

**CORRIGENDUM**  
**EXPRESSION OF INTEREST FOR**  
**AI BASED SOLUTION FOR ONLINE IDENTITY VERIFICATION AND AUTHENTICATION OF CITIZENS**  
**EOI Ref No. OCAC-SEGP-SPD-0019-2020-20026**

SL#	Clause No/Page No.	Existing Clause	Revised Clause
1.	5.1 Part-I- (short video) Point no.7 page no. 4	The solution must be capable of Face recognition and matching using NIST evaluated and top ranked algorithms between the live citizen photo and the photograph present on the ID documents.	The solution must be capable of Face recognition and matching using NIST or any equivalent such as Convolutional Neural Network - CNN, Deep Neural Network –DNN, etc evaluated and top ranked algorithms between the live citizen photo and the photograph present on the ID documents.
2.	5.1 Part-I- (short video) Point no.8 page no. 4	The face recognition should be performed using high throughput Multi-Biometric Authentication Platform that should have capability to expand to fingerprint and iris in the future.	The face recognition should be performed using high throughput Biometric Authentication Platform that should have capability to expand to iris in the future.
3.	Addition of new clause  5.1 Part-I- (short video) Point no.23 page no. 6	New clause : Point no. 23 to be added	The proposed solution should comply with RBI (Reserve Bank of India) notification RBI notification no. RBI/2019-20/138, dated January 9, 2020 on Video based Customer Identification Process (V-CIP). <a href="https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=11783&amp;Mode=0">https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=11783&amp;Mode=0</a> . If the solution is not complying with the above notification, the bidder shall give an undertaking to comply within 3 months.
4.	Addition of new clause  5.1 Part-I- (short video) Point no.24 page no. 6	New clause : Point no. 24 to be added	The solution should support lossless Video Compression.
5.	Addition of new clause  5.1 Part-I- (short video) Point no.25 page no. 6	New clause : Point no. 25 to be added	The solution should have feature (such as VPN/ZTN etc. ) to avoid spoof of location
6.	Addition of new clause  5.1 Part-I- (short video) Point no.26 page no. 6	New clause : Point no. 26 to be added	The solution should support 2 way video interaction between customer and Government official
7.	Section 7.1- Pre-qualification evaluation criteria, Point d, Page 12	The bidder should have provided Video based KYC solution to at least one customer from Central Government/ State Government/ PSU/BFSI in India	The bidder should have Video based KYC solution. Bidder shall submit a declaration in this regard.
8.	7.2 Technical evaluation criteria Point b page 13	(Revised Technical Evaluation)	<b>See the revised Technical evaluation Criteria</b>

## 1.2 Technical evaluation criteria (Revised)

Sl#	Criteria	Documentary Evidence	Marks	Max. Marks
a)	Number of implementation of the solution on face liveness detection or Video KYC done in Central Government/ State Government/ PSU/BFSI in India.	Copy of work order	Each implementation carries 5 marks	10
b)	The face liveness check solution in iOS & Android platform	Letter from client	Any one platform - 5 marks Both platforms - 10 marks	10
c)	The bidder shall possess the patent on capabilities relevant to its Liveness and FaceMatch AI	Document proof	5 marks	5
d)	Availability of following certifications, 1. 1:1 Face match solution proposed by the bidder by NIST FRVT 1:1 2. iBeta PAD 1 ISO certified for passive liveness 3. ISO 27001: 2013 Certification	Document proof	Each certification carries 5 mark	15
4.	Proof of Concept. The POC will be evaluated on following parameters. (For Part-II – Face Match & Liveness check through photograph ) 1. Precision 2. Recall 3. Speed 4. Angle 5. Distance of image capture	Online Demonstration and documentation		20
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<i>S#</i>	<i>Criteria</i>	<i>Documentary Evidence</i>	<i>Marks</i>	<i>Max. Marks</i>
	(For Part-I : Short video based solutions ) 1. Face matching Technique 2. Liveliness Check capabilities			
6.	Technical Presentation - Approach, Methodology & Expertise (Presentation would be held), Deployment Model, Exit Management	Online Demonstration and documentation		20

