

महाराष्ट्र शासन

दिव्यांग कल्याण विभाग. ३१, ३२, ३५ ए, मित्तल टॉवर, ए-विंग, तिसरा मजला, बॅरीस्टर रजनी पटेल मार्ग, नरीमन पॉईंट, मुंबई-०२१.

द्रध्वनी क्र.- ०२२-४०१४५१७६

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दिनांक: ३ ऑक्टोबर, २०२४

क्रमांक: संकीर्ण २०२४ / प्र. क्र. ९९ / दि.क.-१

दरपत्रक सूचना

दिव्यांग कल्याण विभागांतर्गत विषय:-अनुदानित विशेष शाळा व कार्यशाळांकरीता आधार संलग्न ऑनलाईन (Integrated Aadhaar-Based Face Recognition Biometric Attendance System) बायोमेट्रीक उपस्थिती उपकरणे करणेबाबत.

१. खरेदीची व्याप्ती :-

दिव्यांग कल्याण विभागांतर्गत असलेल्या अनुदानित विशेष शाळा व कार्यशाळांकरीता आधार संलग्न (Aadhaar-Based Face Recognition Biometric Attendance devices) ऑनलाईन बायोमेट्रीक उपस्थिती उपकरणे खरेदी करण्यासाठी मोहोरबंद लिफाफ्यामध्ये इच्छुक पुरवठादार / प्राधिकृत वितरक / विक्रेते यांच्याकडून सोबत जोडलेल्या Terms of Reference (ToR) अनुसार दरपत्रके मागविण्यात येत आहेत.

२. दरपत्रक सादर करावयाचा दिनांक

मोहोरबंद लिफाफ्यातील दरपत्रके अवर सचिव (दि.क.-१), दिव्यांग कल्याण विभाग, ३१, ३२, ३५ ए, मित्तल टॉवर, ए-विंग, तिसरा मजला, बॅरीस्टर रजनी पटेल मार्ग, नरीमन पॉईंट, मुंबई-०२१. यांच्या नावे दि. १४ ऑक्टोबर, २०२४ रोजी सायंकाळी ५.३० वाजेपर्यंत पाठवावेत अथवा प्रत्यक्ष सादर करावेत. मोहोरबंद लिफाफ्यावर ठळक शब्दात "दिव्यांगांच्या विशेष शाळा / कार्यशाळांकरीता आधार संलग्न (Aadhaar-Based Face Recognition Biometric Attendance devices) ऑनलाईन बायोमेट्रीक उपस्थिती उपकरणे खरेदी करणे" असे नमूद करावे.

सहपत्र: Terms of Reference (ToR)

आपला.

(रा.भा. गायकवाड) अवर सचिव, महाराष्ट्र शासन

प्रत,

- १. प्रत, आवश्यक त्या पुढील कार्यवाहीसाठी अग्रेषित
- २. उप सचिव (संगणक कक्ष) दिव्यांग कल्याण विभाग, मंत्रालय, मुंबई-३२
- ३. निवडनस्ती/दि.क.-१.

Terms of Reference (TOR) for the Implementing an Integrated Aadhaar-Based Face Recognition Biometric Attendance System in Schools Managed by the Persons with Disabilities (PwDs) Welfare Department

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1. Introduction and Background

The Persons with Disabilities (PwDs) Welfare Department was formed as an independent department on 15^{th} December 2022 with an aim at implementing various schemes for the welfare of persons with disabilities. As per Census of India 2011, the persons with disabilities in India are as given below -

| Population, India 2011 | | | Disabled Persons, India 2011 | | |
|------------------------|-------------|-------------|------------------------------|------------|------------|
| Persons | Males | Females | Persons | Males | Females |
| 121.08 crore | 62.32 crore | 58.76 crore | 2.68 crore | 1.50 crore | 1.18 crore |

As per Census 2011, there are 29,63,392 persons with disabilities in Maharashtra and it was 2.63% of total population of the Maharashtra State covered 7 disabilities at that time as mentioned below -

| Population, Maharashtra 2011 | | | Disabled Persons, Maharashtra 2011 | | |
|------------------------------|------------|------------|------------------------------------|-----------|-----------|
| Persons | Males | Females | Persons | Males | Females |
| 11.24 crore | 5.83 crore | 5.41 crore | 29.6 lakh | 16.9 lakh | 12.7 lakh |

