

QUALIFICATION FILE – CONTACT DETAILS OF SUBMITTING BODY

Name and address of submitting body: **Automotive Skills Development Council**

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1/6, Siri Institutional Area,
August Kranti Marg (Khel Gaon Marg)
New Delhi – 110049**

Name and contact details of individual dealing with the submission

Name: Sunil K Chaturvedi

Position in the organisation: Chief Executive Officer

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List of documents submitted in support of the Qualifications File

1. Qualification Pack :- ASC/Q 1416
2. Documents related to QP Development(**Refer to folder “Common Files”**)
 - (i) RFP for NOS Development
 - (ii) Selection of consultant to Develop NOS
 - (iii) Supporting Document from GC meetings
 - (iv) Skill GAP Study report
 - (v) Occupational Map
 - (vi) Career path ways
 - (vii) MOU with Industry
 - (viii) List of Companies participating in QP Development Process
 - (ix) List of Validating Companies

3. QUALIFICATION FILE SUMMARY

Qualification Title:	AC Specialist (ASC/Q 1416)		
Body/bodies which will assess candidates :	ASDC (AUTOMOTIVE SKILLS DEVELOPMENT COUNCIL)		
Body/bodies which will award the certificate for the qualification:	ASDC (AUTOMOTIVE SKILLS DEVELOPMENT COUNCIL)		
Body which will accredit providers to offer the qualification:	ASDC (AUTOMOTIVE SKILLS DEVELOPMENT COUNCIL)		
Occupation(s) to which the qualification gives access	AC Specialist(In Sales Sector)		
Proposed level of the qualification in the NSQF:	Level 4		
Anticipated volume of training/learning required to complete the qualification:	: 400 Hrs (These are only notional number of hours. The training must achieve competency outcomes as define by the QP/NOS)		
Entry requirements / recommendations:	ITI in Automobile or Class X		
Minimum Age	<p>: 1 ASDC recommends that candidates should seek full employment not before attaining an age of 18 years.</p> <p>2 However, as per Factories Act 1948 and Shops & Establishment Act 1953:</p> <p>- No one can be employed before attaining the age of 14</p> <p>3 Please note that under the Factories Act 1948, and Shops & Establishment Act 1953 different States may have slightly varying provision which need to be adhered to.</p>		
Progression from the qualification:	Vertical 1. Automotive Service Technician L5/6 2. Service Supervisor	Horizontal 1 Brake/ Clutch repair 2 Service Technician L4 3. 2/3 Wheeler Service Technician Level 4	Cross Sector service garage owner
Planned arrangements for RPL.	: Pilots have been planned exclusive of any training input.		
International Comparability	:Not at this stage		
Formal structure of the qualification			
Title of unit or other component (include any identification code used)	Mandatory/ Optional	Estimated size (learning hours)	Level
ASC/ N 1425: Install an automobile air conditioning system	Mandatory	400 Hrs (These are only notional number of hours. and can varies	4
ASC/ N 1426: Service & routine maintenance of an automobile air conditioning system	Mandatory		4

ASC/ N 1427: Repair the automobile air conditioning system	Mandatory	based on training delivery partners analysis of the candidate profile in the batch)	4
ASC/ N 0001: Plan and organise work to meet expected Outcomes	Mandatory		4
ASC/ N 0002: Work effectively in a team	Mandatory		4
ASC/ N 0003: Maintain a healthy, safe and secure working Environment	Mandatory		4

Please attach any document giving further detail about the structure of the qualification – eg a Curriculum or Qualification Pack.

Give details of the document here:

Qualification pack is attached

SECTION 1

ASSESSMENT

Name of assessment body:

If there will be more than one assessment body for this qualification, give details.

ASDC will conduct assessment through ASDC-accredited assessment agency and ASDC-approved assessors.