### **Revised Eol Schedule**

<b>Event</b>	<b>Date</b>
Last date of submission of Eol response	14.10.2020 by 12 Noon
Opening of Eol response	14.10.2020 at 12:30 PM
Technical Presentation and POC	Tentatively - 16.10.2020 at 11 AM onwards through VC Mode –MS-Teams. (Depending upon number of firms, the presentation dates will be assigned)

**Other terms and conditions of the EOI remain unchanged.**

## PRE-BID RESPONSE DOCUMENT

SI #	RFP Reference(s) (Section & Page Number(s))	Content of RFP requiring Clarification(s)	Points of clarification	OCAC's Response
1.	Section 7.1, Point e, Page 12	The bidder should have provided Video based KYC solution to at least one customer from Central Government/ State Government/ PSU/BFSI in India	Dear team, as per the scope of work we understood that the solution OCAC is looking for is different from RBI suggested video KYC, as per our understanding the solution is totally different. Please consider the experience of bidder working for similar projects rather looking for video KYC solution experience. We request you to remove this point in the eligibility criteria	As per the notification no. No.18/1/2020-P&PW(C)-6681 Dated 11.09.2020 issued by Ministry of Personnel, Public Grievances & Pension Department of Pension & Pensioners' Welfare, Govt. of India V-KYC is one of the criteria.  Please see the corrigendum
2.	Section 7.2, Point b, Page 12	Number of Video KYC implementation done in BFSI/Telecom/ Central Government/ State Government/ PSU/Autonomous organization in India	As stated earlier the solution OCAC is looking for is totally different from Video KYC suggested by RBI, please consider the relevant experience of the bidder.	Please see the corrigendum
3.	Section 7.2, Point d, Page 12	Number transactions on Video KYC done in BFSI/ Telecom/ Central Government/ State Government/ PSU/Autonomous organisation in India	Request you to consider removing the point as this experience is totally different from the scope.	Please see the corrigendum
1.	5. Indicative Scope  5.1 Part-I : Short video based solutions for one time on-boarding of pensioners in the OCAC database	Additional Suggestion	We suggest Video Compression shall be made mandatory. The compression of video/images is a huge cost saver as a major part of the storage is the video. Good compression tools can bring down the storage cost by upto 80%.	Please see the revised clause in corrigendum
2.	5. Indicative Scope	Additional Suggestion	We suggest that a VPN Check feature shall be made mandatory.	Please see the revised clause in corrigendum

	5.1 Part-I : Short video based solutions for one time on-boarding of pensioners in the OCAC database		Using a VPN connection, the end customer can spoof his location and try to onboard himself from a foreign location. A VPN check therefore is critical and shall be made mandatory to ensure Customer is in India	
3.	5. Indicative Scope 5.1 Part-I : Short video based solutions for one time on-boarding of pensioners in the OCAC database	Additional Suggestion	Hygiene checks such as: adequate lighting, adequate network speed, permissions like camera, mic, geolocation etc. should happen before initiation of the Video KYC process. This requirement shall be made mandatory. Client side session should not start until all hygiene requirements (as mentioned above) for video session are met. This should be made mandatory as success / failure of a session will greatly depend on these preliminary checks. There can be a lot of customer dropouts if customers are not prompted in the beginning to adjust these issues.	As per RFP
4.	5.1 Part-I : Short video based solutions for one time on-boarding of pensioners in the OCAC database	Additional Suggestion	Smart Scheduling shall be a mandatory requirement that takes into account the skills availability of the RE official and the priority assigned to the customer as the Customer wait time is the most important criteria for the customer overall experience	As per RFP
5.	5.1 Part-I : Short video based solutions for one time on-boarding of pensioners in the OCAC database	<b>Point 3.</b> The solution shall be integrated with other application of Govt. of Odisha	Can we get the list of applications that the vendor needs to integrate?	The list will be shared later
6.	5.1 Part-I : Short video based solutions for one time	<b>Point 4:</b> The solution must be capable to extract the text information from documents	We suggest this to be a "Nice to Have" feature because OCR is not required since customer data (for both PAN and Aadhaar) can be fetched from the original sources (Govt Databases). Also, the quality of	As per RFP