As per Census of India 2011, the district wise population of (PwDs) in Maharashtra are as mentioned below –

| S. No | Name of the District | Males | Females | Total |
|-------|----------------------|--------|---------|----------|
| 1 | Thane | 142840 | 108917 | 2,51,757 |
| 2 | Mumbai Suburban | 138652 | 103691 | 2,42,343 |
| 3 | Pune | 131820 | 98062 | 2,29,882 |
| 4 | Jalgaon | 78202 | 59524 | 1,37,726 |
| 5 | Ahmednagar | 69254 | 51194 | 1,20,448 |
| 6 | Solapur | 66569 | 49186 | 1,15,755 |
| 7 | Nashik | 66921 | 48747 | 1,15,668 |
| 8 | Nagpur | 63957 | 49984 | 1,13,941 |
| 9 | Kolhapur | 61174 | 48753 | 1,09,927 |
| 10 | Aurangabad | 56869 | 42330 | 99,199 |
| 11 | Mumbai | 56573 | 41504 | 98,077 |
| 12 | Satara | 54324 | 42763 | 97,087 |
| 13 | Sangli | 51338 | 41128 | 92,466 |
| 14 | Nanded | 52689 | 39604 | 92,293 |

| S. No | Name of the District | Males | Females | Total |
|-------|----------------------|-----------|-----------|-----------|
| 15 | Chandrapur | 43718 | 34685 | 78,403 |
| 16 | Amravati | 44311 | 32319 | 76,630 |
| 17 | Latur | 43477 | 32450 | 75,927 |
| 18 | Buldhana | 43883 | 29485 | 73,368 |
| 19 | Yavatmal | 39184 | 28254 | 67,438 |
| 20 | Jalna | 37680 | 29041 | 66,721 |
| 21 | Parbhani | 35516 | 26782 | 62,298 |
| 22 | Beed | 35769 | 24099 | 59,868 |
| 23 | Raigarh | 33475 | 25826 | 59,301 |
| 24 | Dhule | 32326 | 24912 | 57,238 |
| 25 | Osmanabad | 29869 | 20623 | 50,492 |
| 26 | Akola | 27164 | 19371 | 46,535 |
| 27 | Bhandara | 24736 | 19963 | 44,699 |
| 28 | Ratnagiri | 18420 | 15622 | 34,042 |
| 29 | Washim | 19243 | 13012 | 32,255 |
| 30 | Hingoli | 18166 | 12413 | 30,579 |
| 31 | Wardha | 16889 | 12352 | 29,241 |
| 32 | Nandurbar | 15737 | 12028 | 27,765 |
| 33 | Gondiya | 15123 | 11449 | 26,572 |
| 34 | Gadchiroli | 13512 | 10474 | 23,986 |
| 35 | Sindhudurg | 12905 | 10560 | 23,465 |
| | Total | 16,92,285 | 12,71,107 | 29,63,392 |

As per Census of India 2011, the population of (PwDs) in Maharashtra was categories into 8 types are as mentioned below -

| S. No | Particular | Male | Females | Total |
|-------|--------------------|----------|----------|----------|
| 1 | In seeing | 3,11,835 | 2,62,217 | 5,74,052 |
| 2 | In Hearing | 2,64,956 | 2,08,315 | 4,73,271 |
| 3 | In Speech | 2,60,792 | 2,12,818 | 4,73,610 |
| 4 | In Movement | 3,57,348 | 1,91,070 | 5,48,418 |
| 5 | Mental Retardation | 90,408 | 69,801 | 1,60,209 |
| 6 | Mental Illness | 32,907 | 25,846 | 58,753 |
| 7 | Any Other | 2,79,048 | 2,31,688 | 5,10,736 |

| 8 | Multiple Disability | 94,991 | 69,352 | 1,64,343 |
|---|--|-----------|-----------|-----------|
| 9 | Total number of (PwDs) in Maharashtra | 16,92,285 | 12,71,107 | 29,63,392 |

