

CONTACT DETAILS OF SUBMITTING BODY

Name and address of submitting body:

Textiles Committee (Ministry of Textiles, Govt. Of India)
P Balu Road, Prabhadevi Chowk,
Mumbai - 400025

Name and contact details of individual dealing with the submission:

Name : Kartikay Dhanda

Position in the organisation : Director (Lab)

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List of documents submitted in support of the Qualifications File:

1. Career map of Calendaring Machine Operator
2. Calendaring Machine Operator Course Module
3. Format for RFP for Assessment Agency Accreditation from RSA
4. Assessment Protocol developed by RSA
5. Skill gap report for textile sector
6. Assessment sheet
7. Photographs and attendance sheet of the validation programme.

NSQF QUALIFICATION FILEApproved in 23rd NSQC Meeting, 22nd August, 2019**SUMMARY:**

1	Qualification Title	Calendering Machine Operator
2	Qualification Code, if any	TC PRC 08
3	NCO code and occupation	NCO-2015/8154.18
4	Nature and purpose of the qualification (Please specify whether qualification is short term or long term)	A certificate course under ISDS (A project of Govt. Of India) Purpose: To convert a non worker (layman) into a worker (able to operate a Calendering machine)
5	Body/bodies which will award the qualification	Textiles Committee (RSA) under the Ministry of Textiles
6	Body which will accredit providers to offer courses leading to the qualification	Ministry of Textiles/ Office of Textile Commissioner / Resource Support Agency (Textiles Committee)
7	Whether accreditation/affiliation norms are already in place or not , if applicable (if yes, attach a copy)	N/A
8	Occupation(s) to which the qualification gives access	Calendering Machine Operator
9	Job description of the occupation	A Calendering machine Operator - gets work(program) allotted by his supervisor and is responsible for carrying out operating all activities of the Calendering machine giving due importance to safety and environmental aspects.
10	Licensing requirements	N/A

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11	Statutory and Regulatory requirement of the relevant sector (documentary evidence to be provided)	N/A
12	Level of the qualification in the NSQF	2
13	Anticipated volume of training/learning required to complete the qualification	300 hrs
14	Indicative list of training tools required to deliver this qualification	<ul style="list-style-type: none">• Calendaring machine
15	Entry requirements and/or recommendations and minimum age	<ul style="list-style-type: none">• The candidate should be able to read and write in any language.• Minimum 14years of age
16	Progression from the qualification (Please show Professional and academic progression)	Non Worker to Calendaring Machine Operator
17	Arrangements for the Recognition of Prior learning (RPL)	N/A
18	International comparability where known (research evidence to be provided)	N/A
19	Date of Planned Review Of the qualification	2021

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20	Formal structure of the qualification		
	Mandatory components		
	Title of component and identification code/NOSs/Learning outcomes	Estimated size (learning hours)	Level
	Theoretical Knowledge to impart relevant basic technical information of the machines and its operations	60	2
	Practical knowledge of the course to understand the work practices and operating the machines.	210	
	Soft Skills to improve safety, behavior, hygiene, attitude, etc.	30	
	sub total	300	

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

1. Calendering Machine Operator course module – [Annexure II](#)

SECTION 1

ASSESSMENT:

21	Body/Bodies which will carry out assessment: The Assessment Agencies empanelled under Resource Support Agency (Textiles Committee) will carry out the Assessment. Details of the documents: List of Assessment Agencies empanelled under Resource Support Agency (Textiles Committee) is mention below.
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22	<p>How will RPL assessment be managed and who will carry it out?</p> <p>N/A</p>
23	<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> <ul style="list-style-type: none">a) The emphasis is on 'learning-by-doing' and practical demonstration of skills and knowledge based on the performance criteria.b) The assessment Sheets are developed by Subject Matter Experts (SME) available with the Resource Support Agency.c) The assessments sheets are also checked for the various outcome based parameters such as technical knowledge, soft skills, Practical Knowledge, & equipment requirement, etc.d) The assessments are designed so as to assess maximum parts during the practical hands on work. Duties and responsibility of a Calendaring Machine Operator are also assessed.e) The assessment agencies are instructed to hire assessors with integrity, reliability and fairness. Each assessor shall sign a document with its assessment agency by which they commit that they are not associated with any other assessment agencies or any training to avoid any conflict of interest, independence from commercial and other interests that would compromise impartiality of the assessments.f) The assessment agencies are instructed to Ideally have assessor with right mix of industry experience, academia and these are detailed in Assessment Protocolg) The documents of the assessors selected by Assessment Agencies are then forwarded to RSA for further scrutiny.h) The selected assessors are provided with unique assessor id by RSA as per the assessment protocol. <p>The assessment results are backed by evidences collected by assessors.</p>