- 1 Manipal – City & Guilds Pvt Ltd
- 2 Honda Motor India Pvt. Ltd.
- 3 TATA Motors
- 4 KAMT
- 5 Mettl-Assessment Science Expert
- 6 India Skills Pvt. Ltd.
- 7 Green Arrows Safety Management (P) Ltd.
- 8 The Indian Institute of Welding
- 9 Multi Skills Assessors Guild
- 10 Prima Competencies Pvt. Ltd.
- 11 TRENDSETTERS SKILL ASSESSORS PRIVATE LIMITED
- 12 VR Skill & HR Solutions
- 13 Ace Assessments Pvt. Ltd.
- 14 Cognix Knowledge Services (P) Ltd
- 15 Confederation of Indian Industry
- 16 Skills Mantra Edutech Consulting India Pvt. Ltd.

Will the assessment body be responsible for RPL assessment?

Give details of how RPL assessment for the qualification will be carried out and quality assured.

Yes. Standard assessment process will be followed for the given qualifications.

Describe the overall assessment strategy and specific arrangements which have been put in place to ensure that assessment is always valid, consistent and fair and show that these are in line with the requirements of the NSQF:

Assessment documents:

Quality Assurance - Assessment & Certification

ASDC Certificate is Auto industry's own certificate and the certificate is expected to carry an assurance of quality. Therefore, the certified candidate should be able to demonstrate all round skills as expected by industry standard ie ASDC NOS/QP.

In order to achieve this objective ASDC needed to have an approach that is process driven whereby the outcomes meet the quality objectives and also display consistency.

Certification is the outcome of Assessment Process. The Process in turn is derived from an overall strategy.

ASDC Assessment Strategy

ASDC Assessment Strategy has two components:

- 1 Broad Guidelines provided by NSDC QRC (*Qualifications Registration Committee*)
- 2 ASDC's own *sector specific* overarching strategy, covering all job roles.
 - Any specific assessment approach relating to a particular job role.

- 1 Broad Guidelines provided by NSDC QRC (Qualifications Registration Committee):
 - a. Assessment to be conducted by SSC as per competency output defined in the NOS/QP and the assessment criteria provided in the NOS/QP
 - b. Assessment to be carried out by a third party Assessment Body duly affiliated to the SSC.
 - c. Practical and face to face Viva evaluations, where applicable, to be carried out only by the SSC approved assessor deployed by the Assessing Body deputed by SSC for the given assessment.
 - d. Cut off marks for certification could be in the vicinity of 70% level but individual SSC to refine & modify this criteria to suit the sectorial needs.
 - e. Assessing Body to declare results with due concurrence of the SSC.

- 2 ASDC's own sector specific strategy covering all job roles :
 - 2.1 ASDC assessments will be comprehensive and cover all aspects of acquired knowledge, practical skills and also basic ability to communicate. Accordingly, evaluation process would include:
 - i. Theory/Knowledge test
 - ii. Practical demonstration test
 - iii. Face to Face Viva

 - 2.2 Theory/Knowledge assessment will be carried out on line through a link provided for each assessment that generates a random paper from a bank of questions available at the back end.
 - Exception to an online test in favour of Paper Test would be subject to non-availability of requisite broad band and/or hardware.
 - On line test would be conducted in the presence of an ASDC assessor till web enabled proctoring is deployed.

 - 2.3 ASDC assessor would be conducting Practical and Viva as per the criteria provided in the NOS/QP.

 - 2.4 ASDC assessor would be carrying out Practical assessment for job roles such as in sales by way of role playing method.

 - 2.5 ASDC cut offs for accepting a candidate for certification:

Automotive industry has already attained a level of globalization and is on the way to becoming even more integrated into the global supply chains with a big focus by OEMs on sourcing from India. This translates to expectation of high quality skills. In fact, the global integration process would start putting demands on skill quality standards to be in line with transnational standards.

 - 2.6 Also there is an ever increasing quality demands placed by domestic customers.

 - 2.7 Further, the structuring of our industry is such that the different organizations spread across the OEM, Tier1, 2 manufacturing spectrum are expected to follow common quality standards. Similarly, OEMs and their Dealerships and Service Workshops also require to follow common quality standards. This implies that employees need to follow technical discipline, team work and quality processes.