	on-boarding of pensioners in the OCAC database	produced by the citizen in the video call / selfie on-boarding process using OCR and store as a separate attribute/provide API to transfer the information to the solution of Govt. of Odisha.	data fetched from original data sources will always be better than the quality of data extracted through OCR. The OCR efficacy is highly dependent on the quality of image captured, which means it'll not work well in low bandwidth cases or if a customer doesn't have a good quality camera at his end.	
7.	5.1 Part-I : Short video based solutions for one time on-boarding of pensioners in the OCAC database	<b>Point 5:</b> Solution should be able to save the video/selfie captured during on-boarding securely with date/time stamp.	Are we referring to 2 way video interaction between customer and Government official or only 1 way video verification by customer	Please see the revised clause in corrigendum
8.	5.1 Part-I : Short video based solutions for one time on-boarding of pensioners in the OCAC database	<b>Point 7:</b> The solution must be capable of Face recognition and matching using NIST evaluated and top ranked algorithms between the live citizen photo and the photograph present on the ID documents.	Signzy can source these certifications. However these certifications are not standard across industry and there are multiple Face matching algorithms incorporated by various industry players that offer considerably high Accuracy without these certifications.	Please see the revised clause in corrigendum
9.	5.1 Part-I : Short video based solutions for one time on-boarding of pensioners in the OCAC database	<b>Point 8.</b> The face recognition should be performed using high throughput Multi- Biometric Authentication Platform that should have capability to expand to fingerprint and iris in the future.	Capturing of the finger print and iris would require necessary hardware and in person meeting with the citizen.  Wouldn't this hamper envisages contactless online identity and digital authentication of the citizens	Please see the revised clause in corrigendum
10.	5.1 Part-I : Short video based solutions for one time on-boarding of pensioners in the OCAC database	<b>Point 18</b> The solution should be responsive in nature and should support all frontend mobile/devices/form factors, browsers and operating systems (Mac, Linux, Windows, Android, iOS etc.)	Do you have a list of versions across browsers and operating systems for which compatibility is required?  However, Signzy's solutions support browser as well OS compatibility which is one of the highest in the Industry. Our solution is compatible with 94% of Global Browsers in use.	The application should be compatible to all the leading browsers such as Edge, Chrome, Mozilla, Safari.
11.	Section 5.1 Part-I & Page No.4, #1	The solution must have capabilities to integrate with mobile app (to be developed under this assignment) through SDK and API (both) integrations from which the citizen can record the video. The duration shall be fixed by Govt. of Odisha and there shall not be any	Can 3rd party service providers be used for SDK and API (both)	Yes

		facility to upload image/video from the gallery.		
12.	Section 5.1 Part-I & Page No.4, #4	The Solution should capture a clear image of Identity and address proof document to be displayed by the citizen during the process. The solution must be capable to extract the text information from documents produced by the citizen in the video call / selfie on-boarding process using OCR and store as a separate attribute/provide API to transfer the information to the solution of Govt. of Odisha.	After catching text from Image should there be an option for the user to edit the address incase he/she wants to change it.	As per RFP
13.	Section 5.1 Part-I & Page No.4, #4	The Solution should capture a clear image of Identity and address proof document to be displayed by the citizen during the process. The solution must be capable to extract the text information from documents produced by the citizen in the video call / selfie on-boarding process using OCR and store as a separate attribute/provide API to transfer the information to the solution of Govt. of Odisha.	Will we be provided with the metadatas on the basis of which OCR would work for extracting the texts from the image?	OCR in English language
14.	Section 5.1 Part-I & Page No.4, #6	Live location of the citizen (Geotagging), along with the accuracy of the location shall be captured & displayed. The location information of Video call / selfie to be returned through API.	Tolerance to the accuracy of location captured. (Like, 10%, 20%)	As per RFP
15.	Section 5.1 Part-I & Page No.4, #7	The solution must be capable of Face recognition and matching using NIST evaluated and top ranked algorithms between the live citizen photo and the photograph present on the ID documents.	General technical critero seem to be available with only one SDK/API. Can the iBeta PAD level1 , NIST certified Algorithm modified to more generic result oriented selection criteria	Please see the revised clause in corrigendum
16.	Section 5.1 Part-I & Page No.4, #7	The solution must be capable of Face recognition and matching using NIST evaluated and top ranked algorithms between the live citizen photo and the photograph present on the ID documents.	Why NIST as an american entity chosen for evaluating the Algorithms	Please see the revised clause in corrigendum
17.	Section 5.1 Part-I & Page No.4, #7	The solution must be capable of Face recognition and matching using NIST evaluated and top ranked algorithms between the live citizen photo and the photograph present on the ID documents.	What are the preferred Alogortithms like CNN / DNN	Please see the revised clause in corrigendum
18.	Section 5.1 Part-I & Page No.4, #7	The solution must be capable of Face recognition and matching using NIST evaluated and top ranked algorithms	Face recogniton and matching to be done between citizen captured photo and the photograph present on	Please see the revised clause in corrigendum

