



### QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR ELECTRONICS INDUSTRY

### What are Occupational Standards(OS)?

OS describe what individuals need to do, know and understand in order to carry out a particular job role or function

OS 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-Field Technician: Refrigerator

SECTOR: ELECTRONICS SUB-SECTOR: CONSUMER ELECTRONICS

**OCCUPATION:** AFTER SALES SERVICE

**REFERENCE ID: ELE/Q3103** 

ALIGNED TO: NCO-2004/7233.50

**Refrigerator Field Technician:** Also, called 'Fridge Technician', the Refrigerator Field Technician provides installation and after sales service to the refrigerator buyers.

**Brief Job Description:** The individual at work interacts with customers to install the refrigerator and diagnose the problem to assess possible causes of malfunction. Once the problem and causes have been identified, the individual rectifies minor problems or replaces faulty modules for failed parts or recommends factory repairs for bigger faults.

**Personal Attributes:** The individual must be willing to work in the field and travel through the day from one customer's premise to another. Punctuality, amenable behaviour, patience, good interpersonal relationship building, trustworthiness, integrity, and critical thinking are important attributes for this job.





s	Qualifications Pack Code	ELE/Q3103		
	Job Role	Field Technician – Refrigerator		
Detail	Credits(NVEQF/NVQF/NSQF) [ <i>OPTIONAL</i> ]	TBD	Version number	1.0
ob [	Sector	Electronics	Drafted on	07/11/13
of	Sub-sector	<b>Consumer Electronics</b>	Last reviewed on	24/12/13
	Occupation	After Sales Service	Next review date	23/12/14

Job Role	Field Technician – Refrigerator	
	Also called 'Fridge Technician'	
Role Description	Install the refrigerator, decipher the symptoms and diagnose the problems in the refrigerator by carrying out basic volt ampere test, earthing check, refrigeration cycle check and repairing electro-mechanical faults.	
NVEQF/NVQF level	4	
Minimum Educational Qualifications*	8 <sup>th</sup> Standard passed	
Maximum Educational Qualifications*	ITI/Diploma (Electrical/Mechanical/RAC)	
Training	Not Applicable	
(Suggested but not mandatory)		
Experience	Minimum 2 years as helper for 8 <sup>th/</sup> 9 <sup>th</sup> passed	
	Compulsory:	
	1. ELE/N3101 Engage with customer for service	
	2. <u>ELE/N3106 Install the refrigerator</u>	
Applicable National Occupational	3. ELE/N3107 Repair dysfunctional refrigerator	
Standards (NOS)	4. ELE/N9901 Interact with colleagues	
	Optional:	
	Not applicable	
Performance Criteria	As described in the relevant OS units	

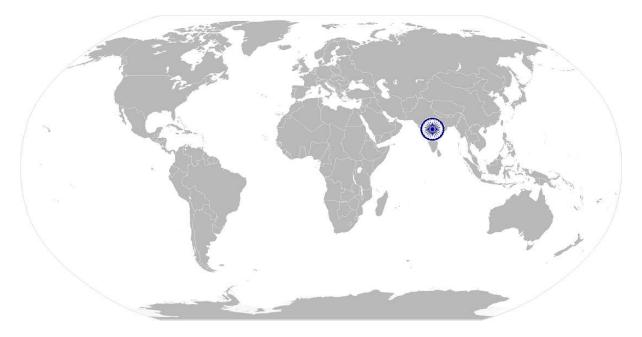






Engage with customer for service

# National Occupational Standard



### **Overview**

This unit is about interacting with customers to understand their requirements and build confidence.