 - 2.8 ASDC aims to build a quality brand for its certification that clearly meets our industry's expectations.

 - 2.9 The other important consideration is the Level notification by NSQF (National Skills Qualifications

Framework) which provides a structure of skills ladder to be followed in the country. This ladder describes the entire skills space to be covered in 10 levels from Level 1 (for mostly menial jobs) and upto Level 10(for mostly strategy level jobs)

2.10 Keeping above points in mind ASDC evolved an acceptance criteria as follows:

- Broadly, overall cut offs to be :

Level 1	60%
Level 2	65%
Level 3	70%
Level 4-10	75%

- Specific Theory/Practical/Viva cut offs to be as per detailed matrix for each QP.

2.11 In line with international practice there is a provision for moderation of marks to account for borderline cases. This process also covers differential moderation possibility across Theory/ Practical/ Viva.

2.12 Moderation could also be necessitated owing to variation between assessors and strictness in marking. This moderation to be carried out by concerned Assessing Body in consultation with ASDC.

2.13 In addition to recording markings of the candidate evaluation, the Assessor will also be recording general observations for every batch as per ASDC format. This record will be useful in carrying out (2.11-2.12) above.

- Any specific assessment approach relating to a particular job role:
 - o ASDC could consider *only* online test for some job roles such as in Design Engineering /Quality
- ASDC assessment process would also provision a suitable re-evaluation mechanism which would offer a fair chance to the TP/candidates for Obtaining an accurate outcome.
- ASDC assessment process would also provision re assessment of a batch in case the TP has enough reason to opt for this on payment of the due assessment fee.

Assessment Process

- ASDC Training Partner will intimate ASDC for readiness of a batch for assessment preferably 15 days before the intended assessment.
- Within 3 working days ASDC will finalize an Assessing Partner for carrying out the assessment
- Assessing Partner will deploy one or more ASDC approved assessor For carrying out the assessment.
- Theory/Knowledge test of the approximate duration of 30-60 minutes will be conducted online for which the online link will be generated by the ASDC Technology Partner and shared with Assessment Partner.
- Online test will be conducted in the presence of ASDC assessor.(ASDC is encouraging development of technology enabled proctoring and when this is ready, the online test could be conducted without requiring human proctoring)
- Exception to an online test in favour of Paper Test would be subject to non-availability of requisite broad band and/or hardware device. Moreover, this could be allowed only after ascertain genuinity of request.
- ASDC assessor would be conducting Practical and Viva as per the criteria provided in the NOS/QP.
- ASDC Assessment Partner will ensure that the assessor to be deployed has complete understanding of the ASDC Assessment Process and the QP/NOS relevant to the assessment.

- Assessor would be reaching the venue well in time and review and on the ground verify the batch information already provided by TP.
- Assessor will then proceed to conduct the assessment as per ASDC Format starting with the attendance.
- Assessor would be capturing Viva and Practical marks on a device that has ASDC assessment link. Technology systems deployed in ASDC assessment process have provision for instantly capturing assessor evaluations in only the standard NOS/QP aligned format.
- In addition to recording markings of the evaluation, the Assessor will also be recording general observations for every batch as per ASDC format as appended below. This record will be useful in carrying out result review process.

Result Processing

- ASDC Assessment Partner responsible for Technology Platform will convert the assessment data captured by Assessor on the device into result matrix and share the same with ASDC
- ASDC Assessment cell will view the results for compliance to process and / or need for moderation in consultation with the Assessing Partner to arrive at final result for the batch as per ASDC acceptance Criteria.
- Assessing Partner will publish finalized results on data base for viewing of the Training Partner
- ASDC would issue a certificate after due verifications of candidate authenticity by way of a unique identification number such as Aadhaar.
- Certificates will be shared preferably in digital form with Training Partners
- Training Partners would be authorized to distribute certificate to candidates after printing them on a standard sheet as per ASDC template.

