

## QUALIFICATIONS PACK – NATIONAL OCCUPATIONAL STANDARDS FOR IT-BPM INDUSTRY

### 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

#### Contact Us:

IT-ITeS SSC NASSCOM

E-mail:

[ssc@nasscom.in](mailto:ssc@nasscom.in)



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### Introduction

### Qualifications Pack-QA Engineer

**SECTOR:** IT-ITeS

**SUB-SECTOR:** IT Services

**OCCUPATION:** Testing and QA

**REFERENCE ID:** SSC/Q1302

**ALIGNED TO:** NCO-2015/ 2519.0301

**QA Engineer** in the IT-ITeS Industry is also known as a Software Quality Assurance Engineer, Quality Engineer.

**Brief Job Description:** Individuals in this job are responsible for coordination with the support and operations teams to maintain quality related schedules like audits, records and reports. The job involves setting quality standards for products, systems and processes within the organisation, followed by ensuring their effective implementation.

**Personal Attributes:** This job requires the individual to work independently and be comfortable in making decisions pertaining to his/her area of work. The individual should be result oriented with high attention to detail. The individual should also be able to demonstrate analytical and logical thinking to develop innovative solutions.

Job Details	Qualifications Pack Code	SSC/Q1302		
	Job Role	QA 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	31/01/2015
	Occupation	Testing and QA	Next review date	31/03/2016
	NSQC Clearance on	20/07/2015		

Job Role	<b>QA Engineer</b> (Software Quality Assurance Engineer, Quality Engineer, Quality Analyst)
Role Description	Design and implement Quality Assurance norms, standards and guidelines to be followed across the organisation
NSQF level	7
Minimum Educational Qualifications	Bachelor's Degree in Science/Technology/Computers or any graduate course
Maximum Educational Qualifications	Master's Degree in Science/Technology/Computers
Training (Suggested but not mandatory)	Certifications in TQM, ISO etc. quality process, software testing techniques such as CMMI, SDLC, Six Sigma, TQM, test writing plans
Minimum Job Entry Age	18 years
Experience	0-2 years of work experience/internship in Software Development/Deployment
Applicable National Occupational Standards (NOS)	<b>Compulsory:</b> <ol style="list-style-type: none"> <li><a href="#">SSC/N1304 (Contribute to quality assurance of projects)</a></li> <li><a href="#">SSC/N9001 (Manage your work to meet requirements)</a></li> <li><a href="#">SSC/N9002 (Work effectively with colleagues )</a></li> <li><a href="#">SSC/N9003 (Maintain a healthy, safe and secure working environment)</a></li> <li><a href="#">SSC/N9004 (Provide data/information in standard formats)</a></li> <li><a href="#">SSC/N9005 (Develop your knowledge, skills and competence)</a></li> </ol> <b>Optional:</b> 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

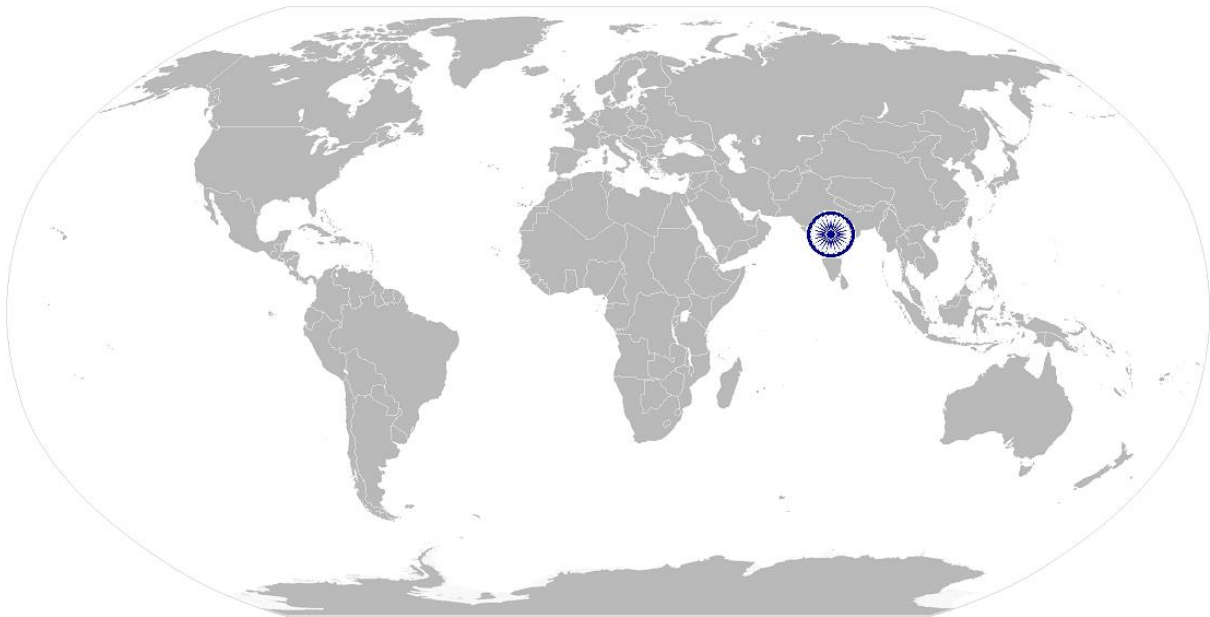
	a critical impact on the quality of performance required.
Knowledge and Understanding	Knowledge and Understanding are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard.
Organizational 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.
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

Acronyms

SSC/N1304

Contribute to quality assurance of projects

# National Occupational Standard

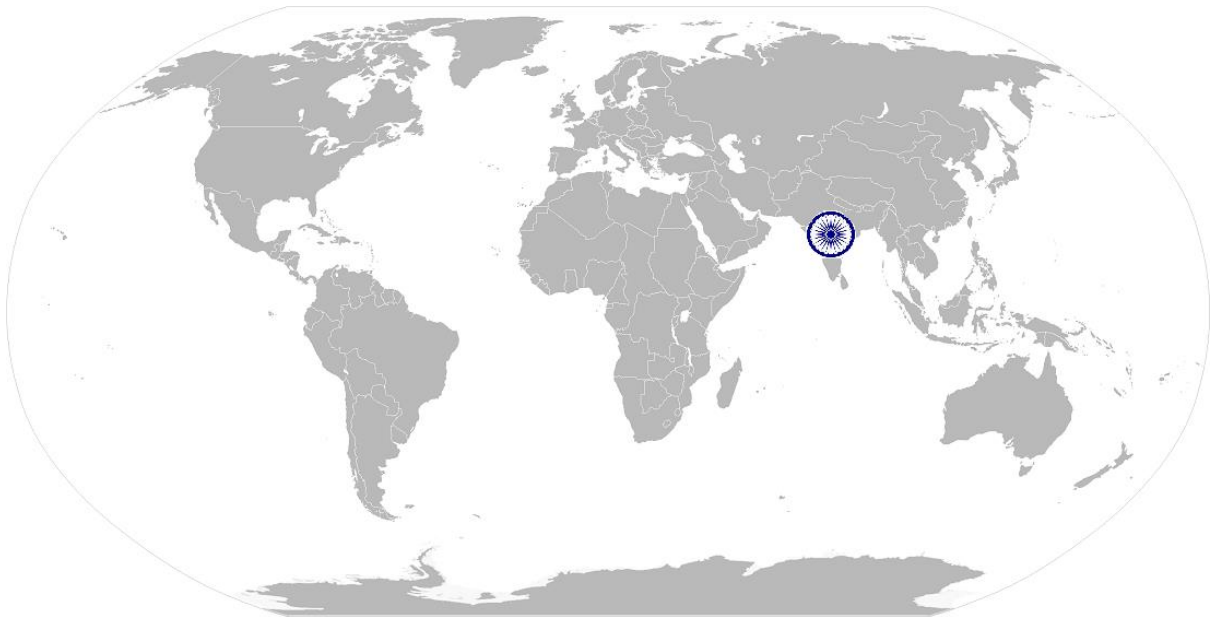


## Overview

This unit is about carrying out specified activities in support of the quality assurance of projects.

**SSC/N1304**

**Contribute to quality assurance of projects**



SSC/N1304

Contribute to quality assurance of projects

Applicable NOS Unit

Unit Code	SSC/N1304
Unit Title (Task)	Contribute to quality assurance of projects
Description	This unit is about carrying out specified activities in support of the quality assurance of projects.
Scope	<p>This unit/task covers the following:</p> <p><b>Organization's requirements</b> include:</p> <ul style="list-style-type: none"> <li>• policies</li> <li>• standards</li> <li>• processes</li> <li>• procedures</li> <li>• approved tools</li> <li>• version control</li> <li>• entry-exit criteria</li> <li>• approvals</li> </ul> <p><b>Appropriate people:</b></p> <ul style="list-style-type: none"> <li>• line manager</li> <li>• project team</li> <li>• internal auditors</li> <li>• subject matter experts</li> </ul>
Performance Criteria (PC) w.r.t. the Scope	
	<p>To be competent, you must be able to:</p> <p>PC1. establish clearly the scope of your role and responsibilities in relation to quality assurance</p> <p>PC2. check that projects comply with your <b>organization's requirements</b> during every phase</p> <p>PC3. collect required data/information against key indicators using standard templates and tools</p> <p>PC4. analyze data/information to accurately identify risks to projects</p> <p>PC5. generate reports on checks carried out, data/information collected and risks identified using standard templates and tools</p> <p>PC6. schedule review meetings at agreed project milestones</p> <p>PC7. provide required information to project management reviewers, internal auditors and technical reviewers in time for review meetings</p> <p>PC8. check that the key actions from review meetings are accurately recorded</p> <p>PC9. monitor project progress to check that key actions are taken on time</p> <p>PC10. obtain advice and guidance from <b>appropriate people</b>, where necessary</p> <p>PC11. comply with relevant standards, policies, procedures, guidelines and service level agreements (SLAs) when contributing to quality assurance</p>