Engage with customer for service

Unit Code	ELE/N3101
Unit Title (Task)	Engage with customer for service
Description	This OS unit is about interacting with customer to understand their requirement with respect to problem in the appliance
Scope	This unit/ task covers the following:
	Interact with the customer prior to visit
	Interact with customer at their premises
	Suggest possible solutions to customer
	Achieve productivity and quality as per company's norms
Performance Criteria(P	C) w.r.t. the Scope
Element	Performance Criteria
Interacting with customer prior to visit Interacting with customer at their premises	<ul> <li>To be competent, the user/ individual must be able to:</li> <li>PC1. check customer complaint registered at customer care or installation schedule</li> <li>PC2. call customer to confirm problem and fix time for visit</li> <li>PC3. greet the customer and confirm the problem registered</li> <li>PC4. be polite and patient when interacting with customer</li> <li>PC5. check about warranty status of appliance and annual maintenance contract</li> <li>PC6. anticipate possible problems to carry tools and parts accordingly</li> <li>PC7. ascertain customer location in order to make the route plan for the day</li> <li>To be competent, the user/ individual must be able to:</li> <li>PC8. enquire about the symptoms and history of problems in the appliance</li> <li>PC9. ask about the age of appliance and status of upkeep</li> </ul>
	<ul> <li>PC10. identify the problem based on customer's information</li> <li>PC11. communicate the problems identified and educate on possible reasons</li> <li>PC12. inform about costs involved</li> </ul>
Suggesting possible solutions to customer	<ul> <li>To be competent, the user/ individual must be able to:</li> <li>PC13. discuss the problem(s) identified with customer</li> <li>PC14. suggest possible solutions and costs involved</li> <li>PC15. explain the time required and methodology for servicing necessary</li> <li>PC16. seek customer's approval on further action</li> </ul>
Achieving productivity and quality	<ul> <li>To be competent, the user/ individual must be able to:</li> <li>PC17. accurately assess the problem and solution(s) necessary</li> <li>PC18. offer most appropriate and cost-effective service as per customer's requirement</li> </ul>



NOS National Occupational Standards



ELE/N3101	Engage with customer for service		
	PC19. communicate problem effectively in order to secure customer's confidence		
	PC20. ensure customer satisfaction and positive feedback		
	PC21. record minimum customer complaints post service		
	PC22. avoid repeat problem post service		
	PC23. prepare most optimum route plan to complete daily target visits		
Knowledge and Unders	standing (K)		
A. Organizational	The individual on the job needs to know and understand:		
Context	KA1. company's policies on: customer care		
(Knowledge of the	KA2. company's code of conduct		
company /	KA3. organisation culture and typical customer profile		
organization and	KA4. company's reporting structure		
-	KA5. company's documentation policy		
its processes)			
B. Technical	The individual on the job needs to know and understand:		
Knowledge	KB1. company's products and recurring problems reported in consumer		
	appliances		
	KB2. how to communicate with customers in order to put them at ease		
	KB3. basic electrical and mechanical modules of various appliances		
	KB4. electronics involved in the type of appliance		
	KB5. models of different appliances and their common and distinguishing features		
	KB6. functionality of different features of appliances and new features		
	KB7. etiquette to be followed at customer's premises		
	KB8. precautions to be taken while handling field calls and dealing with customers		
	KB9. relevant reference sheets, manuals and documents to carry in the field		
Skills (S)			
A. Core Skills/	Reading and writing skills		
Generic Skills	The individual on the job needs to know and understand:		
	SA1. how to read product and module serial numbers and interpret details such		
	as make, date, availability		
	SA2. how to note problems on job sheet and details of work done		
B. Professional Skills	Interpersonal skills		
	The individual on the job needs to know and understand how:		
	SB1. to put customer at ease and generate customer's confidence		
	SB2. to listen carefully and interpret their statement of symptoms		
	352. to listen carefully and interpret their statement of symptoms		
	Communication skills		
	The individual on the job needs to know and understand how:		
	SB3. to seek inputs at assess the problems		
	SB4. how to communicate in local language		
	SB5. how to educate and inform customer about contractual issues such as		
	warranty, cost of service and module replacement		
	SB6. to educate on precautions to be taken post repairs to avoid recurrence of		
	problem		







ELE/N3101	Engage with customer for service
	Behavioural skills
	<ul> <li>The individual on the job needs to know and understand:</li> <li>SB7. importance of personal grooming</li> <li>SB8. significance of etiquette such as maintaining the appropriate physical distance with customer during conversation, not entering bedroom without permission</li> <li>SB9. importance of being patient and courteous with all types of customers</li> <li>SB10. being polite and courteous under all circumstances</li> <li>SB11. importance of maintaining clean surface/work area</li> </ul>
	Decision making skills
	<ul> <li>SB12. decide on the spot on whether interaction of customer with supervisor is necessary or not</li> <li>SB13. when to call customer care and close the call after work is done to customer's satisfaction and documentation is complete</li> </ul>







