



## QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR MEDIA AND ENTERTAINMENT 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-MCR Engineer**

SECTOR: MEDIA AND ENTERTAINMENT

SUB-SECTOR: Television, Radio

OCCUPATION: Broadcast Operations/ Technology

REFERENCE ID: MES/ Q 0805

ALIGNED TO: NCO-2004/NIL

## MCR Engineer in the Media & Entertainment Industry is also known as a MCR Technician

**Brief Job Description:** Individuals at this job are responsible for scheduling and monitoring the on-air output for a broadcaster

**Personal Attributes:** This job requires the individual to line up and play-out recorded/live programing, commercial and promotional advertisements in accordance to the playlists/schedules prepared by the programming/ advertisement functions. The individual is responsible to monitor and maintain the quality of on-air output and troubleshoot/ resolve issues that arise. The individual is also responsible to sync time differences that arise during the day due to irregular timing and insert make-good advertisements in coordination with the traffic department.





Job Details

Qualifications Pack Code	MES/ Q 0805 Master Control Engineer This job role is applicable in both national and international scenarios		
Job Role			
Credits(NSQF)	TBD	Version number	1.0
Sector	Media and Entertainment	Drafted on	18/03/15
Sub-sector	Television, Radio	Last reviewed on	25/03/15
Occupation	Broadcast Operations / Technology	Next review date	24/03/17

Job Role	Master Control Engineer		
Role Description	Schedule and monitor the on-air output		
NSQF level	4		
Minimum Educational Qualifications	Class XII		
Maximum Educational Qualifications	Graduate in Engineering, Technology		
Training	Broadcast engineering technology, Electrical and		
(Suggested but not mandatory)	Telecommunications		
Minimum Job Entry Age	18 years		
Experience	1-3 years		
Applicable National Occupational Standards (NOS)	<ol> <li>Compulsory:         <ol> <li>MES / N 0801 (Develop skills and knowledge in broadcast operations/engineering)</li> <li>MES / N 0807 (Manage master control room (MCR) operations)</li> <li>MES / N 0809 (Operate broadcast systems)</li> <li>MES / N 0104 (Maintain workplace health and safety)</li> <li>Optional: N.A.</li> </ol> </li> </ol>		
Performance Criteria	As described in the relevant OS units		





Keywords /Terms	Description		
Archive	A repository where content produced is stored for further use		
Ingest	Process of importing data into a digital storage system for future use		
Leased Lines	A fiber connection used to connect, transfer and transmit data		
Master Control Room Central room from where broadcasting takes place			
	words describing content that can be used to search/find information		
Meta tagging	from a website/server		
Play-out systems	Equipment that transmits channels from the broadcaster's head end to subscribers		
Satellite	Communications equipment used to receive/transmit audio and video signals		
Server	A centralised computer that provides access to resources over a network		
Signal	Radio waves carrying audio/video content to be dispersed to an audience		
Switcher	A device used to combine or select audio/video signals for playout		
Uplinking	A transmission path through which audio/video signals are sent for broadcasting		
Waveform monitoring	An equipment used to measure the level and voltage of video signals		
Target Audience	Set of individuals with similar characteristics that are prospective		
Target Market	customers of the advertisers' product/service		
Target Market	The geographic area over which the advertising campaign is focused		
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 per 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	of performance required when carrying out a task		
National Occupational Standards (NOS)	ional NOS are Occupational Standards which apply uniquely in the Indian context.		
Qualifications Pack     Qualifications Pack Code is a unique reference code that identifies a			
Code	qualifications pack.		





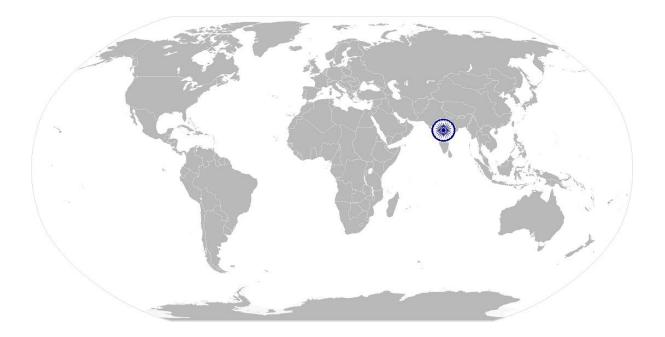
Qualifications Pack(QP)	Qualifications Pack comprises the set of OS, together with the		
	educational, training and other criteria required to perform a job role. A		
	Qualifications Pack is assigned a unique qualification pack code.		
Unit Code	Unit Code is a unique identifier for an Occupational Standard, which is denoted by an $(N')$		
11.11.71.711.	denoted by an 'N'. Unit Title gives a clear overall statement about what the incumbent		
Unit Title	liftle gives a clear overall statement about what the incumbent uld be able to do.		
Description	Description gives a short summary of the unit content. This would be		
Description	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		
beope	individual may have to deal with in carrying out the function which have		
	a critical impact on the quality of performance required.		
Knowledge and	Knowledge and Understanding are statements which together specify the		
Understanding	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	Core Skills or Generic Skills are a group of skills that are key to learning		
Skills	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.		
Keywords /Terms	Description		
NOS	National Occupational Standard(s)		
QP	Qualifications Pack		
NSQF	National Skill Qualifications Framework		
NVEQF	National Vocational Education Qualifications Framework		
NVQF	National Vocational Qualifications Framework		
ТСР	Transmission Control		
IP	Internet protocol		
DSNG	Digital satellite news gathering		
DG	Diesel generator		
OB	Outside Broadcast		