The Rights of Persons with Disabilities Act was enacted in the 2016. It promotes and protects the rights and dignity of people with disabilities in various aspects of life – educational, social, legal, economic, cultural, and political. It applies to government, non-government, and private organisations. The types of disabilities under RPwD Act can be classified under twenty-one heads (21). These have been listed below -

- Blindness
- Low Vision
- Leprosy Cured Persons
- Hearing Impairment (Deaf and Hard of Hearing)
- Locomotor Disability
- Dwarfism
- Intellectual Disability
- Mental Illness
- Autism Spectrum Disorder
- Cerebral Palsy
- Muscular Dystrophy
- Chronic Neurological Conditions
- Specific Learning Disabilities
- Multiple Sclerosis
- Speech and Language Disability
- Thalassemia
- Hemophilia
- Sickle Cell Disease
- Multiple Disabilities (more than one of the above specified disabilities)
- Acid Attack Victim
- Parkinson's Disease

1.1 Vision and Mission of the (PwDs) Welfare Department, Maharashtra

Vision

To build an inclusive society in which equal opportunities are provided for the growth and development of Persons with Disabilities so that they can lead productive, safe and dignified lives.

Mission

To empower Persons with Disabilities, through its various Acts/ Institutions/Organizations and Schemes for rehabilitation and to create an enabling environment that provides such persons with equal opportunities, protection of their rights and enables them to participate as independent and productive members of society.

1.2 Objectives and Functions of the (PwDs) Welfare Department, Maharashtra

Objectives

The primary objective of the department is to ensure:

- 1. Respect for inherent dignity, individual autonomy including the freedom to make one's own choices, and independence of persons with disabilities.
- 2. Non-discrimination
- 3. Full and effective participation and inclusion in society
- 4. Respect for difference and acceptance of persons with disabilities as part of human diversity and humanity.
- 5. Equality of opportunity
- 6. Accessibility

Values

1. Collaborative

We believe that jointly working towards a common goal not only creates a far greater impact, but also brings value to all those involved.

2. Dedication

We are compassionate and committed to our vision, mission, and the people we serve, by aligning our work and decisions with our cause.

3. Inclusive

We aim at creating a society inclusive of all by advocating qualities such as empathy, accessibility and through our activities.

4. Inspirational

We are dedicated to making a positive difference, while constantly instilling a sense of hope and optimism to those in need.

5. Openness

We welcome diverse ideas and views. We ensure that we engage respectfully, appropriately, clearly, sensibly, and collaboratively in an exchange of information and ideas for the benefit of the people we serve.

6. Trustworthy

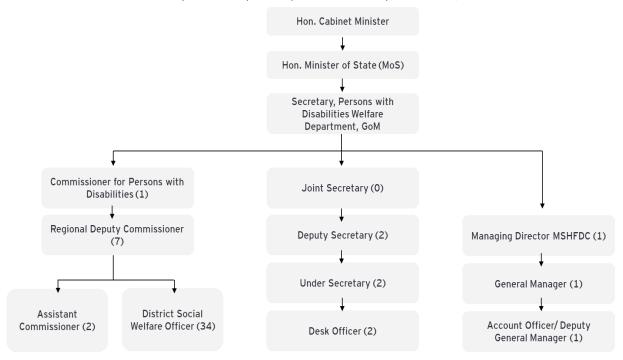
As reliable partners to all our stakeholders, we serve and perform our role with integrity and excellence, guided by our moral ethics and principles.

1.3 Functions of the (PwDs) Welfare Department, Maharashtra

- Implementation of Rights of Persons with Disabilities Act 2016 and various policies/act related to (PwDs) in Maharashtra
- Implementing Central and State Government for (PwDs) in Maharashtra
- Disbursing subsidies, scholarships, incentives, and monitoring of operations in Maharashtra

- Progressively achieving paperless offices and introducing suitable Information Technology tools towards process automation.
- Proactively providing information for initiatives by the Department through various channels.
- Implementing flagship programs in various domains identified from time to time.
- Promoting IEC, conferences, workshops, webinars, and exhibitions to improve stakeholder participation in the disability sector.