Engage with customer for service

### **NOS Version Control**

NOS Code	ELE/N3101		
Credits(NVEQF/NVQF/NSQF) [OPTIONAL]	TBD	Version number	1.0
Industry	Electronics	Drafted on	07/11/13
Industry Sub-sector	Consumer Electronics	Last reviewed on	24/12/13
		Next review date	23/12/14

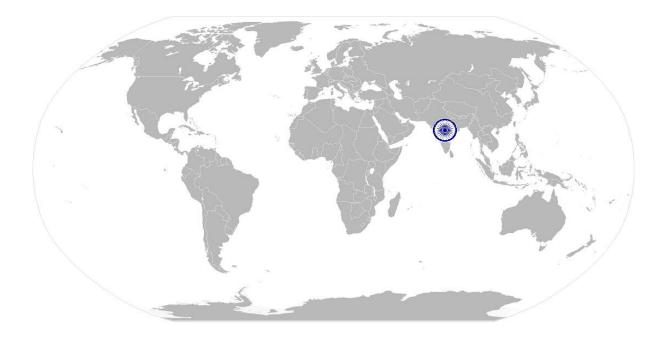






Install the refrigerator

# National Occupational Standard



### **Overview**

This unit is about installing the newly purchased refrigerator at customer's premises.







National Occupational Standard

### Install the refrigerator

ELE/NJ100	Instan the reirigerator
Unit Code	ELE /N3106
Unit Title (Task)	Install the refrigerator
Description	This OS unit is about installing the newly purchased refrigerator at customer's location and make it ready to use
Scope	This unit/ task covers the following:
	Remove packaging and check accessories
	Place the appliance to appropriate location
	Check refrigerator's functioning
	Complete documentation
	Interact with superior
	<ul> <li>Achieve productivity and quality as per company's standards</li> </ul>
Performance Criteria(P	C) w.r.t. the Scope
Element	Performance Criteria
	Performance Criteria To be competent, the user/ individual must be able to:
Element	To be competent, the user/ individual must be able to: PC1. remove the refrigerator packaging in which it was shipped to customer
Element	To be competent, the user/ individual must be able to: PC1. remove the refrigerator packaging in which it was shipped to customer PC2. check that the product matches the customer order in terms of colour and
Element	<ul> <li>To be competent, the user/ individual must be able to:</li> <li>PC1. remove the refrigerator packaging in which it was shipped to customer</li> <li>PC2. check that the product matches the customer order in terms of colour and make</li> </ul>
Element	<ul> <li>To be competent, the user/ individual must be able to:</li> <li>PC1. remove the refrigerator packaging in which it was shipped to customer</li> <li>PC2. check that the product matches the customer order in terms of colour and make</li> <li>PC3. check that all supporting accessories purchased are there in the pack</li> </ul>
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Element Removing packaging	<ul> <li>To be competent, the user/ individual must be able to:</li> <li>PC1. remove the refrigerator packaging in which it was shipped to customer</li> <li>PC2. check that the product matches the customer order in terms of colour and make</li> <li>PC3. check that all supporting accessories purchased are there in the pack</li> <li>PC4. check tools and fitments required for the installation are available</li> <li>PC5. clear up the packaging material waste and dispose as per company's norms</li> </ul>
Element Removing packaging Placing refrigerator at	<ul> <li>To be competent, the user/ individual must be able to:</li> <li>PC1. remove the refrigerator packaging in which it was shipped to customer</li> <li>PC2. check that the product matches the customer order in terms of colour and make</li> <li>PC3. check that all supporting accessories purchased are there in the pack</li> <li>PC4. check tools and fitments required for the installation are available</li> <li>PC5. clear up the packaging material waste and dispose as per company's norms</li> <li>To be competent, the user/ individual must be able to:</li> </ul>
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Element Removing packaging Placing refrigerator at appropriate location	<ul> <li>To be competent, the user/ individual must be able to:</li> <li>PC1. remove the refrigerator packaging in which it was shipped to customer</li> <li>PC2. check that the product matches the customer order in terms of colour and make</li> <li>PC3. check that all supporting accessories purchased are there in the pack</li> <li>PC4. check tools and fitments required for the installation are available</li> <li>PC5. clear up the packaging material waste and dispose as per company's norms</li> <li>To be competent, the user/ individual must be able to:</li> <li>PC6. seek customer's input on placement of refrigerator</li> <li>PC7. maintain required distance from wall and floor</li> <li>PC8. check nearest plug point and distance of refrigerator from it</li> <li>PC9. place on appropriate stand or platform as recommended by company</li> <li>PC10. educate customer on placing refrigerator in obstruction-free area, importance of proper placing and every day care</li> </ul>
Element Removing packaging Placing refrigerator at appropriate location Checking	<ul> <li>To be competent, the user/ individual must be able to:</li> <li>PC1. remove the refrigerator packaging in which it was shipped to customer</li> <li>PC2. check that the product matches the customer order in terms of colour and make</li> <li>PC3. check that all supporting accessories purchased are there in the pack</li> <li>PC4. check tools and fitments required for the installation are available</li> <li>PC5. clear up the packaging material waste and dispose as per company's norms</li> <li>To be competent, the user/ individual must be able to:</li> <li>PC6. seek customer's input on placement of refrigerator</li> <li>PC7. maintain required distance from wall and floor</li> <li>PC8. check nearest plug point and distance of refrigerator from it</li> <li>PC9. place on appropriate stand or platform as recommended by company</li> <li>PC10. educate customer on placing refrigerator in obstruction-free area, importance of proper placing and every day care</li> <li>To be competent, the user/ individual must be able to:</li> </ul>
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### National Occupational Standards