Develop skills and knowledge in broadcast operations/engineering

## National Occupational Standard



## Overview

This unit is about maintaining and developing broadcast operations/ engineering expertise





Develop skills and knowledge in broadcast operations/engineering

Unit Code	MES/ N 0801			
Unit Title (Task)	Develop skills & knowledge in broadcast operations/engineering			
Description	This OS unit is about maintaining and developing broadcast operations/engineering expertise			
Scope	<ul> <li>This unit/task covers the following:</li> <li>Understand skills &amp; knowledge required in broadcast operations / engineering</li> <li>Develop skills &amp; knowledge in broadcast operations / engineering</li> </ul>			
Performance Criteria (F	Performance Criteria (PC) w.r.t. the Scope			
Element	Performance Criteria			
Understand skills & knowledge required in broadcast operations/ engineering	<ul> <li>To be competent, the user/individual on the job must be able to:</li> <li>PC1. Identify required broadcast operations/engineering activities</li> <li>PC2. Evaluate the contribution of new broadcast operations/engineering theories, methods, and procedures, especially in terms of IT solutions to own organization and in relation to their job profile</li> <li>PC3. Understand audience and customer feedback, and suggestions from colleagues in a positive way</li> </ul>			
Develop skills & knowledge in broadcast operations /engineering	<ul> <li>PC4. Monitor developments within broadcast engineering</li> <li>PC5. Attend professional development of grams to update skills and knowledge</li> <li>PC6. Maintain and update expertise and knowledge at appropriate intervals and in ways that are appropriate to own job role</li> </ul>			
Knowledge and Unders	standing (K)			
A. Organizational Context (Knowledge of the company / organization and its processes)	<ul> <li>The user/individual on the job needs to know and understand:</li> <li>KA1. The broadcast objectives of the organization</li> <li>KA2. The broadcast equipment and applications being used by the organization, its use in broadcasting activities</li> <li>KA3. The roles and responsibilities of the production and operational departments, as relevant</li> </ul>			
B. Technical Knowledge	<ul> <li>The user/individual on the job needs to know and understand:</li> <li>KB1. The type of expertise that is required for own broadcast engineering role</li> <li>KB2. The importance of keeping up-to-date with IT, practice and other broadcast operations/engineering developments</li> <li>KB3. The professional development programs that are available</li> <li>KB4. How to identify and obtain information on technological developments in broadcast systems, software and equipment, how they are used and what they can achieve</li> <li>KB5. The expertise of others in the profession</li> <li>KB6. The broadcast operations/engineering activities that could be used for different types of development objectives</li> </ul>			





### MES/ N 0801 Develop skills and knowledge in broadcast operations/engineering

Skills (S) ( <u>Optional</u> )				
A. Core Skills/	Writing Skills			
Generic Skills	The user/individual on the job needs to know and understand how to: SA1. Take notes to enhance learning of broadcast operations/engineering, where appropriate			
	Reading Skills			
	The user/individual on the job needs to know and understand how to: SA2. Read and interpret information on technological developments in broadcast systems, software and equipment, how they are used and what they can achieve			
	Oral Communication (Listening and Speaking skills)			
	The user/individual on the job needs to know and understand how to: SA3. Receive and understand feedback from customers, supervisors and peers positively			
B. Professional Skills	Plan and Organize			
	The user/individual on the job needs to know and understand how to: SB1. Manage schedule to ensure time is set aside for learning and skill development			
	Critical Thinking			
	The user/individual on the job needs to know and understand how to: SB2. Critically evaluate own skills & knowledge, and identify gaps/deficiencies therein			
	Decision Making			
	The user/individual on the job needs to know and understand how to: SB3. review and extract dimensional or statistical information from technical drawings			
	Problem Solving			
	The user/individual on the job needs to know and understand how to:			
	SB4. Select, use and apply diagnostic techniques, tools and aids to locate faults			
	Customer Centricity           The user/individual on the job needs to know and understand how to:			
	NA			