SSC/N1304

Contribute to quality assurance of projects

	<p>PC12. carry out root cause analysis of process failures in projects to facilitate process improvements</p> <p>PC13. identify and share good practice with others to improve productivity</p>
<b>Knowledge and Understanding (K)</b>	
<p><b>A. Organizational Context</b> (Knowledge of the company/ organization and its processes)</p>	<p>You need to know and understand:</p> <p>KA1. your organization's policies, standards, procedures, guidelines and service level agreements for the quality assurance of projects and your role in applying these</p> <p>KA2. the principles of effective quality assurance of projects</p> <p>KA3. objectives and scope of the quality assurance work being undertaken</p> <p>KA4. key indicators for the quality assurance of projects and why projects must comply with these</p> <p>KA5. methods of collecting data/information to quality assure projects and how to apply these</p> <p>KA6. the range of standard tools and templates available for quality assurance of projects and how to use them</p> <p>KA7. the types and purpose of data/information provided to:</p> <ol style="list-style-type: none"> <li>management reviewers</li> <li>internal auditors</li> <li>technical reviewers</li> </ol> <p>KA8. how to record, report and present data/information</p> <p>KA9. your organization's procedures for sharing information/data with others</p> <p>KA10. the importance of providing timely and accurate information to others</p> <p>KA11. how to identify project risks and their potential/actual impact</p> <p>KA12. the purpose of scheduling regular review meetings and how to do this</p> <p>KA13. how to monitor and report on progress</p> <p>KA14. what to do when actions have not been completed on time</p> <p>KA15. the importance of conducting root cause analysis and how to do this</p> <p>KA16. how to conduct trend analysis</p> <p>KA17. how to determine examples good practice</p> <p>KA18. how to carry out unit level analysis of multiple projects</p> <p>KA19. the importance of project commitments to customers</p> <p>KA20. how to review and track improvement plans</p>
<p><b>B. Technical Knowledge</b></p>	<p>You need to know and understand:</p> <p>KB1. the methods of collecting data/information for quality assurance and how to apply these</p> <p>KB2. how to analyze data/information and how to use this analysis to identify risks to projects</p> <p>KB3. how to identify project risks and their potential/actual impact</p>



SSC/N1304

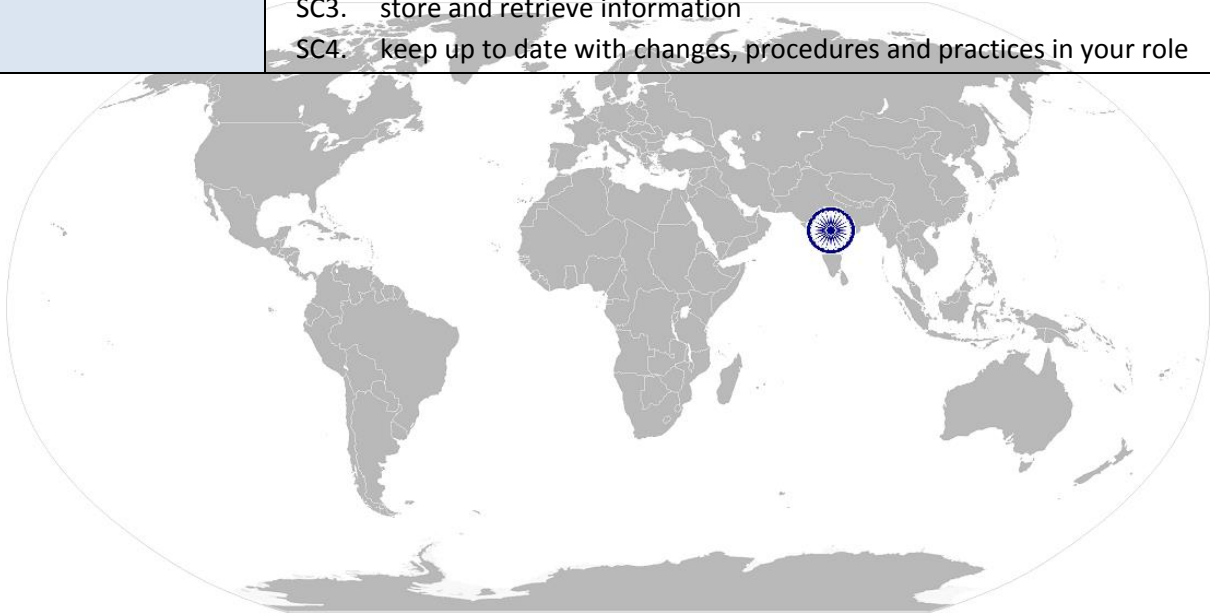
Contribute to quality assurance of projects

	KB4. the principles of project management and project lifecycle models KB5. different quality tools in your organization and how to use these
<b>Skills (S)</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Writing Skills</b>
	You need to know and understand how to: SA1. communicate with others in writing SA2. complete accurate well written work with attention to detail
	<b>Reading Skills</b>
	You need to know and understand how to: SA3. follow guidelines/procedures/rules and service level agreements
	<b>Oral Communication (Listening and Speaking skills)</b>
	You need to know and understand how to: SA4. ask for clarification and advice from others SA5. listen effectively and orally communicate information accurately
<b>B. Professional Skills</b>	<b>Decision Making</b>
	You need to know and understand how to: SB1. make a decision on a suitable course of action or response
	<b>Plan and Organize</b>
	You need to know and understand how to: SB2. plan and organize your work to achieve targets and deadlines
	<b>Customer Centricity</b>
	You need to know and understand how to: SB3. check that your own and/or your peers work meets customer requirements SB4. work effectively in a customer facing environment SB5. build and maintain positive and effective relationships with customers SB6. deliver work on time and free of defects SB7. facilitate customer feedback
	<b>Problem Solving</b>
	You need to know and understand how to: SB8. apply problem-solving approaches in different situations SB9. seek clarification on problems from others SB10. refer anomalies to the supervisor
	<b>Analytical Thinking</b>
	You need to know and understand how to: SB11. analyze data and activities SB12. configure data and disseminate relevant information to others
	<b>Critical Thinking</b>
	You need to know and understand how to: SB13. provide opinions on work in a detailed and constructive way

SSC/N1304

Contribute to quality assurance of projects

	SB14. apply balanced judgments to different situations
	<b>Attention to Detail</b>
	You need to know and understand how to: SB15. check your work is complete and free from errors SB16. get your work checked by others
	<b>Team Working</b>
	You need to know and understand how to: SB17. work independently and collaboratively SB18. work effectively in a team environment
<b>C. Technical Skills</b>	You need to know and understand how to: SC1. use information technology effectively to input and/or extract data accurately SC2. agree objectives and work requirements SC3. store and retrieve information SC4. keep up to date with changes, procedures and practices in your role