ELE/N3106	Install the refrigerator
Completing	To be competent, the user/ individual must be able to:
documentation	PC17. fill in customer acknowledgement form
	PC18. seek customer's signature
	PC19. complete other documentation for recording completion of installation
	PC20. call customer care and inform about job completion
Interacting with	To be competent, the user/ individual must be able to:
superior	PC21. understand the work requirement from superior, periodically
	PC22. report to superior on the work completed
	PC23. escalate customer issues and problems that are unresolved at field level
	PC24. document the work completed on the company ERP software for tracking and
	future references
	PC25. refer customer queries on non-field service areas
Achieving	To be competent, the user/ individual must be able to:
productivity and	PC26. ensure no damage to the refrigerator unit or accessories while removing
quality	packaging
. ,	PC27. use the correct tools and equipment for installation
	PC28. position and install in safe and stable condition
	PC29. complete installation in time target given
	PC30. report in time, work status and prepare required documentation as per
	company rules
	PC31. achieve 100% customer satisfaction and feedback on each field visit
Knowledge and Unders	tanding (K)
B. Organizational	The individual on the job needs to know and understand:
Context	KA1. company's policies on: incentives, delivery standards, and personnel
(Knowledge of the	management, call closure
	KA2. company's sales, installation and after sales support policy
company /	KA3. importance of the individual's role in the workflow
organization and	KA4. reporting structure
its processes)	KA5. company's policy on product's warranty and other terms and conditions
B. Technical	The individual on the job needs to know and understand:
Knowledge	KB1. installation-site requirements (structural requirements, ventilation, etc.)
inite an eage	KB2. different types of refrigerators such as traditional, frost-free, Peltier
	KB3. different features and functionalities of various models
	KB4. safety precautions to be taken while installing
	KB5. manual-based procedure of installing the refrigerators
	KB6. packaging waste disposal procedures
	KB7. use of test equipment and tools such as multi-meter, oscilloscope
	KB8. other products of the company
	KB9. safety rules, policies and procedures
	KB10. quality standards to be followed