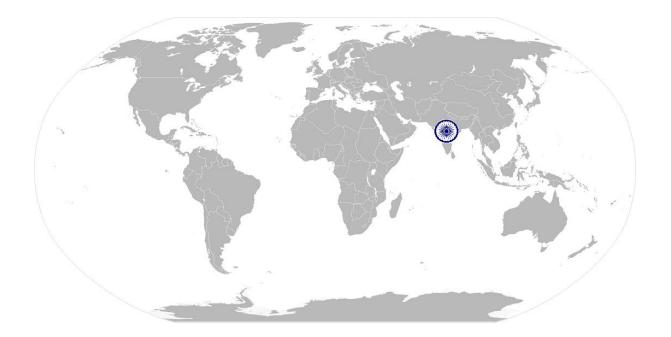




### MES/ N 0801 Develop skills and knowledge in broadcast operations/engineering

## NOS Version Control

NOS Code	MES / N 0801		
Credits(NSQF)	TBD	Version number	1.0
Sector	Media and Entertainment	Drafted on	18/03/15
Sub-sector	Television, Radio	Last reviewed on	25/03/15
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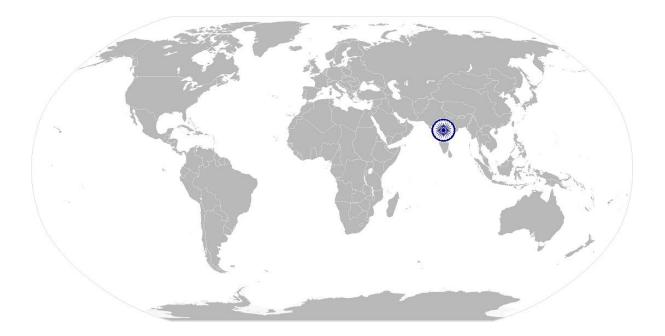






Manage master control room (MCR) operations

## National Occupational Standard



## **Overview**

This unit is about managing on-air output from the master control room





### Manage master control room (MCR) operations

/	Unit Code	MES/ N 0807		
	Unit Title (Task)	Manage master control room (MCR) operations		
	Description	This OS unit is about managing on-air output from the master control room		
Monite		<ul> <li>This unit/task covers the following:</li> <li>Monitoring output going out on air from the master control room</li> <li>Maintaining equipment</li> </ul>		
		<ul> <li>Notes:</li> <li>Master control room (MCR) in a broadcasting company is the final point from where content is broadcasted. It can also be called the transmission control room (TCR) in smaller set-ups.</li> <li>Typically, content is transferred from the Production Control Room (PCR) where content from different sources are managed/switched in the manner it needs to be broadcasted on air. The final output is then monitored and combined with advertisements, promos and channel branding and uplinked from the MCR. Multiple channels/ stations can be run by a single MCR.</li> </ul>		

Performance Criteria (PC) w.r.t. the Scope				
Element Performance Criteria				
Monitoring output going out on air from the master control room	<ul> <li>To be competent, the user/individual on the job must be able to:</li> <li>PC1. Manage live telecasts/ programming by accurately downlinking, managing advertisement time and uplinking as per the directors instructions</li> <li>PC2. Build play out lists by accurately lining-up recorded programming, feeds, commercial and promo tapes/files in accordance to programming and advertisement playlists/ schedules</li> <li>PC3. Switch between live/recorded programming, commercials and promos in accordance to schedules maintaining on-air continuity</li> <li>PC4. Monitor on-air output and resolve any issues that may arise (in signals, audio/video quality etc.)</li> </ul>			
Maintaining equipment	<ul> <li>PC5. Sync/ make adjustments for any time differences (by inserting make-good advertisements, promotions etc.) in coordination with the relevant departments (programming, traffic, promos)</li> <li>PC6. Troubleshoot issues that may arise in master control room equipment such as playout automation systems, servers, switchers, monitors, routers, satellite receivers, meters etc., audio/video quality and signal availability</li> </ul>			
Knowledge and Unders	standing (K)			
B. Organizational Context (Knowledge of the company /	<ul> <li>The user/individual on the job needs to know and understand:</li> <li>KA1. The number of channels being uplinked from a single location</li> <li>KA2. The types of content being uplinked and their duration</li> <li>KA3. Daily programming and advertisement schedules for play out</li> <li>KA4. The equipment and technology being used by the organization</li> </ul>			