		between the live citizen photo and the photograph present on the ID documents.	scanned id document or photograph from the API fetched document.	
19.	Section 5.1 Part-I & Page No.4, #8	The face recognition should be performed using high throughput MultiBiometric Authentication Platform that should have capability to expand to fingerprint and iris in the future.	Any timeline for expanding the capability of biometric authentication to Fingerprint and Iris scanning.	Not decided yet
20.	Section 5.1 Part-I & Page No.4, #9	The solution must have neural network based passive liveness check of the person in the video/selfie (required for very old age person, bedridden, coma patients etc.) in order to guard against spoofing and such other fraudulent manipulations. The passive liveness check solution must be iBeta PAD level 1 certified.	Along with passive liveness check is there any possibility to add active liveness check with the application.	As per RFP
21.	Section 5.1 Part-I & Page No.5, #9	The solution must have neural network based passive liveness check of the person in the video/selfie (required for very old age person, bedridden, coma patients etc.) in order to guard against spoofing and such other fraudulent manipulations. The passive liveness check solution must be iBeta PAD level 1 certified.	iBeta PAD Level 1 certification should be applied for, on or before integration of passive liveness solution. Does the bidder need to acquire this certificate for his firm or is it applicable to the company owning the 3rd party SDK / API.	The bidder need to acquire
22.	Section 5.1 Part-I & Page No.5, #18	The solution should be responsive in nature and should support all frontend mobile/devices/form factors, browsers and operating systems (Mac, Linux, Windows, Android, iOS etc.).	The tender is to develop desktop(Mac, Windows), mobile(Android, iOS) and web application (supporting all browsers)?	Yes
23.	Section 5.1 Part-I & Page No.6, #21	Solution should have capability to complete Vvideo calling process / selfie based on boarding even on low bandwidth on citizen end.	What is Vvideo calling process? Or is it a typo?	Typographic error
24.	Section 5.1 Part-I & Page No.6, #22	The solution should support multilingual platform and show further instructions in his/her preferred language.	What are the languages should the application support?	English and Odia
25.	Section 5.2 Part-II & Page No.7, Face Match	Lighting: The solution should be able to support photo match with images of varied lighting	What are the minimum & maximum lighting lux conditions for which solution should be able to satisfy the Lighting module concept?	Will be decided after presentation
26.	Section 5.2 Part-II & Page No.7, Face Match	Age Variation: The solution shall be able to match image of person with facial variations due to age	What is the age timeline length for which the solution should be capable of matching the person's facial variations?	Will be decided after presentation



