



## **Proof of Age Standards Scheme**

**Call for a proposal**

**Universal acceptance and validation of  
Digital Proof of Age (DPoA)**

# The Call for a Proposal is issued by PASSCO CiC<sup>1</sup>

## 1 Executive Summary

This Call for a Proposal aims to find a solution to enable interoperability across Digital Proofs of Age (DPoA) from multiple issuers. The goal is to provide the capability for different solutions to communicate with one another freely and easily, and thereby to allow for the universal acceptance of Digital Proofs of Age (DPoA) by any relying party.

This exercise will establish a pre-approved PASS Scheme compliant universal method of validation, in accordance with the PASS 5 Standard<sup>2</sup>. Such pre-approval would negate the need for the validation method to be audited for individual DPoA issuers using a pre-approved interoperability solution.

*4.14 (e) Their approach to interoperability has been audited by the PASSCO auditors to ensure that it is compatible with these PASS Technical Requirements.*

Solutions will be assessed by their compliance with the need to provide universal acceptance and the wider provisions within this document. Respondents are asked to provide an estimate of the cost to be recovered through a levy, collected from providers by the PASS Scheme, based on the number of DPoAs issued each year, chargeable for 3 years from commencement, by negotiation thereafter. Respondents to the tender should be able to demonstrate a sustainable business model and the ability for innovation to enable the establishment of a long-term relationship with the Proof of Age community.

## 2 Introduction

- 1.1 The Proof of Age Standards Scheme (PASS) currently accredits physical card schemes based on agreed standards for both verification of identity and the rigour of the card issuing process, meaning that those accepting these cards can be confident these are valid documents proving age to the standard required in law for age-restricted goods services, including the sale of alcohol, cigarettes, vaping products, bladed items as well as for access to age-restricted and licensed premises such as bars, clubs, pubs, bookmakers and casinos.
- 1.2 A growing number of people want to prove their age through a digital application on their smartphone rather than, or as well as, using physical proof of age cards.
- 1.3 The PASS Board recently approved PASS 5 2021, a new standard for the digital presentation of a card on a smartphone. This standard addressed the physical look of the DPoA and essential security measures.

---

<sup>1</sup> The PASS Scheme is operated by PASSCO CiC a not for profit Community Interest Company.

<sup>2</sup> PASS 5: Para 4.14 (e) Their approach to interoperability has been audited by the PASSCO auditors to ensure that it is compatible with these PASS Technical Requirements.

- 1.4 The PASS Board has invited the Age Verification Providers Association (AVPA)<sup>3</sup>, to facilitate the production of a consensus across all interested stakeholders<sup>4</sup> about a suitable single validation mechanism that would be available, as a PASS Scheme preferred interoperability solution, to all Acceptors so they are able to accept DPoA from all Issuers.
- 1.5 The agreed approach is to develop this Call for a Proposal (CfP) and invite innovative proposals which address the requirements set out herein.
- 1.6 PASS 5 does not address how cards from multiple Issuers can be accepted universally. Issuers are required by the standard to demonstrate how they would offer interoperability, but the method for this is not specified.
- 1.7 The purpose of this CfP is to identify a suitable method for validating Digital Proof of Age.
- 1.8 This CfP seeks solutions to enable any number of Accredited PASS Card Issuers to operate via a shared mechanism for the validation of their cards
- 1.9 This CfP and the solutions it generates only necessarily applies to DPoA issued under the PASS regime. Other digital proofs of age issued without the endorsement of the PASS scheme could operate independently and seek separate approval for legal acceptance under relevant age-restrictions.
- 1.10 The PASS Board retains ownership of the PASS logo, giving it control over the use of system created by this process by PASS Scheme approved Issuers.
- 1.11 The interoperability solution will be self-funding, with Issuers continuing to make a royalty payment to PASS including an annual contribution to cover the cost of interoperability (See 6 for more detail).