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1. The assessor ensures that the attendances of the trainees are equal to or more than 60%.
2. The assessor needs to verify the authenticity of the candidate by confirming the biometric identity. In case of suspicion, the assessor should authenticate and cross verify trainee's credentials in the enrolment form.
3. The assessor collects the assessment summary sheet with signature of both the assessor and the Implementing Agency's coordinator after successful completion of the assessment.
4. The assessor also needs to carry a photo ID card.
5. The assessor verifies whether the training infrastructure is in compliance to the criteria as set by RSA.
6. The details on assessment are elaborated in the Assessment Protocol developed by RSA.

All accredited Assessment Agency follow the "Assessment Protocol developed by RSA". Each course module comprises of soft skills, theoretical part and practical and accordingly the assessment sheets are prepared. The marks for the theoretical and practical assessment, in total, are calculated and the candidates acquiring marks equal to or more than 60% are declared pass.

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

Give details of the document(s) here:

1. Format of RFP for AA Accreditation from RSA- [Annexure III](#)
2. Assessment Protocol Developed by RSA – [Annexure IV](#)

24. ASSESSMENT EVIDENCE:

Title of Component:

Outcomes to be assessed/NOSs to be assessed	Assessment criteria for the outcome
<p>Practical Outcome:</p> <ul style="list-style-type: none"> • Setting the control panel, • Operate the Machine, • Setting between steel roll, cotton roll and plastic roll • Maintain the steam pressure of the machine, • Proper passage of fabric through guide rollers & through metal detector to be careful about the speed & temperature of the machine 	<ul style="list-style-type: none"> • The assessor will ask the trainee to set the machine for different qualities of fabric. • The trainee will be asked to operate the machine on a sample fabric. • The trainee will be asked to do the setting of the steel, cotton and plastic roll according to the different qualities of fabric. • He/she will be asked to set the steam pressure for a sample fabric. • He/she will be asked by the assessor to pass the cheda fabric through various guide rollers and He/she will be asked to maintain the temperature and speed of the machine.

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Theoretical Outcome: <ul style="list-style-type: none">• Knowledge of basic textiles terms,• Importance of metal detector and seam detector,• Different parts of machine and their functions,• Importance of inspection at outlet of the machine.• Calendaring defects & their remedies.	<ul style="list-style-type: none">• The trainee will be asked questions by the assessor regarding the basic textile terms (given in the assessment sheet).• The trainee will be asked about the importance of metal and seam detector.• He/she will be asked questions regarding the different part of the machines and their functions without them the machine.• The assessor will ask questions like what is the importance of inspection at the outlet of the machine.• The questions regarding defects of calendaring and their remedies will be asked by the assessor as per the assessment sheet.
Safety precautions	The assessor will ask questions like what safety precautions will you take before starting the machine etc.
Means of assessment 1	Theoretical and practical knowledge would be assessed separately with the help of questionnaire (already attached above)
Means of assessment 2	N/A
Pass / Fail	Qualified or Not qualified. Only after qualifying the certificate will be awarded.

