to: SA3. read instructions, guidelines, procedures, rules and service level agreements
	Oral Communication (Listening and Speaking skills)
	You need to know and understand how to: SA4. listen effectively and orally communicate information accurately SA5. ask for clarification and advice from line managers
B. Professional Skills	**Decision Making**
	You need to know and understand how to: SB1. make a decision on a suitable course of action
	Plan and Organize
	You need to know and understand how to: SB2. plan and organize your work to achieve targets and deadlines
	Customer Centricity
	You need to know and understand how to: SB3. check that your own work meets customer requirements SB4. deliver consistent and reliable service to customers
	Problem Solving
	You need to know and understand how to: SB5. apply problem solving approaches in different situations
	Critical Thinking
	You need to know and understand how to: SB6. apply balanced judgments to different situations
	Attention to Detail
	You need to know and understand how to: SB7. check your work is complete and free from errors SB8. get your work checked by peers
	Team Working
	You need to know and understand how to:

SSC/N9002 **Work effectively with colleagues**

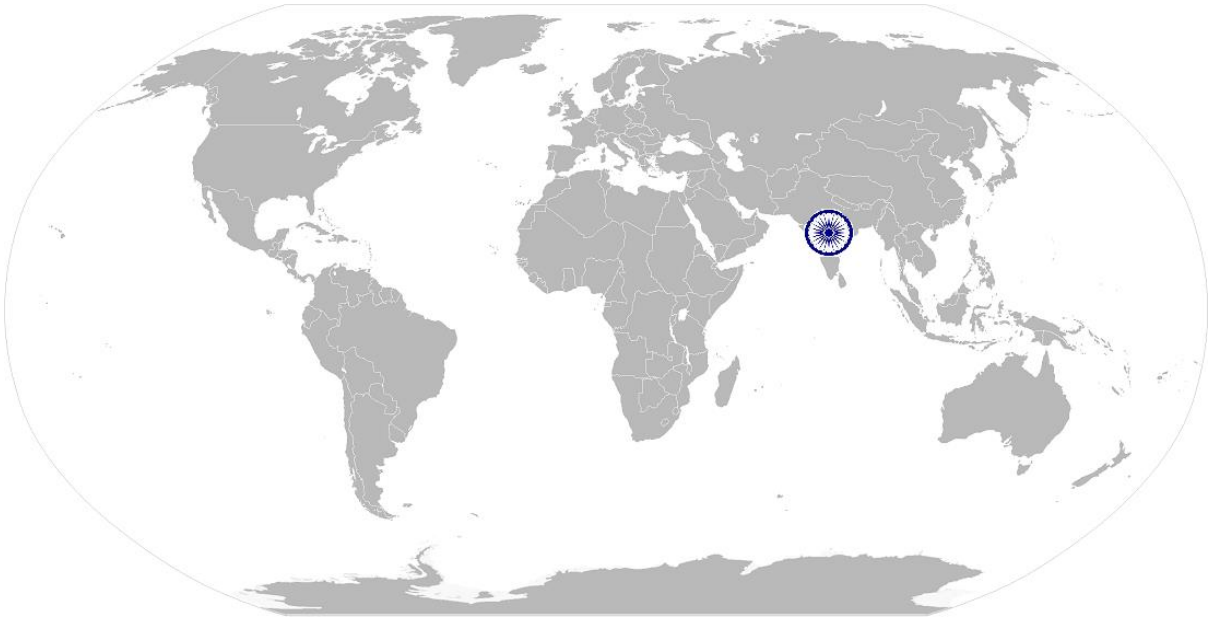
	SB9. work effectively in a team environment SB10. work effectively with colleagues and other teams SB11. treat other cultures with respect
C. Technical Skills	You need to know and understand how to: SC1. identify and refer anomalies SC2. help reach agreements with colleagues SC3. keep up to date with changes, procedures and practices in your role



