

CONTACT DETAILS OF THE BODY SUBMITTING THE QUALIFICATION FILE

Name and address of submitting body:

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List of documents submitted in support of the Qualifications File

1. Qualification document for Assistant Fire Operator.
2. Curriculum for Assistant Fire Operator under Fire & Safety Engineering Sector for Modular Employable Scheme (MES)
3. Study/Report on Skill Requirement

SUMMARY

1	Qualification Title	Assistant Fire Operator
2	Qualification Code, if any	FRS101
3	NCO code and occupation	5411.0100: Fire Fighter
4	Nature and purpose of the qualification (Please specify whether qualification is short term or long term)	NCVT Certificate in job role of Assistant Fire Operator Main Purpose of the Qualification to develop proficiency skill to operate different types of fire fighting equipment to extinguish fire.
5	Body/bodies which will award the qualification	National Council for Vocational Training (NCVT)
6	Body which will accredit providers to offer courses leading to the qualification	GOI Ministries and State departments who have adopted MES qualifications, accredit training providers for their programs and schemes (only in case of SDIS schemes Training providers accredited by States on behalf of NCVT)
7	Whether accreditation/affiliation norms are already in place or not , if applicable (if yes, attach a copy)	-NA-
8	Occupation(s) to which the qualification gives access	After completion of the course the trainees shall be qualified for one or more of the following job roles: <ul style="list-style-type: none"> • Firefighter • Fireman
9	Job description of the occupation	Fire Fighter; Fireman (Fire Service), fights fires as member of firefighting force using firefighting equipment to extinguish fire, rescue people and property from fire and performs sentry duty. Visits scene of fire on motor vehicle equipped with firefighting material, water pumps etc. on receipt of fire information. Connects and mans hose to spray water or chemicals on fire, or uses portable fire extinguisher in places not accessible with hose. Demolishes parts of buildings or other structure as necessary, to clear passage and to prevent further spread of fire. Rescues trapped persons and administers artificial respiration to those overcome by heat or fire. Maintains

		firefighting equipment in perfect condition and performs sentry duty at fire station according to roster. May perform other services during emergencies or natural calamities such as flood, storm by rescuing people in danger, manning hoses to assist police to control rioters, extricating persons or animals from places not easily accessible etc.	
10	Licensing requirements	-NA-	
11	Statutory and Regulatory requirement of the relevant sector (documentary evidence to be provided)	-NA-	
12	Level of the qualification in the NSQF	Level 3	
13	Anticipated volume of training/learning required to complete the qualification	300 Hours	
14	Indicative list of training tools required to deliver this qualification	Mentioned in curriculum attached	
15	Entry requirements and/or recommendations and minimum age	10 th from any recognized board 18 years of age & above and physically fit	
16	Progression from the qualification (Please show Professional and academic progression)	An individual can progress in an organisation as Fire Inspectors,	
17	Arrangements for the Recognition of Prior learning (RPL)	RPL arrangements are not planned under this qualification.	
18	International comparability where known (research evidence to be provided)	-NA-	
19	Date of planned review of the qualification.	5 years after approval of the Qualification	
20	Formal structure of the qualification Mandatory components		
	Title of component and identification code/NOSs/Learning outcomes	Estimated size (learning hours)	Level
(i)	DGT/MES/FRS/N01: Understand the Basic Fundamentals of Fire and Safety	20	3

(ii)	DGT/MES/FRS/N02: Understand the Fire and Fire components and able to use and maintain different types of fire extinguishers.	60	3
(iii)	DGT/MES/FRS/N03: Acquire the Basic Concepts of fire components and equipment. Knowledge of communication equipment.	100	3
(iv)	DGT/MES/FRS/N04: Able to do ground drill, hose drill, drills in ropes & lines , ladder drill, drill with fire tender. Safety in construction- housekeeping, first aid, evacuation etc.	100	3
(v)	DGT/MES/FRS/N05: Demonstrate tackling a fire hazard/rescue/accident and save lives/ material/ properties.	20	3
Sub Total (A)		300	
Optional components- NA-			
	Title of component and identification code/NOSs/ Learning outcomes	Estimated size (learning hours)	Level
	Sub Total (B)		
Total (A+B)		300	