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SECTION 2

25. EVIDENCE OF LEVEL

Title / Name of qualification / component: Calendering Machine Operator	Outcome of the Qualification/Component	How the outcomes relates to the NSQF level descriptors	NSQF level
Process	A Calendering machine Operator - gets work(program) allotted by his supervisor and is responsible for carrying out operating all activities of the Calendering machine like to maintain the steam pressure of the machine, to be careful about the speed & temperature of the machine. Should maintain the continuity without stopping the machine. Operator should be able to stitch the fabric on simple sewing machine.	The process like setting the control panel, operating the machine, handling the various qualities of fabric for giving various effects are the work which are having repetitive nature. This work is done by the operator on regular basis to operate this machine with a little understanding like he/she should operate the machine according to the required procedures.	2
Professional Knowledge	A Calendering machine Operator needs to know the process and material flow in a textile	The operator has to handle different panels of the machine according to	2

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	<p>processing mill, functioning of different types of processing machines, oiling and greasing, . Understanding of various defects in the fabric. Understanding of importance of quality & productivity and proper handing over shift and taking over shift is very important for efficient production. Also should follow the SOP and safety standards, etc. maintained by the company</p>	<p>the different qualities of the fabric. In this way he/she will work with high efficiency, focus on the quality of the product and he/she will make sure that there should be least wastage.</p>	
<p>Professional Skills</p>	<p>This operator operated the fabric Calendering machine on routine basis on instructions from supervisor, attends workshops, provides suggestions in interest of the company, and extends voluntary support wherever required. Also identifies the cause of a problem and applies problem solving approach to get the best suitable solution, refers defects to the supervisor</p>	<p>Limited service skills used in limited context like operating the machine etc. He/she have to maintain the speed and temperature according to the fabric. He/she will assist in professional work like to told about any special defects in the machine while working on it. He/she will know about the defects of the product so that he/she could differentiate the</p>	<p>2</p>

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		good and bad quality.	
Core Skills	<p>This operator writes clear and short sentences, comprehends written instructions, communicates with the supervisor appropriately and talks to others to convey information effectively. Applies problem-solving approaches in different situations during the production and performs basic calculations required during the production process for quality and uninterrupted output. Operating the machine/control panel as per instructions. Safe handling of tools and equipments. Will be able to set the machine according to the material dyed. Ensures proper functioning of the machine. Safely handles dyes & chemicals using personal protective equipments. Knows personal financing and understands social, political and religious</p>	<p>Receive and transmit written and oral messages like the operator received written instruction from the shift officer and transmit them to the helper. The operator knows basic calculations like addition, subtraction etc. and he uses the same for bath solution preparation according to the required procedure.</p>	2

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	diversity, hygiene and environment.		
Responsibility	<p>This operator takes charge of the shift after discussing in the issues faced with respect to the quality, production and safety, reports to his shift superior about issues faced in his shift and leaves the department. He is not responsible for any mishap and works under instructions with close supervision. He contributes in making the work place healthy, safe and secure and follows the industry & organizational compliances.</p>	<p>As the operator leave the premises after discussing the issues faced during the shift, no responsibility lies on the operator. The shift supervisor takes up the matter and resolves the problem, if any. The operator works under instruction and close supervision of the supervisor.</p>	2

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SECTION 3

EVIDENCE OF NEED

26	What evidence is there that the qualification is needed? What estimated uptake of this qualification and what is the basis of this estimate?		
	Basis	In Case Of SSC	In case of other Awarding Bodies (Institutes under Central Ministries and states departments)
	Need of the qualification		<p>Different course validation programs were conducted the details of which is mentioned below:</p> <ol style="list-style-type: none"> 1. Validation program of Spinning and Weaving course modules developed by RSA was conducted at Coimbatore (Ref. RSA fortnightly report as on 29.05.2015 to MoT). 2. Validation program of Processing, Knitting and Apparels course modules developed by RSA was conducted at Tirupur (Ref. RSA fortnightly report as on 29.05.2015 to MoT). 3. Workshop on course content validation was held in New