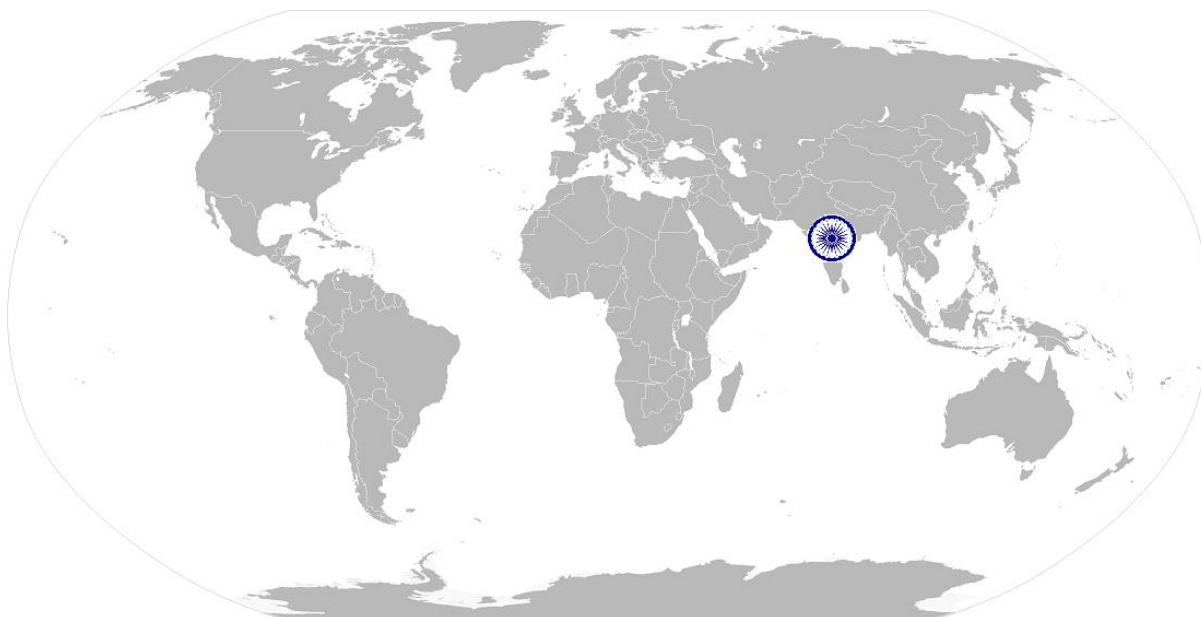


SSC/N1304

Contribute to quality assurance of projects

NOS Version Control

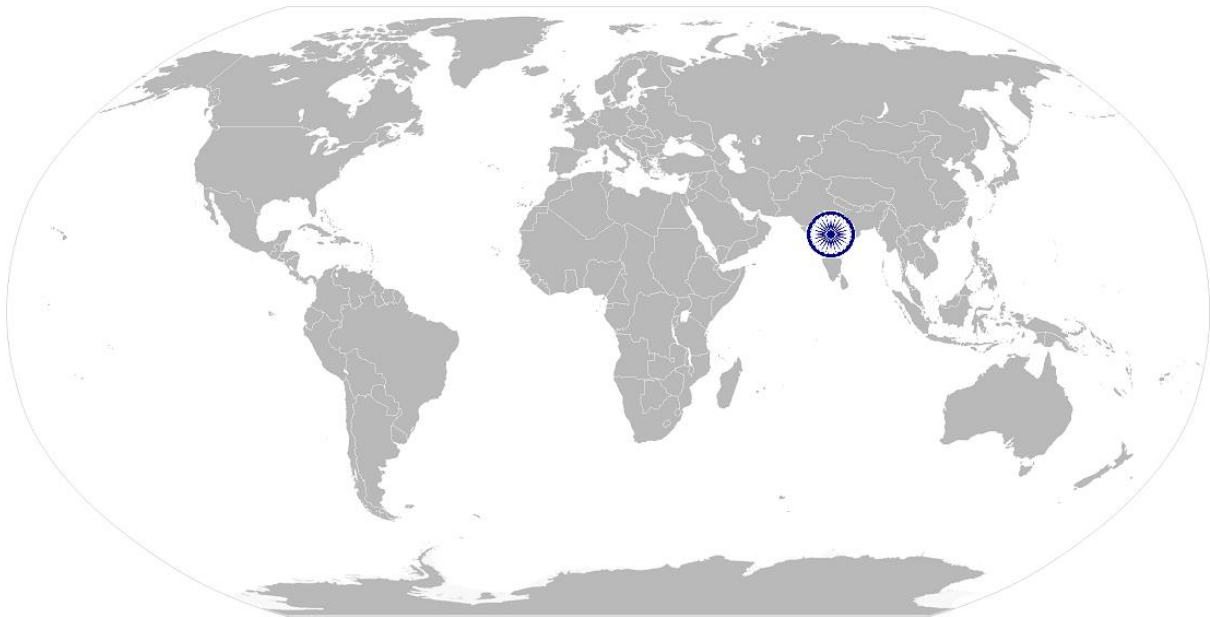
NOS Code	SSC/N1304		
Credits (NSQF)	TBD	Version number	1.0
Industry	IT-ITeS	Drafted on	30/04/2013
Industry Sub-sector	IT Services	Last reviewed on	31/01/2015
		Next review date	31/03/2016



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	<p>This unit/task covers the following:</p> <p><b>Work requirements:</b></p> <ul style="list-style-type: none"> <li>activities (what you are required to do)</li> <li>deliverables (the outputs of your work)</li> <li>quantity (the volume of work you are expected to complete)</li> <li>standards (what is acceptable performance, including compliance with Service Level Agreements)</li> <li>timing (when your work needs to be completed)</li> </ul> <p><b>Appropriate people:</b></p> <ul style="list-style-type: none"> <li>line manager</li> <li>the person requesting the work</li> <li>members of the team/department</li> <li>members from other teams/departments</li> </ul> <p><b>Resources:</b></p> <ul style="list-style-type: none"> <li>equipment</li> <li>materials</li> <li>information</li> </ul>
Performance Criteria (PC) w.r.t. the Scope	
	<p>To be competent on the job, you must be able to:</p> <p>PC1. establish and agree your <b>work requirements</b> with <b>appropriate people</b></p> <p>PC2. keep your immediate work area clean and tidy</p> <p>PC3. utilize your time effectively</p> <p>PC4. use <b>resources</b> correctly and efficiently</p> <p>PC5. treat confidential information correctly</p> <p>PC6. work in line with your organization's policies and procedures</p> <p>PC7. work within the limits of your job role</p> <p>PC8. obtain guidance from <b>appropriate people</b>, where necessary</p> <p>PC9. ensure your work meets the agreed <b>requirements</b></p>
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company/ organization and its processes)	<p>You need to know and understand:</p> <p>KA1. your organization's policies, procedures and priorities for your area of work and your role and responsibilities in carrying out your work</p> <p>KA2. limits of your responsibilities and when to involve others</p> <p>KA3. your specific work requirements and who these must be agreed with</p> <p>KA4. the importance of having a tidy work area and how to do this</p> <p>KA5. how to prioritize your workload according to urgency and importance and the benefits of this</p>

SSC/N9001

Manage your work to meet requirements

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

SSC/N9001

Manage your work to meet requirements

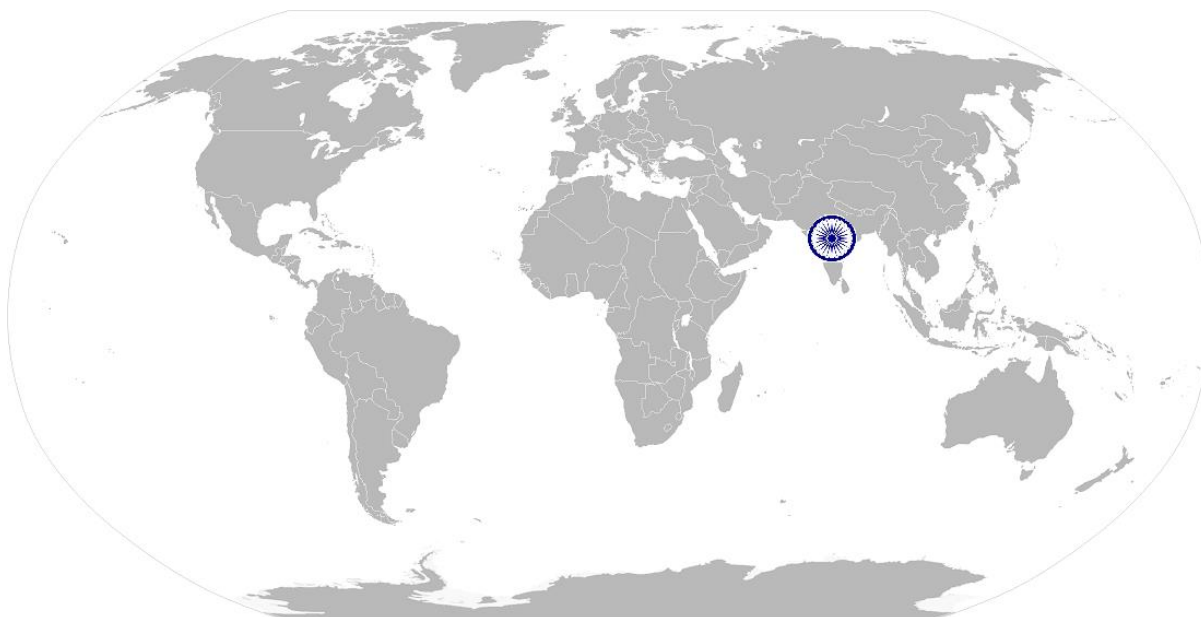
	You need to know and understand how to: SB8. provide relevant information to others SB9. analyze needs, requirements and dependencies in order to meet your work requirements
	<b>Critical Thinking</b>
	You need to know and understand how to: SB10. apply judgments to different situations
	<b>Attention to Detail</b>
	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
	<b>Team Working</b>
	You need to know and understand how to: SB13. work effectively in a team environment
<b>C. Technical Skills</b>	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  
NOS Version Control

Manage your work to meet requirements

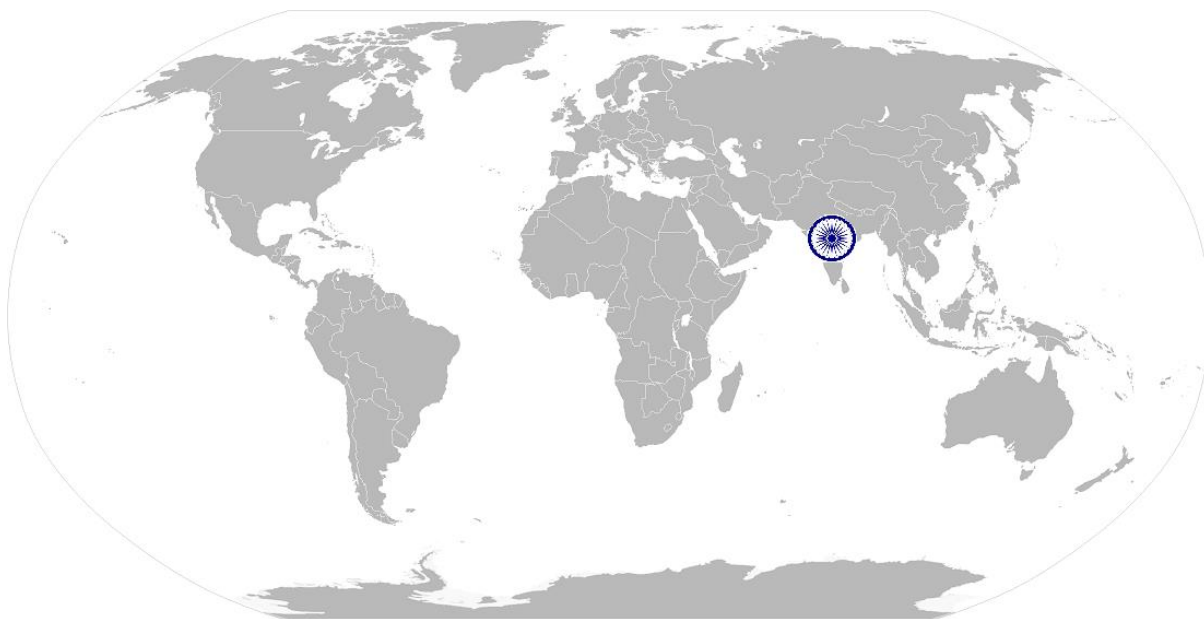
NOS Code	SSC/N9001		
Credits (NSQF)	TBD	Version number	1.0
Industry	IT-ITeS	Drafted on	30/04/2013
Industry Sub-sector	IT Services	Last reviewed on	31/01/2015
		Next review date	31/03/2016