SECTION 1
ASSESSMENT

<p>21</p>	<p>Body/Bodies which will carry out assessment:</p> <p>DGT empaneled Assessing Bodies (ABs). Some of the ABs are:</p> <ul style="list-style-type: none"> • CK Skills Research & Development • Shri Thakur ji Educational Welfare Trust • JV Chrom Solutions • RCI Skills and Social Development Pvt. Ltd. • Yuva Skills Foundation
<p>22</p>	<p>How will RPL assessment be managed and who will carry it out?</p> <p>RPL arrangements are not planned under this qualification.</p>
<p>23</p>	<p>Describe the overall assessment strategy and specific arrangements which have been put in place to ensure that assessment is always valid, reliable and fair and show that these are in line with the requirements of the NSQF.</p> <p>Criteria for selection of Assessment body</p> <p>Minimum Eligibility Criteria</p> <ul style="list-style-type: none"> • The applicant shall be a legal entity, registered in India. • The applicant should have in last two years carried out competency / skill assessment for minimum 1000 persons or should have trained minimum 1000 persons and got tested by some agencies such as NCVT, Sector Skill Council, State, board/ council and reputed industry Association. Organizations having experience in testing of competencies would be preferred. • In case more number of applications is received, preference will be given to those organizations that have trained/assessed larger number of persons. • The applicant is not a Training Provider (TP) in the same sector and in same State, but it can be TP in other States, other Sectors or other scheme. • The applicant shall have access to technically qualified personnel of repute and integrity in different industrial trades and technology. • The applicant shall develop dedicated human resource for handling the processes in assessment process. • The applicant shall declare its linkages with other organization(s), if any to ensure independence and avoid any conflict of interest. • Institutions/ Firms blacklisted by any Government Department shall not be considered in this RFP.

- The Applicant shall provide the information and supporting documents towards their claims.
- Initially provisional empanelment will be awarded to the organizations based on the evaluation of eligibility of the Assessing Body based on the criteria.
- Based on the module and sector that will be handled by the assessor, the assessing body shall send its assessor for competency evaluation in the institutions which will be notified by DGT time to time. The assessor will be assessed to ascertain the competency to carry out competency based assessment.
- Final empanelment would be granted subject to the Assessing Body fulfilling the following conditions of getting the competencies of 2 assessors of each module per State evaluated in the institutes notified by the DGT. Testing charges for evaluating the competencies of the assessors will be borne by the Assessing Bodies.

(1) Assessment process:

The assessment process aims to test and certify the competency of the persons through Assessing Bodies who seek certification of their skills acquired informally or the persons who have been trained at the registered TPs. The competency assessment of the candidate is being done by the Assessor Competency Evaluation (ACE) qualified assessor of the independent Assessing Bodies (AB) which is not involved in training delivery, to ensure an impartial assessment. ACE is conducted to evaluate the competency of the assessor. In the assessment process, identification of competency, ways to measure the competency and deciding on the type of evidence that has to be collected are the responsibility of the Assessing bodies whereas administering the assessment and collecting the evidence and reporting the results are the responsibility of the assessors. The assessment process consists of following components:

Theory Test:

- It must assess the knowledge which is essential for a person to do the job. Without this knowledge, the person will not be able to do the job.
- The questions shall be of objective type involving selection of correct response.
- The question paper should contain sketches/ diagrams/ photographs/ drawing to overcome the problems of reading comprehension.
- The test shall be of short duration.

Practical Test:

It shall be able to test:

- Manipulative skills to handle tools and equipment.

- Speed in doing work.
- Accuracy maintained
- Quality in workmanship.
- Sequence of performance.
- Economical use of material.
- Neatness & housekeeping.
- All the competencies prescribed in the course curriculum.