Manage master control room (MCR) operations

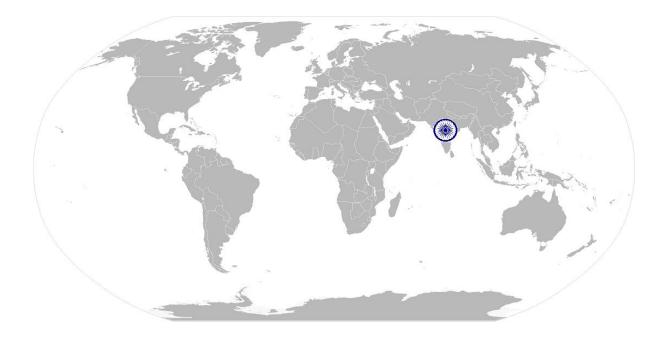
organization and	KA5. The roles and responsibilities of key departments that the team has maximum		
its processes)	interaction with, including ingest, archival, engineering, programming and		
	advertisement traffic		
B. Technical	The user/individual on the job needs to know and understand:		
Knowledge	KB1. Master control operations and workflow		
	KB2. Different content sources including uncompressed audio/video data in		
	standard definition (SD), high definition multimedia interface (HDMI) or		
	analog formats, compressed audio/video using compression codecs - MPEG		
	(Moving Picture Experts Group Phase), AVC(Advanced Video Coding) etc. and		
	other formats such as DivX, XviD, MOV, AVI etc.		
	KB3. How to operate play-out systems (such as Harris, Morpheus, iTX, OASYS etc.)		
	KB4. How to operate advertisement traffic software such as CHAMP, SPOT etc.		
	KB5. How to operate systems and equipment including audio switchers, video		
	switchers, monitors, feeds, servers, editing systems etc.		
	including satellites, antennas, decoders, lease lines, towers, flyways, digital		
	modulators etc.		
	KB7. How to test the quality of on-air output using monitoring equipment, meters		
	etc.		
	KB8. Fundamentals of programming and production		
	KB9. Applicable health and safety guidelines		
	KB10. Legal and regulatory policies and guidelines		
Skills (S) ( <u>Optional</u> )			
C. Core Skills/	Writing Skills		
C. Core Skills/ Generic Skills			
-	The user/individual on the job needs to know and understand how to:		
-	The user/individual on the job needs to know and understand how to: SA1. Generate as-run and discrepancy logs/reports		
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Generic Skills	The user/individual on the job needs to know and understand how to:         SA1. Generate as-run and discrepancy logs/reports         Reading Skills         The user/individual on the job needs to know and understand how to:         SA2. Read output displayed on meters to gauge the quality of audio/video signals         SA3. Read programming and advertisement playlists         SA4. Read the file names for recorded programming, commercial and promo tapes/files to ensure a correct line-up for play out         Oral Communication (Listening and Speaking skills)         The user/individual on the job needs to know and understand how to:         SA5. Liaise with the programming and advertisement teams to confirm schedules, make-goods, duration of programming etc.         SA6. Coordinate with broadcast engineers to conduct repairs and troubleshoot issues, if required         Plan and Organize		
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### Manage master control room (MCR) operations

Problem Solving           The user/individual on the job needs to know and understand how to:		
SB4. Resolve issues that may arise in the play out/ master control equipment		
Analytical Thinking		
The user/individual on the job needs to know and understand how to:		
SB5. Make adjustments for time-differences that may occur due to shorts/delays in programming		



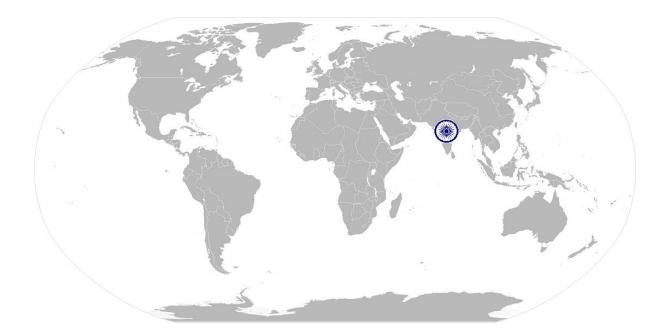




Manage master control room (MCR) operations

## **NOS Version Control**

NOS Code	MES / N 0807		
Credits(NSQF)	TBD	Version number	1.0
Sector	Media and Entertainment	Drafted on	18/03/15
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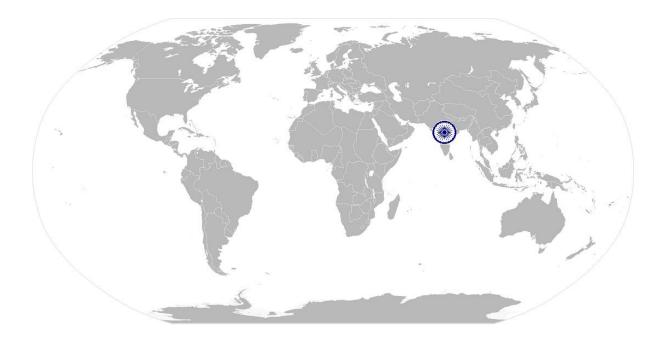


N·S·D·C National Skill Development Corporation

MES/ N 0809

**Operate broadcast systems** 

# National Occupational Standard



## **Overview**

This unit is about operating broadcast systems to the expected quality and requirements of the broadcast ouput