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	<p>This unit/task covers the following:</p> <p><b>Colleagues:</b></p> <ul style="list-style-type: none"> <li>line manager</li> <li>members of your own work group</li> <li>people in other work groups in your organization</li> </ul> <p><b>Communicate:</b></p> <ul style="list-style-type: none"> <li>face-to-face</li> <li>by telephone</li> <li>in writing</li> </ul>
Performance Criteria (PC) w.r.t. the Scope	
	<p>To be competent, you must be able to:</p> <p>PC1. communicate with <b>colleagues</b> clearly, concisely and accurately</p> <p>PC2. work with <b>colleagues</b> to integrate your work effectively with them</p> <p>PC3. pass on essential information to <b>colleagues</b> in line with organizational requirements</p> <p>PC4. work in ways that show respect for <b>colleagues</b></p> <p>PC5. carry out commitments you have made to <b>colleagues</b></p> <p>PC6. let <b>colleagues</b> know in good time if you cannot carry out your commitments, explaining the reasons</p> <p>PC7. identify any problems you have working with <b>colleagues</b> and take the initiative to solve these problems</p> <p>PC8. follow the organization's policies and procedures for working with <b>colleagues</b></p>
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company/ organization and its processes)	<p>You need to know and understand:</p> <p>KA1. your organization's policies and procedures for working with colleagues and your role and responsibilities in relation to this</p> <p>KA2. the importance of effective communication and establishing good working relationships with colleagues</p> <p>KA3. different methods of communication and the circumstances in which it is appropriate to use these</p> <p>KA4. benefits of developing productive working relationships with colleagues</p> <p>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</p> <p>KA6. where you do not meet your commitments, the implications this will have on individuals and the organization</p>
B. Technical	<p>You need to know and understand:</p> <p>KB1. different types of information that colleagues might need and the importance</p>

SSC/N9002

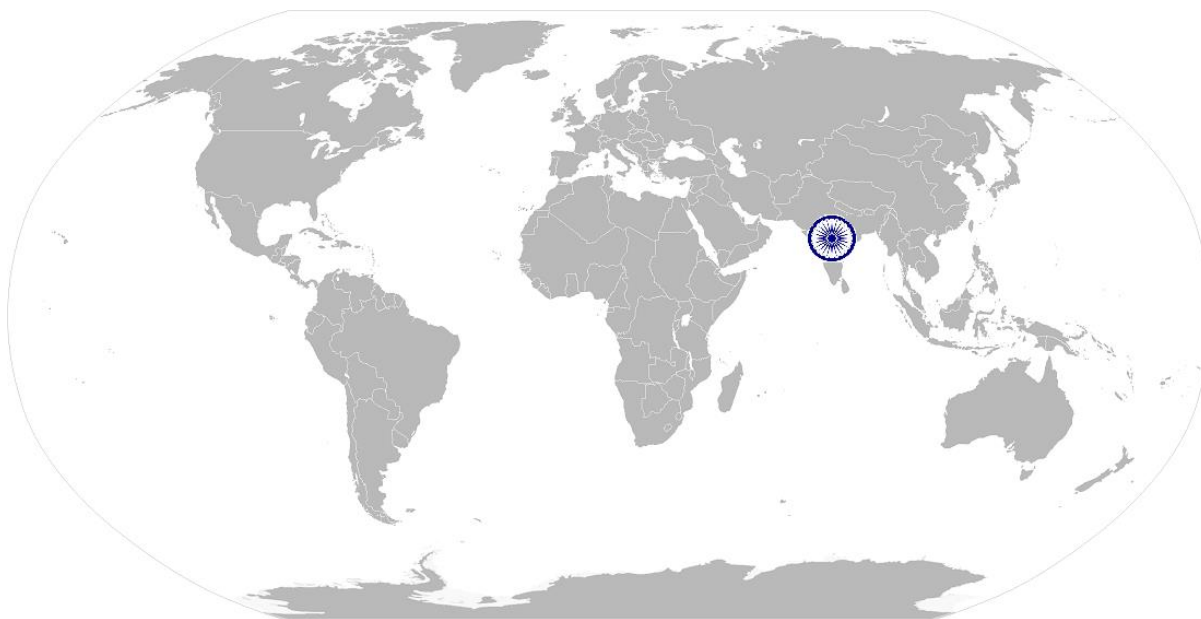
Work effectively with colleagues

Knowledge	<p>of providing this information when it is required</p> <p>KB2. the importance of understanding problems from your colleague's perspective and how to provide support, where necessary, to resolve these</p>
<b>Skills (S)</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Writing Skills</b>
	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
	<b>Reading Skills</b>
	You need to know and understand how to:
<b>B. Professional Skills</b>	SA3. read instructions, guidelines, procedures, rules and service level agreements
	<b>Oral Communication (Listening and Speaking skills)</b>
	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>Decision Making</b>
	You need to know and understand how to:
	SB1. make a decision on a suitable course of action
	<b>Plan and Organize</b>
	You need to know and understand how to:
	SB2. plan and organize your work to achieve targets and deadlines
	<b>Customer Centricity</b>
	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
	<b>Problem Solving</b>
	You need to know and understand how to:
	SB5. apply problem solving approaches in different situations
	<b>Critical Thinking</b>
	You need to know and understand how to:
	SB6. apply balanced judgments to different situations
	<b>Attention to Detail</b>
	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
	<b>Team Working</b>
	You need to know and understand how to:
	SB9. work effectively in a team environment
	SB10. work effectively with colleagues and other teams

SSC/N9002

Work effectively with colleagues

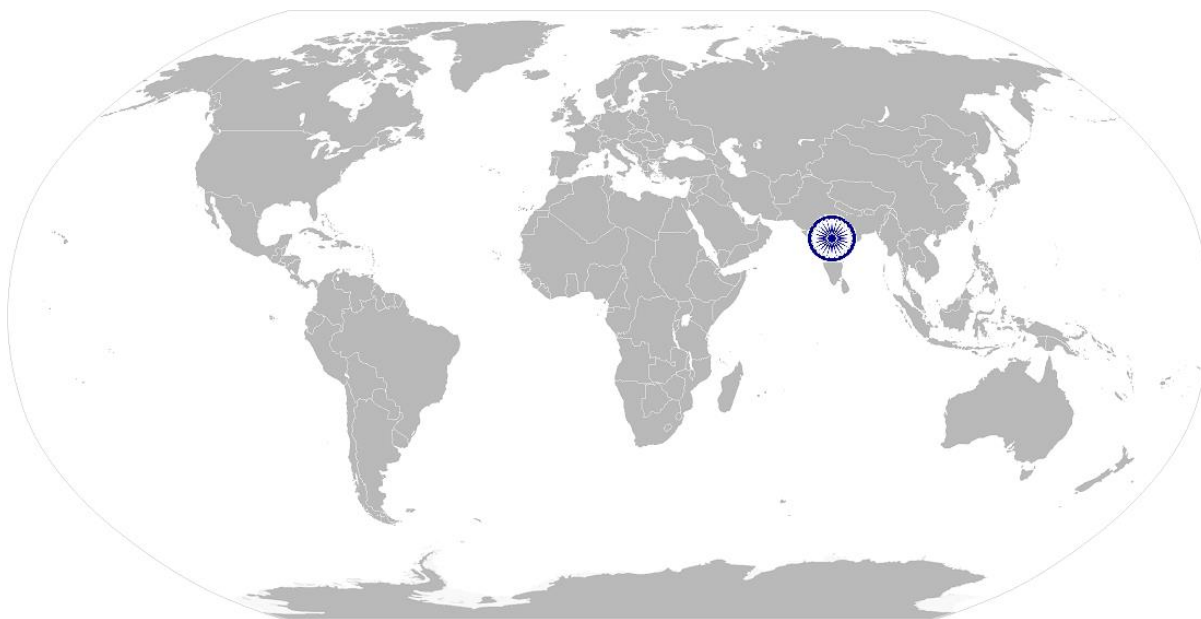
	SB11. treat other cultures with respect
<b>C. Technical Skills</b>	<p>You need to know and understand how to:</p> <p>SC1. identify and refer anomalies</p> <p>SC2. help reach agreements with colleagues</p> <p>SC3. keep up to date with changes, procedures and practices in your role</p>