The Assessment Parameters adopted during assessment:

- Knowledge of equipment, limitation of use of tools and equipment, and methods & procedure.
- Understanding of functioning of equipment & tool, criteria to be used in selecting tools for given job, and the process of measurement.
- Skill in finishing to required measurement, handling measurement & calculations, handling tools and equipment with ease, finishing neatly.
- Abilities to take corrective steps, use correct work habits, take measurements, complete the job within stipulated time, and adopt safe practices.
- Attitude towards the work, accurate & precise work and co-workers and supervisor.

(2) Duration of Test:

The duration of test vary according to the task. Theory test shall be of 1 hour duration and practical test for engineering trade shall be 6 to 8 hours minimum and non-engineering it shall be of 4 hours minimum. Assessing Bodies while preparing practical test shall ensure that candidate shall be tested on all the competencies prescribed in the course module.

The marking pattern and distribution of marks for the qualification are as under:

Terminal competency	Maximum marks
Application of knowledge	30
Care for tools & equipment	15
Economic use of materials	15
Safety consciousness	10
Speed	10
Accuracy	15
Quality of workmanship	20

Amount of work	15
No. of attempts	10
Attitude	10
Total maximum marks for Practical	150
Maximum marks for theory	50

(3) Minimum pass mark:

Minimum passing marks for Practical is 60%

Minimum pass marks for theory is 40%

(4) Testing and certifications process for the course:**Pre- Assessment**

- Regional Directorate of Apprenticeship Training (RDAT) allot batches to the Assessing Bodies on rotational basis depending on the presence of assessing body in that region sector wise and the assessing body in coordination with Training Provider and assessor should confirm and schedule the assessment.
- The Assessing Body confirms the date of assessment in consultation with Training Provider and communicates to the RDAT/State.
- The Assessing Body forms a panel of ACE qualified assessors of high repute and integrity, sector wise and location wise.
- The assessment of the candidates is done by the Assessing Bodies in designated Testing Centre (TC). The Testing Centre where the assessment is carried out and Testing Centre can be Training Center also. The Assessing Body select the TC based on the location, accessibility and the infrastructure facilities available for conducting the test.
- The testing center is approved by the RDAT incase of courses run by DGT,MSDE. Incase where the courses are run by the Sate Govt., TC is approved by State Govt.. Training conducted by other dept. at their accredited Training Centre, same training centre is designated as Testing centre.
- The Assessing Body provide details of selected TC along with skill areas in which assessment can be done at the TC, to the RDAT and respective States/UTs.
- The Assessing Bodies depute ACE qualified assessors for assessments whose details are furnished by Assessing Bodies to DGT in advance.
- Assessing Body has to communicate to the Testing Centre following:
 - Details of the candidates to appear for assessment in various MES courses.
 - Details of Assessors selected with their contact details.
 - Requirement of infrastructure, raw material etc.

-Testing charges to be reimbursed to Testing Centre

Preparation of assessment tools and prerequisites:

- The assessment tools contain components for testing the knowledge, application of knowledge and demonstration of skill. The knowledge test is objective paper based test or short structured questions based. The application of knowledge is verified based on questioning or seeking response for a case. Demonstration of skill is verified based on practical demonstration by the candidate.
- The type of assessment tools to be used for assessment are to be prepared in advance by the assessing body in accordance to the guidelines as prescribed below:
 - Define the performance objective – This is based on the course objectives and competency in workplace as prescribed by MES curriculum. The written tests and practical tests assess all the competencies mentioned in course curriculum.
 - In case of practical test, the operations which are to be observed in case of process test (how a particular task is being carried out) are clearly mentioned and the specifications of the final product in case of product test (the task in itself).
 - List of tools, infrastructure, and equipment to carry out the assessment are prepared based on the test instruments that are planned to be used.
 - Written directions are given to the candidates before the task is attempted.
 - Scoring system, observations and rating is prepared for each competency which is going to be assessed.