1.4 Administrative Setup of the (PwDs) Welfare Department, Maharashtra



1.5 Organizations under (PwDs) Welfare Department, Maharashtra

1. Commissionerate for Persons with Disabilities, Maharashtra State, Pune

In Maharashtra State in the year 1957, the Directorate of Social Welfare was established at Pune., The Women and Child Development, Tribal Welfare, VJNT Welfare and Handicapped (Divyang) Welfare were included in the Department of Social Welfare.

An Independent disability Welfare Commissionerate was established by the Social Justice and Special Assistance Department Government of Maharashtra on 19.08.2000 to implement the provisions of the Persons with Disabilities (Equal Opportunity, Protection of Rights and Full Participation) Act, 1995 as per section 60(1) by the Government Resolution dated 22nd January 2004 and dated 14th October 2004 respectively. Prior to the establishment of the Independent Commissionerate, all the schemes for Persons with Disabilities were implemented by social Welfare Department, Government of Maharashtra, Pune. The following Acts Provisions are being implemented by the Commissionerate.

- Rehabilitation Council of India Act, 1992.
- National Trust Act, 1999 (The national Trust for Welfare of Persons with Autism, Cerebral Palsy Mental Retardation and Multiple Disability)
- The Rights of Persons with Disabilities Act 2016.

Maharashtra State Handicapped Finance and Development Corporation (MSHFDC), Mumbai

Maharashtra State Handicapped Finance and Development Corporation, Mumbai has been established vide Social Justice Dept. Government Resolution No.EDD-2001/C.R.65/Sudhar-3 Dated 21.11.2001 and registered under section 25 of Companies Act, 1956 on 27th March 2002.

The main object of this corporation is as follows.

- To undertake, carry on, assist to carry on and promote economic development activities including self-employment and other ventures for benefit and economic rehabilitation of handicapped persons regardless of their religion, sex, caste, and age, in collaboration with State Government Ministries/Departments,
- Extend financial assistance/loans/concessional finance to handicapped persons for implementing economically and financially viable schemes /projects,
- To grant loans to the handicapped for pursuing education at graduation and higher levels,
- To assist in up gradation/improvement of technical and entrepreneurial skills,
- To set up training, quality control, process development and other infrastructural development activities aimed to achieve economic rehabilitation/upliftment of handicapped persons,
- To assist other organizations engaged in rehabilitation of the handicapped by providing financial assistance,
- To assist businesses run by handicapped persons in procuring raw materials and marketing finished goods and to work as an Apex Institution for the State of Maharashtra for channelizing the funds received from State Finance Corporation or the Central Government.

The Maharashtra State Handicapped Finance and Development Corporation (MSHFDC) provides three schemes:

- Term Loan (Small & Medium Scale Business)
- Education Loan
- Micro Credit Finance

1.6 Project Description

The Persons with Disabilities Welfare Department operates schools and workshops for visually impaired, deaf and dumb, locomotor disabled, and intellectually disabled students on aided, unaided, and permanent unaided basis.

As per the Government Resolution by the Finance Department dated 8th June 2022, it is necessary to record the Aadhaar-based online biometric attendance of the students and staff working in the schools managed by the department.

For this purpose, the PwDs welfare department intends to implement Integrated Aadhaar based face recognition biometric attendance systems in the 10 schools and workshops on piolet basis run by the PwDs Welfare department.

There are 932 aided schools/workshops for the especially abed students managed by the department with approximately 43,314 students with disabilities enrolled in these schools.

1.6.1 Objective of the Project

- Ensure accurate and reliable attendance tracking for students and staff in schools and workshops managed by the Persons with Disabilities Welfare Department.
- Compliance of Government Resolution by the Finance Department dated 8th June 2022, which mandates Aadhaar-linked online biometric attendance system.
- Implement Aadhar-based face recognition biometric attendance systems across 10 grant-aided schools and workshops on piolet basis.
- Improve the transparency and efficiency of attendance management.

The project will assist the PwDs Welfare Department in:

- Allocating maintenance allowances to 10 schools and workshops managed by the PwDs welfare department based on the number of enrolled students.
- Distributing salaries and other subsidies to teaching and non-teaching staff according to the number of students enrolled and linking of the attendance to the salaries and other subsidies.

