Subject: Mandatory Compliance of AEBAS under CSSM component of PMKVY and SOP-reg.

The undersigned is directed to inform that in pursuance of the decision taken by the Steering Committee under PMKVY in its 9th meeting, use of AEBAS (Aadhaar Enabled Biometric Attendance System) for capturing attendance of the trainees and trainers under CSSM component of PMKVY has been made mandatory w.e.f from 1st April, 2018. Till then, the states are advised to begin batches and capture attendance on their MIS Portals/manual attendance till AEBAS is fully rolled out.

2. AEBAS monitors the attendance of students enrolled under PMKVY on a real-time basis. The attendance gets captured on a central portal called the Skill Attendance Portal (www.skill.attendance.gov.in) designed by NIC which helps in checking duplication of candidates. AEBAS is currently mandated for use in all training centres except for North East States and J&K. AEBAS forms the basis for the assessment of the enrolled students under the scheme. PMKVY is a fully Aadhar compliant scheme and is also checking the basic candidate details with UIDAI before enrolment into the programs. As the implementation agency for the State Component of PMKVY 2.0, the SSDMs needs to get onboarded onto the Skill Attendance Portal developed by NIC and register all its training centres on it.

3. The SOP followed by NSDC for carrying out the onboarding process for AEBAS in coordination with NIC is enclosed herewith and may be used by the SSDMs for reference while developing their own mechanisms and procedures to implement AEBAS under CSSM. The SOP enlists various practices that NSDC follows while implementing AEBAS under CSCM. While formulating their own SOP, SSDMs may reach out to their State NIC Officers for any advice and support. For additional support and consultations, SSDMs may contact Shri Vishwajeet V. Ringe, STD & HOD, NIC AEBAS Team, MSDE at ringe@nic.in or at 011-23450945.

4. This issues with the approval of competent authority.

(Rajnish Kumar Gupta)
Director
Tel. No.: 23450886
E-mail: rk.gupta74@gov.in

Encl: As above

To:
1. Mission Director/ Concerned Officials of State Skill Development Missions from 36 States/ UTs
2. Shri Vishwajeet V. Ringe, STD & HOD, NIC AEBAS Team, MSDE with a request for providing necessary support to the SSDMs
3. MD & CEO, NSDC, Aerocity, New Delhi

Copy to:
1. PS to Secretary, MSDE
2. PS to Joint Secretary (Skill Development), MSDE
Aadhar Enabled Biometric Attendance System (AEBAS)

1. Introduction

Aadhar Enabled Biometric Attendance System (AEBAS) is a pre-requisite to participate in PMKVY 2. AEBAS stands as a non-negotiable component of the scheme and Aadhar enabled biometric devices for capturing students' and trainers' attendances is mandatory. The state of Jammu and Kashmir as well as North – Eastern states are exempted from Aadhar enabled biometric attendance.

<table>
<thead>
<tr>
<th>What is AEBAS?</th>
<th>AEBAS is acronym for Aadhar Enabled Biometric Attendance System.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why AEBAS?</td>
<td>AEBAS monitors student's attendance on a real time basis, bringing in accountability and transparency. When students punch in attendance their in and time out is noted. Attendance is marked for both students and trainers.</td>
</tr>
<tr>
<td>What does one need to punch in attendance on AEBAS?</td>
<td>One needs a valid Aadhar Card and guideline specified biometric machine.</td>
</tr>
<tr>
<td>AEBAS and PMKVY 2016-2020 Mandate</td>
<td>PMKVY 2016-2020 mandates use of AEBAS at all training centers except for North East and J &amp;K.</td>
</tr>
</tbody>
</table>
| Why is AEBAS Important in PMKVY | 1. AEBAS is mandatory to receive the first tranche payment.  
2. It forms the basis for student's assessment.  
3. Noncompliance of AEBAS process may lead to targets being revoked/strict action may be initiated. |
1.1 AEBAS – PMKVY Dashboard - Snapshot

Dashboard: Biometric Attendance System

- 7493 Organizations
- 1125910 Registered Candidates
- 154962 Present Today
- 3696 Active Devices

1.2 Process Flow of AEBAS

Device Procurement → Download onboarding form → Courier onboarding form

Complete onboarding on Skill Portal → Activate Device → Add Nodal officer/Admin

Add Students/Activate → Punch Attendance → Generate Attendance Report
1. Students punches in attendance at box A (AEBAS) machine. Information like that of biometric match, name, other detail capture in Aadhar Card is sent to Box B.
2. Box B is the BAS server which received the information, and then further sends to UID server which is Box C.
3. UID server authenticates the information receive, if the details matches to the database attendance is marked successfully. In case it does not match then an error code is generated which is shown on the tab at the training center.
4. All information which is exchanged from Box A-B-C and back is encrypted as specified by the Aadhar guidelines.