#### Operate broadcast systems

Unit Code	MES/ N 0809
Unit Title (Task)	Operate broadcast systems
Description	This OS unit is about operating broadcast systems to the expected quality and requirements of the broadcast ouput
Scope	<ul> <li>This unit/task covers the following:</li> <li>Operate broadcast systems</li> </ul>
Performance Criteria (P	PC) w.r.t. the Scope
Element	Performance Criteria
Operate broadcast systems	<ul> <li>PC1. Identify, research and understand the software and equipment required to operate broadcast sytems effectively, within the context of the role</li> <li>PC2. Identify and be aware of appropriate methods, procedures and guidelines prior to operating broadcast systems</li> <li>PC3. Operate broadcast systems in various conditions (including studio operation, outside broadcast, post production, distribution and transmission), in line with production objectives</li> <li>PC4. Identify and rectify the causes of basic faults in broadcast systems and equipment, and bring problems to the attention of appropriate personnel</li> </ul>
Knowledge and Unde	
A. Organizational Context (Knowledge of the company / organization and its processes)	<ul> <li>The user/individual on the job needs to know and understand:</li> <li>KA1. The broadcast objectives of the organization</li> <li>KA2. The broadcast equipment and applications being used by the organization, and its use in broadcasting activities</li> <li>KA3. The roles and responsibilities of the production and operational departments</li> </ul>
B. Technical Knowledge	<ul> <li>The user/individual on the job needs to know and understand:</li> <li>KB1. The purpose, benefits, limitations and risks of different equipment and software required for broadcast systems, and when appropriate to use them</li> <li>KB2. How to operate the broadcast systems, software and equipment required, in line with protocols</li> <li>KB3. How to connect broadcast systems and equipment to IT systems</li> <li>KB4. The organisational processes for ensuring physical and IT security of data and systems</li> <li>KB5. The techniques to ingest, wrangle and play out/export broadcast data or media</li> <li>KB6. The current industry protocols for metadata in relation to file transfer</li> <li>KB7. The types of problem that can occur with the operation of broadcast systems, and how to prioritise these problems</li> <li>KB8. The tools and techniques to identify and rectify the causes of basic faults in broadcast systems and equipment</li> <li>KB9. How to check the quality of outputs of the broadcast system using subjective and objective assessments of output picture and sound quality</li> </ul>





### Operate broadcast systems

Skills (S) (Option	nal)
A. Core Skills/	Writing Skills
Generic Skills	The user/individual on the job needs to know and understand how to: SA1. Maintain reports for any repair/maintenance activities, data manipulation or file transfer activities undertaken
	Reading Skills
	The user/individual on the job needs to know and understand how to: SA2. Read standard operating procedures and technical training manuals to understand how to operate broadcast equipment and software SA3. Read and interpret broadcast specifications, systems configurations, documentations etc
	Oral Communication (Listening and Speaking skills)
	<ul> <li>The user/individual on the job needs to know and understand how to:</li> <li>SA4. Liaise with relevant personnel to understand the technical requirements of the broadcast output</li> <li>SA5. Liaise with the operational staff to identify and diagnose any on-air/ off-air technical issues</li> <li>SA6. Liase with IT staff to ensure broadcast systems are connected appropriately with IT systems</li> <li>SA7. Explain and discuss the impact of the provide the provided the provide the providet the provide the provide the provide the providet the providet</li></ul>
	across the organization
B. Professional S	kills Plan and Organize
	The user/individual on the job needs to know and understand how to: SB1. Plan for any repair/maintenance activities, data manipulation or file transfer activities, to ensure completion as per broadcast schedules
	Problem solving
	The user/individual on the job needs to know and understand how to: SB2. Identify, prioritize and rectify the causes of basic faults in broadcast systems and equipment
	Decision making
	The user/individual on the job needs to know and understand how to: SB3. Decide on appropriate levels of specification required for different broadcast situations
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB4. Identify interrelation of different broadcast systems
	Analytical Thinking
	The user/individual on the job needs to know and understand how to: SB5. Analysis different broadcast systems and techniques for identifying the benefits, weaknesses and implications of different solutions
	Customer Centricity
	The user/individual on the job needs to know and understand how to: NA

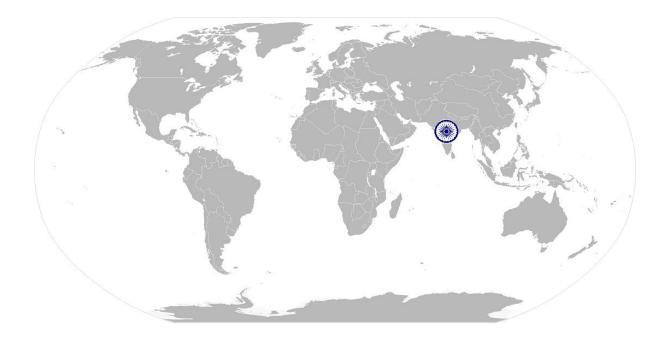




Operate broadcast systems

## **NOS Version Control**

NOS Code	MES / N 0809		
Credits(NSQF)	TBD	Version number	1.0
Sector	Media and Entertainment	Drafted on	18/03/15
Sub-sector	Television, Radio	Last reviewed on	25/03/15
Occupation	Broadcast Operations / Technology	Next review date	24/03/17