SSC/N9002 **Work effectively with colleagues**

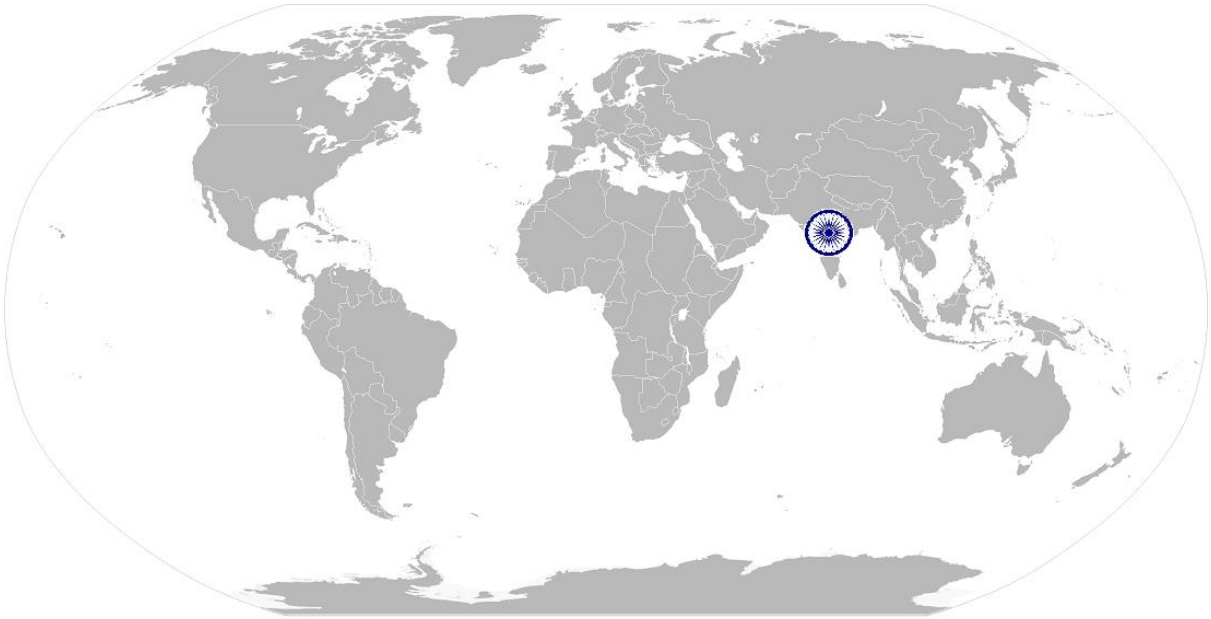
NOS Version Control

NOS Code	SSC/N9002		
Credits (NSQF)	TBD	Version number	1.0
Industry	IT-ITeS	Drafted on	30/04/2013
Industry Sub-sector	IT Services	Last reviewed on	31/03/2018
		Next review date	31/03/2019



SSC/N9003 **Maintain a healthy, safe and secure working environment**

National Occupational Standard



Overview

This unit is about monitoring the working environment and making sure it meets requirements for health, safety and security.

SSC/N9003 **Maintain a healthy, safe and secure working environment**

Applicable NOS Unit

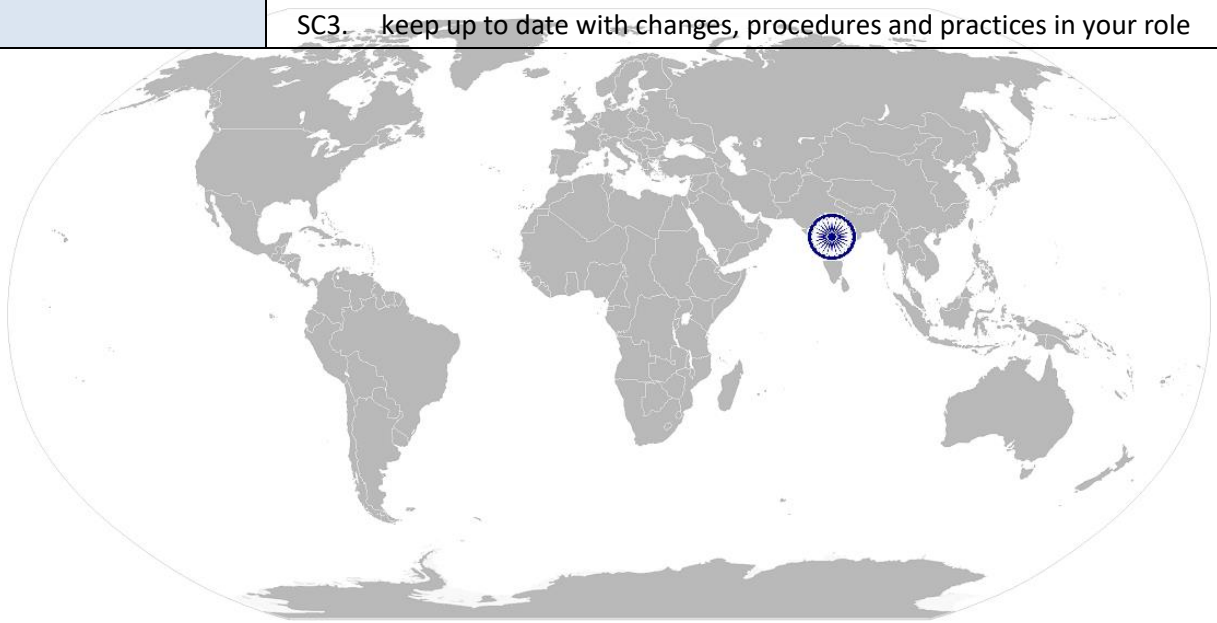
Unit Code	**SSC/N9003**
Unit Title (Task)	**Maintain a healthy, safe and secure working environment**
Description	This unit is about monitoring your working environment and making sure it meets requirements for health, safety and security.
Scope	This unit/task covers the following: **Emergency procedures**: • illness • accidents • fires • other reasons to evacuate the premises • breaches of security
Performance Criteria (PC) w.r.t. the Scope	
	To be competent, you must be able to: PC1. comply with your organization's current health, safety and security policies and procedures PC2. report any identified breaches in health, safety, and security policies and procedures to the designated person PC3. identify and correct any hazards that you can deal with safely, competently and within the limits of your authority PC4. report any hazards that you are not competent to deal with to the relevant person in line with organizational procedures and warn other people who may be affected PC5. follow your organization's **emergency procedures** promptly, calmly, and efficiently PC6. identify and recommend opportunities for improving health, safety, and security to the designated person PC7. complete any health and safety records legibly and accurately
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company/ organization and its processes)	You need to know and understand: KA1. legislative requirements and organization's procedures for health, safety and security and your role and responsibilities in relation to this KA2. what is meant by a hazard, including the different types of health and safety hazards that can be found in the workplace KA3. how and when to report hazards KA4. limits of your responsibility for dealing with hazards KA5. your organization's **emergency procedures** for different emergency situations and the importance of following these KA6. the importance of maintaining high standards of health, safety and security KA7. implications that any non-compliance with health, safety and security may