1.6.2 Duration

The duration of the project will be two months. This period will be extended as necessary. (The exact duration will be specified after the program is finalized.)

1.6.3 Implementation

The project in the state will be executed at three levels, as follows:

- **State Level:** Coordinating the overall activities and ensuring compliance with the guidelines.
- **District Level:** Supervising the execution of the project within the district and providing necessary support.
- **Local Level:** Installation of devices, one time registration of students and teachers and Training program at schools and workshops level in Maharashtra.

1.6.4 Schools run by PwDs Welfare Department

The Persons with Disabilities Welfare Department, Maharashtra, runs 932 schools that collectively provide education and cater to a student population of 43,314. The district wise number of schools and students are as mentioned below –

| S. No | Name of the District | Number of the School | Number of the Students |
|-------|----------------------|----------------------|------------------------|
| 1 | Ahmednagar | 21 | 1296 |

| 2 | Akola | 5 | 421 |
|----|--------------------|----|-------|
| 3 | Amravati | 36 | 1,430 |
| 4 | Beed | 51 | 2,344 |
| 5 | Bhandara | 13 | 441 |
| 6 | Buldhana | 19 | 1,030 |
| 7 | Ch. Sambhaji Nagar | 27 | 1,269 |
| 8 | Chandrapur | 13 | 508 |
| 9 | Dharashiv | 28 | 1,086 |
| 10 | Dhule | 15 | 883 |
| 11 | Gadchiroli | 17 | 641 |
| 12 | Gondiya | 8 | 354 |
| 13 | Hingoli | 21 | 731 |
| 14 | Jalgaon | 16 | 1,086 |
| 15 | Jalna | 15 | 446 |
| 16 | Kolhapur | 19 | 1,150 |
| 17 | Latur | 72 | 2,519 |
| 18 | Mumbai (Suburban) | 26 | 3,007 |
| 19 | Mumbai II | 28 | 324 |
| 20 | Nagpur | 70 | 3,647 |
| 21 | Nanded | 80 | 2,655 |
| 22 | Nandurbar | 4 | 477 |
| 23 | Nashik | 19 | 1,151 |
| 24 | Palghar | 7 | 528 |
| 25 | Parbhani | 34 | 1,172 |
| 26 | Pune | 65 | 3,404 |
| 27 | Raigarh | 3 | 478 |
| 28 | Ratnagiri | 5 | 244 |
| 29 | Sangli | 20 | 1,476 |
| 30 | Satara | 17 | 660 |
| 31 | Sindhudurg | 1 | 143 |
| 32 | Solapur | 60 | 2,171 |
| 33 | Thane | 26 | 1,959 |

| 34 | Wardha | 17 | 478 |
|-------|----------|-----|--------|
| 35 | Washim | 14 | 509 |
| 36 | Yavatmal | 40 | 1,196 |
| Total | | 932 | 43,314 |

The Persons with Disabilities Welfare Department will select 10 schools out of 932 for the pilot implementation of an Aadhaar-based Face Recognition Biometric Attendance System.

2. Scope of Work

2.1 Overview

Aadhaar-based Face Recognition Attendance Biometric System have advanced facial recognition technology to verify an individual's identity based on their Aadhaar data. It ensures a contactless, secure, and efficient method of marking attendance while eliminating possibilities of proxy attendance.

The key features of Aadhaar-based Face Recognition Attendance Biometric System are as mentioned below.

- **Aadhaar Integration:** This Biometric system is fully integrated with the Aadhaar database, ensuring real-time identity verification.
- Advanced Face Recognition: It is developed state-of-the-art facial recognition technology for accurate identification.
- Contactless and Hygienic: As a contactless system, it promotes hygiene and reduces the risk of germ transmission.
- **Real-Time Monitoring:** Provides real-time data on attendance, enabling efficient workforce management.
- **Secure and Reliable:** Adheres to stringent security standards to protect sensitive personal data.
- Aadhar base Face Recognition: Authentication system authenticate user information while providing Aadhaar Enabled Services.