Re-evaluation of batch result

- Results once published will be treated as final. However, as per ASDC Assessment Strategy, there is need for provisioning a re-evaluation of results if desired by a TP essentially to cover a case where the TPs internal assessments are at large variance with the results.
- Re-evaluation will be done batch wise.
- ASDC Assessment cell will carry out re-evaluation in two steps:
 - Check for totalling error, if any
 - Use statistical tools where required to establish a pattern and extent of borderline cases.
 - Refer to the Assessor feed back form for the given batch
 - Use a weightage reference table to establish priority of type of assessment eg Theory or Practical or Viva
 - Where required, share the findings with Assessment Partner for review and concurrence.
 - Establish a modified range of acceptance based on above
 - In case of need for moderation based on assessor level variation, to consult the Assessing Partner/Assessor and facilitate moderated values.
 - Re do the results based on above process

- Share the revised results with TP

Quality Assurance & Audit

While the Assessment Process based on a well-defined strategy as above, does have an in built quality assurance, ASDC also has a plan that augments assurance.

This entails a Quality Audit process as defined below :

There will be a 2 tier Audit of the assessment process:

Tier 1 Audit

- 1 ASDC Assessor will be required to submit a report for each assessment carried out. This report will be as per ASDC format as described in the Assessment Process. The format of the report aims to capture details of the Training Delivery process, soft & hard infrastructure, Training of Trainer, industry connect and overall approach to training delivery vis a vis expectations of ASDC QP/NOS.
- 2 Each Assessment Partner is required to carry out and submit Tier 1 audit reports as per a plan and frequency agreed with ASDC.
- 3 ASDC will continuously review the Tier 1 audit reports for any alarming observation or trend.
- 4 ASDC will develop and execute a suitable action plan to redress the situation as deemed necessary for a given case.

Tier 2 Audit

- 1 ASDC to carry out a Tier 2 level Audit as per a plan being developed.
 - a. Tier 2 audit will be carried out by a third party contracted by ASDC for the purpose.
 - b. Tier 2 audit will provide adequate coverage for variables such as Assessing Partner, Assessor, TP and geographical variations.
- 2 ASDC Assessment cell to review audit findings at least once every month or on sos basis.
- 3 Based on review findings as in 2 above, ASDC to decide on a suitable corrective action plan and execute the same.
- 4 ASDC to record directional needs for refinement of Assessment process specially for incorporation of Technology that could enhance reliability and speed of assessments.

Please attach any documents giving further information about assessment and/or RPL.

Give details of the document(s) here:

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ASSESSMENT EVIDENCE

Complete the following grid for each grouping of NOS, assessment unit or other component as listed in the entry on the structure of the qualification on page 1.

CRITERIA FOR ASSESSMENT OF TRAINEES

AC Specialist

ASC/Q 1416

Guidelines for Assessment

- 1 ASDC Assessments will be carried out as per overall assessment strategy and process given in Section 1.
- 2 Accordingly, ASDC Assessment has three elements: 1. Theory/Knowledge 2. Viva and 3. Practical.
- 3 Theory/Knowledge test will be conducted online (*ref:- point no. 2.2* in section 1 above).
- 4 Viva, Practical (test will carried out by ASDC approved assessor deployed through ASDC Affiliated Assessment Partner. (*Ref :- point no. 2.3 to 2.4* in section 1)
5. The Qualification cutoffs will be as per point 2.10 in Section 1 above.

Title of NOS/Unit/Component:

Assessable Outcomes	Assessment criteria	Total Mark	Marks allocation		
			Theory (Total randomised over all PCs)	Viva	Practical
ASC/N 1425	Install an automotive air conditioning system				
Decide appropriate AC system & install it	To be competent, the user/individual on the job must be able to: PC1. understand the AC manufacturer specifications related to the various components/ aggregates in the air				