Pre-assessment activities for Assessor at the Testing Centre

- Verification of student credentials: The assessor check the application form submitted by the candidates and verify the photo pasted on the forms with candidates who are taking assessment in accordance with checklist
- Verification of testing centre for adequate infrastructure, tools and equipment: The assessor verifies the availability of infrastructure, tools and equipment for carrying out both theory and practical assessments. The minimum requirement prescribed under the MES modules is used as benchmark.
- Attendance verification: The assessor checks the attendance register of candidates and instructors until the time biometric attendance system is put in place. Once the biometric attendance system is in place, the biometric attendance of assessors along with that of trainees/candidates has to be captured during the assessment at the start as well as end of theory and practical test.
- Attendance during assessment: The assessor takes the attendance of all the students who appear for assessment after the successful

verification of the student credentials and before the start of the assessment. The assessor also provides his/her attendance during start and end of the practical and theory test.

- Verification of the documents related test carried out by Training Provider/ Testing Centre (TC) for candidates who were not able to produce document in support of having passed the qualification.

Assessment activities

- Before the start of assessment, read out the instructions to the students.
- The written test & practical test is for fixed duration as prescribed.
- It is ensured that individual attention is given to all the candidates during the practical test.
- The assessor takes photographs during the assessment process of all the students in the testing centre, the students during theory and practical tests, practical lab/workshop showing the equipment to be used for assessment, the assessor along with the students appearing for the assessment.

Post-assessment activities

- The assessor consolidates all the theory and practical test papers and ensures that all the mandatory information is filled. The total score for each student should be calculated and recorded in result sheet.
- The assessor send the attendance sheet, result sheet, answer papers by courier/post to the assessing body immediately after the completion of assessment
- Uploading outcome of the assessment and photos in portal by assessing body
- Assessing body upload the results within one week of the assessment date.
- Photos taken by the assessors during assessment are sent to respective RDATs through e-mail only. Non dispatch of photos of assessment to RDAT makes assessment void. Re-assessment of such batch is done by the Assessing Bodies on their own expenses.
- Details of assessors are emailed to RDAT at the time of uploading the outcome of the assessment. Outcome of the assessment is not accepted in case details of assessors are not emailed to respective RDAT.
- Maintaining assessment records
- Publishing of results and Certificate issue
- RDAT verifies the outcome of the assessment, details of assessors, photos and print and sign the certificates for successful candidates and send it to the respective candidates. In case of direct candidate's assessment, the Certificates are sent to the Assessing Body.

	<ul style="list-style-type: none"> • Certificates which will be issued carry photograph of the trainee, name of Training Provider, start date & end date of training and duration of training once the systems for the same are put in place. • The certificate is issues under the aegis of NCVT. All the communications are done through portal.
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Please attach most relevant and recent documents giving further information about assessment and/or RPL.

Give the titles and other relevant details of the document(s) here. Include page references showing where to find the relevant information.

ASSESSMENT EVIDENCE

Complete a grid for each component as listed in “Formal structure of the qualification” in the Summary.

NOTE: this grid can be replaced by any part of the qualification documentation which shows the same information – ie Learning Outcomes to be assessed, assessment criteria and the means of assessment.

24. Assessment evidences

Title of Component: Assistant Fire Operator

Outcomes to be assessed		Means of Assessment
Learning Outcome	Assessable Outcome Description	
DGT/MES/FRS/N01: To understand the Basic Fundamentals of Fire and Safety	AO1. Able to recognize general safety symbols and colour.	Practical Test
	AO2. Have knowledge of different stages of fire.	Theory Test
	AO3. Able to use breathing equipment, proximity shoes, personal protective suits, physical fitness training.	Practical Test
	AO4. Should able to demonstrate methods of put out of fire.	Practical Test
DGT/MES/FRS/N02: Understand the Fire and Fire	AO1. Have the Knowledge of different types of fire extinguishers, their use and maintenance.	Theory Test/Practical test