2. AEBAS stages installation and compliance

<table>
<thead>
<tr>
<th>Stage: 1 Center Accreditation and Affiliation &amp; Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.Center Accreditation and Affiliation Process/Compliance</td>
</tr>
<tr>
<td>Training Center must have an AEBAS machine while applying for Center Accreditation and Process. In case of non-availability of machine, center is ‘conditionally’ affiliated. Training center must get AEBAS within two months of getting affiliated failing which conditional accreditation is withdrawn.</td>
</tr>
<tr>
<td>1.1 Device Procurement</td>
</tr>
<tr>
<td>Accreditation of center is based on availability of AEBAS hence device procurement should be initiated prior to/or as soon as filling up application of accreditation process</td>
</tr>
<tr>
<td>1.2 Where can the device be procured from?</td>
</tr>
<tr>
<td>Device can be procured from <a href="https://gem.gov.in/">https://gem.gov.in/</a></td>
</tr>
</tbody>
</table>
### 1.3 Device Specification

A device must meet the below specification:
- UIDAI (API 2.0) with L0 and RD compliant.
- NIC AEBAS Compliant wall mount tablet.
- UIDAI Approved
- Android 4.4. & Android 5.1 or above
- BAS Application Version 3.342 & above
- STQC approved FPS integrated Tablet
- Device must be wall mounted and tab based

### 1.4 Number of devices to be installed?

It is recommended to install 1 device per 30-40 students.

### Stage 2: Post Target Allocation

#### 2.1 Download the onboarding form

Once the target is received, TP should download onboarding form as given on [https://goo.gl/NAuPnz](https://goo.gl/NAuPnz). Onboarding of AEBAS should be parallel to all the processes. Onboarding takes about 14 working days.

#### 2.2 Instruction to fill the onboarding form

- Fill in the form in capital letter or type it out
- Nodal and IT officer are the two people to be appointed from within your organization.
- Sign only on right side of form, left side is for NSDC to sign and stamp
- Form is rejected in case of incomplete details.

*Always keep a scanned copy of the filled form for reference.*

#### 2.3 Post the filled form.

Filled form to be sent to:
National Skill Development Corporation 301, 3rd Floor, West Wing, Worldmark 1, Aerocity New Delhi-110037

## Stage: 3 Process and timeline of onboarding
3.1 Form Processing Timeline

- Once the hard copy of the form reaches at the address mentioned above, it takes about seven to eight working to process the same.
- Day 8th – Organization name appears on http://skill.attendance.gov.in/register/organization
- Click the drop-down option
- Select your organization name
- Fill in the details
- Details should be same as sent in the form
- Submit the form
- In 3-4 days login credential are sent to the nodal officer email ID
- Please check nodal officer inbox as well as SPAM folder.

3.4 Device Activation

- For device to be activated nodal officer must complete all the steps mentioned on the portal (http://skill.attendance.gov.in/register/organization)
- Nodal officer must make necessary global master entry after logging on the Portal with the credentials received from AEBAS team e.g. Manage Masters, Division, Units, Trade/Job profile, Details of the Trainee $ Trainer, Office location (sent with credentials), Device location, Shifts of Batches, Office timings.
- One of the candidate or Trainer or Nodal Officer is to be made the Biometric Administrator. This can be done on the device (Manage Device>Add Biometric Admin). Please ensure that whoever is made the biometric admin must be registered and activated on the portal.
- Nodal officer will have to generate activation code for Biometric Admin (Manage device->Activation Code)
- AEBAS Wall mount DEVICE to be preconfigured by the Vendor or instructions and software to be download from http://basreports.attendance.gov.in/downloads/
- Open the AEBAS app in the wall mount device, select domain as skill development and enter the activation code generated and click on lock icon.
- Select Entry point i.e. Device location entered by Nodal officer.
3.3 Candidate Registration

Once the master entries as mentioned in the preceding section are made by the Nodal officer, Candidate may register themselves on the respective TC URL (allocated by NIC AEBAS Team) without logging in by choosing Candidate Registration tab and fill their Personal details like Candidate Name, Aadhar no, D.O.B etc. and Organization Details like Candidate type i.e. Non-Government designation as Trainee/Trainer/Training Head or as applicable.