EI	LE/N3106	Install the refrigerator		
Ski	lls (S) [Optional]			
C. Core Skills/ Generic Skills		Reading and writing skillsThe user/individual on the job needs to know and understand how to:SA1. read job sheet for installation as registered by customer care/ company's ERP systemSA2. document the completed workSA3. read the standard operating procedures for different types of refrigeratorsSA4. read about different types of refrigerators, their basic electro-mechanical		
		structure and functionality of features Teamwork and multitasking The user/individual on the job needs to know and understand how to:		
		SA6. achieve the targets given on installation per day or month		
D.	Professional Skills	Refrigerator operation		
		<ul> <li>The user/individual on the job needs to know and understand how:</li> <li>SB1. the refrigeration cycle works</li> <li>SB2. to operate the refrigerator and use the various features</li> <li>SB3. to fix various accessories and parts that have accompanied the refrigerator</li> <li>SB4. to check features and functionalities after installation</li> </ul>		
		Using tools and machines		
		<ul><li>The user/individual on the job needs to know and understand how to:</li><li>SB5. operate tools such as screw drivers for installation</li><li>SB6. set temperature after plugging in</li></ul>		
		Reflective thinking		
		The user/individual on the job needs to know and understand how to: SB7. improve work processes SB8. reduce repetition of errors in installation <b>Critical thinking</b>		
		The user/individual on the job needs to know and understand how to: SB9. spot process disruptions and delays SB10. report on any customer concerns to superiors without delay		







Install the refrigerator

### **NOS Version Control**

NOS Code	ELE/N3106		
Credits(NVEQF/NVQF/NSQF) [OPTIONAL]	TBD	Version number	1.0
Industry	Electronics	Drafted on	07/11/13
Industry Sub-sector	Consumer Electronics	Last reviewed on	24/12/13
		Next review date	23/12/14







**Repair dysfunctional refrigerator** 

# National Occupational Standard



### **Overview**

This unit is about technician visiting customer's premise in order to provide support for rectifying refrigerator related faults as per complaint recorded at customer care.







### **Repair dysfunctional refrigerator**

Unit Code	ELE/N3107
Unit Title (Task)	Repair dysfunctional refrigerator
Description	This OS unit is about understanding the customer's complaints, identifying the fault and fixing the refrigerator
Scope	This unit/ task covers the following:
	Understand the symptoms and identify the fault
	Replace dysfunctional module in the refrigerator unit
	Confirm functionality of the repaired unit
	Achieve productivity and quality as per company's standards
Performance Criteria	(PC) w.r.t. the Scope
Element	Performance Criteria
Understanding	To be competent, the user/ individual must be able to:
symptoms and	PC1. verify if thermostat settings are appropriate
identifying fault	PC2 diagnose the fault in the unit as per customer interaction and initial

Symptoms and	er. verify it thermostat settings are appropriate	
identifying fault	C2. diagnose the fault in the unit as per customer interaction and initial inspection	
	C3. unplug the unit, carry out basic tests such as power supply inspection, version ampere test and earthing test power supply, compressor, motors, PCB, condenser	olt
	C4. follow the electrical circuit path and inspect each component in that	
	sequence in order to identify the faulty module	
	C5. send to factory for in-depth diagnosis, if problem cannot be identified at	t site
Replacing faulty	b be competent, the user/ individual must be able to:	
module	C6. repair at location, if the fault identified is due to damage of components	s such
	as relay or thermostat	
	PC7. remove and replace module during either second visit or as per complai registered with customer care and as collected from the service centre, dysfunctional module/part is specialised such as PCB and cannot be repairmediately	if the
	C8. if the fault identified is a gas leak, take necessary actions for the refriger	rator
	to be transported to the service centre for brazing	
Confirming	b be competent, the user/ individual must be able to:	
functionality of	C9. reassemble the unit	
repaired unit	C10. switch on power supply and confirm that the unit is functioning	
	C11. check that all the modules of the unit work as per specifications	
	C12. demonstrate and confirm functionality of the unit to the customer	