## **2. Background**

- 2.1 The PASS card scheme is operated by a Community Interest Company, PASSCO C.I.C., providing accreditation to suppliers of physical Proof of Age Cards in the UK. The card suppliers are assessed against strict standards and criteria by qualified independent auditors. Sellers of age-restricted products can be confident in the validity of cards with a PASS holograms, safe in the knowledge that the scheme is supported by the police, trading standards and a wide range of relevant trade bodies.
- 2.2 Some 800,000 children turn 18 in the UK each year. Currently, approximately 200,000 plastic cards are issued annually. Around 22-24% of 18-25 year-olds in the UK possess a PASS approved card (All young people in Scotland aged 11-26 can apply for a free Young Scot National Entitlement Card which is part of the PASS Scheme).
- 2.3 PASS now wishes to include Digital Proof of Age cards which can be stored, displayed and validated on a smartphone.

---

<sup>3</sup> The AVPA is a trade association representing a large number of providers of age verification solutions

<sup>4</sup> This is not limited to members of the AVPA.

- 2.4 The UK Government is “keen to encourage efforts to develop new technology to improve the experience of consumers and retailers when purchasing age restricted products.”<sup>5</sup>
- 2.5 Currently DPoA are being developed for a number of sales methods:
- 2.5.1 **Face-to-face tills** where staff confirm a customer’s age in person
  - 2.5.2 **Face-to-face** access to goods or services situations where tills or dedicated scanners are not used e.g. pubs, restaurants, gaming, entrance challenges etc.
  - 2.5.3 **Self-service tills** where currently staff confirm a customer’s age in person. but innovative solutions are now available to replace this with technical mechanisms e.g. facial recognition of customers who have pre-enrolled and already proven their age, or whose age is reliably estimated using facial estimation.
  - 2.5.4 **In-aisle purchases** where customers scan products as they select them, and are able to pay online without using a till.
  - 2.5.5 **Lockers** where customers pick-up goods which have been purchased in advance online and are delivered to a central point to await collection. This may be in a range of places e.g. a store, a transport hub or in stand-alone premises
  - 2.5.6 **Delivery** – grocery delivery with a range of operational models

### 3 Progress to date

- 3.1 Considerable progress has already been made in delivering a solution to meet these requirements. A new PASS-5 standard sets out the requirements for the presentational design of the digital card and generic requirements for its core security.
- 3.2 PASS-5 does not define a solution for interoperability but in section 4.14, requires all Issuers of DPoA to set-out how they will achieve it:

---

<sup>5</sup> Government recognise advancements in technology and the need for agreement on what constitutes an acceptable form of digital ID for age-verification purposes. We have also commissioned the PASSCO board to produce a set of standards for digital ID. (Hansard comment from HO Minister of State, Baroness Williams, in the Lords debate on 13 July 2020)



## *Use of the PASS Trade Mark by Providers of DPoA Interoperability Services*

4.14 An Accredited Provider or any DPoA Interoperability Service shall not use the PASS Trade Mark to indicate that their DPoA is compatible with these PASS Technical Requirements unless:

- (a) They have submitted an interoperability statement to PASSCO;
- (b) They have produced an integration protocol for their system in accordance with the Interoperability Guidelines issued by PASSCO;
- (c) They have provided a copy of their interoperability statement and integration protocol to all Accredited Providers of DPoA;
- (d) They have not established or attempted to establish any exclusivity arrangements with any individual relying parties;
- (e) Their approach to interoperability has been audited by the PASSCO auditors to ensure that it is compatible with these PASS Technical Requirements.

3.3 The outcome of this CfP process will enable Issuers to meet the requirements set out in sub-paragraphs (a), (b), (c) and (e) above, delivering the “uniform approach” referenced in the Note.

3.4 A number of suppliers are now trialling their own digital proof of age products, facilitated by a Home Office sandbox. See section 10 below for examples.

3.4.1 Each has its own approach to validation to prevent misuse but these generally rely on a direct relationship between the DPoA Issuer and the Acceptor.

3.5 DPoA Acceptors currently need to integrate their existing till software or other Point-of-Sale technology (e.g. card readers) with each Issuer whose DPoA they wish to accept. Any interoperability interface must be effective with all Issuers.

## **4 Requirements**

4.1 The PASS Board supports an open and competitive market in the provision of DPoA, and has concluded that a DPoA from any provider must be able to be validated by any Acceptor.