3.4 Marking Attendance

- After registration of all the candidates by Nodal officers or Candidate by themselves on the URL (Provided to TP/TCs by helpdesk team)
- The Attendance ID will be generated from your Aadhaar number, the last 8 digit number of their Aadhar is attendance id for each student. The attendance ID will only be active to mark attendance only when your Aadhaar information is verified by UIDAI and activated by you Nodal officer.
- Attendance ID has also been sent by SMS to your registered Mobile Number. Enter your 8-digit Attendance ID on Screen.
- A Red light will start to glow on Finger Print Scanner (Wall mount Tablet/USB device).
- Now put any one of your fingers on the Finger Print Scanner.
- DO NOT move your finger on scanner otherwise finger prints will not be properly scanned.
- DO NOT Press very hard on Finger Print Scanner.
- Once the screen shows "Authenticating, Please Wait". Remove your finger from the scanner.
- A pop-up screen will show your Photo and Attendance Type as "Opening" for the first time you mark the attendance for that day

• Scan finger of Biometric Admin for whom Activation code was generated.
• After Scanning finger of Biometric Admin, in case of Invalid Activation code Please check the Device location in the portal, Status must be like this as shown below, here Deactivate means device location is Activated:
If Attendance Type is "Closing" then it will be counted as OUT Time. However, OUT time would be the LAST "Closing" time marked by you. Any "Closing" time in-between "Opening" time and Last "Closing" time would be ignored.

If, you see a CROSS instead of your photo, then some ERROR has occurred while marking attendance.

You will be able to mark your attendance in any bio-metric terminal installed in your TP/TC.

You can also mark your attendance in any of fingerprint devices (USB), which have been connected on Windows 7 or Windows OS. Presently client attendance software is not available for MAC OS.

If you are having difficulty in marking attendance using fingerprints scanning devices, please try marking your attendance through Iris Device.

3.5 Generating Attendance Report

Nodal officer can Generate Attendance Reports of the candidates as per requirement.

Types of Reports:

1. Attendance Today
2. Attendance Register
3. Advance Reports
4. Dynamic Advance Reports
5. Date wise Attendance
6. Dynamic Date wise Attendance
7. Weekly/Monthly Report
8. Shift Report etc.

Students may also check their attendance itself by choosing Candidate Login tab and enter their attendance ID, an OTP will sent to Candidate's registered mobile no. for login.
3. **Roles and Responsibility of Various Stakeholder in the AEBAS Process**

NSDC monitors and ensures AEBAS implementation through NIC - AEBAS Team.

<table>
<thead>
<tr>
<th>Issues</th>
<th>Role/ Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device issue</td>
<td>TP to connect with the device vendor</td>
</tr>
<tr>
<td>Software issue</td>
<td>AEBAS helpdesk can assist over phone but in case of no resolution, connect with device vendor</td>
</tr>
<tr>
<td>RD issue</td>
<td>Device Vendor</td>
</tr>
<tr>
<td>Form Onboarding</td>
<td>Nodal officer of center</td>
</tr>
<tr>
<td>Login credential</td>
<td>AEBAS team</td>
</tr>
<tr>
<td>Reset of password</td>
<td>AEBAS Manager</td>
</tr>
<tr>
<td>Form status</td>
<td>AEBAS team- Helpdesk</td>
</tr>
<tr>
<td>Wrong credential and password</td>
<td>AEBAS Manager</td>
</tr>
<tr>
<td>Domain issue</td>
<td>AEBAS Manager</td>
</tr>
<tr>
<td>Attendance Report Generation</td>
<td>AEBAS Manager</td>
</tr>
<tr>
<td>Device Activation</td>
<td>AEBAS Helpdesk</td>
</tr>
<tr>
<td>Adding Biometric Administrator / student</td>
<td>AEBAS Helpdesk</td>
</tr>
<tr>
<td>Internet Issue</td>
<td>Connect to the internet provider</td>
</tr>
</tbody>
</table>
In case there is no response in defined timeline as given above please send a reminder to AEBAS team to CC to NSDC team lead.