PC13. educate the customer about cleaning procedures and best practices



NOS National Occupational Standards



ELE/N3107	Repair dysfunctional refrigerator
	PC14. collect necessary payments from the customer
	PC15. fill in customer acknowledgement form
	PC16. complete other documentation procedures to record complaint closure
Achieving	To be competent, the user/ individual must be able to:
productivity and	PC17. diagnose the problem accurately and in short time
quality	<ul> <li>PC18. identify the problem modules such as the power supply, compressor, motors, PCB, condenser optimise the time taken to fix the dysfunctional refrigerator</li> <li>PC19. rectify to avoid repeat fault in the fridge</li> </ul>
	PC20. meet daily target for attending to number of complaints
	PC21. record minimum customer complaints post service
	PC22. select the right spares according to recorded complaints at the customer care
	PC23. educate customer on refrigerator maintenance in order to avoid problems
	PC24. ensure damage free handling of the unit
	PC25. achieve 100% customer satisfaction
	PC26. make sale of related products such as new equipment or annual maintenance
	contracts (AMC)
Knowledge and Unders	standing (K)
C. Organizational	The individual on the job needs to understand:
Context	KA1. company's policies on: incentives, delivery standards and personnel
(Knowledge of the	management and customer service standards
company /	KA2. reporting and documentation processes
organization and	KA3. refrigerator manufacturing capabilities of the organization
-	KA4. importance of the individual's role in the system
its processes)	KA5. reporting structure
B. Technical	The individual on the job needs to know and understand:
Knowledge	KB1. different types of refrigerators, e.g., frost free, direct cool and peltier
	refrigerators and differences in their operation
	<ul><li>KB2. features of different refrigerators of the company</li><li>KB3. refrigeration cycle and functioning of the appliance and its various modules</li></ul>
	<ul><li>KB3. refrigeration cycle and functioning of the appliance and its various modules</li><li>KB4. method of refrigeration, its use and functioning of refrigerator sealed system</li></ul>
	<ul> <li>KB4. Interfold of refrigeration, its use and functioning of refrigeration sealed system</li> <li>KB5. types of refrigerants such as R12, R22, R134a, R290, R600a, R410, R32 use of</li> <li>different brazing sticks, types of brazing torches and their application</li> </ul>
	KB6. types of brazing torches, types of fluxes and their application
	KB7. basic electronics (knowledge of components such as diode, transformer, LED,
	photo transistor, capacitor, resistor, inductor, thermisters)
	KB8. functioning of various electromechanical parts of the refrigerator
	KB9. fundamentals of electricity such as ohms law, difference between ac and dc, calculation of energy consumption of appliances, understanding of domestic wiring, understanding of series and parallel connections
	KB10. troubleshooting knowledge with respect to refrigerators
	KB10. hazards, their causes and prevention/personal safety
	KB12. frequently occurring faults such as noise, water dripping and insufficient
	cooling, their causes and solutions
	KB13. components/modules of the refrigerator and their prices



NOS National Occupational Standards



ELE/N3107	Repair dysfunctional refrigerator		
	KB14. refrigerator energy ratings such BEE rating		
	KB15. other products of the company		
Skills (S) [Optional]			
E. Core Skills/	Reading, writing and computer skills		
Generic Skills	The individual on the job needs to know and understand how to: SA1. read warnings, instructions and other text material on product labels, and		
	components		
	SA2. read job sheet and complaints		
	SA3. read product operating manuals		
	SA4. operate computers and software installed		
	SA5. read and understand electrical and electronic symbols, multiples and SI units		
	Documentation skills		
	The individual on the job needs to know and understand how to:		
	SA6. document completion note for customer		
	SA7. record completion information in the ERP system		
F. Professional Skills	Using tools and machines		
	The individual on the job needs to know and understand how:		
	SB1. to operate/use multi-meter, clamp meter, tube cutter, tube bender, vacuum		
	pump, weigh scale, gas cylinder, temperature meter, pressure gauges		
	Fault diagnosing skills		
	The individual on the job needs to know and understand how to:		
	SB2. detect basic electrical faults such as improper/no earthing, defective power		
	cord, connector or internal wiring defect, short/ loose/open contacts, blown		
	fuse		
	SB3. diagnose reasons for improper cooling by diagnosing causes such as defective temperature control, defrost control, bimetallic thermostat, defrost heater device, relay and OLP		
	SB4. detect defects in the compressor such as electrical faults, defective pump, jamming/noise		
<ul> <li>SB5. identify improper usage practices by the customer such as frequent opening, leaving door open for long duration, placing hot food inside refrigerator, leaving food/liquid items uncovered, inappropriate platerities</li> <li>SB6. relate causes for excessive power consumption, insufficient cooling spoiling to refrigerant leak or partial leak and defective(moisture/or refrigerant system</li> </ul>			
		SB7. detect problems in the condenser such as clogging in the condenser, tub touching each other	
	SB8. detect other problems such as defective light switch, light bulb, wet insulation, uneven floor		







