Regula

Webinar

Age Assurance Under Pressure:

Regulations, Risks and Smarter Verification





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Business role

Head of Compliance and
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Name/Surname

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Business role

Head of Product, Regula
Biometric products, transforming data-intensive IDV products into intuitive user experiences.

Age Assurance Is Now an Enforcement Priority



Australia

AUD 109,2M

(~76 million US dollars) max civil penalty for failing to take reasonable steps to keep under-16s off social media (in force since 10 Dec 2025)

Ofcom in action 2026

£1.35M

Feb: £800K, Kick Online Entertainment (no age checks)

Feb: £1.35M, 8579 LLC (no age checks)

Sep: £700K, Xgroovy



UK

10% of global revenue

or £18M, whichever is greater, under the Online Safety Act

Three pressures, one question

How do we verify age without sacrificing compliance, security, or conversion?

Regulation | Fines, audits, investigations |
Regulators ask: can you prove it works?

Cheating | Borrowed IDs, deepfakes, misrepresentation, shared and resold accounts |
Cheaters ask: how do I get around it?

Privacy & UX | Collect less data, lose fewer real users |
Users ask: why do you need this from me?

From a checkbox to infrastructure



“I am 18+” checkbox or date of birth field

self-declaration → effective age checks → risk-based age assurance infrastructure

Regulator asked: *is there a gate?*

What Makes Age Assurance Defensible?



- Effectiveness
- Proportionality
- Evidence
- Privacy

Methods

Same goal, different proofs

Gating, estimation, verification, inference: what's the difference?

No proof

Proof

Probabilistic

Only the answer is shadoof

Age gating
User types a birth date or ticks "I'm 18+"

Age verification
Age confirmed from an ID document or authoritative source

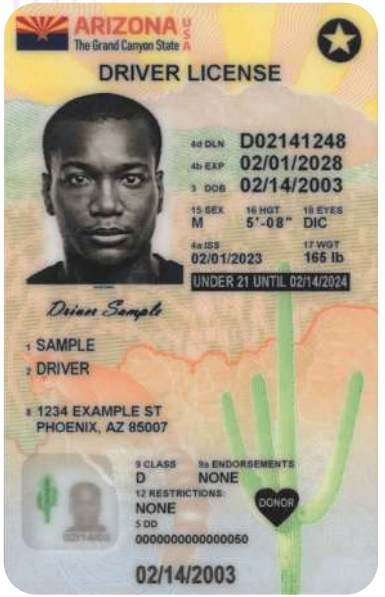
Age estimation
Algorithm estimates age, e.g. from a selfie

Age inference
Reusable "18+" proof from a wallet, bank, or mobile network operator

ISO 27566-1

Sometimes the ID Format Can Be Useful





The USA driver license has different format depending on whether the holder is under the age of 21