	conditioning system				
PC2.	follow standard operating procedures for using workshop tools and equipment especially in the AC system of the vehicle				
PC3.	ensure any malfunctions observed in tools and equipment used in the air conditioning systems are reported to the concerned persons			10	30
PC4.	inspect the vehicle to check and decide an appropriate air conditioning system which can be powered by the exiting capacity of the vehicle				
PC5.	select appropriate fittings and materials as required for installation				
PC6.	install air conditioning system without causing damage to any other component or system powering the vehicle				
PC7.	install, connect, and adjust thermostats, humidistats timers, and other components of the air conditioning system using hand tools				
PC8.	install the compressor and its drive from the engine, the evaporator unit (under the dashboard, in the boot or on the roof) and the electrical wiring to the units, power source and controls				
PC9.	fill the unit with an appropriate refrigerant and test it for potential leaks and malfunctions				
PC10.	join pipes or tubing to equipment and to fuel, water, or refrigerant source, to form complete circuit				
PC11.	test pipe or tubing joints or connections for leaks, using pressure gauge or soap-and-water solution			30	50
PC12.	charge the air conditioning system before first time usage				
PC13.	test the system performance along with any adverse performance of other aggregates using prescribed methods and equipment				
PC14.	carry out the final inspection to ensure that:				
PC15.	protective guards, safety features and cowlings are in place			10	20
PC16.	the system is functional, without any leaks				
PC17.	clean and maintain the work place area				
PC18.	ensure that trainings organized by the OEM from time-to-time are attended and knowledge levels are upgraded (esp. in case of newly launched products, product refreshes)				

	Subtotal		Theory	50	100
ASC/N 1426	Carry out routine service & maintenance for automotive air conditioning system			Viva	Practical
Service & routine maintenance of the AC system	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. understand the AC manufacturer specifications related to the various components/ aggregates in the air conditioning system</p> <p>PC2. follow standard operating procedures for using workshop tools and equipment especially in the AC system of the vehicle</p> <p>PC3. ensure any malfunctions observed in tools and equipment used in the air conditioning systems are reported to the concerned persons</p> <p>PC4. check operation of air conditioning system</p> <p>PC5. perform visual inspection and temperature and leak checks</p> <p>PC6. test electrical circuits or components for continuity, using electrical test equipment</p> <p>PC7. test pipe or tubing joints or connections for leaks, using pressure gauge or soap-and-water solution</p> <p>PC8. perform routine maintenance of any necessary service on the following :</p> <ul style="list-style-type: none"> • compressor • evaporator • condenser • receiver/ dryer and expansion valve • accumulator and orifice tube • minor components like rubber hoses, metal pipes etc. • any other component in the AC unit of the vehicle <p>PC9. recharge refrigerant to recommended levels</p> <p>PC10. recover refrigerant, evacuate air and moisture from system</p> <p>PC11. perform any routine maintenance of other sensitive components in the vehicles controlled by microprocessors or small computers:</p> <ul style="list-style-type: none"> • ECU (Electron Control Unit) 			5	10
				10	20
				5	10
				5	10

	<ul style="list-style-type: none"> • ATC (Automatic Temperature Control) 				
	Subtotal			25	50
ASC/N 1427	Repair the AC and related systems		Theory	Viva	Practicle
Repair AC and related systems	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. understand the AC manufacturer specifications related to the various components/ aggregates in the air conditioning system</p> <p>PC2. follow standard operating procedures for using workshop tools and equipment especially in the AC system of the vehicle</p> <p>PC3. ensure any malfunctions observed in tools and equipment used in the air conditioning systems are reported to the concerned persons</p> <p>PC4. identify and replace worn, damaged, deteriorated or faulty components/ aggregates in the AC system of a vehicle</p> <p>PC5. dismantle, reassemble and test air conditioning system components</p> <p>PC6. test pipe or tubing joints or connections for leaks, using pressure gauge or soap-and-water solution</p> <p>PC7. test electrical circuits or components for continuity, using electrical test equipments</p> <p>PC8. select appropriate fittings and materials as required</p> <p>PC9. de-gas and re-gas air conditioning system using recovery unit</p> <p>PC10. re-gas and conduct performance test on the system</p> <p>PC11. fill the unit with refrigerant and test it for leaks and malfunctions</p> <p>PC12. carry out repair work on existing units, including testing, fault finding, dismantling, repair or replacement of faulty parts, re-assembly and final testing.</p> <p>PC13. overhaul air conditioning system without causing damage to any component or system</p> <p>PC14. repair or retrofit air conditioning system without causing damage to any component or system test the installation prior to placing in service and record the results</p> <p>PC15. test the system performance using</p>			5	10
				15	30