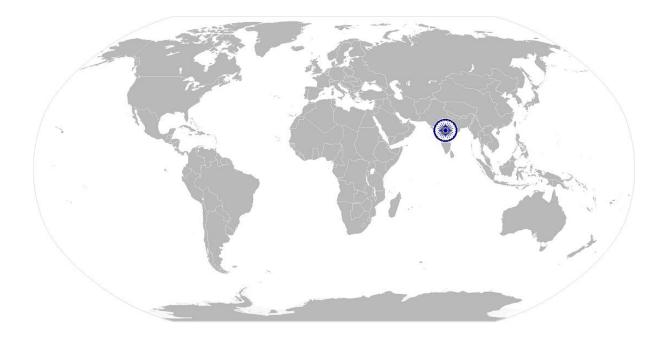






Maintain workplace health and safety

# National Occupational Standard



## **Overview**

This unit is about contributing towards maintaining a healthy, safe and secure working environment





### Maintain workplace health and safety

Unit Code	MES/ N 0811			
Unit Title (Task)	Maintain workplace health and safety			
Description	This OS unit is about contributing towards maintaining a healthy, safe and secure working environment			
Scope	<ul> <li>his unit/task covers the following:</li> <li>Understanding the health, safety and security risks prevalent in the workplace</li> <li>Knowing the people responsible for health and safety and the resources available</li> <li>Identifying and reporting risks</li> <li>Complying with procedures in the event of an emergency</li> </ul>			
Performance Criteria (P	PC) wrt the Scope			
Element	Performance Criteria			
Understanding the risks prevalent in the workplace	<ul> <li>To be competent, the user/individual on the job must be able to:</li> <li>PC1. Understand and comply with the organisation's current health, safety and security policies and procedures</li> <li>PC2. Understand the safe working practices pertaining to own occupation</li> <li>PC3. Understand the government norms and policies relating to health and safety including emergency procedures for illness, accidents, fires or others which may involve evacuation of the premises</li> </ul>			
Knowing the people responsible for health and safety and the resources available	<ul> <li>PC4. Participate in organization health and safety knowledge sessions and drills</li> <li>PC5. Identify the people responsible for health and safety in the workplace, including those to contact in case of an emergency</li> <li>PC6. Identify security signals e.g. fire alarms and places such as staircases, fire warden stations, first aid and medical rooms</li> </ul>			
Identifying and reporting risks	<ul> <li>PC7. Identify aspects of your workplace that could cause potential risk to own and others health and safety</li> <li>PC8. Ensure own personal health and safety, and that of others in the workplace though precautionary measures</li> <li>PC9. Identify and recommend opportunities for improving health, safety, and security to the designated person</li> <li>PC10. Report any hazards outside the individual's authority to the relevant person in line with organisational procedures and warn other people who may be affected</li> </ul>			
Complying with procedures in the event of an emergency	<ul> <li>PC11. Follow organisation's emergency procedures for accidents, fires or any other natural calamity in case of a hazard</li> <li>PC12. Identify and correct risks like illness, accidents, fires or any other natural calamity safely and within the limits of individual's authority</li> </ul>			
Knowledge and Unders	tanding (K)			
A. Organizational Context (Knowledge of the company / organization and its processes)	<ul> <li>The user/individual on the job needs to know and understand:</li> <li>KA1. Organisation's norms and policies relating to health and safety</li> <li>KA2. Government norms and policies regarding health and safety and related emergency procedures</li> <li>KA3. Limits of authority while dealing with risks/ hazards</li> <li>KA4. The importance of maintaining high standards of health and safety at a workplace</li> </ul>			





MES/ N 0811	Maintain workplace health and safety
B. Technical Knowledge	<ul> <li>The user/individual on the job needs to know and understand:</li> <li>KB1. The different types of health and safety hazards in a workplace</li> <li>KB2. Safe working practices for own job role</li> <li>KB3. Evacuation procedures and other arrangements for handling risks</li> <li>KB4. Names and contact numbers of people responsible for health and safety in a workplace</li> <li>KB5. How to summon medical assistance and the emergency services, where necessary</li> </ul>
	KB6. Vendors' or manufacturers' instructions for maintaining health and safety while using equipments, systems and/or machines
Skills (S) ( <u>Optional</u> )	
A. Core Skills/	Writing Skills
Generic Skills	<ul> <li>The user/individual on the job needs to know and understand how to:</li> <li>SA1. How to write and provide feedback regarding health and safety to the concerned people</li> <li>SA2. How to write and highlight potential risks or report a hazard to the concerned</li> </ul>
	People Reading Skills
	The user/individual on the job needs to know and understand how to: SA3. Read instructions, policies, procedures and norms relating to health and safety
	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA4. Highlight potential risks and report hazards to the designated people SA5. Listen and communicate information with all anyone concerned or affected
B. Professional Skills	Decision making
	The user/individual on the job needs to know and understand how to:
	SB1. Make decisions on a suitable course of action or plan.
	Plan and Organize
	The user/individual on the job needs to know and understand how to: SB2. Plan and organize people and resources to deal with risks/ hazards that lie within the scope of one's individual authority
	Problem Solving
	The user/individual on the job needs to know and understand how to:
	SB3. Apply problem solving approaches in different situations
	Critical Thinking
	<ul> <li>The user/individual on the job needs to know and understand how to:</li> <li>SB4. Understand hazards that fall within the scope of individual authority and report all hazards that may supersede one's authority</li> <li>SB5. Apply balanced judgements in different situations</li> </ul>
	Customer Centricity
	The user/individual on the job needs to know and understand how to: SB6. build and maintain positive and effective relationships with colleges and customers
	Analytical Thinking
	The user/individual on the job needs to know and understand how to:
	SB7. analyze data and activites