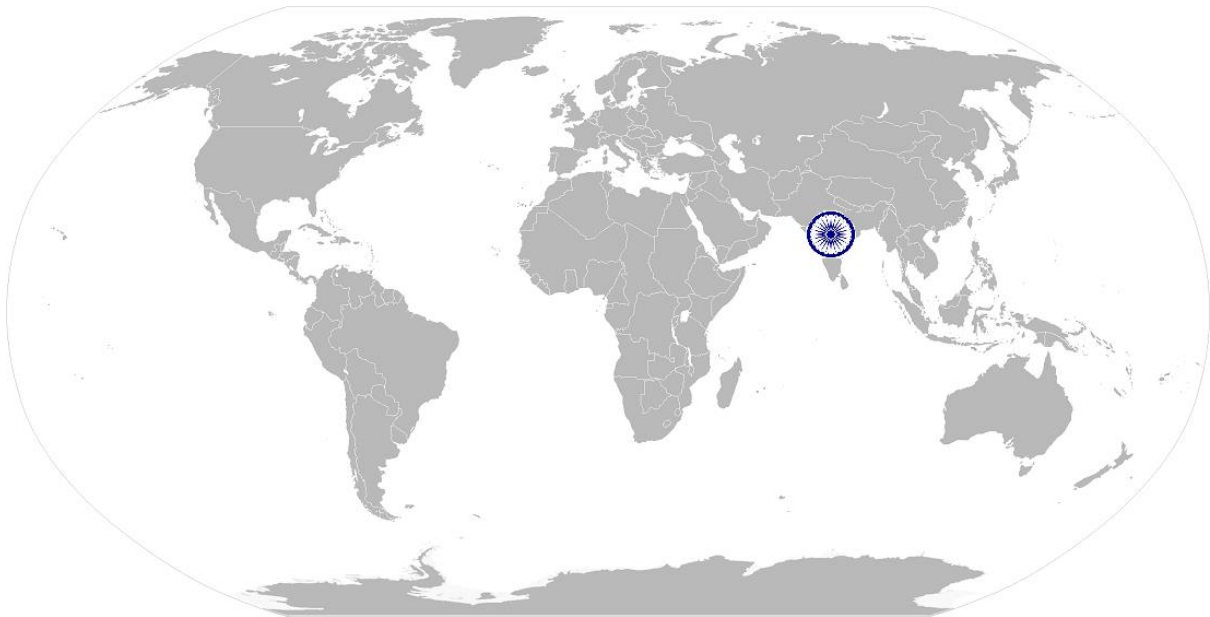
SSC/N9002  
NOS Version Control

Work effectively with colleagues

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	31/01/2015
		Next review date	31/03/2016



# 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

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	<p>This unit/task covers the following:</p> <p><b>Emergency procedures:</b></p> <ul style="list-style-type: none"> <li>• illness</li> <li>• accidents</li> <li>• fires</li> <li>• other reasons to evacuate the premises</li> <li>• breaches of security</li> </ul>
<b>Performance Criteria (PC) w.r.t. the Scope</b>	
	<p>To be competent, you must be able to:</p> <p>PC1. comply with your organization's current health, safety and security policies and procedures</p> <p>PC2. report any identified breaches in health, safety, and security policies and procedures to the designated person</p> <p>PC3. identify and correct any hazards that you can deal with safely, competently and within the limits of your authority</p> <p>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</p> <p>PC5. follow your organization's <b>emergency procedures</b> promptly, calmly, and efficiently</p> <p>PC6. identify and recommend opportunities for improving health, safety, and security to the designated person</p> <p>PC7. complete any health and safety records legibly and accurately</p>
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context</b> (Knowledge of the company/ organization and its processes)	<p>You need to know and understand:</p> <p>KA1. legislative requirements and organization's procedures for health, safety and security and your role and responsibilities in relation to this</p> <p>KA2. what is meant by a hazard, including the different types of health and safety hazards that can be found in the workplace</p> <p>KA3. how and when to report hazards</p> <p>KA4. limits of your responsibility for dealing with hazards</p> <p>KA5. your organization's <b>emergency procedures</b> for different emergency situations and the importance of following these</p> <p>KA6. the importance of maintaining high standards of health, safety and security</p> <p>KA7. implications that any non-compliance with health, safety and security may have on individuals and the organization</p>

SSC/N9003

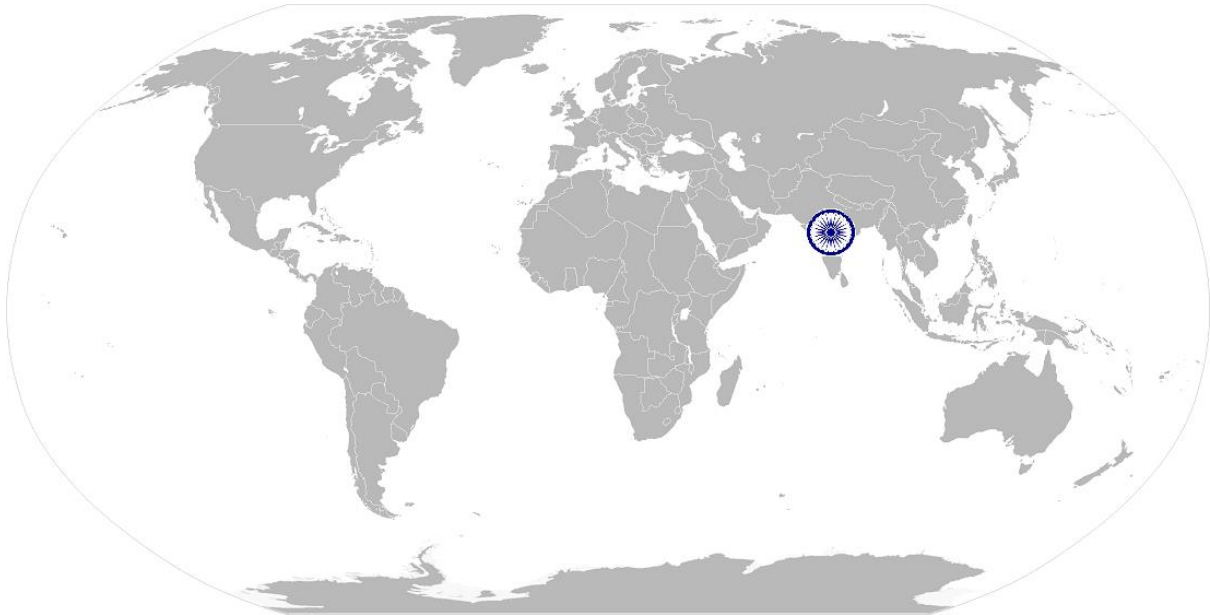
**Maintain a healthy, safe and secure working environment**

<b>B. Technical Knowledge</b>	<p>You need to know and understand:</p> <p>KB1. different types of breaches in health, safety and security and how and when to report these</p> <p>KB2. evacuation procedures for workers and visitors</p> <p>KB3. how to summon medical assistance and the emergency services, where necessary</p> <p>KB4. how to use the health, safety and accident reporting procedures and the importance of these</p> <p>KB5. government agencies in the areas of safety, health and security and their norms and services</p>
<b>Skills (S)</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Writing Skills</b>
	<p>You need to know and understand how to:</p> <p>SA1. complete accurate, well written work with attention to detail</p>
	<b>Reading Skills</b>
	<p>You need to know and understand how to:</p> <p>SA2. read instructions, guidelines, procedures, rules and service level agreements</p>
	<b>Oral Communication (Listening and Speaking skills)</b>
	<p>You need to know and understand how to:</p> <p>SA3. listen effectively and orally communicate information accurately</p>
<b>B. Professional Skills</b>	<b>Decision Making</b>
	<p>You need to know and understand how to:</p> <p>SB1. make a decision on a suitable course of action</p>
	<b>Plan and Organize</b>
	<p>You need to know and understand how to:</p> <p>SB2. plan and organize your work to meet health, safety and security requirements</p>
	<b>Customer Centricity</b>
	<p>You need to know and understand how to:</p> <p>SB3. build and maintain positive and effective relationships with colleagues and customers</p>
	<b>Problem Solving</b>
	<p>You need to know and understand how to:</p> <p>SB4. apply problem solving approaches in different situations</p>
	<b>Analytical Thinking</b>
	<p>You need to know and understand how to:</p> <p>SB5. analyze data and activities</p>
	<b>Critical Thinking</b>
	<p>You need to know and understand how to:</p> <p>SB6. apply balanced judgments to different situations</p>