components and able to use and maintain different types of fire extinguishers.	AO2. Have knowledge of effect of sand and blanketing in fire extinguishing.	Theory Test
	AO3. Should able to perform fire drill – use of fire extinguishers	Practical Test
DGT/MES/FRS/N03: Acquire the Basic Concepts of fire components and equipment.	AO1. Able to identify different types of fire hoses, hose drill, couplings, hose fittings, branches, nozzles and their use.	Theory Test
	AO2. Able to perform hose laying and hose drill. Fitting pump drill and fire fighting with fire tenders- ladder drill, Hydrant drill.	Practical Test
	AO3. Should able to calculate the capacity of a tank and to assess the pumping time for fire fighting.	Practical Test
	AO4. Should able to practice special tools used in fire field and rescue operations.	Practical Test
	AO5. Able to demonstrate communication equipment in any exigency.	Theory test
	AO6. Have knowledge of different types of fire hydrants and sprinklers system	Theory test
DGT/MES/FRS/N04: Able to do ground drill, hose drill, drills in ropes & lines , ladder drill, drill with fire tender. Safety in construction- housekeeping, first aid, evacuation etc.	AO1. Should have knowledge of excavation gas cutting, welding etc. in construction.	Theory Test
	AO2. Able to demonstrate good housekeeping, first aid for injury, fracture, burns, drowning in water, CPR, evacuation etc.	Practical Test
	AO3. Able to perform ground drill, hose drill, fire drill, drills in rope and lines, ladder drill etc. drill with fire tender.	Practical test
DGT/MES/FRS/N05: demonstrate tackling a fire hazard/ rescue/ accident and save lives/ material/ properties	AO1. Able to demonstrate independently tackling of fire hazard, rescue, accident.	Practical Test

Means of assessment 1

The assessment (offline) comprise of

- Theory Examination MCQ, VIVA Voce
- Practical assessment Role plays, Demonstration

Pass/Fail

The trainee is judged as pass in the qualification if minimum passing marks is obtained in each test i.e Theory and Practical.

Minimum pass mark:

Approved in 20th NSQC- 09.04.18

Minimum passing marks for Practical is 60%

Minimum pass marks for theory is 40%

NSQC Approved

NSQF QUALIFICATION FILE

SECTION 2

25. EVIDENCE OF LEVEL

OPTION A

Title/Name of qualification/component: Assistant Fire Operator		Level: 3	
NSQF Domain	Outcomes of the Qualification/Component	How the job role relates to the NSQF level descriptors	NSQF Level
Process	<p>The job holder is expected to have the knowledge and display expertise skills in the field of work like:</p> <ul style="list-style-type: none"> – Basic operation of fire fighting safety equipment. – Fire extinguishers, fire hoses, – Fire drills- Drill in ropes & lines, ladder drill, hydrant drill, Fire fighting with fire tenders – First Aid measures – Independent fire tackling 	The job requires the limited range of activities routine and predictable like assisting Fire and Rescue Operator in extinguishing fire using different types of fire fighting equipment.	3
Professional knowledge	<p>The job holder is required to have knowledge in the related field of work like:</p> <ul style="list-style-type: none"> – Basic Fundamentals of Fire and Safety – Types of fires, Fire extinguishers, fire hoses – First Aid Measures for Fire Accidents 	The job holder understands the basic facts , process and principles involved in his job role like basics of fire, types of fires, safety measures.	3
Professional skill	<p>The job holder is needs to know and understand :</p> <ul style="list-style-type: none"> – Safety measures in Fire accidents – Methods to doze different types of fires – Application of various tools & Equipments in handling fire 	The job role only includes handling fire accidents with safety which is routine and repetitive in narrow range of application.	3

NSQF QUALIFICATION FILE

Title/Name of qualification/component: Assistant Fire Operator		Level: 3	
NSQF Domain	Outcomes of the Qualification/Component	How the job role relates to the NSQF level descriptors	NSQF Level
Core skill	<p>The job holder is expected to possess knowledge and skills regarding:</p> <ul style="list-style-type: none"> – Technical terms of fire safety and equipments – Understands fire safety signs and symbols 	The Assistant will be able to communicate with the fellow persons to work as a team for a particular work.	3
Responsibility	The job holder works under the supervision of his superior, as per his directions. He is responsible for his designated task as and when given by the superior.	The job holder works under the supervision of his superiors and is responsible for his own limited work assigned.	3