To fulfill the mentioned objective, the selected agency shall be expected to perform the following activities as a scope.

• Development of integrated aadhar-based face recognition biometric attendance system which shall include analysis, design, development, testing, hosting, and implementation of the application

Or

- Linking of installed devices in Schools and Workshops to Aadhaar Enabled Biometric Attendance System (AEBAS) portal developed by National Informatics Centre (NIC) at no extra cost.
- Installation of Aadhar-based face recognition biometric devices in 10 schools which are situated 10 different locations in Pune, Mumbai Sub-urban and Mumbai City Districts at and workshops, along with a one-time user registration process.
- Training and handholding of the services it shall include planning and organizing trainings majorly in the schools and workshops at various user levels in the state, as directed by the department.

• Maintenance services which shall ensure the upkeep of the complete system and devices for the contract period of 1 year, including change requests and reporting and system handover at the end of the contract.

The functions to be performed by the agency are as mentioned below –

1. System Design and Architecture

- Develop a detailed system architecture that integrates Aadhaar-based face recognition technology.
- Define hardware and software requirements, including biometric devices, servers, and network infrastructure.
- Ensure compliance with data security and privacy regulations, particularly with Aadhaar data.

2. Device Installation and Setup

- Install Aadhaar-based face recognition biometric devices at designated locations, including schools and workshops.
- Configure devices for optimal performance, ensuring accurate face recognition and reliable attendance recording.
- Set up secure data transmission channels between devices and central servers.

3. User Registration

- Develop a user-friendly registration interface for one-time user enrollment.
- Facilitation for Enrollment of Students / Staff for Aadhar and update in case required
- Integrate Aadhaar authentication to verify user identities during registration.
- Capture and store biometric data securely, ensuring it is linked to the corresponding Aadhaar information.

4. Attendance Management System

- Design an attendance management module to record and monitor daily attendance of students and teachers.
- Ensure real-time synchronization of attendance data with the central server.
- Provide administrators with access to attendance records through a secure online portal.

5. Reporting and Analytics

• Develop reporting tools to generate attendance reports, track attendance patterns, and identify anomalies.

- Implement analytics features to provide insights into attendance trends and overall system performance.
- Ensure reports can be customized and exported in various formats (e.g., PDF, Excel).

6. System Integration

- Integrate the attendance system with the devices.
- Ensure seamless data exchange between systems for comprehensive user management.
- Implement APIs for third-party integration if necessary.

7. User Training and Support

- Conduct training sessions for administrators, teachers, students and support staff on system usage.
- Provide comprehensive user manuals and troubleshooting guides.
- Offer ongoing technical support and maintenance services to ensure system reliability.

8. Security and Compliance

- Implement robust security measures to protect biometric data and ensure user privacy.
- Regularly update and patch systems to protect against vulnerabilities.
- Conduct periodic audits to ensure compliance with Aadhaar regulations and other relevant laws.

9. Performance Monitoring and Optimization

- Continuously monitor system performance and user feedback to identify areas for improvement.
- Optimize system components for enhanced accuracy and efficiency.
- Implement regular system updates and upgrades to incorporate new features and improvements.

2.2 Development of Application

The Persons with Disabilities (PwDs) Welfare department plans to develop and implement aadhar-based face recognition attendance biometric system that would consist of various modules as per different functions. Various modules to be developed for the application include the following –

a. User Profile Management

• Create, modify, activate, and deactivate user accounts for all roles. The major stakeholders include departmental officials (Mantralaya level), Commissionerate's

level, divisional and district and levels (District Social Welfare Officer), super administrators, principals at school level etc.