SSC/N9003

**Maintain a healthy, safe and secure working environment**

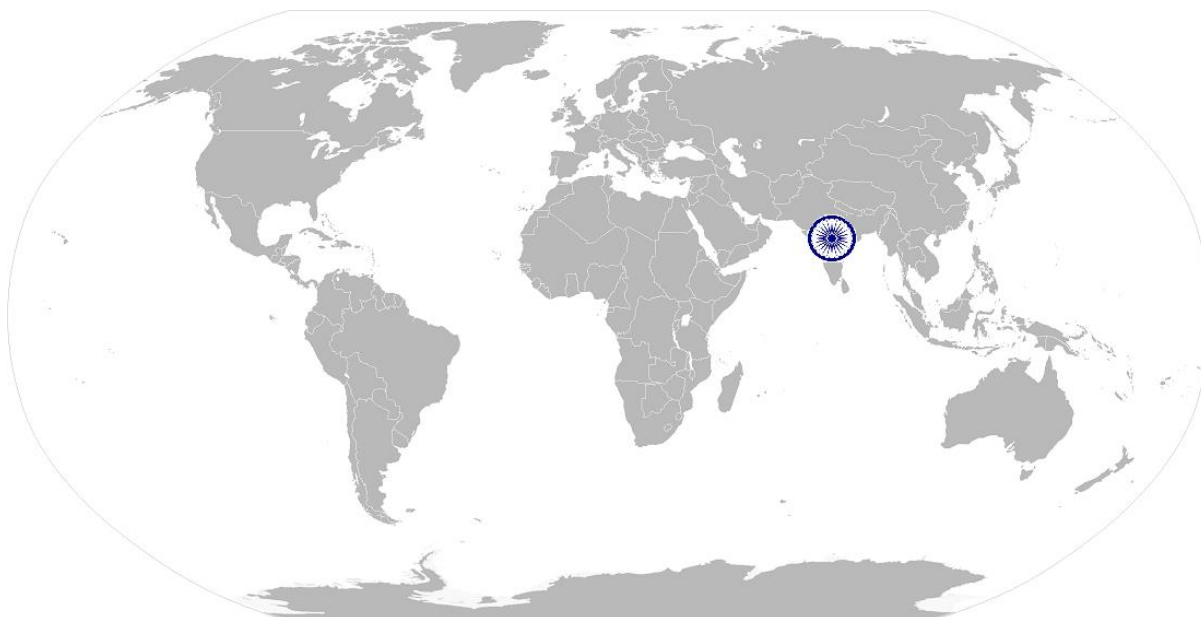
	<b>Attention to Detail</b>
	You need to know and understand how to:
	SB7. check your work is complete and free from errors
	SB8. get your work checked by peers
	<b>Team Working</b>
	You need to know and understand how to:
	SB9. work effectively in a team environment
<b>C. Technical Skills</b>	You need 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  
NOS Version Control

## Maintain a healthy, safe and secure working environment

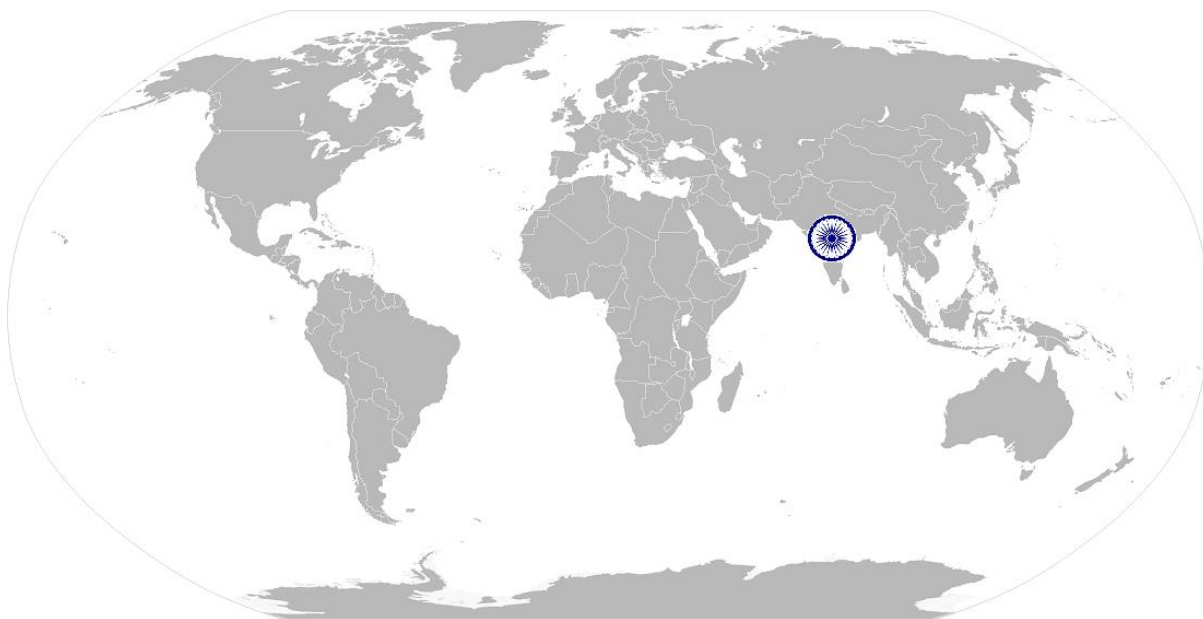
NOS Code	SSC/N9003		
Credits (NSQF)	TBD	Version number	1.0
Industry	IT-ITes	Drafted on	30/04/2013
Industry Sub-sector	IT Services	Last reviewed on	31/01/2015
		Next review date	31/03/2016



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

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	<p>This unit/task covers the following:</p> <p><b>Appropriate people:</b></p> <ul style="list-style-type: none"> <li>line manager</li> <li>members of your own work group</li> <li>people in other work groups in your organization</li> <li>subject matter experts</li> </ul> <p><b>Data/information:</b></p> <ul style="list-style-type: none"> <li>quantitative</li> <li>qualitative</li> </ul> <p><b>Sources:</b></p> <ul style="list-style-type: none"> <li>within your organization</li> <li>outside your organization</li> </ul> <p><b>Formats:</b></p> <ul style="list-style-type: none"> <li>paper-based</li> <li>electronic</li> </ul>
<b>Performance Criteria (PC) w.r.t. the Scope</b>	
	<p>To be competent, you must be able to:</p> <p>PC1. establish and agree with <b>appropriate people</b> the <b>data/information</b> you need to provide, the <b>formats</b> in which you need to provide it, and when you need to provide it</p> <p>PC2. obtain the <b>data/information</b> from reliable <b>sources</b></p> <p>PC3. check that the <b>data/information</b> is accurate, complete and up-to-date</p> <p>PC4. obtain advice or guidance from <b>appropriate people</b> where there are problems with the <b>data/information</b></p> <p>PC5. carry out rule-based analysis of the <b>data/information</b>, if required</p> <p>PC6. insert the <b>data/information</b> into the agreed <b>formats</b></p> <p>PC7. check the accuracy of your work, involving colleagues where required</p> <p>PC8. report any unresolved anomalies in the <b>data/information</b> to <b>appropriate people</b></p> <p>PC9. provide complete, accurate and up-to-date data/information to the <b>appropriate people</b> in the required <b>formats</b> on time</p>
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context</b>	<p>You need to know and understand:</p> <p>KA1. your organization's procedures and guidelines for providing data/information</p>



## SSC/N9004

## Provide data/information in standard formats

(Knowledge of the company/ organization and its processes)	<p>in standard formats and your role and responsibilities in relation to this</p> <p>KA2. the knowledge management culture of your organization</p> <p>KA3. your organization's policies and procedures for recording and sharing information and the importance of complying with these</p> <p>KA4. the importance of validating data/information before use and how to do this</p> <p>KA5. procedures for updating data in appropriate formats and with proper validation</p> <p>KA6. the purpose of the CRM database</p> <p>KA7. how to use the CRM database to record and extract information</p> <p>KA8. the importance of having your data/information reviewed by others</p> <p>KA9. the scope of any data/information requirements including the level of detail required</p> <p>KA10. the importance of keeping within the scope of work and adhering to timescales</p>
<b>B. Technical Knowledge</b>	<p>You need to know and understand:</p> <p>KB1. data/information you may need to provide including the sources and how to do this</p> <p>KB2. templates and formats used for data/information including their purpose and how to use these</p> <p>KB3. different techniques used to obtain data/information and how to apply</p> <p>KB4. these</p> <p>KB5. how to carry out rule-based analysis on the data/information</p> <p>KB6. typical anomalies that may occur in data/information</p> <p>KB7. who to go to in the event of inaccurate data/information and how to report this</p>
<b>Skills (S)</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Writing Skills</b>
	<p>You need to know and understand how to:</p> <p>SA1. complete accurate, well written work with attention to detail</p>
	<b>Reading Skills</b>
	<p>You need to know and understand how to:</p> <p>SA2. read instructions, guidelines, procedures, rules and service level agreements</p>
	<b>Oral Communication (Listening and Speaking skills)</b>
	<p>You need to know and understand how to:</p> <p>SA3. listen effectively and orally communicate information accurately</p>
<b>B. Professional Skills</b>	<p><b>Decision Making</b></p> <p>You need to know and understand how to:</p> <p>SB1. follow rule-based decision-making processes</p> <p>SB2. make a decision on a suitable course of action</p>



SSC/N9004

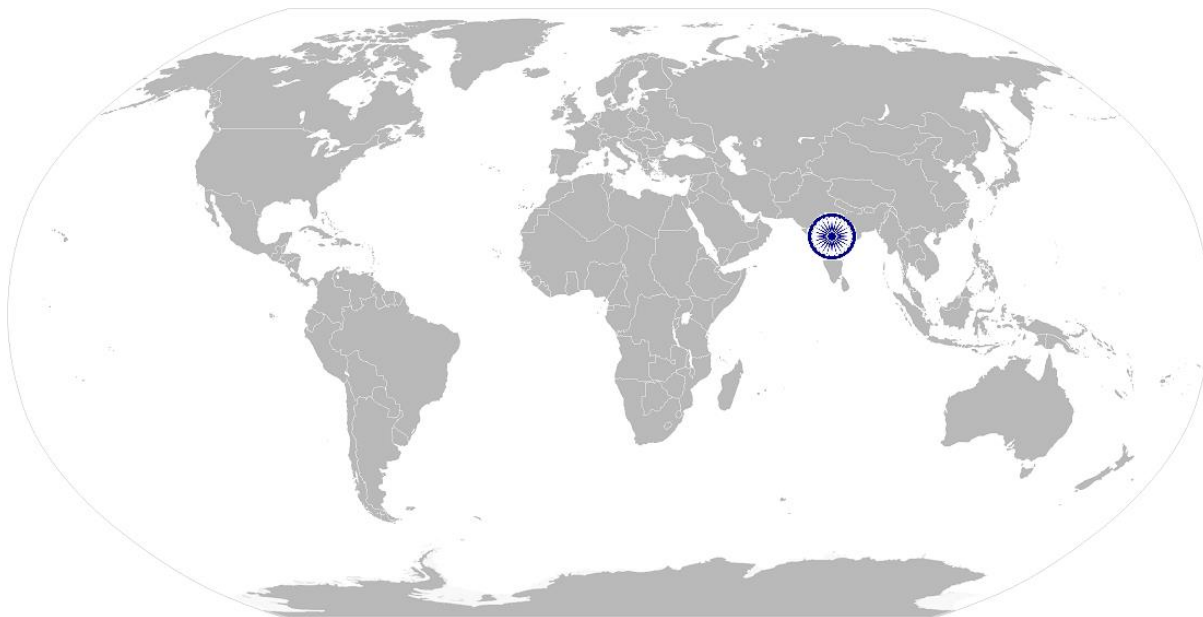
Provide data/information in standard formats