SSC/N9003 **Maintain a healthy, safe and secure working environment**

	have on individuals and the organization
B. Technical Knowledge	You need to know and understand: KB1. different types of breaches in health, safety and security and how and when to report these KB2. evacuation procedures for workers and visitors KB3. how to summon medical assistance and the emergency services, where necessary KB4. how to use the health, safety and accident reporting procedures and the importance of these KB5. government agencies in the areas of safety, health and security and their norms and services
Skills (S)	
A. Core Skills/ Generic Skills	**Writing Skills**
	You need to know and understand how to: SA1. complete accurate, well written work with attention to detail
	Reading Skills
	You need to know and understand how to: SA2. read instructions, guidelines, procedures, rules and service level agreements
	Oral Communication (Listening and Speaking skills)
	You need to know and understand how to: SA3. listen effectively and orally communicate information accurately
B. Professional Skills	**Decision Making**
	You need to know and understand how to: SB1. make a decision on a suitable course of action
	Plan and Organize
	You need to know and understand how to: SB2. plan and organize your work to meet health, safety and security requirements
	Customer Centricity
	You need to know and understand how to: SB3. build and maintain positive and effective relationships with colleagues and customers
	Problem Solving
	You need to know and understand how to: SB4. apply problem solving approaches in different situations
	Analytical Thinking
	You need to know and understand how to: SB5. analyze data and activities
	Critical Thinking

SSC/N9003 **Maintain a healthy, safe and secure working environment**

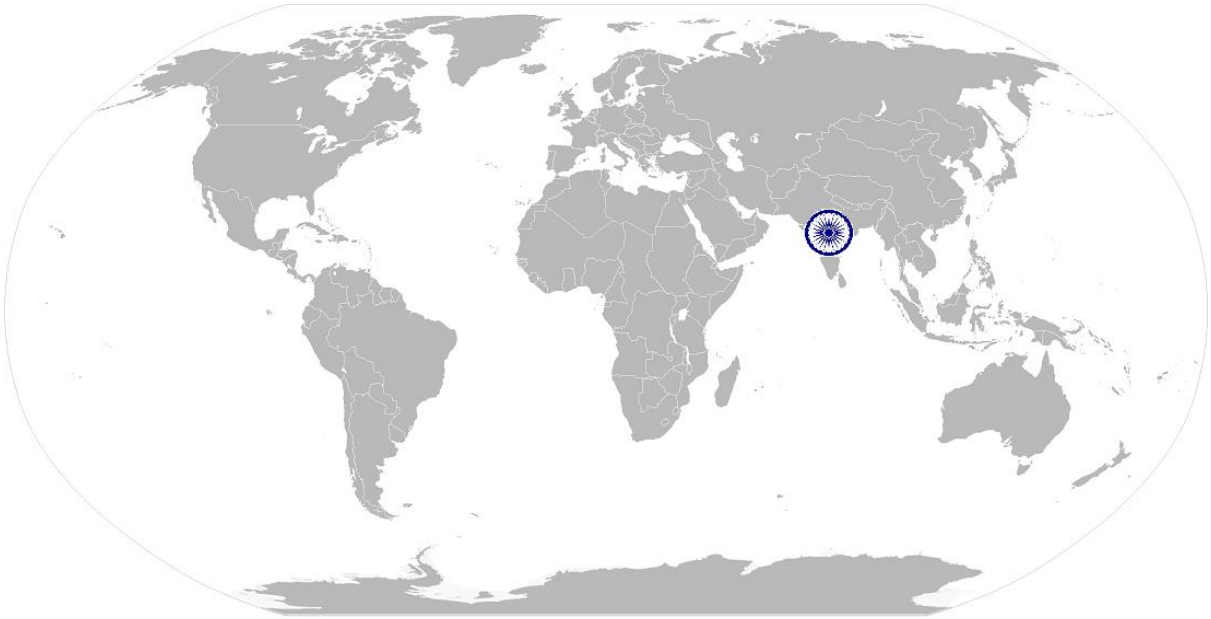
	You need to know and understand how to: SB6. apply balanced judgments to different situations
	Attention to Detail
	You need to know and understand how to: SB7. check your work is complete and free from errors SB8. get your work checked by peers
	Team Working
	You need to know and understand how to: SB9. work effectively in a team environment
C. Technical Skills	You need to know and understand how to: SC1. identify and refer anomalies SC2. help reach agreements with colleagues SC3. keep up to date with changes, procedures and practices in your role