SECTION 3

EVIDENCE OF NEED

<p>26</p>	<p>What evidence is there that the qualification is needed? What is the estimated uptake of this qualification and what is the basis of this estimate?</p> <p>Need of the Qualification: Sub Group of Chief Minister's note dated 27 November 2015 of Neeti Aayog, in Para xviii have strongly recommended `developing dedicated pool of trained manpower Tor disaster management, region-wise. The Reality in India is that there is paucity of Disaster Management institutions which can impart such training to the community volunteers. As per the NDMA, India is 97% deficient of fire services. As per the Crime Bureau Records, 25000 deaths per year are taking place due to fire related disasters and 1.46 lac people die every year due to road accidents, maximum in the World.</p> <p>Fire Safety:- As per Standing Fire Advisory Council, Ministry of Home Affairs and NDMA, gaps and deficiencies for fire safety in India are as follows:-</p> <ul style="list-style-type: none"> Lack of vulnerability and risk analysis. Lack of public awareness on do's and don'ts for fire safety. Not conducting mock drills periodically under experts. Fire Stations - 97.54% deficient. Firefighting and rescue vehicles - 80.04% deficient. Fire personnel - 96-28% deficient. <p>(Source: Facility and Disaster Management Council)</p> <p>Industry Relevance: List of Trade Committee members is attached in curriculum</p> <p>Usage of the Qualification: About 5091 individuals have been assessed in this course under this scheme in FY 2015-16, 2016-17 & 2017-18, which shows there is huge requirement of this skill in the Market.</p> <p>Estimated uptake: India is in the midst of rampant growth on all fronts and hence the overwhelming demand for skilled, professionally trained manpower to safeguard Industrial units in fields as diverse as Refineries, Heavy Engineering Manufactures, Automobile Manufactures, Textile, Airports, Ports, Building Industry, Power Sector, Telecom Sector. To state the facts the Fire Fighting Industry is worth Rs. 3000 corers annually.</p> <p>A rough assessment of the Industrial and Government demand puts the requirement at over 50,000 fire and safety personnel every year (Source: Facility and Disaster Management Council)</p>
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NSQF QUALIFICATION FILE

27	<p>Recommendation from the concerned Line Ministry of the Government/Regulatory Body. To be supported by documentary evidences</p> <p>-NA-</p>
28	<p>What steps were taken to ensure that the qualification(s) does (do) not duplicate already existing or planned qualifications in the NSQF? Give justification for presenting a duplicate qualification</p> <p>The Qualification has been mapped with the National Qualification Register, maintained by NSDA to ensure the qualification does not duplicate. Some of the outcomes of Fireman (Mining) are similar to this qualification, but the present qualification is more comprehensive and has more practice/learning hours than Fireman (Mining) which is particular to Mining Sector only.</p>
29	<p>What arrangements are in place to monitor and review the qualification(s)? What data will be used and at what point will the qualification(s) be revised or updated? Specify the review process here</p> <ol style="list-style-type: none">1) DGT interacts with training providers to gather feedback in implementation and updation of qualification.2) Monitoring of results of assessments3) Employer feedback will be sought post-placement4) In a recent initiative, a Mentor Council (MC) for the relevant sector has been formed to review the curriculum of this qualification under the sector.5) CSTARI, the research wing of DGT, reviews and updates the qualification, in consultation with industries and other stakeholders, on a regular basis. <p>The qualification is reviewed after every 5 years for updation according to latest Technologies and practices.</p>

Please attach most relevant and recent documents giving further information about any of the topics above.

Give the titles and other relevant details of the document(s) here. Include page references showing where to find the relevant information.

SECTION 4

EVIDENCE OF PROGRESSION

30	<p>What steps have been taken in the design of this or other qualifications to ensure that there is a clear path to other qualifications in this sector?</p> <p><i>Show the career map here to reflect the clear progression</i></p> <p>An Individual has vertical pathway to promote to higher designations in an</p>
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NSQF QUALIFICATION FILE

	<p>organisation. Can further undergo specialization course to excel to the higher post in jobs listed above or can start with up his/her own business.</p> <p>Progression chart: Assistant Fire Operator > Fire Officer (Level4) > Fire Inspector (Level 5)</p>
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Please attach most relevant and recent documents giving further information about any of the topics above.

Give the titles and other relevant details of the document(s) here. Include page references showing where to find the relevant information.

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