ELE/N3107	Repair dysfunctional refrigerator	
	Communication skills	
	The individual on the job needs to know and understand:	
	SB9. how to interact with customer to understand the problem faced	
	SB10. how to market and sell accessories and products of the company	
	SB11. importance of communicating in language understood by customer	
	SB12. importance of behavioural precautions and etiquette while dealing with	
	customer	
	SB13. how to be polite, patient and punctual	
	Critical thinking	
	The individual on the job needs to know and understand how to:	
	SB14. match symptoms of the fault noticed to the cause of the problem	
	SB15. anticipate and avoid hazards that may occur during repairs because of tools, materials used or repair processes	







**Repair dysfunctional refrigerator** 

### **NOS Version Control**

NOS Code	ELE/N3107		
Credits(NVEQF/NVQF/NSQF) [OPTIONAL]	TBD Version number 1.0		
Industry	Electronics	Drafted on	07/11/13
Industry Sub-sector	Consumer Electronics	Last reviewed on	24/12/13
		Next review date	23/12/14

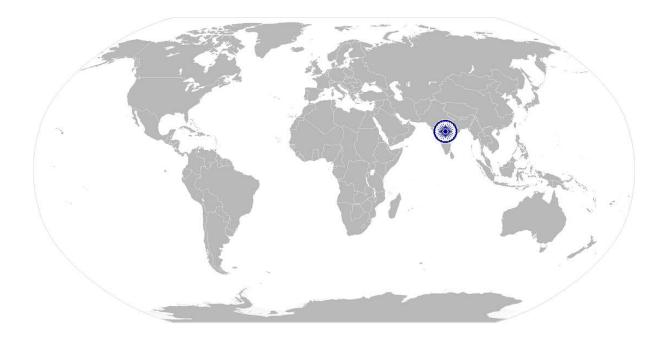






Interact with colleagues

# National Occupational Standard



### **Overview**

This unit is about the individual's level of communication with colleagues and other departments within the organisation. It determines the ability to work as a team member to achieve the required deliverables on schedule.







### Interact with colleagues

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Unit Code         ELE/N9901           Unit Title (rask)         Interact with colleagues           Description         This OS unit is about communicating with colleagues and seniors in order to achieve smooth work flow           Scope         This unit/ task covers the following: <ul> <li>Interact with supervisor or superior</li> <li>Coordinate with colleagues</li> </ul> Performance Criteria(PC) w.r.t. the Scope           Element         Performance Criteria           Interacting with supervisor         To be competent, the user/ individual must be able to: PC1. understand work requirements, targets and incentives PC2. learn about new product models, their features and functions PC3. report problems identified in the field PC4. escalate customer concerns that cannot be handled on field PC4. escalate customer concerns that cannot be handled on field PC5. resolve personnel issues PC6. receive feedback on work standards and customer satisfaction PC7. communicate any potential hazards at a particular location PC6. meet given targets PC3. deliver work of expected quality despite constraints PC10. Have feedback from a happy and satisfied customer           Interacting with colleagues         To be competent, the user/ individual must be able to: PC11. resolve inter-personnel conflicts and achieve smooth workflow PC12. receive spares from toor rom or stres PC13. deposit faulty modules and tools to stores PC14. pass on customer complaints to colleagues in a respective geographical area PC15. cassit colleagues with resolving field problems PC16. clearly demarcate roles of each team member           Knowledge and Understanding (K) <li>The individual</li>	Entry of Interact with concagues		
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KA2.       importance of the individual's role in the workflow         KA3.       reporting structure         B. Technical Knowledge       The individual on the job needs to know and understand:         KB1.       how to communicate effectively	Context	KA1. company's policies on: incentives, delivery standards, and personnel	
KA2.importance of the individual's role in the workfloworganization and its processes)KA3.reporting structureB. Technical KnowledgeThe individual on the job needs to know and understand:KB1.how to communicate effectively	(Knowledge of the	-	
organization and its processes)       KA3. reporting structure         B. Technical Knowledge       The individual on the job needs to know and understand:         KB1.       how to communicate effectively			
its processes)       The individual on the job needs to know and understand:         Knowledge       KB1. how to communicate effectively		KA3. reporting structure	
Knowledge KB1. how to communicate effectively	U U		
Knowledge KB1. how to communicate effectively	B Technical	The individual on the job needs to know and understand:	
-		-	
	Kilowicuge	·	