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			<p>Delhi on 29.06.2015.</p> <p>4. One day orientation program on course content and assessment on 13th August, 2015 was conducted in New Delhi</p> <p>5. Two validation programs were conducted at Ludhiana and Panipath on 2nd june 2015 3rd june 2015 respectively</p> <p>6. Industrial consultation workshop with the stake holders, traders and industry for course content developed by RSA was organized on Saturday. 31.05.2015 at Coimbatore for validation.</p> <p>Participants from industry, implementing agencies & assessment agencies participated in the validation programs. Based on the feedback from participant's tables modifications in the course module were incorporated and some more modules were developed.</p>
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	Industry Relevance		This job role is required in the specific industry and also validates by organisation of the industry. The list of which is attached below.
	Usage of qualification		It will be used for training purpose to convert a non worker into a worker. Also to skill and up-skill the candidates
	Estimated uptake	As per the report of NSDC on Human Resource and Skill Requirement in Textile and Clothing Sector (2013-17, 2017-22) (Annexure-5): Currently, 15.23 million people are employed in the textile subsector across yarn and fabric, home textiles, technical textiles and readymade garments. Human resource requirement in the sector is expected to reach 21.54 million by 2022 translating into 6.31 million additional employment opportunities during the period 2013-22. Also the National Textile Policy aims to create 35 million jobs and achieve exports worth INR 18 lakh crores by 2024-25 with the help of investments. Draft proposal for the same was submitted by expert panel constituted by the government on 28th July, 2014.	
27	<p>Recommendation from the concerned Line Ministry of the Government / Regulatory Body. To be supported by documentary evidences.</p> <p>Textiles Committee as Resource Support Agency (RSA) is itself submitting the said qualification as per the direction of MoT.</p>		

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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>QPs for Job Roles of various related SSC's were studied to ensure that there is no duplicity for the claimed levels i.e. level 2</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> <p>Version 1 of the courses has been prepared and uploaded on Textiles Committee website and next version will be prepared by September 2018. Feedback for the courses will be collected 6 months prior to the revision and format for the said purpose will be prepared and uploaded to TC website for receiving the comments from the stake holder for any change, if required, in the said course. Further, the feedback form will be sent to all the Implementing Agencies under MoT for their necessary comments before taking the exercise of revision of version-1.</p> <p>After receiving feedback and compiling the same the necessary amendments, if required, will be made and all the course will be revised by the team of experts in the domain field.</p>

Please attach any documents giving further information about any of the topics above.

Give details of the document(s) here:

1. Skill gap report for textile sector_2008-2022– [Annexure V](#)

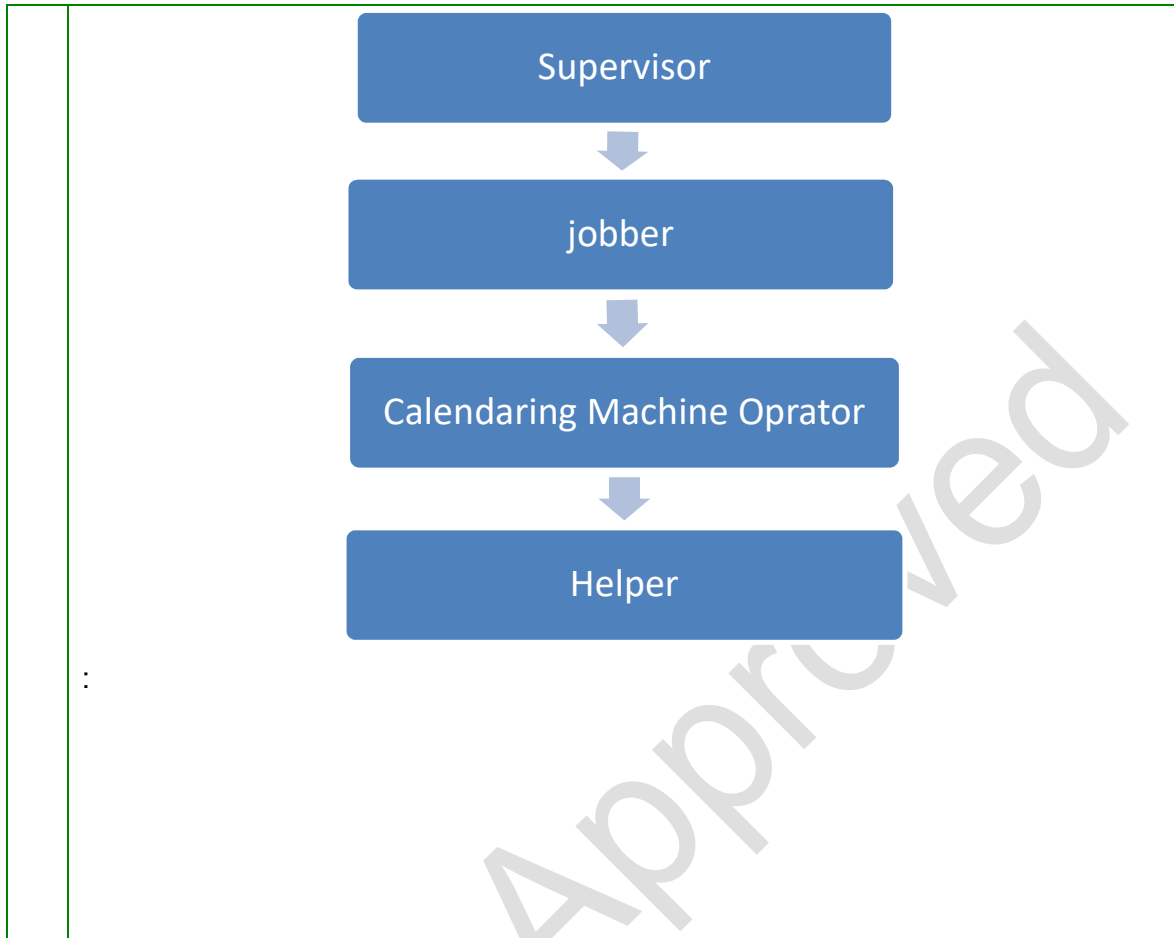
SECTION 4

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>Show the career map here to reflect the clear progression</p> <p>By acquiring this qualification the operator will be able to operate Auto coner machines. After giving some extra training the operator will be able to operate other Autoconer, other winding machines etc.</p> <p>The career progression would be as follows :</p>
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Most relevant and recent documents giving further information about any of the topics above:

List of documents submitted in support of the Qualifications File:

1. Career map of Calendaring Machine Operator

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2. Calendaring Machine Operator Course Module
3. Format for RFP for Assessment Agency Accreditation from RSA
4. Assessment Protocol developed by RSA
5. Skill gap report for textile sector
6. Assessment sheet
7. Photographs and attendance sheet of the validation programme.

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List of Industries involved in the validation process:

- SITRA, Coimbatore
- TASMA, Dindigul
- ALPINE Knits India Pvt. Ltd.
- NIFT, Tirupur
- Nitin Textiles Pvt. Ltd., Dindigul
- Saravana Spg. Mills Pvt. Ltd. Dindigul
- Gomathi Spinning Mills, Tirupur
- Quantum Knits
- G K Consultancy
- BRT Spinners Pvt. Ltd.
- Sky Cotex India Pvt. Ltd.
- KCT, Copimbatore
- Raghav Industries limited
- Textile Technology Kumaraguru College
- NIFTTEA College, Tirupur
- CBC Tirupur
- SCM Textiles
- Sri Karthikeya Spg. Mills
- ELLITE Textiles
- Aatharva Garments
- ATDC-ERODE
- ATDC-Tirupur
- Santhosh Spg mills
- Sri Venkateshwara Spg. Mills
- Venilakshmi Mills
- Hi Tech Spg. Mills
- Sunder Textiles

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- SISPA
- Bhaskar Foundation
- CMAI-Mumbai
- ALT Kanpur
- RSWM, Banswara
- RSWM, Bhilwara
- Modelama Exports
- Textile Association Delhi
- Matric Clothing Pvt. Ltd (ASDA)
- NEED
- Institute of Jute Technology, DJFT, CU
- Dhruv international pvt. Ltd.
- Shri lakshmi Cotsyn
- NTC- New Delhi
- AMH-SSC
- Laj Exports Ltd, noida
- Technopak Advisors Pvt. Ltd.
- Wazir Advisors
- Golden Trends Pvt. Ltd.
- IL&FS Clusters
- SPINFED Odisha
- Orient Craft Limited
- India Fashion
- U K International
- Shivalik Prints
- Feather Touch
- Sampada tex
- Kapoor Industries panipat
- Paliwal Industries
- Rivira Home Furnishings
- Dashmesh Jacquard and Powerloom
- Mittal Industries