### 3.1 Escalation Matrix

<table>
<thead>
<tr>
<th>Query Related</th>
<th>L1 Support</th>
<th>L2 Support</th>
<th>L3 Support</th>
<th>L4 Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>All General Queries / Organisation Onboarding</td>
<td><a href="mailto:helpdesk-skill@gov.in">helpdesk-skill@gov.in</a></td>
<td><a href="mailto:aebasonboarding-skill@gov.in">aebasonboarding-skill@gov.in</a></td>
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</tr>
<tr>
<td>Candidate Registration Related</td>
<td><a href="mailto:helpdesk-skill@gov.in">helpdesk-skill@gov.in</a></td>
<td><a href="mailto:aebasonboarding_skill@gov.in">aebasonboarding_skill@gov.in</a></td>
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<td><a href="mailto:aebasmgr2-skill@gov.in">aebasmgr2-skill@gov.in</a></td>
</tr>
<tr>
<td>Software Download and Other Queries</td>
<td><a href="mailto:helpdesk-skill@gov.in">helpdesk-skill@gov.in</a></td>
<td><a href="mailto:aebasonboarding_skill@gov.in">aebasonboarding_skill@gov.in</a></td>
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<td><a href="mailto:aebasmgr2-skill@gov.in">aebasmgr2-skill@gov.in</a></td>
</tr>
<tr>
<td>SubDomain Related</td>
<td><a href="mailto:helpdesk-skill@gov.in">helpdesk-skill@gov.in</a></td>
<td><a href="mailto:has-moral@gov.in">has-moral@gov.in</a></td>
<td><a href="mailto:aebason_mgmt-skill@gov.in">aebason_mgmt-skill@gov.in</a></td>
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<td><a href="mailto:aebasmgr2-skill@gov.in">aebasmgr2-skill@gov.in</a></td>
</tr>
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**3.1.1 Internal Escalation Matrix for Skill Attendance Portal**

Helpdesk Support Number: 011-47451663/47451664

A Health System for Skill Attendance

<table>
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</tr>
</tbody>
</table>

### 4. Issues and Challenges

<table>
<thead>
<tr>
<th>Issue/ Challenge</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device Procurement</td>
<td>There are no empaneled vendors, hence the price of device can go up to Rs 1700 per device. Training Partners find it cost intensive and more often would use one device for attendance. In case of device failure there is no attendance.</td>
</tr>
<tr>
<td>Training Partners don’t understand the technicalities and functioning of AEBAS</td>
<td>This is a major challenge faced as all the centers are using the AEBAS for first time and there are multiple technical steps.</td>
</tr>
</tbody>
</table>
Server issues from BAS-NIC | In last one year there has been more than five outages lasting each time up to three days
---|---
Six-month caveat for implementing AEBAS | Now revoked
No financial penalty for non-compliance | Now revoked
Non-integration with SDMS | Completed in December 2017
Delayed or no response from NIC AEBAS team | NSDC though in monitoring role has to take over operational function of AEBAS team due to delay and non-responsiveness to queries.
Internet connection in the country | In most part of the country the internet connection is not stable and if present does not have enough bandwidth for marking attendance
Lack of monitoring | Monitoring on AEBAS needs to be done robust
Inclusion of Tranche 1 payment clause only on AEBAS commencement | FRS needs to build and worked on

4.1 Error Codes

Errors could be generated in the following cases:

1. Internet issue at the center
2. Slow response from BAS server
3. Issue in BAS server
4. UID server down

List of error codes is given below with corresponding response/meaning.

300: Biometric data did not match.
330: Biometric locked. Kindly contact UIDAI Helpline.
500: Invalid encryption of Skey.
502: Invalid encryption of PID.
511: Invalid PID XML format.
561: Request expired.
562: Timestamp value is future time (value specified “Pid->ts” is ahead of authentication server time beyond acceptable threshold).
800: Invalid biometric data.
811: Missing biometric data in CIDR for the given Aadhaar number.
951: Biometric lock related technical error. Kindly contact UIDAI Helpline.
997: Biometric corrupt at UIDAI.
998: Template not in Aadhaar. Try after 15 minutes after first Try.
1201: ASA Connectivity Lost to UIDAI.
1204: No Response UIDAI.
1205: Delay in response from AUA/ASA to UIDAI.
9901: Technical Error.
9902: User Not Registered.
9903: Invalid Device.
9904: Delay in response from AUA/ASA to UIDAI.
9904: Delayed Reply from AUA/ASA.

Abbreviations and Meanings

- Skey - Session key.
- PID - Personal Identity Data.
- CIDR - Central Identities Data Repository.
- UIDAI - Unique Identification Authority of India.
- ASA - Authentication Service Agency.
- AUA - Authentication User Agency.

Apart from the above error codes the most common error response which is shown on machine is 3.1 in which case the Nodal Officer should check the internet connection. In case there is a server issue (meaning either at Box B or C) then downtime report is generated and is applicable to all the centers.

At no given time Manual Attendance is admissible under PMKVY except in case of server error issue when it is applicable to all training centers.