But Sometimes the ID Doesn't Help

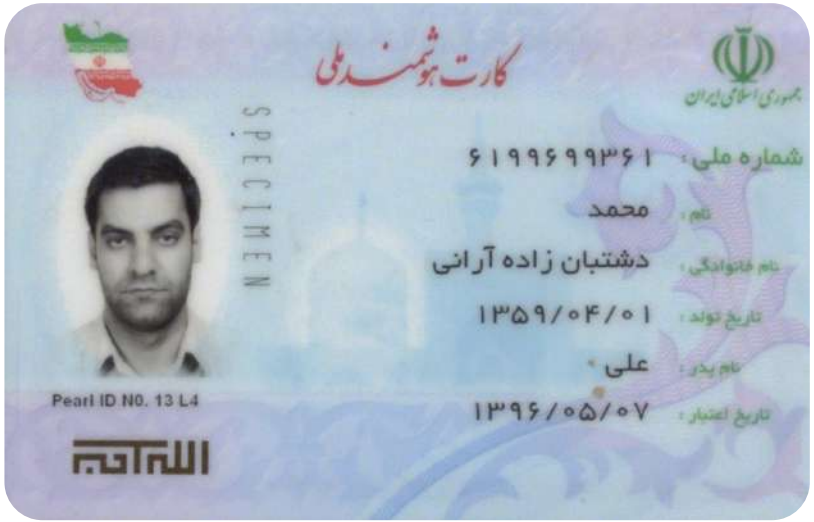


Taiwan National ID Card



Japan Driver's License

But Sometimes the ID Doesn’t Help



Iranian identity card



Malaysian identity card

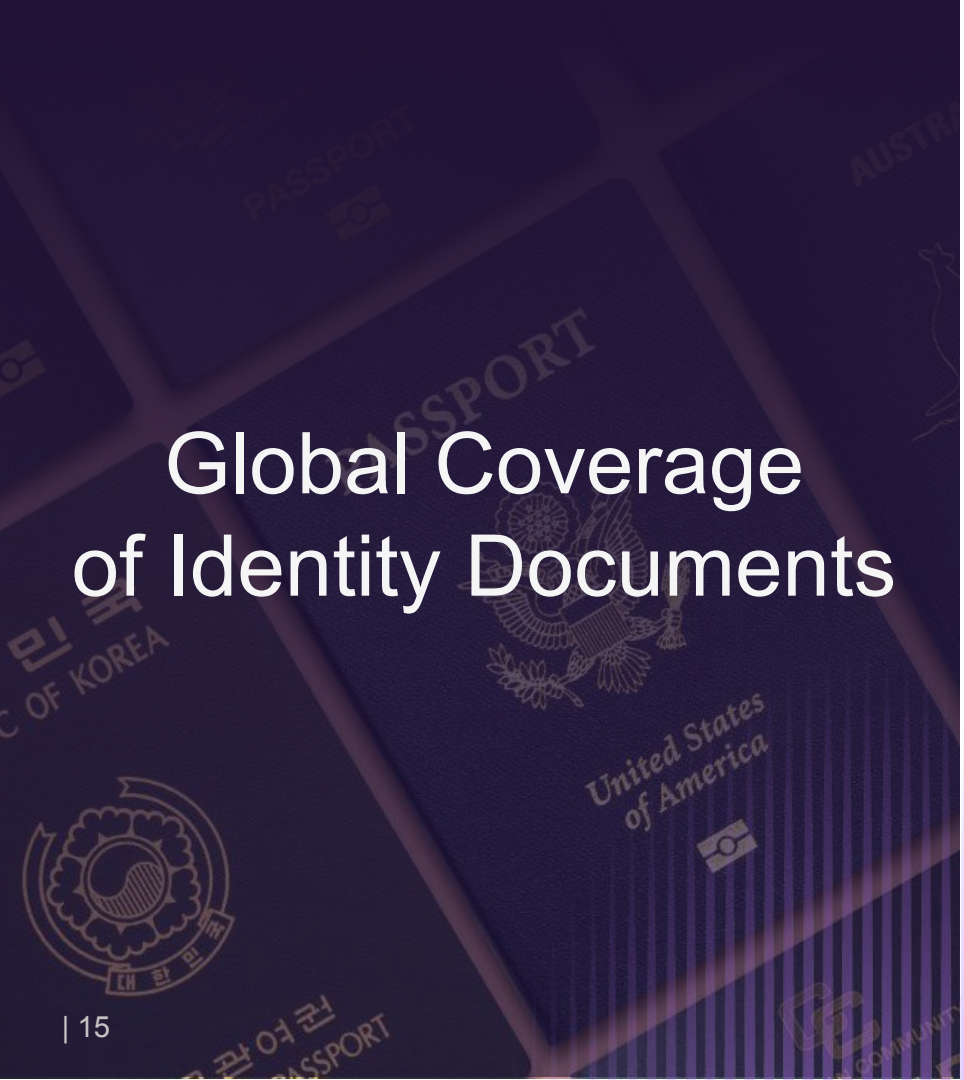
But Sometimes the ID Doesn’t Help

Australia - ePassport (2022)