SSC/N9003 **Maintain a healthy, safe and secure working environment**

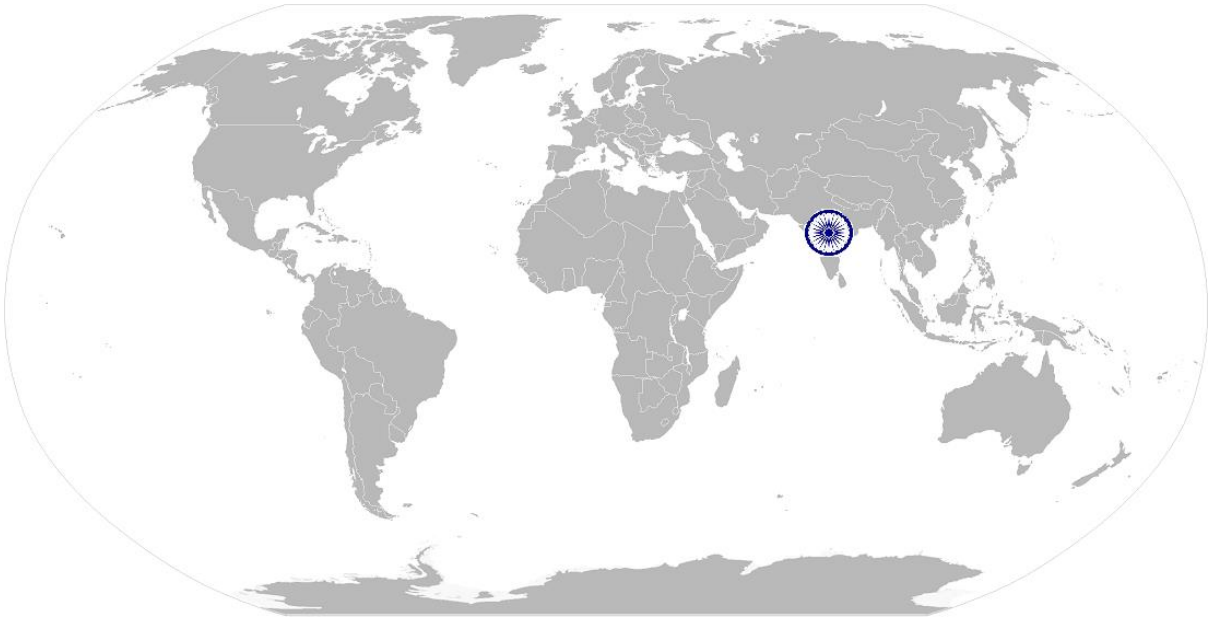
NOS Version Control

NOS Code	SSC/N9003		
Credits (NSQF)	TBD	Version number	1.0
Industry	IT-ITeS	Drafted on	30/04/2013
Industry Sub-sector	IT Services	Last reviewed on	31/03/2018
		Next review date	31/03/2019



SSC/N9004 **Provide data/information in standard formats**

National Occupational Standard



Overview

This unit is about providing specified data/information related to your work in templates or other standard formats

SSC/N9004 Provide data/information in standard formats

Applicable NOS Unit

Unit Code	**SSC/N9004**
Unit Title (Task)	**Provide data/information in standard formats**
Description	This unit is about providing specified data/information related to your work in templates or other standard formats.
Scope	This unit/task covers the following: **Appropriate people**: • line manager • members of your own work group • people in other work groups in your organization • subject matter experts **Data/information**: • quantitative • qualitative **Sources**: • within your organization • outside your organization **Formats**: • paper-based • electronic
Performance Criteria (PC) w.r.t. the Scope	
	To be competent, you must be able to: PC1. establish and agree with **appropriate people** the **data/information** you need to provide, the **formats** in which you need to provide it, and when you need to provide it PC2. obtain the **data/information** from reliable **sources** PC3. check that the **data/information** is accurate, complete and up-to-date PC4. obtain advice or guidance from **appropriate people** where there are problems with the **data/information** PC5. carry out rule-based analysis of the **data/information**, if required PC6. insert the **data/information** into the agreed **formats** PC7. check the accuracy of your work, involving colleagues where required PC8. report any unresolved anomalies in the **data/information** to **appropriate people** PC9. provide complete, accurate and up-to-date data/information to the **appropriate people** in the required **formats** on time
Knowledge and Understanding (K)	
A. Organizational	You need to know and understand:

SSC/N9004 **Provide data/information in standard formats**

Context (Knowledge of the company/ organization and its processes)	KA1. your organization's procedures and guidelines for providing data/information in standard formats and your role and responsibilities in relation to this KA2. the knowledge management culture of your organization KA3. your organization's policies and procedures for recording and sharing information and the importance of complying with these KA4. the importance of validating data/information before use and how to do this KA5. procedures for updating data in appropriate formats and with proper validation KA6. the purpose of the CRM database KA7. how to use the CRM database to record and extract information KA8. the importance of having your data/information reviewed by others KA9. the scope of any data/information requirements including the level of detail required KA10. the importance of keeping within the scope of work and adhering to timescales
B. Technical Knowledge	You need to know and understand: KB1. data/information you may need to provide including the sources and how to do this KB2. templates and formats used for data/information including their purpose and how to use these KB3. different techniques used to obtain data/information and how to apply KB4. these KB5. how to carry out rule-based analysis on the data/information KB6. typical anomalies that may occur in data/information KB7. who to go to in the event of inaccurate data/information and how to report this
Skills (S)	
A. Core Skills/ Generic Skills	**Writing Skills**
	You need to know and understand how to: SA1. complete accurate, well written work with attention to detail
	Reading Skills
	You need to know and understand how to: SA2. read instructions, guidelines, procedures, rules and service level agreements
	Oral Communication (Listening and Speaking skills)
	You need to know and understand how to: SA3. listen effectively and orally communicate information accurately
B. Professional Skills	**Decision Making**
	You need to know and understand how to: SB1. follow rule-based decision-making processes

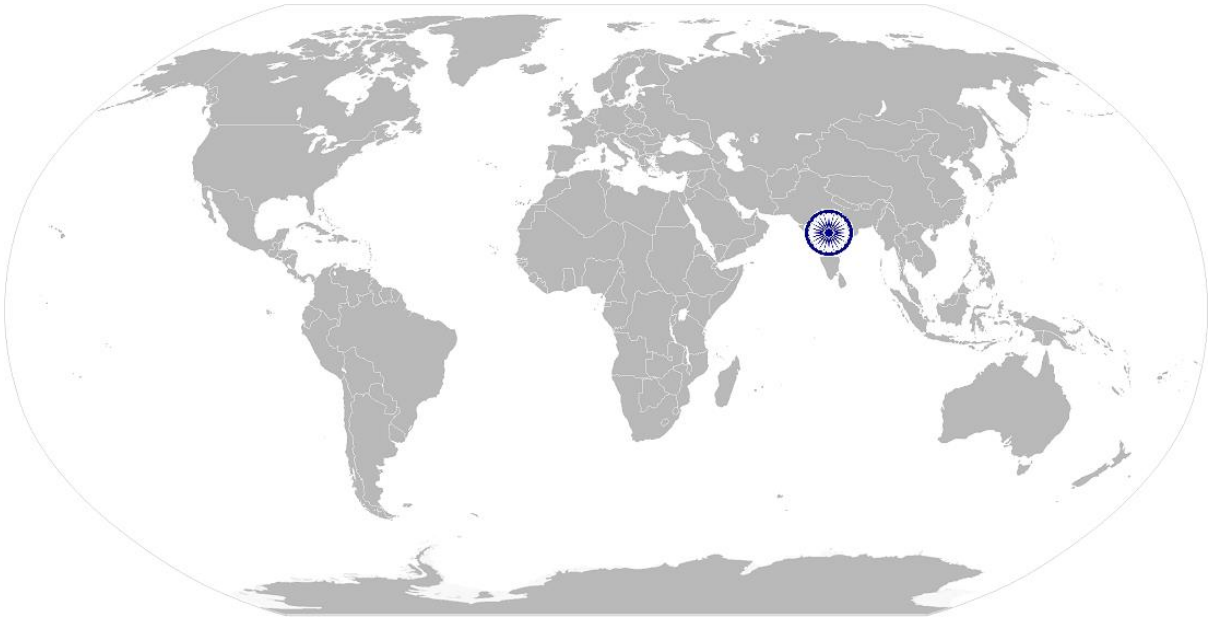
SSC/N9004 **Provide data/information in standard formats**