	<p>approved methods and equipment</p> <p>PC16. carry out final inspection to ensure that:</p> <ul style="list-style-type: none"> • protective guards, safety features and cowlings are in place • the system is functional, without leaks <p>PC17. clean and maintain the work place area</p>				10
	Subtotal			20	50
ASC/N 0001	Plan & organize work to meet expected outcome		Theory	Viva	Practical
Work requirements including various activities within the given time and set quality standards	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. keep immediate work area clean and tidy</p> <p>PC2. treat confidential information as per the organisation's guidelines</p> <p>PC3. work in line with organisation's policies and procedures</p> <p>PC4. work within the limits of job role</p> <p>PC5. obtain guidance from appropriate people, where necessary</p> <p>PC6. ensure work meets the agreed requirements</p>			15	30
Appropriate use of resources	<p>PC7. establish and agree on work requirements with appropriate people</p> <p>PC8. manage time, materials and cost effectively</p> <p>PC9. use resources in a responsible manner</p>			10	20
	Subtotal			25	50
ASC/N 0002	Work effectively in a team		Theory	Viva	Practical
Interact & communicate effectively with colleagues including member in the own group as well as other groups	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. maintain clear communication with colleagues (by all means including face-to-face, telephonic as well as written)</p> <p>PC2. work with colleagues to integrate work</p> <p>PC3. pass on information to colleagues in line with organisational requirements both through verbal as well as non-verbal means</p> <p>PC4. work in ways that show respect for colleagues</p> <p>PC5. carry out commitments made to colleagues</p> <p>PC6. let colleagues know in good time if cannot carry out commitments, explaining the reasons</p>				

	<p>PC7. identify problems in working with colleagues and take the initiative to solve these problems</p> <p>PC8. follow the organisation's policies and procedures for working with colleagues</p>			20	50
	Subtotal			20	50
ASC/N 0003	Maintain safe , healthy environment friendly workplace		Theory	Viva	Practical
Resources needed to maintain a safe, secure working environment	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. comply with organisation's current health, safety and security policies and procedures</p> <p>PC2. report any identified breaches in health, safety, and security policies and procedures to the designated person</p> <p>PC3. Coordinate with other resources at the workplace to achieve the healthy, safe and secure environment for all incorporating all government norms esp. for emergency situations like fires, earthquakes etc.</p> <p>PC4. identify and correct any hazards like illness, accidents, fires or any other natural calamity safely and within the limits of individual's authority</p> <p>PC5. 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</p> <p>PC6. follow organisation's emergency procedures for accidents, fires or any other natural calamity</p> <p>PC7. identify and recommend opportunities for improving health, safety, and security to the designated person</p> <p>PC8. complete all health and safety records are updates and procedures well defined</p>			20	40
	Subtotal			20	40
	Total	840	340	160	340

Means of assessment 1: Theory/Knowledge test to be carried out online for which question paper is generated by the computer from the question bank repository. Only in an exceptional case where connectivity and hardware availability is a challenge, the same would be carried out in pen and paper mode after due approval (Please refer section 1)

Means of assessment 2:- Viva / face to face interview and practical test to be carried out by ASDC assessor as per the QP Assessment Criteria. (Please refer section 1)

cut off criteria for certification (*Marks obtained in %*):

75

*based on weighted %

SECTION 2

EVIDENCE OF NEED

What evidence is there that the qualification is needed?

This job role was identified during industry engagement for development of Occupational Map.

The total number of industry validations for this QP are:

Large =38

Medium=12

Small=66

(Details of the Industry validation are attached in Common Files)

What is the estimated uptake of this qualification and what is the basis of this estimate?