Text fields | Image quality | Document type

Date of issue	2022-06-09	⊖
Months to expire	67	✓
Sex	F	✓
Age	35	✓
Nationality	AUSTRALIAN	⊖
Document class code	P	✓
Issuing state code	AUS	✓
Issuing authority	AUSTRALIA	⊖



Global Coverage of Identity Documents

17,000+ document templates covering **254** countries and territories

Supports **138** languages and scripts, including Latin, Cyrillic, Hebrew, Greek, Spanish, Arabic, Chinese, and more

Regula's Document Database

Age estimation: diversity matters



Age: 21



Age: 22



Age: 19



Age: 23



Age: 18

How to choose reliable vendor

Algorithm	Region of Birth and Sex											
	E Africa		E Asia		E Europe		S Asia		S E Asia		W Africa	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
regula-000	3.2 ± 0.2 (1)	2.5 ± 0.2 (1)	2.24 ± 0.07 (1)	1.85 ± 0.06 (1)	2.1 ± 0.1 (1)	1.62 ± 0.10 (1)	2.56 ± 0.08 (1)	1.98 ± 0.07 (1)	2.5 ± 0.1 (3)	1.9 ± 0.1 (1)	3.3 ± 0.2 (2)	2.6 ± 0.2 (1)
idemia-001	3.3 ± 0.2 (2)	3.2 ± 0.2 (8)	2.45 ± 0.07 (4)	2.19 ± 0.08 (5)	2.9 ± 0.1 (19)	2.1 ± 0.1 (13)	2.73 ± 0.09 (3)	2.60 ± 0.09 (13)	2.7 ± 0.1 (6)	2.3 ± 0.1 (7)	3.3 ± 0.2 (1)	3.0 ± 0.2 (4)
nominder-001	3.4 ± 0.2 (3)	3.0 ± 0.2 (5)	2.80 ± 0.07 (9)	2.52 ± 0.08 (13)	2.6 ± 0.1 (9)	2.1 ± 0.1 (12)	2.89 ± 0.08 (6)	2.49 ± 0.08 (8)	2.8 ± 0.1 (7)	2.4 ± 0.1 (9)	4.2 ± 0.2 (16)	3.1 ± 0.2 (6)
				2.26 ± 0.08 (7)	2.4 ± 0.1 (4)	1.9 ± 0.1 (5)	2.77 ± 0.09 (4)	2.37 ± 0.08 (3)	2.6 ± 0.1 (4)	2.3 ± 0.1 (6)	3.5 ± 0.2 (4)	2.7 ± 0.2 (2)
				2.10 ± 0.07 (4)	2.8 ± 0.1 (13)	1.9 ± 0.1 (7)	2.96 ± 0.09 (8)	2.28 ± 0.08 (2)	2.6 ± 0.1 (5)	2.2 ± 0.1 (4)	3.4 ± 0.2 (3)	2.7 ± 0.2 (3)
				2.68 ± 0.08 (17)	2.6 ± 0.1 (8)	2.3 ± 0.1 (18)	3.12 ± 0.09 (13)	2.88 ± 0.09 (18)	2.9 ± 0.1 (11)	2.8 ± 0.1 (19)	4.0 ± 0.2 (10)	3.1 ± 0.2 (7)
				3.85 ± 0.09 (30)	3.5 ± 0.2 (26)	3.0 ± 0.2 (29)	3.8 ± 0.1 (27)	3.7 ± 0.1 (28)	3.9 ± 0.2 (25)	3.7 ± 0.2 (27)	4.0 ± 0.2 (9)	3.8 ± 0.2 (23)
				2.60 ± 0.08 (15)	2.7 ± 0.1 (11)	2.3 ± 0.1 (19)	2.97 ± 0.10 (9)	2.68 ± 0.10 (15)	3.1 ± 0.1 (13)	2.5 ± 0.1 (12)	3.9 ± 0.2 (7)	3.3 ± 0.2 (11)
cvut-003	3.9 ± 0.2 (9)	3.3 ± 0.2 (9)	2.81 ± 0.07 (10)	2.32 ± 0.07 (8)	2.7 ± 0.1 (10)	2.1 ± 0.1 (15)	2.90 ± 0.09 (7)	2.58 ± 0.09 (11)	2.9 ± 0.1 (9)	2.4 ± 0.1 (8)	4.2 ± 0.2 (14)	3.2 ± 0.2 (10)
innovatrics-001	3.9 ± 0.2 (10)	3.4 ± 0.2 (13)	2.36 ± 0.07 (2)	1.98 ± 0.06 (2)	2.3 ± 0.1 (3)	1.8 ± 0.1 (4)	2.70 ± 0.08 (2)	2.38 ± 0.08 (4)	2.35 ± 0.10 (1)	2.0 ± 0.1 (2)	4.2 ± 0.2 (15)	3.3 ± 0.2 (13)