	<b>Plan and Organize</b>
	You need to know and understand how to: SB3. plan and organize your work to achieve targets and deadlines
	<b>Customer Centricity</b>
	You need to know and understand how to: SB4. check that your own work meets customer requirements SB5. meet and exceed customer expectations
	<b>Problem Solving</b>
	You need to know and understand how to: SB6. apply problem solving approaches in different situations
	<b>Analytical Thinking</b>
	You need to know and understand how to: SB7. configure data and disseminate relevant information to others
	<b>Critical Thinking</b>
	You need to know and understand how to: SB8. apply balanced judgments to different situations
	<b>Attention to Detail</b>
	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
	<b>Team Working</b>
	You need to know and understand how to: SB11. work effectively in a team environment
<b>C. Technical Skills</b>	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  
NOS Version Control

Provide data/information in standard formats

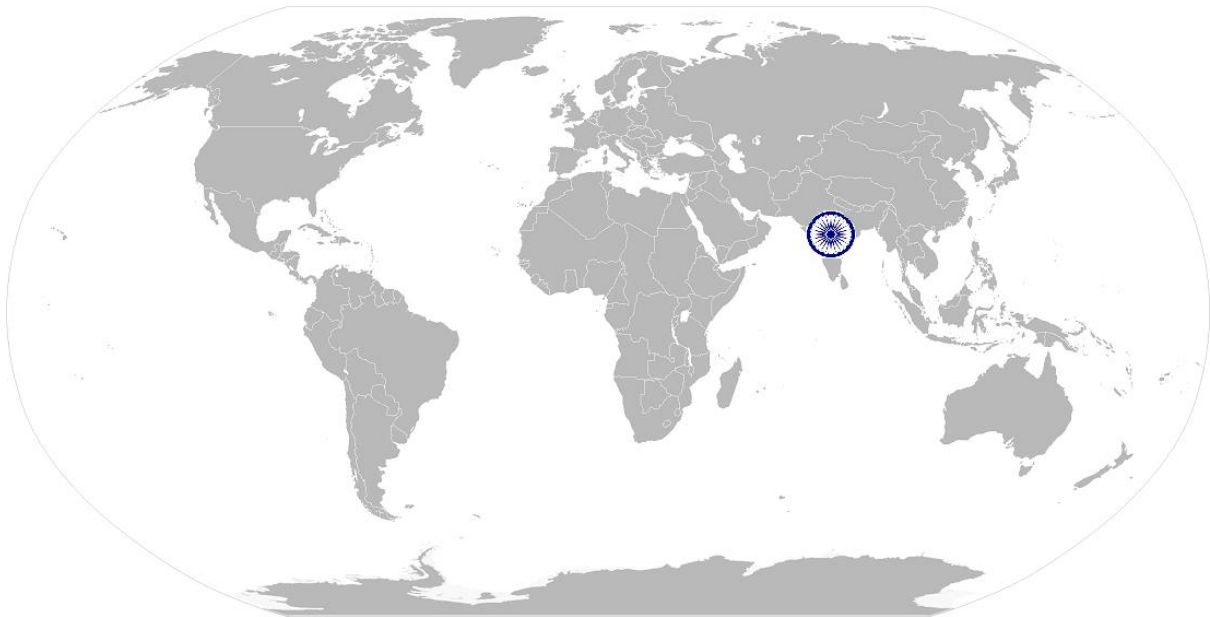
NOS Code	SSC/N9004		
Credits(NVEQF/NVQF/NSQF)	TBD	Version number	1.0
Industry	IT-ITeS	Drafted on	30/04/2013
Industry Sub-sector	IT Services	Last reviewed on	31/01/2015
		Next review date	31/03/2016



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

Unit Code	SSC/N9005
Unit Title (Task)	Develop your knowledge, skills and competence
Description	<p>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.</p> <p><i>Competence</i> is defined as: the application of knowledge and skills to perform to the standards required.</p>
Scope	<p>This unit/task covers the following:</p> <p><b>Appropriate people</b> may be:</p> <ul style="list-style-type: none"> <li>line manager</li> <li>human resources specialists</li> <li>learning and development specialists</li> <li>peers</li> </ul> <p><b>Job role:</b></p> <ul style="list-style-type: none"> <li>current responsibilities as defined in your job description</li> <li>possible future responsibilities</li> </ul> <p><b>Learning and development activities:</b></p> <ul style="list-style-type: none"> <li>formal education and training programs, leading to certification</li> <li>non-formal activities (such as private study, learning from colleagues, project work), designed to meet learning and development objectives but without certification</li> </ul> <p><b>Appropriate action</b> may be:</p> <ul style="list-style-type: none"> <li>undertaking further learning and development activities</li> <li>finding further opportunities to apply your knowledge and skills</li> </ul>
Performance Criteria (PC) w.r.t. the Scope	
	<p>To be competent, you must be able to:</p> <p>PC1. obtain advice and guidance from <b>appropriate people</b> to develop your knowledge, skills and competence</p> <p>PC2. identify accurately the knowledge and skills you need for your <b>job role</b></p> <p>PC3. identify accurately your current level of knowledge, skills and competence and any learning and development needs</p> <p>PC4. agree with <b>appropriate people</b> a plan of <b>learning and development activities</b> to address your learning needs</p> <p>PC5. undertake <b>learning and development activities</b> in line with your plan</p> <p>PC6. apply your new knowledge and skills in the workplace, under supervision</p> <p>PC7. obtain feedback from <b>appropriate people</b> on your knowledge and skills and how effectively you apply them</p> <p>PC8. review your knowledge, skills and competence regularly and take <b>appropriate</b></p>

SSC/N9005

Develop your knowledge, skills and competence

	action
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context</b> (Knowledge of the company/ organization and its processes)	<p>You need to know and understand:</p> <p>KA1. your organization's procedures and guidelines for developing your knowledge, skills and competence and your role and responsibilities in relation to this</p> <p>KA2. the importance of developing your knowledge, skills and competence to you and your organization</p> <p>KA3. different methods used by your organization to review skills and knowledge including:</p> <ul style="list-style-type: none"> <li>• training need analysis</li> <li>• skills need analysis</li> <li>• performance appraisals</li> </ul> <p>KA4. how to review your knowledge and skills against your job role using different methods and analysis</p> <p>KA5. different types of learning and development activities available for your job role and how to access these</p> <p>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</p> <p>KA7. different types of support available to help you plan and undertake learning and development activities and how to access these</p> <p>KA8. why it is important to maintain records of your learning and development</p> <p>KA9. methods of obtaining and accepting feedback from appropriate people on your knowledge skills and competence</p> <p>KA10. how to use feedback to develop in your job role</p>
<b>B. Technical Knowledge</b>	<p>You need to know and understand:</p> <p>KB1. the knowledge and skills required in your job role</p> <p>KB2. your current learning and development needs in relation to your job role</p> <p>KB3. different types of learning styles and methods including those that help you learn best</p> <p>KB4. the importance of taking responsibility for your own learning and development</p> <p>KB5. to the importance of learning and practicing new concepts, theory and how to apply these in the work environment or on samples.</p> <p>KB6. how to explore sample problems and apply solutions</p>
<b>Skills (S)</b>	
<b>A. Core Skills/ Generic Skills</b>	<p><b>Writing Skills</b></p> <p>You need to know and understand how to:</p> <p>SA1. communicate with colleagues in writing</p>