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- Anand International
- Harisons Overseas
- Khurana Furnishing Pvt. Ltd.
- R H F Pvt. Ltd.
- ESSKAY Enterprise
- Hometex Design
- Abhishek Textiles
- R P Overseas

FAZE3

List of Assessment Agencies Provisionally empanelled under

Resource Support Agency (Textiles Committee)

Sr. No.	Name of the Applicant Agency
1	SAMHIT Assessments and Research Foundation
2	Employable Skills Advancement, Assessments and Certification LLP

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3	E Skill revolution Pvt. Ltd.
4	Amrit Skills Development Pvt. Ltd
5	Punia Consultancy LLP
6	AIMS Educational Society
7	PVR Skill Central Pvt. Ltd.
8	Sun Gateway
9	INNOCOX Consulting and Research Pvt. Ltd.
10	Indus Institute of Skills Management Pvt. Ltd.
11	Indian Institute of Multimedia and Animation Technology
12	Last Mile Innovation Pvt. Ltd.
13	Wirat Skill Pvt. Ltd.
14	FORMAC Software Service Pvt. Limited
15	Grassroots Skill Development Initiative Pvt. Ltd.
16	Blue and Green Skills Solution
17	E & E Skill Development and Technologies Pvt. Ltd.
18	The Unique Handloom and Handicraft Society
19	Radiant Infonet Pvt. Ltd.
20	Yuva Skill Foundation
21	Odisha institute for Social Development
22	Federation of Indian Chamber of Commerce and Industry
23	QUIZ India Solutions and Services Pvt. Ltd.
24	Krushi Mitra Grameen Abhivruddhi Sansthe
25	Rajiv Gandhi education Foundation
26	PSG College of Technology
27	Quibus Technologies Pvt. Ltd.
28	ITCOT Consultancy and Services Pvt. Ltd.
29	Ayman Trainer Wings Pvt. Ltd.
30	Aspiring Minds Assessment Pvt. Ltd.
31	Eduquity Career Technologies Pvt. Ltd.
32	Pacifier Solutions Pvt. Ltd.
33	KSR Institute of Technology

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34	ASSOCHAM
35	Easyfix Technologies Pvt. Ltd
36	DN Polytechnic Education Trust
37	TIRTH Global Solutions LLP
38	RAS Skill Initiatives
39	TUV SUD South Asia Pvt. Ltd.
40	Rational Multiskill Pvt. Ltd.
41	Skill Training Assessment Management Partners Ltd. (STAMP)
42	Global SME Devnet Pvt. Ltd.
43	Federation of Indian Women Entrepreneur
44	Inspire Youth Development Pvt. Ltd.
45	Trendsetters Skill Assessors Pvt. Ltd.
46	Skill Mantra Edutech Consulting India Pvt. Ltd.
47	The Assessors Guild
48	Dharmarth paristhapan Evam Sanskriti Samvardhan Samiti
49	AYES Infotech Pvt. Ltd
50	SKISAT
51	Shri Guru Hargovind Society
52	Geostat Technologies Pvt. Ltd.
53	Imperial Service Development Society
54	Sehpathi Publications Pvt. Ltd.
55	Mirams Training Services (I) Pvt. Ltd.
56	I-Vintage Solutions Pvt. Ltd.
57	Mercury Institute of Engineering and Technology
58	Veritas Skill and Research Pvt. Ltd.
59	Tanstia FNF Service Center
60	Roshtoffe International Pvt. Ltd.
61	Truely Yours Welfare Society
62	Sell Safari EBIZ Pvt. Ltd.

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63	Unique Call Solutions Pvt. Ltd.
64	Skill Express Learning Solutions Pvt. Ltd.
65	MSAG Skill India LLP
66	Base research Consultancy Services Pvt. Ltd.
67	C K Skills Research and Development Pvt. Limited
68	DNA Training Academy Pvt. Ltd.
69	Bayleaf
70	People Point
71	SB Assessors and Services Pvt. Ltd.
72	Narsingh Technical Shiksha Samiti
73	Doon Bosco Women Education and Vocational Training Society
74	Central Technical Consultancy
75	ITRC Technologies Pvt. Ltd.
76	Centurian University of Technology and Management