- Assign roles and permissions based on organizational hierarchy and project needs.
- Monitor user activities and audit logs for security and compliance purposes.
- **b.** Feedback & Grievances module User can provide feedback and raise a complaint in case of any technical issues.
- **c. GPS and Mapping Integration –** Integrate GPS functionalities to track and verify the locations of the devices for accuracy and coverage.
- **d. Real-time Data Sync -** Ensure the data collected by devices is synchronized with the central database in real-time for immediate analysis and reporting.
- e. Contact Us The application should have 'Contact Us' feature with a call button for users. Clicking on this button provides access to a predefined number for real-time support. Upon calling, users can receive the necessary assistance or solutions promptly.
- f. MIS Reporting and Analytics This module provide various tools to generate daily, weekly, and monthly reports and analyze attendance data to identify trends and patterns. This will also generate district wise reports on collected data, trends, and insights.
- **g.** Dashboard This module provides an overview of attendance summary, data analytics, and key metrics.
- h. Audit trail This module tracks and logs all actions performed within the application for accountability and traceability.
- i. Training and Support This module offers training materials and resources to users on using the application effectively.
- **j. Security and Privacy -** Implement robust security measures to protect sensitive user information and ensure compliance with data protection regulations.
- **k.** Search Using this module all users can be able to find fields by entering text in the search box. Also, Voice to text can be done in the search box to find out expected results quickly.
- **I. Notification and Alerts –** This module send notifications and alerts to users about new updates.
- **m.** Multilingual Support— This system should support multiple languages (English and Marathi) to accommodate Maharashtra's linguistic diversity. Ensures content is localized to be culturally appropriate and understandable.
- n. Offline Data Collection/Offline Attendance This module provide capability for users to mark attendance offline in areas with limited connectivity and sync data when online. Offline functionality can store responses locally and synchronized with the server once an internet connection is available. Additionally, the system should display the total number of offline attendances recorded by each respective school or workshop.

2.3 Specification of Aadhaar-Based Face Recognition Biometric Devices

| S. No. | Parameter | Specification |
|--------|---|--|
| 1. | Face Recognition Technology | Standalone Device |
| 2. | Type of Recognition Biometric Attendance system | Embedded |
| 3. | Identify mode | Face |
| 4. | Encryption (AES) | 512 |
| 5. | Power Source | Battery with minimum 10 hours |
| 6. | Ingress Protection rating | IP 65 |
| 7. | Screen Resolution | Minimum 800 X 480 |
| 8. | RAM | Min 512 MB |
| 9. | Face Storage Capacity* | Minimum 200- 400 nos |
| 10. | Log Capacity* | Minimum 50,000 nos |
| 11. | Screen size | Minimum 5 inches |
| 12. | Recognition speed | Maximum 1 second |
| 13. | Recognition distance | Maximum 5 feet |
| 14. | Communication protocols | TCP/IP, WIFI, GSM/4G/5G inclusive of data charges/data pack required for minimum 1 year* |
| 15. | Metal Enclosure with digital Lock | Yes |
| 16. | Digital ID verification facility with User KYC application | Yes |
| 17. | Real time Attendance logs | Yes |
| 18. | Backward integration API for Existing attendance system if any. | Yes |
| 19. | On site comprehensive warranty | Minimum 3 year |

^{*}Note — The agency should provide a SIM card with Aadhaar-based face recognition biometric devices, including a data pack valid for at least one year.

- Digital ID Verification facility with User KYC application.
- Web Application for Attendance, Device management, Student / employees management. Other standard features along with standard as well as customized reports.
- Software provided should ensure 100% authenticity in the enrolment process.
- Bidder should provide integration with existing database in terms of pushing the attendance data or log into the existing application database without any additional cost.
- Solution should be secured for communication between ORGANIZATION networks and to any other network as required.
- It is essential that software should have a definitive protocol to verify the integrity of all the communication between ORGANIZATION and another network.
- Solution should handle the exploitation of data to ensure 100% safety and accuracy of the data.
- Verified images and relevant data e.g. Student / Employee Number/Code need to be transferred to the facial device. This image should be used by the high threshold Facial Recognition Attendance System.
- Data from multiple locations needs to be available at cloud provided by ORGANIZATION.

- Customized Reports for different entities should be available.
- System should have APIs ready for exposure to any future system that is envisaged for integration.
- Solution for Data Accuracy to be maintained equal and above 97%.
- The solution to function smoothly and efficiently in low bandwidth infrastructure. For example, 4G/SG Solutions should have a 24*7 support mechanism.
- The solution should be cost-effective and robust.