	SB2. make a decision on a suitable course of action
	Plan and Organize
	You need to know and understand how to: SB3. plan and organize your work to achieve targets and deadlines
	Customer Centricity
	You need to know and understand how to: SB4. check that your own work meets customer requirements SB5. meet and exceed customer expectations
	Problem Solving
	You need to know and understand how to: SB6. apply problem solving approaches in different situations
	Analytical Thinking
	You need to know and understand how to: SB7. configure data and disseminate relevant information to others
	Critical Thinking
	You need to know and understand how to: SB8. apply balanced judgments to different situations
	Attention to Detail
	You need to know and understand how to: SB9. check your work is complete and free from errors SB10. get your work checked by peers
	Team Working
	You need to know and understand how to: SB11. work effectively in a team environment
C. Technical Skills	You need to know and understand how to: SC1. use information technology effectively, to input and/or extract data accurately SC2. validate and update data SC3. identify and refer anomalies in data SC4. store and retrieve information SC5. share information using standard formats and templates SC6. keep up to date with changes, procedures and practices in your role

SSC/N9004 **Provide data/information in standard formats**

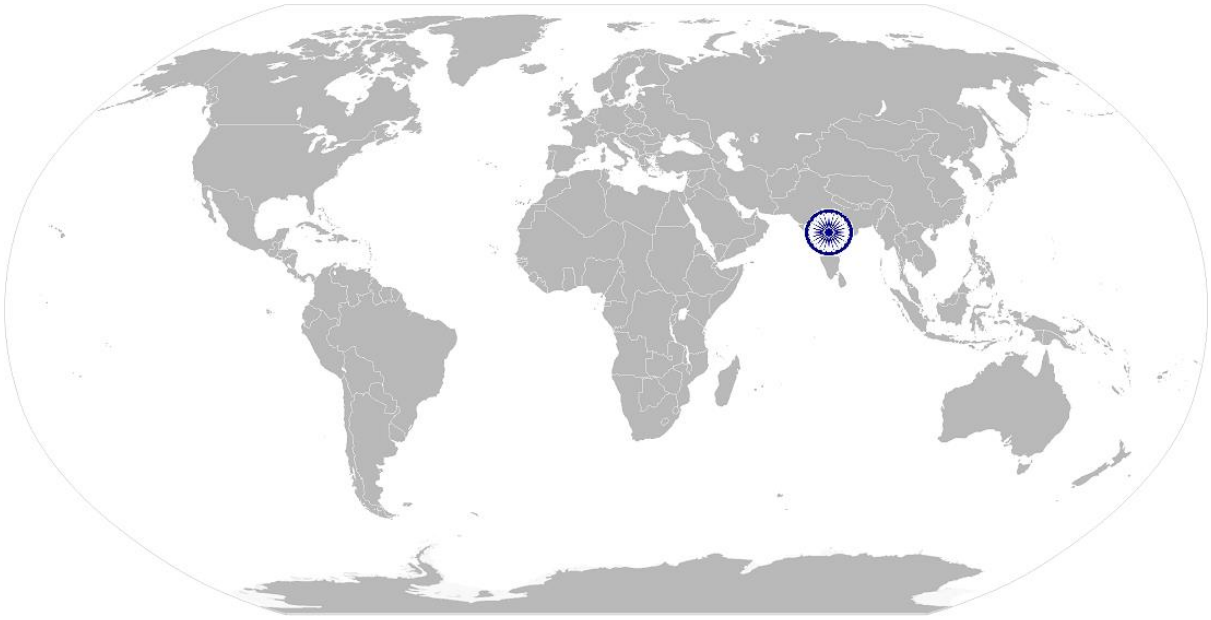
NOS Version Control

NOS Code	SSC/N9004		
Credits (NSQF)	TBD	Version number	1.0
Industry	IT-ITeS	Drafted on	30/04/2013
Industry Sub-sector	IT Services	Last reviewed on	31/03/2018
		Next review date	31/03/2019



SSC/N9005 **Develop your knowledge, skills and competence**

National Occupational Standard



Overview

This unit is about taking action to ensure you have the knowledge and skills you need to perform competently in your current job role and to take on new responsibilities, where required.