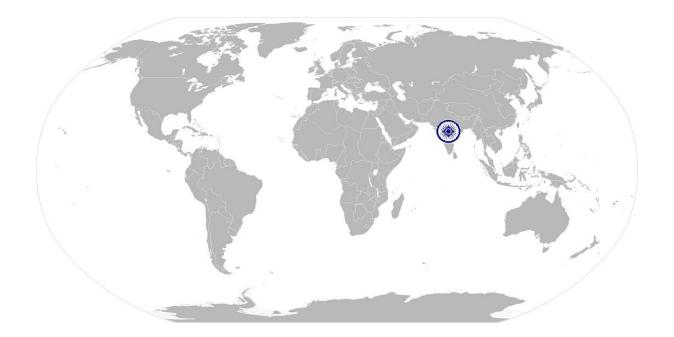




Maintain workplace health and safety

## **NOS Version Control**

NOS Code	MES / N 0104		
Credits(NSQF)	TBD	Version number	1.0
Sector	Media and Entertainment	Drafted on	18/03/15
Sub-sector	Television	Last reviewed on	25/03/15
Occupation	Broadcast Operations / Technology	Next review date	24/03/17

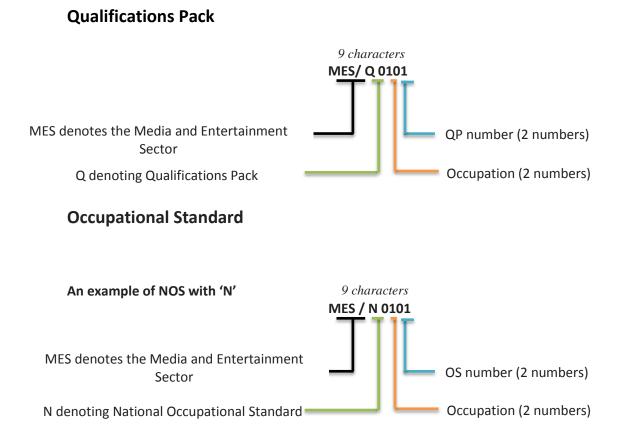






## **Annexure**

### Nomenclature for QP and NOS



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

Sub-sector	Range of Occupation numbers

Sequence	Description	Example
Three letters	Media and Entertainment	MES
Slash	/	/
Next letter	Whether <b>Q</b> P or <b>N</b> OS	Q
Next two numbers	Broadcast Operations/ Technology	05
Next two numbers	Master Control Engineer	05





## CRITERIA FOR ASSESSMENT OF TRAINEES Job Role: MCR Engineer Qualification Pack: MES Q 0805 Sector Skill Council: Media and Entertainment Skills Council

	NOS	NOS NAME	Weightage
1	1 MES/ N 0801 Develop skills and knowledge in broadcast		
-		operations/engineering	30%
2	MES/ N 0807	Manage master control room (MCR) operations	30%
3	MES/ N 0809	Operate the broadcast systems	30%
4	MES/ N 0104	Maintain workplace health and safety	10%
			100%

### **Guidelines for Assessment:**

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.

2. The assessment for the theory & Practical part will be based on knowledge bank of questions created by the AA and approved by SSC.

3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below)

4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criteria.