### Interact with colleagues

Ski	Skills (S) [Optional]			
Α.	Core Skills/	Teamwork and multitasking		
	Generic Skills	The individual on the job needs to know and understand how:		
		SA1. to deliver product to next work process on time		
В.	Professional Skills	Decision making		
		The individual on the job needs to know and understand:		
		SB1. how to report potential areas of disruptions to work process		
		SB2. when to report to supervisor and when to deal with a colleague depending		
		on the type of concern		
		Reflective thinking		
		The individual on the job needs to know and understand:		
		SB3. how to improve work process		
		Critical thinking		
		The individual on the job needs to know and understand:		
	SB4. how to spot process disruptions and delays			







### Interact with colleagues

### **NOS Version Control**

NOS Code	ELE/N9901		
Credits(NVEQF/NVQF/NSQF) [OPTIONAL]	TBD	Version number	1.0
Industry	Electronics	Drafted on	07/11/13
Industry Sub-sector	Consumer Electronics	Last reviewed on	24/12/13
		Next review date	23/12/14



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Keywords /Terms	Description	
Sector	Sector is a conglomeration of different business operations having similar business 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 characteristics and interests of its components.	
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 an area of work, which can be carried out by a person or a group of persons. Functions are identified through functiona analysis and form the basis of OS.	
Sub-function	Sub-functions are sub-activities essential to fulfil 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 organisation.	
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 (OS)	NOS are occupational standards which apply uniquely in the Indian context.	
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.	
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by 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 a 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 quality of performance required.	
Knowledge and Understanding	Knowledge and understanding are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.	
Organisational Context		
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.	





Skining india in Electronics		Qualifications Pack for Field Technician – Refrigerator	
Core Skills/ Generic SkillsCore skills or generic skills are a group of skills that are and working in today's world. These skills are typica work environment in today's world. These skills are t any work environment. In the context of the C		Core skills or generic skills are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment 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.	
	Keywords /Terms	Description	
	NOS	National Occupational Standard(s)	
	NVQF	National Vocational Qualifications Framework	
	NSQF	National Qualifications Framework	
NVEQF         National Vocational Education Qualifications Framework		National Vocational Education Qualifications Framework	
	QP	Qualifications Pack	





### <u>Annexure</u>

### Nomenclature for QP and NOS

# Qualifications Pack 9 characters [Insert 3 letter code for SSC] QP number (2 numbers) Q denoting Qualifications Pack Occupation (2 numbers) Occupational Standard 9 characters An example of NOS with 'N' 9 characters [Insert 3 letter code for SSC] Occupation (2 numbers) N denoting National Occupational Standard Occupation (2 numbers)

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

Sub-sector	Range of Occupation numbers
Passive Components	01 - 10
Semiconductors	11 - 20
PCB Manufacturing	21 - 30
Consumer Electronics	31 - 40
IT Hardware	41 - 50
PCB Assembly	51 - 55
Solar Electronics	56 - 60
Strategic Electronics	61 - 65
Automotive Electronics	66 - 70
Industrial Electronics	71 - 75
Medical Electronics	76 - 80
Communication Electronics	81 - 85
PCB Design	86 - 90
LED	91 - 95

Sequence	Description	Example
Three letters	Industry name	ELE
Slash	/	/
Next letter	Whether <b>Q</b> P or <b>N</b> OS	Q
Next two numbers	Occupation code	01
Next two numbers	OS number	01



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