SSC/N9005 **Develop your knowledge, skills and competence**

Applicable NOS Unit

Unit Code	**SSC/N9005**
Unit Title (Task)	**Develop your knowledge, skills and competence**
Description	This unit is about taking action to ensure you have the knowledge and skills you need to perform competently in your current job role and to take on new responsibilities, where required. *Competence* is defined as: the application of knowledge and skills to perform to the standards required.
Scope	This unit/task covers the following: **Appropriate people** may be: • line manager • human resources specialists • learning and development specialists • peers **Job role**: • current responsibilities as defined in your job description • possible future responsibilities **Learning and development activities**: • formal education and training programs, leading to certification • non-formal activities (such as private study, learning from colleagues, project work), designed to meet learning and development objectives but without certification **Appropriate action** may be: • undertaking further learning and development activities • finding further opportunities to apply your knowledge and skills
Performance Criteria (PC) w.r.t. the Scope	
	To be competent, you must be able to: PC1. obtain advice and guidance from **appropriate people** to develop your knowledge, skills and competence PC2. identify accurately the knowledge and skills you need for your **job role** PC3. identify accurately your current level of knowledge, skills and competence and any learning and development needs PC4. agree with **appropriate people** a plan of **learning and development activities** to address your learning needs PC5. undertake **learning and development activities** in line with your plan PC6. apply your new knowledge and skills in the workplace, under supervision PC7. obtain feedback from **appropriate people** on your knowledge and skills and how effectively you apply them PC8. review your knowledge, skills and competence regularly and take **appropriate**

SSC/N9005 **Develop your knowledge, skills and competence**

	action
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company/ organization and its processes)	You need to know and understand: KA1. your organization's procedures and guidelines for developing your knowledge, skills and competence and your role and responsibilities in relation to this KA2. the importance of developing your knowledge, skills and competence to you and your organization KA3. different methods used by your organization to review skills and knowledge including: • training needs analyses • skills needs analyses • performance appraisals KA4. how to review your knowledge and skills against your job role using different methods and analyses KA5. different types of learning and development activities available for your job role and how to access these KA6. how to produce a plan to address your learning and development needs, who to agree it with and the importance of undertaking the planned activities KA7. different types of support available to help you plan and undertake learning and development activities and how to access these KA8. why it is important to maintain records of your learning and development KA9. methods of obtaining and accepting feedback from appropriate people on your knowledge skills and competence KA10. how to use feedback to develop in your job role
B. Technical Knowledge	You need to know and understand: KB1. the knowledge and skills required in your job role KB2. your current learning and development needs in relation to your job role KB3. different types of learning styles and methods including those that help you learn best KB4. the importance of taking responsibility for your own learning and development KB5. to the importance of learning and practicing new concepts, theory and how to apply these in the work environment or on samples. KB6. how to explore sample problems and apply solutions
Skills (S)	
A. Core Skills/ Generic Skills	**Writing Skills** You need to know and understand how to: SA1. communicate with colleagues in writing

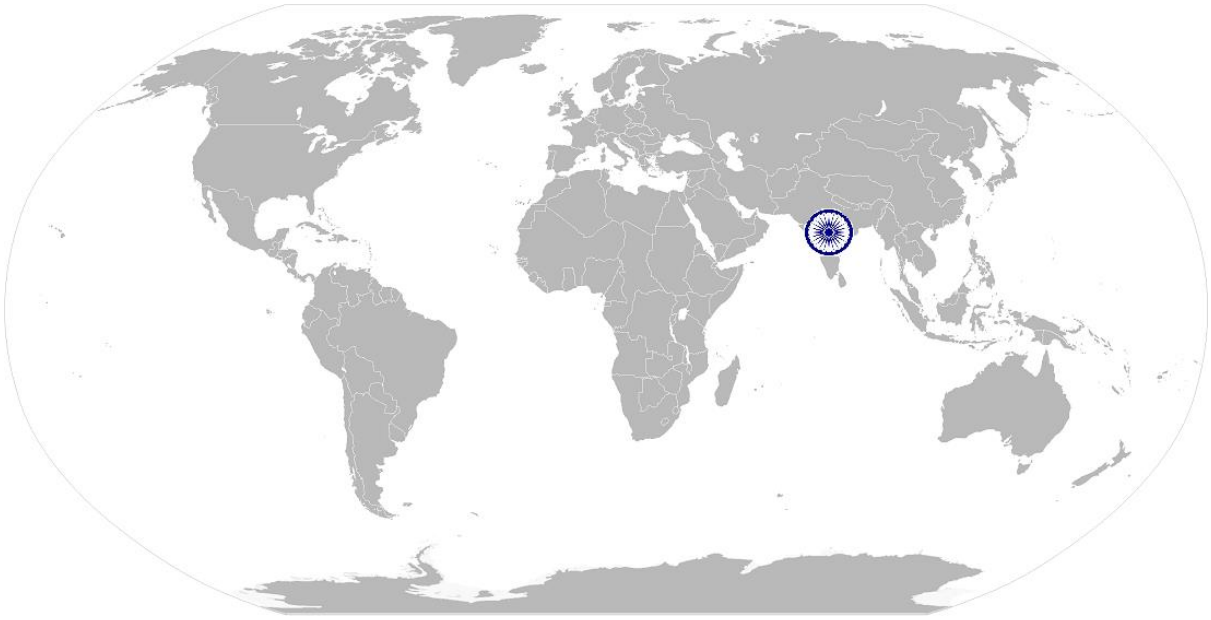
SSC/N9005 **Develop your knowledge, skills and competence**

	Reading Skills
	You need to know and understand how to: SA2. read instructions, guidelines and procedures
	Oral Communication (Listening and Speaking skills)
	You need to know and understand how to: SA3. ask for clarification and advice from line managers
B. Professional Skills	**Decision Making**
	You need to know and understand how to: SB1. make a decision on a suitable course of action
	Plan and Organize
	You need to know and understand how to: SB2. plan and organize your work to achieve targets and deadlines
	Customer Centricity
	You need to know and understand how to: SB3. check that your own work meets customer requirements
	Problem Solving
	You need to know and understand how to: SB4. refer anomalies to the line manager
	Analytical Thinking
	You need to know and understand how to: SB5. analyze data and activities
	Critical Thinking
	You need to know and understand how to: SB6. apply balanced judgments to different situations
	Attention to Detail
	You need to know and understand how to: SB7. check your work is complete and free from errors SB8. get your work checked by peers
	Team Working
	You need to know and understand how to: SB9. work effectively in a team environment
C. Technical Skills	You need to know and understand how to: SC1. use information technology effectively SC2. agree objectives and work requirements SC3. keep up to date with changes, procedures and practices in your role