- Regula is the only vendor recognized among top performers in all critical age estimation scenarios
- 99.7% accuracy rate, confirmed by NIST

How to choose reliable vendor

Algorithm	Challenge 25		Child Online Safety (13-16)					
	Application	Border	Age 13-16				Age 8-12	Age 17-22
	FPR	FPR	MAE	TPR	FNR↓	FNR↑	FPR	FPR
idemia-002	0.019±0.010(1)	0.036±0.014(1)	2.7956(7)	0.5114(31)	0.1067(32)	0.3819(4)	0.1573(4)	0.0557(30)
regula-000	0.024±0.011(2)	0.068±0.018(3)	2.2108(3)	0.4885(28)	0.0914(28)	0.4201(5)	0.1134(1)	0.0257(20)
idemia-001	0.024±0.011(3)	0.044±0.015(2)	2.4601(4)	0.4954(30)	0.1475(33)	0.3572(3)	0.1213(2)	0.0609(31)
cognitec-000	0.027±0.012(4)	0.130±0.025(10)	2.4676(5)	0.4894(29)	0.0564(25)	0.4542(7)	0.2107(6)	0.0427(27)
nominder-001	0.042±0.015(5)	0.090±0.021(4)	4.2849(22)	0.2163(12)	0.0138(13)	0.7700(22)	0.3583(21)	0.0057(10)
cyberlink-001	0.047±0.017(6)	0.097±0.023(5)	4.1283(21)	0.1400(11)	0.0022(4)	0.8578(24)	0.6128(32)	0.0041(9)
incode-000	0.047±0.017(7)	0.254±0.033(24)	2.7267(6)	0.3678(21)	0.1027(31)	0.5295(9)	0.1409(3)	0.0309(24)
innovatrics-001	0.048±0.014(8)	0.098±0.021(6)	3.5867(16)	0.2419(13)	0.0143(15)	0.7438(21)	0.3504(20)	0.0029(7)
cvut-003	0.051±0.017(9)	0.226±0.031(22)	4.1120(20)	0.4665(26)	0.0236(22)	0.5099(8)	0.2967(16)	0.0277(22)
incode-001	0.053±0.017(10)	0.216±0.030(18)	3.1825(9)	0.1230(8)	0.0230(21)	0.8539(23)	0.1952(5)	0.0011(4)
innovatrics-000	0.055±0.015(11)	0.115±0.023(7)	3.5499(15)	0.2703(16)	0.0158(18)	0.7139(19)	0.3408(18)	0.0036(8)

Attackers don’t break the algorithm. They go around it.

Identity misuse



Borrowed ID

- A minor uses an adult’s document or photo
- Mitigating controls: face match to the document photo, authenticity checks

Presentation and injection attacks

Photo or video replay

- Printed photo, screen replay, mask

Injection attacks

- A virtual camera feeds fake video straight into the app, so the real camera is never used

Deepfakes and synthetic faces

- AI-generated faces. UK users even passed a face check with a video game character

Account misuse



A parent’s account

- A child uses an adult’s already-verified account
- Mitigating controls: re-verification

Anti Fraud measures



Liveness detection

Active and passive liveness checks to check that the user is physically present

iBeta-certified at PAD Level 1 and Level 2 under ISO/IEC 30107-3.