Skill GAP analysis carried out by a reputed research agency provided a broad estimate of demand. The report can be referred in the Common Files. ASDC is taking initiative to develop a labour market information database that would peg the demand more accurately- job role wise as well as based on geographical spread. Key enabler segments for the core segments of the Automotive Industry include Auto Insurance, Financiers, Mechanics, and Auto Dealers etc.

Based on the current growth profile in the Indian auto Industry, it is expected that an additional 2~2.5 million employment opportunities per annum will be created in the Indian auto industry over the next decade. The details below provide the manpower requirement at various levels:

- Skill Level 1 – 4 , people, Demand for such manpower is expected to be around 15 – 18 lakh per annum.
- Skill Level 5 -6 people working as supervisors on the shop floor. Demand for such manpower if expected to be around 4 lakh per annum.
- Skill Level 5- 7 people includes primarily engineers (B.E., M. Tech., MS), working in managerial grade, and demand for such manpower is expected to be around 1 lakh per annum.
- Skill Level 6-10 people are executives, including engineers and doctorates, and demand for such manpower is expected to be around 0.5 lakh per annum.

What steps were taken to ensure that the qualification(s) does/do not duplicate already existing or planned qualifications in the NSQF?

Qualifications Registration Committee's (QRC) diligence process ensures no duplication.

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?

ASDC actively seeks feedback from all stakeholders. The feedback is to be collated and rationalized for updating QP by the designated review schedule.

Review date: 01/08/15

SECTION 3

Summary of Direct Evidence (from learning outcomes): responsible for routine diagnostics, repair, maintenance, replacements related to the AC system aggregates & their problems.

Justify the NSQF level allocated to the QP by building upon the five descriptors of NSQF. Explain the reasons for allocating the level to the QP.

Generic NOS is/are linked to the overall authority attached to the job role.

AC Specialist (ASC/Q 1416)					
Process required	Professional Knowledge	Professional Skills	Core Skills	Responsibility	Level
The individual should be able to do routine jobs like Installation of Air conditioning systems in vehicles, service and carryout routine maintenance and repairs of the air conditioning system of vehicles.	<p>The individual on the job needs basic factual Knowledge of overall functioning of AC systems of vehicles along with knowledge of how to clean, test, inspect, evaluate and install various air conditioning components such as Compressor, evaporator Condenser etc.</p> <p>He needs to know the methods for: adjustment, refrigerant leak detection, performance testing, refrigerant re-gassing and de-gassing.</p> <p>The individual needs to know how to use the health, safety and accident reporting Procedures and the importance of these.</p>	<p>The individual on the job requires practical skills to analyse all options available for cooling & air conditioning in the OEM vehicle before the installation of the AC unit.</p> <p>He needs to plan work according to the required schedule and location and ensure that customer's requirements regarding the clutch assembly and allied aggregates/ components are assessed and satisfactory service is provided.</p>	<p>The individual on the job should be able record and document the basic details of installations, performed of the AC systems as well as details of service and routine maintenance and repairs performed.</p> <p>He needs to communicate effectively with customers, superiors and support staff and make a decision on a suitable course of action appropriate for accurately completing the task within resources.</p>	<p>The Individual is responsible for deciding on the appropriate air conditioning system required for the vehicle and Installing the same.</p> <p>The Individual is also responsible for servicing and routine maintenance of the air conditioning system .</p> <p>He is responsible for maintaining a safe working environment as per the prevalent norms & government policies and knowledge of emergency and evacuation procedures.</p>	4
Level 4	Level 4	Level 4	Level 4	Level 4	Level 4

Please attach any documents giving further information about any of the topics above.
Give details of the document(s) here:

SECTION 4

EVIDENCE OF RECOGNITION OR PROGRESSION

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?

Occupational and career maps indicating horizontal and vertical mobility have been created and are being used.

Please attach any documents giving further information about any of the topics above.
Give details of the document(s) here:

List of Annexure(s)

Annexure A = Cutoffs

Annexure B= Accredited Assessment Agencies guidelines