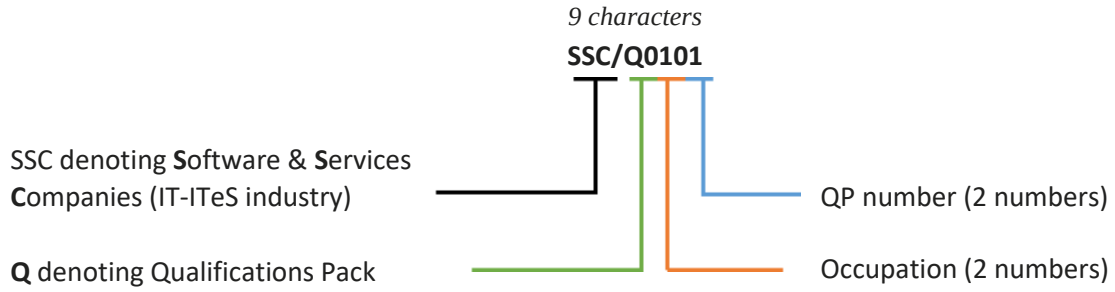
SSC/N9005 **Develop your knowledge, skills and competence**

NOS Version Control

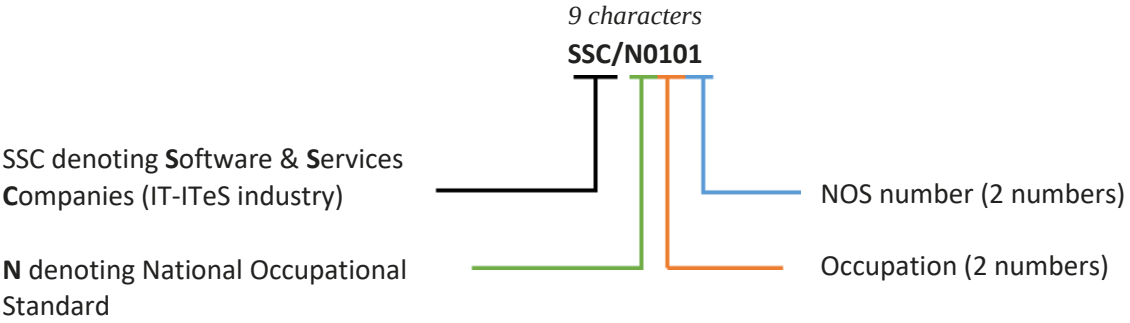
NOS Code	SSC/N9005		
Credits (NSQF)	TBD	Version number	1.0
Industry	IT-ITeS	Drafted on	30/04/2013
Industry Sub-sector	IT Services	Last reviewed on	31/03/2018
		Next review date	31/03/2019



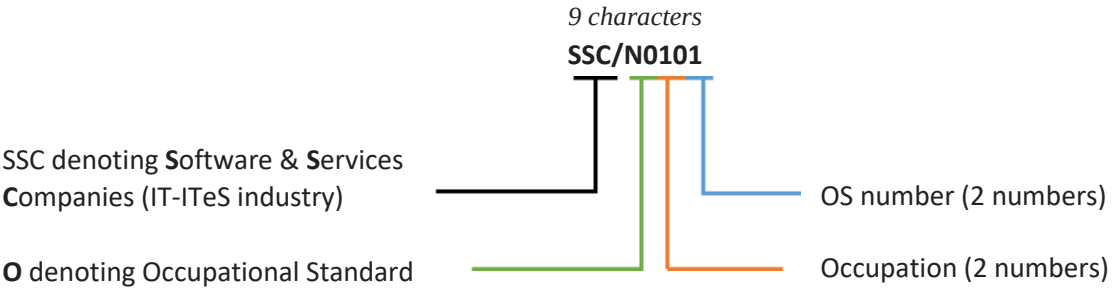
Qualifications Pack



National Occupational Standard



Occupational Standard



It is important to note that an OS unit can be denoted with either an '**O**' or an '**N**'.

- If an OS unit denotes 'O', it is an OS unit that is an international standard. An example of OS unit denoting 'O' is SSC/**O**0101.
- If an OS unit denotes '**N**', it is an OS unit that is a national standard and is applicable only for the Indian IT-ITeS industry. An example of OS unit denoting '**N**' is SSC/N0101

Nomenclature for QP and NOS Units

The following acronyms/codes have been used in the nomenclature above:

Sub-Sector	Range of Occupation numbers
IT Service (ITS)	01-20
Business Process Management (BPM)	21-40
Engg. and R&D (ERD)	41-60
Software Products (SPD)	61-80

Sequence	Description	Example
Three letters	Industry name (Software & Service Companies)	SSC
Slash	/	/
Next letter	Whether **Q**P or **N**OS	N
Next two numbers	Occupation Code	01
Next two numbers	OS number	01

Job Role Application Maintenance Engineer

Qualification Pack SSC/Q0201

Sector Skill Council IT-ITes

Guidelines for Assessment:

1. Criteria for assessment for each Qualification Pack (QP) will be created by the Sector Skill Council (SSC). Each performance criteria (PC) will be assigned Theory and Skill/Practical marks proportional to its importance in NOS.
2. The assessment will be conducted online through assessment providers authorised by SSC.
3. Format of questions will include a variety of styles suitable to the PC being tested such as multiple choice questions, fill in the blanks, situational judgement test, simulation and programming test.
4. To pass a QP, a trainee should pass each individual NOS. Standard passing criteria for each NOS is 70%.
5. For latest details on the assessment criteria, please visit www.sscnasscom.com.