27.	5.2 Liveness Page - 6	The solution shall have a response time of less than 3 seconds i.e. the solution shall be able to judge the liveness of the image in less than 3 seconds from the time that the transaction hits the backend service	Suggestion The overall response time may be dependent on externalities such as bandwidth, device processing, etc. We request if the point can be made relevant for AI processing time and same should be less than 1.5 second can be a fair condition.	Will be decided after presentation
28.	6.2.d Page - 8	All materials submitted by the Bidders will become the property of Purchaser and may be returned completely at its sole discretion	Clarification We request a clarification that this clause currently cover only the material submitted as response to the EOI and, not the all other information that will be shared by bidders in subsequent phases of the process.	only the material submitted as response to the EOI
29.	6.6.a Page - 10	Bids shall be submitted in a single sealed envelope and superscripted "AI based solution for Online Identity Verification and Authentication of Citizens" – EoI Reference No- OCAC-SEGP-SPD-0019-2020-20026". This envelope should contain hard copy of EOI proposal and one soft copy in CD media or in USB drive	Request: We request you to allow the submission through soft copy. We are based out of Bangalore and everyone is working in work from home basis. We all are trying to avoid going out as much as possible. Sending a hard copy has logistical challenges for us. We request for sending through password protected email as soft copy.	As per RFP
30.	6.6.c Page - 10	Bidder shall submit all the required documents as mentioned in the Appendix including various templates (Form 1 to Form 3). It should be ensured that various formats mentioned in this EOI should be adhered to and no changes in the format should be done	Clarification: Requesting clarification if all templates pertaining to Form 1 to Form will need to be submitted.	Yes. Form 1 to form 5 should be submitted
31.	7.1 Page - 12	New clause suggested	Suggestion: 1. A condition on positive net profit for the last three financial years may be also considered. 2. This will ensure OCAC selects a partner which is self sustainable and is able to execute the scope without any financial challenges in future	As per RFP
32.	7.2 (a), (b) Page - 14	Copy of Work Order	Request: The work order comprises many other client confidential information. We request you to allow us such documents with masking the confidential information. Also, alternatively, we request that Reference Letters from the Clients may be also be allowed.	Reference letters from clients are also allowed
33.	7.2 (c) Page - 14	Each 5,000 transactions – 2 marks	Suggestion: 5,000 is a very low number which may not imply a reliability at scale. Instead of 5,000, we recommend this number shall be 10,00,000. i.e. 2 marks for each 10,00,000 checks.	As per RFP

34.	7.2 (e) Page - 14	The face liveness check solution in iOS & Android platform	Clarification Requesting clarification that if the intent here is to check the availability of mobile SDKs on Android and iOS to check liveness. We request for this clarification, as it is possible to integrate APIs with any interface which may work in Android as well as iOS. However, availability of SDKs specifically can guarantee high accuracies. Kindly confirm if the condition pertains to availability of Liveness SDKs for iOS and Android.	Yes. Bidder have to provide SDK for integration with mobile app.
35.	7.2 (f) Page - 14	Evaluation of the 1:1 Face match solution proposed by the bidder by NIST FRVT 1:1/iBeta PAD 1 ISO certified for passive liveness	Clarification and Request 1. These certifications are not very common in India and the AI companies have not felt the need of this in past. 2. We request that these conditions be relaxed. Instead, there are alternate ways to ensure the strengths of the solution as well. 3. In India, multiple Regulators/Regulating Agencies (RBI, TRAI, SEBI, IRDAI, State/Central Govt) have allowed Digital KYC and, they require adequate process checks such as Liveness Check and Face Match as part of such processes. We request, a bidder's experience on working with entities regulated by various Regulators is more relevant in India currently. Hence, we request that 2 marks each may be considered for experience with each type of Regulator or Govt listed above.	It is not a mandatory criteria. However, if the bidder have these certifications, they will get some mark.
36.	Form 2 Page - 18	Details of company registration	Clarification: Requesting clarification on what exact information is sought here?	Copy of ROC certificate
37.	General Comment on Hard Copy Submission in Envelope and CDs		- The current EOI response requires submission of pre-qualification and technical specifications which may be possible to be done in the soft copy format. - We request if softcopy submission may be permitted. We can password protect the files and share the password on the date of EOI opening publicly or over another email to designated email addresses.	As per RFP
38.		Considering the uniqueness of the solution, we request you to allow the consortium to meet the pre-requisite qualification together with all members and		As per RFP
39.		request you to extend the last date for submission of the Eoi at least by 3 weeks' from the publication of the corrigendum.		See the revised schedule