Face matching and identification

Performs 1:1 face matching against a document portrait, RFID chip image, or external database, and supports 1:N face identification.

Identification common spoofing attempts

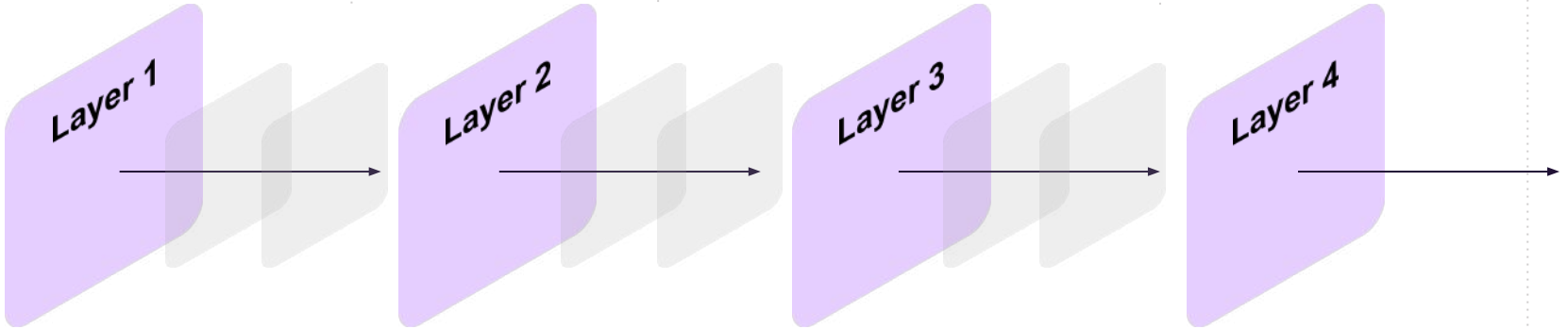
- Screen replays with deepfake video
- Digital images and masks
- Video injections into the camera stream
- AI-generated deepfakes
- 3D-masks and silicon replicas
- Detection of multiple faces in the camera

Age Assurance Should Adapt to Risk

Different users and situations require different verification journeys.

Light check at entry
Facial age estimation with a buffer age. Low friction. *[UX]*

Re-verification on triggers
Suspected bypass, new device, risky action, unusual behaviour. [Attacks]



Strong verification for restricted actions
ID + authenticity + selfie + liveness + face match. [Attacks]

Audit trail
Method, threshold, model version, outcome, timestamp. [Regulation]

One Platform. Multiple Age Assurance Journeys.

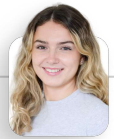


- Configurable workflows - Match verification requirements to different situations and risk levels
- Multiple verification technologies - Combine document, biometric, and integrated third-party checks
- Risk-based step-up verification - Request additional evidence when the initial result is insufficient
- Customer profiles and verification history - Connect previous and new checks to support ongoing identity management









Age Assurance Is More Than an Age Check

Choose the right verification method



Combine document, biometric, and other checks when needed

Manage verification decisions and store sufficient evidence

Three Principles for Smarter Age Assurance



Match Verification to the Level of Uncertainty

Apply proportionate age checks, escalating to stronger verification when the risk or uncertainty increases.



Protect Against Bypass Attempts

Combine strong document and biometric checks where needed to prevent bypass attempts using deepfakes, masks, or forgeries.



Make Every Decision Defensible

Maintain verification evidence, apply consistent policies, and minimize unnecessary data collection and user friction.



Thank you!

Regula

Decades of Forensics for Seamless Identity Verification.

Bringing together 30 years of experience in forensics, border control and business, to create industry standards to trust and follow.