2.4 Linking of Integrated Aadhaar-Based Face Recognition Biometric Attendance System with Samaj Sevarth Portal of the PwDs Welfare Department for the disbursement of salaries and other benefits

The agency will be responsible for the following activities for linking Integrated Aadhaar-Based Face Recognition Biometric Attendance System with Samaj Sevarth Portal of the PwDs Welfare Department for the disbursement of the salaries to the teaching and non-teaching staff as mentioned below —

1. Integration and Linking -

- Integrate and link the Aadhaar-based face recognition biometric attendance system with the Samaj Sevarth Portal of the PwDs Welfare Department.
- Ensure the seamless transmission of attendance data through an API to the Samaj Sevarth Portal.

2. Coordination with MahalT-

- Work in coordination with MahalT to facilitate the integration process.
- Ensure all technical requirements and standards specified by MahalT are met.

3. Data Transmission and Synchronization:

- Ensure real-time and accurate synchronization of attendance data of the employees (teaching staff and non-teaching staff) from the biometric system to the Samaj Sevarth Portal.
- Implement measures to ensure the security and privacy of the data during transmission.

4. Testing and Validation:

- Conduct thorough testing of the integrated system to ensure it operates as expected.
- Address any issues or discrepancies that arise during the testing phase.

5. Documentation and Reporting:

- Provide detailed documentation of the integration process, including technical specifications, configurations, and user manuals.
- Regularly report the progress of the integration to the PwDs Welfare Department and MahalT.

6. Support and Maintenance:

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- Offer ongoing technical support and maintenance for the integrated system to ensure its continued functionality and reliability.
- Promptly address any issues or updates required post-integration.

The benefits provided to specially abled students will be linked to their attendance through the Integrated Aadhaar-Based Face Recognition Biometric Attendance System. Additionally, the department will develop a separate portal or mechanism for this purpose.

3. Terms and Condition

3.1 Selection Method

The selection of vendors will be based on the least cost based (L1) proposal. The issue of this request for procurement does not imply that the department is bound to select a bidder or to appoint the selected bidder for development of the application. The PwDs Welfare department reserves the right to reject all or any of the bidders or bids without assigning any reason whatsoever.

To respond to the above requirement, bidders are requested to-

- The bidder should have experience in implementing similar projects for other state or central government departments.
- Confirm that the bidder organization has not been blacklisted and/or debarred by any Government /Semi-Government/PSU organization.
- Share technical proposal in detail.
- Provide commercial quotes for the indicative scope of work mentioned above.

3.2 Other Conditions

Please note that-

- The bidder must have an existing application and experience in implementing such projects that has similar services as envisage by the department.
- The application source code to be transferred to the PwDs welfare department as and when required. The application may be required to be hosted on the NIC infrastructure or any other infrastructure chosen by the department. The bidder is free to use the application for any other organization/department. The bidder may quote comprehensive price while submitting the bids, considering the said scenario.
- The validity of the rate quoted will be 180 days.
- The payment for the application and installation of devices will be made upon installation and handover of the application approved by the department and remaining payment for the maintenance and other activities will be done on monthly or quarterly basis. The service provider should submit invoices in original to the PwDs Welfare department.
- The bidder must demonstrate that the required facilities that are envisaged by the PwDs department exist in the application.
- Subcontracting is not allowed while executing this work.
- The bidder shall keep confidential any information related to this service with the same degree of care as it would treat its own confidential information. The bidders shall note that the confidential information will be used only for the

purposes of this procurement and shall not be disclosed to any third party for any reason whatsoever.

• The PwDs welfare department shall be under no obligation to accept the lowest or any other offer received in response to this request for service and shall be entitled to reject any or all offers, including those received late, or incomplete, without assigning any reason.

Bids may be rejected in case Conditional Bids OR If the information provided by the Bidder is found to be incorrect/misleading/fraudulent at any stage/time during the procurement process OR Any effort on the part of a Bidder to influence the bid evaluation, bid comparison or contract award decisions OR Bids received after the prescribed time & date for receipt of bids.

The deadline for receiving the bids is 14th October 2024 before 5.30 pm. No bids will be entertained after the deadline. The bids are to be submitted in response to this proposal/email.