4.2 The requirement this CfP seeks to address is primarily 4.3.1 below, universal acceptance.

4.3 The general requirements for the solution this CfP seeks to find are:

**4.3.1 A DPoA supplied by any approved Issuer MUST be universally acceptable to all Acceptors**

- 4.3.2 The presentation of the DPoA MUST be recognizable by acceptors' staff already familiar with plastic PASS cards without extensive additional training.
- 4.3.3 Relying parties MUST not require extensive or expensive new hardware e.g., no more than a smartphone or existing, widely-deployed point-of-sale technology.
- 4.3.4 The solutions MUST be easily integrated with existing POS systems e.g. tills, credit card readers etc.
- 4.3.5 The DPoA validation process MUST be at least as secure as its plastic predecessor – but may provide increased level of security to protect against tampering, forgery and borrowed credentials.
- 4.3.6 The solutions MUST allow PASS to authorize and de-authorize providers, allowing and withdrawing access to the validation system, and de-activating any individual DPoA supplied by an Issuer which is no longer authorized.
- 4.3.7 Bidders MUST describe how their proposal is commercially sustainable.
- 4.3.8 Solutions MUST facilitate compliance with the provisions of the PASS5 standard, and allow providers to adopt one or more of the technical mechanisms for “revealing” the DPoA i.e. matrix code or near-field communication, and is universally required of all providers to ensure universal acceptance by relying parties is guaranteed.
- 4.3.9 The solution is in effect strategically important national infrastructure, so any business critical element MUST be deliver 99.9% uptime, 365 days a year such that age-restricted sales can be made in a legally compliant manner. Any failure of this solution MUST not disrupt the commercial operations of Acceptors for more than 5 minutes (See also 4.4.6).
- 4.3.10 The solution MUST protect the privacy of consumers by applying privacy-by-design and adhering to the principle of data minimisation.
- 4.3.11 The solution MUST not create any additional database of personally identifiable information (PII).
- 4.3.12 The solution MUST not allow Acceptors to record any PII without the additional and explicit consent of the consumer.
- 4.3.13 The solution MUST be secure to prevent unauthorised external interference.
- 4.3.14 The solution MUST protect commercially sensitive information from being accessed by any party which does not own that data. For example, if data on the volume of DPoA presentations by Issuer is collected, it should only be visible to that Issuer, and likewise, if the volume of presentations to an Acceptor is recorded, it should only be visible to the Acceptor. Any administrative access for accounting or audit purposes should be carefully controlled and where possible anonymised.

4.3.15 The provider of the solution MUST charge all Issuers based on the same rate card. Discounts are not permitted unless offered to all Issuers on an equal basis.

4.3.16 The PASS Board MUST retain the ability to approve Issuers and to withdraw that approval. If approval is withdrawn, the solution should allow for DPoA issued by that Issuer to be immediately invalidated, or invalidated to an agreed schedule.

Additional requirements:

4.4 In addition, additional requirements for the solution this CFP seeks to find which will be considered favourably are:

4.4.1 The solution MUST monitor the number of DPoA issued by any provider, as this is the basis of charging for participation in the PASS Scheme.

4.4.2 The solution MUST be built on agreed international standards

4.4.3 The PASS Board does not wish to determine the commercial arrangements associated with the introduction of a universally accepted DPoA but does wish to facilitate a wide range of options.

4.4.4 The PASS Board wishes to encourage new entrants to become Issuers. Commercial proposals which take this into account will be favourably considered.

4.4.5 It may be assumed that Acceptors need to have access to basic technology to validate DPoA. This SHOULD be inexpensive and preferably already ubiquitous e.g. a smartphone, or widespread POS devices.

4.4.6 It may be assumed that Acceptors have access to the internet/phone connectivity. Solutions SHOULD enable offline operations which will be favourably considered, recognising the level of assurance under such a contingency may be reduced.

Acceptors do not wish to have to undertake extensive re-training of their staff either to recognise or to validate DPoA. Solutions SHOULD minimise this burden.

## **5 Commercial and Governance arrangements**

5.1 The PASS scheme is a standards body not an operational entity, and its governance function is currently funded through a small commission per card issued).

5.1.1 Issuers pay an annual Membership fee per card issued to PASS, as well as levy to purchase physical PASS Holograms.

5.2 It would be simplest to mirror this arrangement for DPoA, with an additional fee per DPoA payable to cover the cost of interoperability, albeit annually recurring, to reflect the ongoing cost of any infrastructure or management processes. Alternative commercial arrangements will be considered but must be acceptable to the PASS Board.