5. To pass the Qualification Pack , every trainee should score a minimum of 70% cumulatively (Theory and Practical).





				Marks A	llocation
Assessment	Assessment Criteria for Outcomes	Total	Out		Skills
Outcomes		Mark	Of	Theory	Practical
	PC1. Identify required broadcast				
	operations/engineering activities		20	10	
	PC2. Evaluate the contribution of new broadcast				
	operations/engineering theories, methods, and				
	procedures, especially in terms of IT solutions to				
MES/ N 0801	own organization and in relation to their job			10	
(Develop	profile		20	10	-
skills and	PC3. Understand audience and customer				
knowledge in	feedback, and suggestions from colleagues in a	100			50
broadcast	positive way		20	10	
operations/en gineering)	PC4. Monitor developments within broadcast engineering		20	10	
0 0/	PC5. Attend professional development programs		20	10	-
	to update skills and knowledge		10	5	
	PC6. Maintain and update expertise and			-	-
	knowledge at appropriate intervals and in ways				
	that are appropriate to own job role		10	5	
		Total	100	50	50
				Marks A	llocation
Assessment	Assessment Criteria for Outcomes	Total	Out		Skills
Outcomes		Mark	Of	Theory	Practical
	PC1. Manage live telecasts/ programming by				
	accurately downlinking, managing advertising time and uplinking as per the directors instructions		30	15	
	accurately downlinking, managing advertising time and uplinking as per the directors		30 10	15	
MES/ N 0807 (Manage master	<ul> <li>accurately downlinking, managing advertising time and uplinking as per the directors instructions</li> <li>PC2. Build play out lists by accurately lining-up recorded programming, feeds, commercial and promo tapes/files in accordance to programming</li> </ul>	100			50
(Manage	accurately downlinking, managing advertising time and uplinking as per the directors instructions PC2. Build play out lists by accurately lining-up recorded programming, feeds, commercial and promo tapes/files in accordance to programming and advertising playlists/ schedules PC3. Switch between live/recorded programming, commercials and promos in accordance to schedules maintaining on-air continuity PC4. Monitor on-air output and resolve any issues that may arise (in signals, audio/video quality etc.)	100	10	5	50
(Manage master control room (MCR)	accurately downlinking, managing advertising time and uplinking as per the directors instructions PC2. Build play out lists by accurately lining-up recorded programming, feeds, commercial and promo tapes/files in accordance to programming and advertising playlists/ schedules PC3. Switch between live/recorded programming, commercials and promos in accordance to schedules maintaining on-air continuity PC4. Monitor on-air output and resolve any issues that may arise (in signals, audio/video	100	10 20	5	50
(Manage master control room (MCR)	accurately downlinking, managing advertising time and uplinking as per the directors instructions PC2. Build play out lists by accurately lining-up recorded programming, feeds, commercial and promo tapes/files in accordance to programming and advertising playlists/ schedules PC3. Switch between live/recorded programming, commercials and promos in accordance to schedules maintaining on-air continuity PC4. Monitor on-air output and resolve any issues that may arise (in signals, audio/video quality etc.) PC5. Sync/ make adjustments for any time differences (by inserting make-good advertisements, promotions etc.) in coordination with the relevant departments (programming, traffic, promos) PC6. Troubleshoot issues that may arise in master control room equipment such as switchers, monitors, meters etc., audio/video	100	10 20 10	5 10 5 10	50
(Manage master control room (MCR)	<ul> <li>accurately downlinking, managing advertising time and uplinking as per the directors instructions</li> <li>PC2. Build play out lists by accurately lining-up recorded programming, feeds, commercial and promo tapes/files in accordance to programming and advertising playlists/ schedules</li> <li>PC3. Switch between live/recorded programming, commercials and promos in accordance to schedules maintaining on-air continuity</li> <li>PC4. Monitor on-air output and resolve any issues that may arise (in signals, audio/video quality etc.)</li> <li>PC5. Sync/ make adjustments for any time differences (by inserting make-good advertisements, promotions etc.) in coordination with the relevant departments (programming, traffic, promos)</li> <li>PC6. Troubleshoot issues that may arise in master control room equipment such as</li> </ul>	100	10 20 10	5	50





				Marks A	llocation
Assessment	Assessment Criteria for Outcomes	Total	Out		Skills
Outcomes		Mark	Of	Theory	Practical
	PC1. Identify, research and understand the software and equipment required to operate broadcast sytems effectively, within the context of the role		30	15	
MES/ N 0809 (Operate the broadcast	PC2. Identify and be aware of appropriate methods, procedures and guidelines prior to operating broadcast systems PC3. Operate broadcast systems in various	100	30	15	50
systems)	conditions (including studio operation, outside broadcast, post production, distribution and transmission), in line with production objectives		20	10	
	PC4. Identify and rectify the causes of basic faults in broadcast systems and equipment, and bring problems to the attention of appropriate personnel		20	10	
		Total	100	50	50
Assessment outcomes	Assessment criteria for outcomes	Total mark	Out of	Theory	Skills Practical
	<ul> <li>PC1. Understand and comply with the organisation's current health, safety and security policies and procedures.</li> <li>PC2. Understand the safe working practices pertaining to own occupation.</li> <li>PC3. Understand the government norms and policies relating to health and safety including emergency procedures for illness, accidents, fires or others which may involve evacuation of the premises.</li> </ul>		10 10 5	5	
MES/ N 0104	PC4. Participate in organization health and safety knowledge sessions and drills.		5	2	
(Maintain workplace health and	PC5. Identify the people responsible for health and safety in the workplace, including those to contact in case of an emergency.	100	10	5	50
safety)	PC6. Identify security signals e.g. fire alarms and places such as staircases, fire warden stations, first aid and medical rooms.		10	5	
	PC7. Identify aspects of your workplace that could cause potential risk to own and others health and safety.		10	5	
	PC8. Ensure own personal health and safety, and that of others in the workplace though precautionary measures.		10	5	
	PC9. Identify and recommend opportunities for improving health, safety, and security to the designated person.		5	3	





PC10. Report any hazards outside the individual's authority to the relevant person in line with organisational procedures and warn other people who may be affected.		10	5	
PC11. Follow organisation's emergency procedures for accidents, fires or any other natural calamity in case of a hazard.		10	5	
PC12. Identify and correct risks like illness, accidents, fires or any other natural calamity safely and within the limits of individual's authority.		5	2	
	Total	100	50	50