SSC/N9005

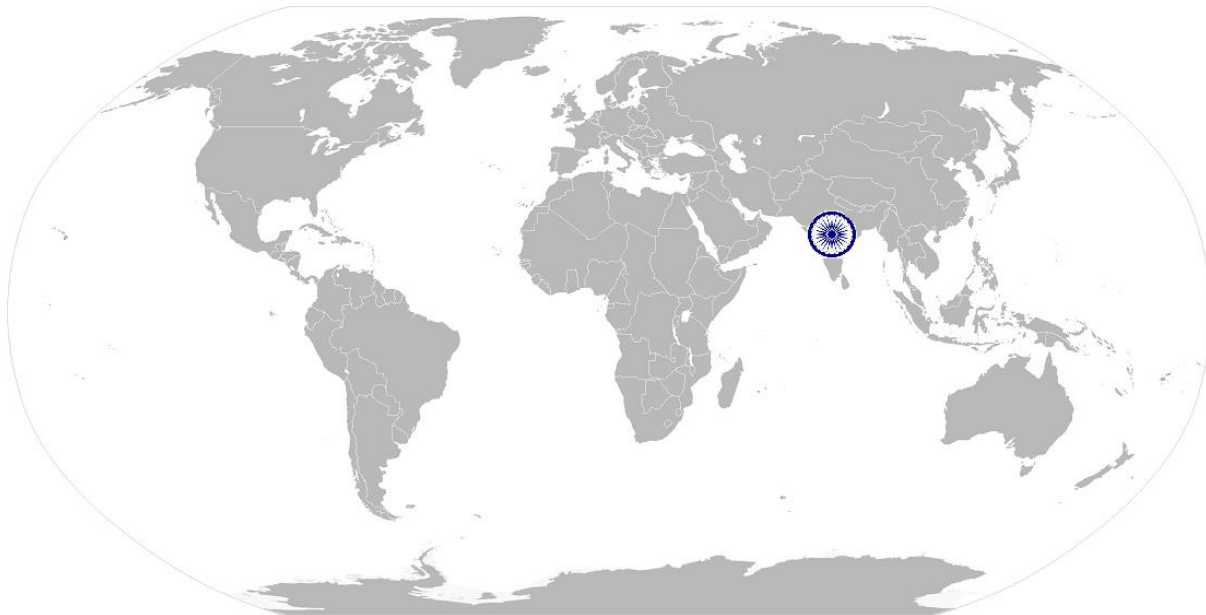
Develop your knowledge, skills and competence

	<b>Reading Skills</b>
	You need to know and understand how to: SA2. read instructions, guidelines and procedures
	<b>Oral Communication (Listening and Speaking skills)</b>
	You need to know and understand how to: SA3. ask for clarification and advice from line managers
<b>B. Professional Skills</b>	<b>Decision Making</b>
	You need to know and understand how to: SB1. make a decision on a suitable course of action
	<b>Plan and Organize</b>
	You need to know and understand how to: SB2. plan and organize your work to achieve targets and deadlines
	<b>Customer Centricity</b>
	You need to know and understand how to: SB3. check that your own work meets customer requirements
	<b>Problem Solving</b>
	You need to know and understand how to: SB4. refer anomalies to the line manager
	<b>Analytical Thinking</b>
	You need to know and understand how to: SB5. analyze data and activities
	<b>Critical Thinking</b>
	You need to know and understand how to: SB6. apply balanced judgments to different situations
	<b>Attention to Detail</b>
	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
<b>C. Technical Skills</b>	<b>Team Working</b>
	You need to know and understand how to: SB9. work effectively in a team environment
	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  
NOS Version Control

Develop your knowledge, skills and competence

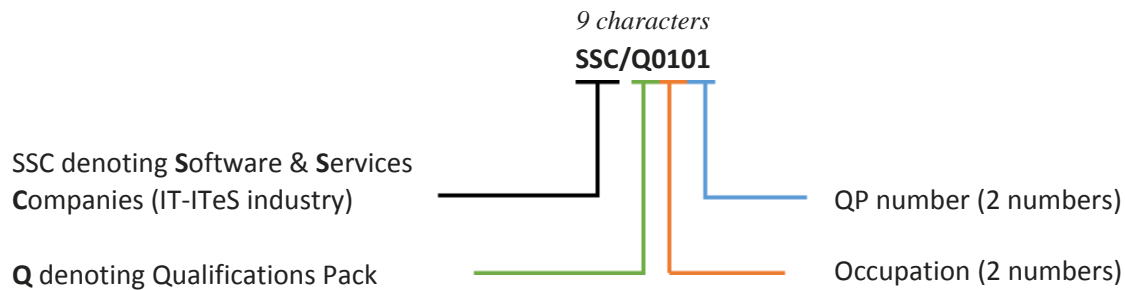
NOS Code	SSC/N9005		
Credits (NSQF)	TBD	Version number	1.0
Industry	IT-ITeS	Drafted on	30/04/2013
Industry Sub-sector	IT Services	Last reviewed on	31/01/2015
		Next review date	31/03/2016



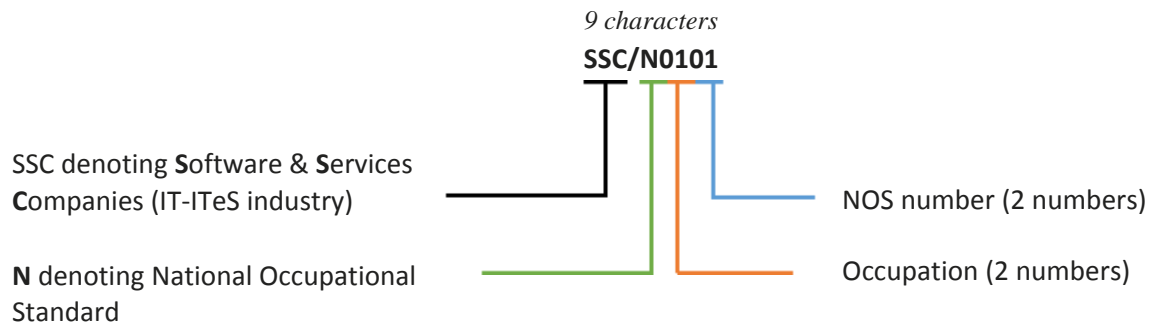


## Nomenclature for QP and NOS Units

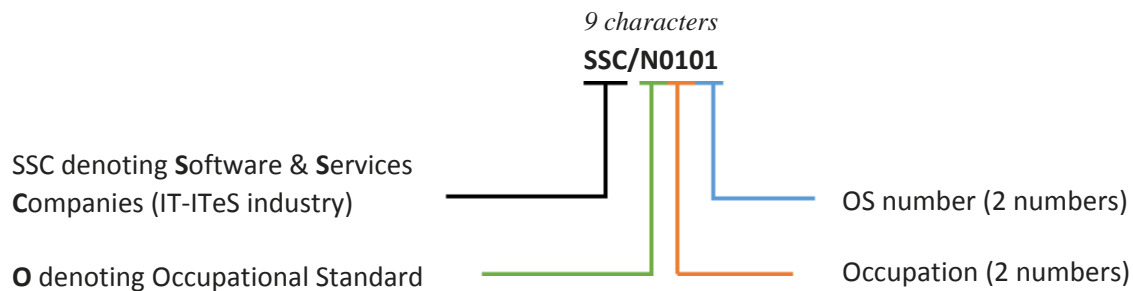
### Qualifications Pack



### 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/O0101.
- 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 QP or NOS	N
Next two numbers	Occupation Code	01
Next two numbers	OS number	01

### Criteria for Assessment of Trainees

<b>Job Role</b>	QA Engineer
<b>Qualification Pack</b>	SSC/Q1302
<b>Sector Skill Council</b>	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 judgment 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](http://www.sscnasscom.com).

				Marks Allocation	
Assessment Outcomes	Assessment Criteria for Outcomes	Total Mark	Out of	Theory	Skills Practical
<b>1. SSC/N1304 (Contribute to quality assurance of projects)</b>	PC1. establish clearly the scope of your role and responsibilities in relation to quality assurance	<b>100</b>	5	5	0
	PC2. check that projects comply with your organization's requirements during every phase		5	5	0
	PC3. collect required data/information against key indicators using standard templates and tools		10	0	10
	PC4. analyze data/information to accurately identify risks to projects		10	0	10
	PC5. generate reports on checks carried out, data/information collected and risks identified using standard templates and tools		10	0	10
	PC6. schedule review meetings at agreed project milestones		5	5	0
	PC7. provide required information to project management reviewers, internal auditors and technical reviewers in time for review meetings		5	5	0
	PC8. check that the key actions from review meetings are accurately recorded		10	0	10
	PC9. monitor project progress to check that key actions are taken on time		5	5	0
	PC10. obtain advice and guidance from appropriate people, where necessary		5	5	0

### Criteria for Assessment of Trainees

	PC11. comply with relevant standards, policies, procedures, guidelines and service level agreements (SLAs) when contributing to quality assurance		10	0	10
	PC12. carry out root cause analysis of process failures in projects to facilitate process improvements		10	0	10
	PC13. identify and share good practice with others to improve productivity		10	0	10
		<b>Total</b>	<b>100</b>	<b>30</b>	<b>70</b>
<b>2.SSC/N9001 (Manage your work to meet requirements)</b>	PC1. establish and agree your <b>work requirements</b> with <b>appropriate people</b>	<b>100</b>	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
		<b>Total</b>	<b>100</b>	<b>25</b>	<b>75</b>
<b>3.SSC/N9002 (Work effectively with colleagues)</b>	PC1. communicate with colleagues clearly, concisely and accurately	<b>100</b>	20	0	20
	PC2. work with colleagues to integrate your work effectively with theirs		10	0	10
	PC3. pass on essential information to colleagues in line with organizational requirements		10	10	0
	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
		<b>Total</b>	<b>100</b>	<b>20</b>	<b>80</b>
<b>4.SSC/N9003 (Maintain a</b>	PC1. comply with your organization's current	<b>100</b>	20	10	10

### Criteria for Assessment of Trainees

healthy, safe and secure working environment)	health, safety and security policies and procedures				
	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
		<b>Total</b>	<b>100</b>	<b>30</b>	<b>70</b>
<b>5.SSC/N9004 (Provide data/information in standard formats)</b>	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		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
		<b>Total</b>	<b>100</b>	<b>25</b>	<b>75</b>
<b>6.SSC/N9005 (Develop your knowledge, skills and competence)</b>	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

*Criteria for Assessment of Trainees*

	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		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
		<b>Total</b>	<b>100</b>	<b>20</b>	<b>80</b>