				Marks Allocation	
Assessment Outcomes	**Assessment Criteria for Outcomes**	**Total Mark**	**Out of**	**Theory**	**Skills Practical**
1.SSC/N0201 (Contribute to the support and maintenance of software applications)	PC1. monitor systems to identify promptly automated alerts and customer change requests		10	0	10
	PC2. analyze alerts to accurately identify issues		10	0	10
	PC3. record and acknowledge issues and change requests using relevant tools and procedures		5	0	5
	PC4. access your organization's knowledge base to identify any immediate solutions/workarounds		10	0	10
	PC5. evaluate the suitability of solutions/workarounds, where available		5	0	5
	PC6. evaluate new design solutions where immediate solutions/workarounds are not available		5	0	5
	PC7. agree immediate solutions/workarounds or new design solutions with appropriate people		5	5	0
	PC8. make agreed changes to address issues where these are within your level of competence and authority		5	0	5
	PC9. carry out testing on the changes where	**100**	5	0	5

	these are within your level of competence and authority				
	PC10. refer changes outside your level of competence and authority to appropriate people		5	5	0
	PC11. produce documentation, deployment scripts and release notes using standardtemplates and tools		5	0	5
	PC12. obtain approval from appropriate people to implement immediate solutions/workarounds and changes		5	5	0
	PC13. co-ordinate the implementation of immediate solutions/workarounds and changes in line with your organization's standards and guidelines		5	5	0
	PC14. obtain advice and guidance from appropriate people, where necessary		5	5	0
	PC15. recommend to appropriate people any ways in which support and maintenance procedures can be improved		5	0	5
	PC16. update your organization's knowledge base with the changes		5	0	5
	PC17. comply with relevant standards, policies, procedures, guidelines and service level agreements (SLAs) when contributing to the maintenance of software applications		5	0	5
		Total	100	25	75
2.SSC/N9001 (Manage your work to meet requirements)	PC1. establish and agree your **work requirements** with **appropriate people**	**100**	6.25	0	6.25
	PC2. keep your immediate work area clean and tidy		12.5	6.25	6.25
	PC3. utilize your time effectively		12.5	6.25	6.25
	PC4. use **resources** correctly and efficiently		18.75	6.25	12.5
	PC5. treat confidential information correctly		6.25	0	6.25
	PC6. work in line with your organization's policies and procedures		12.5	0	12.5
	PC7. work within the limits of your job role		6.25	0	6.25
	PC8. obtain guidance from **appropriate people**, where necessary		6.25	0	6.25
	PC9. ensure your work meets the agreed requirements		18.75	6.25	12.5
		Total	**100**	**25**	**75**
3.SSC/N9002 (Work effectively with colleagues)	PC1. communicate with colleagues clearly, concisely and accurately	**100**	20	0	20
	PC2. work with colleagues to integrate your work effectively with theirs		10	0	10
	PC3. pass on essential information to colleagues		10	10	0

	in line with organizational requirements				
	PC4. work in ways that show respect for colleagues		20	0	20
	PC5. carry out commitments you have made to colleagues		10	0	10
	PC6. let colleagues know in good time if you cannot carry out your commitments, explaining the reasons		10	10	0
	PC7. identify any problems you have working with colleagues and take the initiative to solve these problems		10	0	10
	PC8. follow the organization's policies and procedures for working with colleagues		10	0	10
		Total	**100**	**20**	**80**
4.SSC/N9003 (Maintain a healthy, safe and secure working environment)	PC1. comply with your organization's current health, safety and security policies and procedures	**100**	20	10	10
	PC2. report any identified breaches in health, safety, and security policies and procedures to the designated person		10	0	10
	PC3. identify and correct any hazards that you can deal with safely, competently and within the limits of your authority		20	10	10
	PC4. report any hazards that you are not competent to deal with to the relevant person in line with organizational procedures and warn other people who may be affected		10	0	10
	PC5. follow your organization's **emergency procedures** promptly, calmly, and efficiently		20	10	10
	PC6. identify and recommend opportunities for improving health, safety, and security to the designated person		10	0	10
	PC7. complete any health and safety records legibly and accurately		10	0	10
		Total	**100**	**30**	**70**
5.SSC/N9004 (Provide data/information in standard formats)	PC1. establish and agree with appropriate people the data/information you need to provide, the formats in which you need to provide it, and when you need to provide it	**100**	12.5	12.5	0
	PC2. obtain the data/information from reliable sources		12.5	0	12.5
	PC3. check that the data/information is accurate, complete and up-to-date		12.5	6.25	6.25
	PC4. obtain advice or guidance from appropriate people where there are problems with the data/information		6.25	0	6.25
	PC5. carry out rule-based analysis of the data/information, if required		25	0	25
	PC6. insert the data/information into the agreed formats		12.5	0	12.5

	PC7. check the accuracy of your work, involving colleagues where required		6.25	0	6.25
	PC8. report any unresolved anomalies in the data/information to appropriate people		6.25	6.25	0
	PC9. provide complete, accurate and up-to-date data/information to the appropriate people in the required formats on time		6.25	0	6.25
		Total	**100**	**25**	**75**
6.SSC/N9005 (Develop your knowledge, skills and competence)	PC1. obtain advice and guidance from appropriate people to develop your knowledge, skills and competence		10	0	10
	PC2. identify accurately the knowledge and skills you need for your job role		10	0	10
	PC3. identify accurately your current level of knowledge, skills and competence and any learning and development needs		20	10	10
	PC4. agree with appropriate people a plan of learning and development activities to address your learning needs	**100**	10	0	10
	PC5. undertake learning and development activities in line with your plan		20	10	10
	PC6. apply your new knowledge and skills in the workplace, under supervision		10	0	10
	PC7. obtain feedback from appropriate people on your knowledge and skills and how effectively you apply them		10	0	10
	PC8. review your knowledge, skills and competence regularly and take appropriate action		10	0	10
		Total	**100**	**20**	**80**