- 5.3 There is no central funding available from either the PASS Board or AVPA to develop any solution, beyond the resource required to facilitate this CfP process and provide ongoing governance.
- 5.4 Bidders should set out how they would structure their fees to continue to recover the costs of the PASS scheme, as its user-base transitions from plastic to digital proof of age, and the fee it would charge for the provision of the service e.g. x pence per issued (and not cancelled) DPoA per annum.
- 5.5 Bidders MUST set out an exit strategy which would allow for the smooth transition of the scheme to an alternative supplier of interoperability infrastructure at the end of the contract period (3 years from the successful conclusion of the pilot).

## **6 The CfP process and how to bid**

- 6.1 Responses must be submitted to [iain@avpassociation.com](mailto:iain@avpassociation.com) and [martin@pass-scheme.org.uk](mailto:martin@pass-scheme.org.uk) by 18:00 British Summer Time on Friday 24 June 2022.
- 6.2 Existing and prospective PASS card Issuers are not precluded from bidding. They must make clear in a specific statement how selecting their solution will not give them an advantage over other issuers.
- 6.3 All responses will be considered by the AVPA and the PASS Board with a view to selecting a "preferred supplier". The technical aspects of the solution will be reviewed in collaboration with the industry. with existing and prospective Issuers. Shortlisted suppliers may be invited to present their solutions as part of this review process.
- 6.4 If you have any queries about the tender process or this CfP, then please get in touch with Iain Corby at [iain@avpassociation.com](mailto:iain@avpassociation.com) and/or Martin Rawlings (PASSCO) at [martin6rawlings@gmail.com](mailto:martin6rawlings@gmail.com)
- 6.5 All technical questions raised will be answered on the AVPA website [here](#) so that answers are available to all bidders. Questions must be submitted by 18:00 BST on Friday 10 June 2022
- 6.6 There is no specified format, template or page limit, but responses should take an assessor familiar with this field (i.e. who fully understands this CfP) no longer than 30 minutes to assimilate.
- 6.7 If any part(s) of a response is considered commercially confidential and should not be shared as part of a consultation process with Issuers, this should be clearly indicated. Bidders should aim to ensure enough of their response is available for this consultation process to secure a consensus in support of their solution.

Click on the link below for a copy of the PASS 5 2021: Requirements for Digital Presentation of Proof of Age

<https://www.pass-scheme.org.uk/wp-content/uploads/2022/05/PASS-5-2021-Requirements-for-Digital-Presentation-of-Proof-of-Age.pdf>

## Key Terms and acronyms

**Acceptor** – any organisation which relies upon a PASS card to confirm the age of its Customers. In technical documents, it is often referred to as a Relying Party or a Verifier. e.g. retailers, pubs, clubs, cinemas

**AVPA** – the Age Verification Providers Association, a non-profit company limited by guarantee, acting as the trade body representing suppliers of age assurance technology and associated businesses.<sup>6</sup>

**Bidder** – any organization or consortium submitted a response to this CfP

**Call for a Proposal (CfP)** - this document, which is intended to provide the information required by Bidders to put forward a proposal on a comparable basis to other proposals to facilitate the selection of a solutions.

**Customer** – a person who used a form of proof of age approved by PASS

**Digital Proof of Age (DPoA)** – a proof of age which is stored and presented on a smartphone.

**Issuer** – an organisation which has been audited and certified to issue PASS cards and is in good standing with PASS.

**PASS Scheme** – Scheme whereby card issuers are accredited through independent auditors and issued a licence to use the PASS hologram

**PASS Card** – a physical, plastic card issued under licence from PASS

**PASSCO CiC**<sup>7</sup> – A not for profit Community Interest Company that operates the PASS Scheme

**Provider** – see Issuer

**Relying Party** – see Acceptor

---

<sup>6</sup> The AVPA's members operate globally, and it is currently engaged by the European Commission to deliver age verification solutions across the EU. The arrangement above allows for the interoperability solution to be extended beyond the UK.

<sup>7</sup> PASSCO CiC Members consist of PASS Scheme accredited card issuers and supporting trade organisations.