



# India Updates

Asia PKI Consortium: Special Steering Committee Meeting

## Indian Digital Certificate Userbase

- 1 10 Million+ DSC (Long Lived Certificate) Users
- 2 110 Million+ eSign (Short Lived Certificate) Users and growing.
- 3 National Regulator: Controller of Certifying Authorities
- 4 15 Certifying Authorities licensed by Government
- 5 Signatures Trusted in Adobe & Microsoft Applications

## Key Features of eSign

- Regulated common set of APIs by Government Regulator
- Wide implementation with numerous signing applications and use cases.
- Short Lived Key Pair, and Short Lived Certificates (30 minutes validity), LTV with CRL

### Enrolment / Authentication / eSign Cost

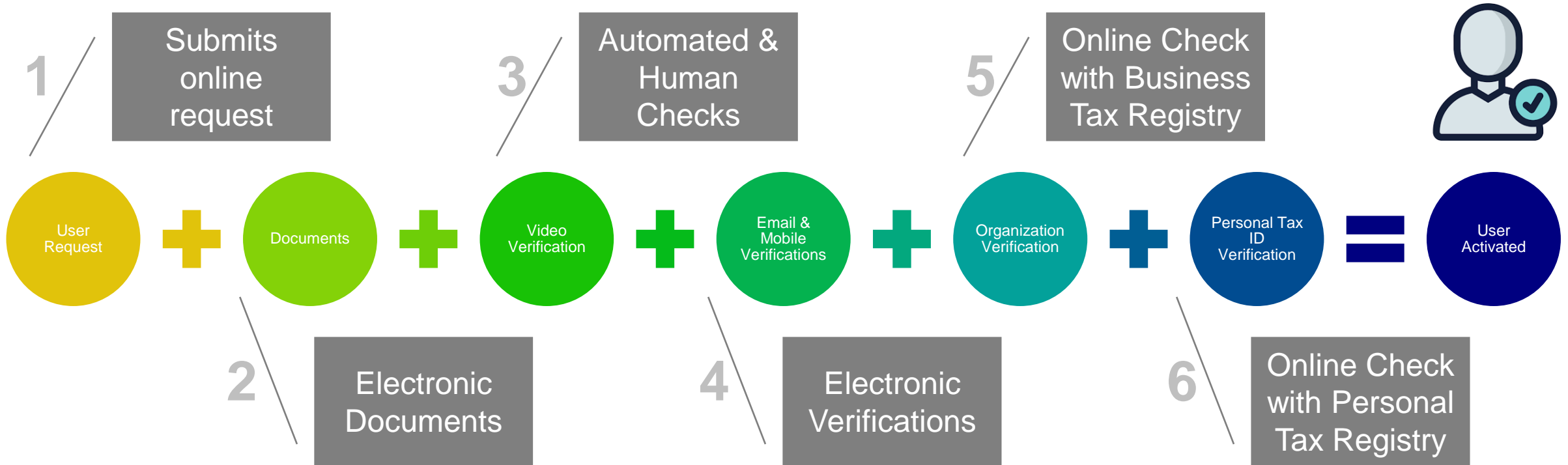
#### UIDAI / Aadhaar based: v2

- 1.28 Billion Enrolments (95%+ Population)
- Easy Authentication with Aadhaar (National ID) + OTP
- Cost: USD 0.40 per transaction
- Limited by law for private use cases.

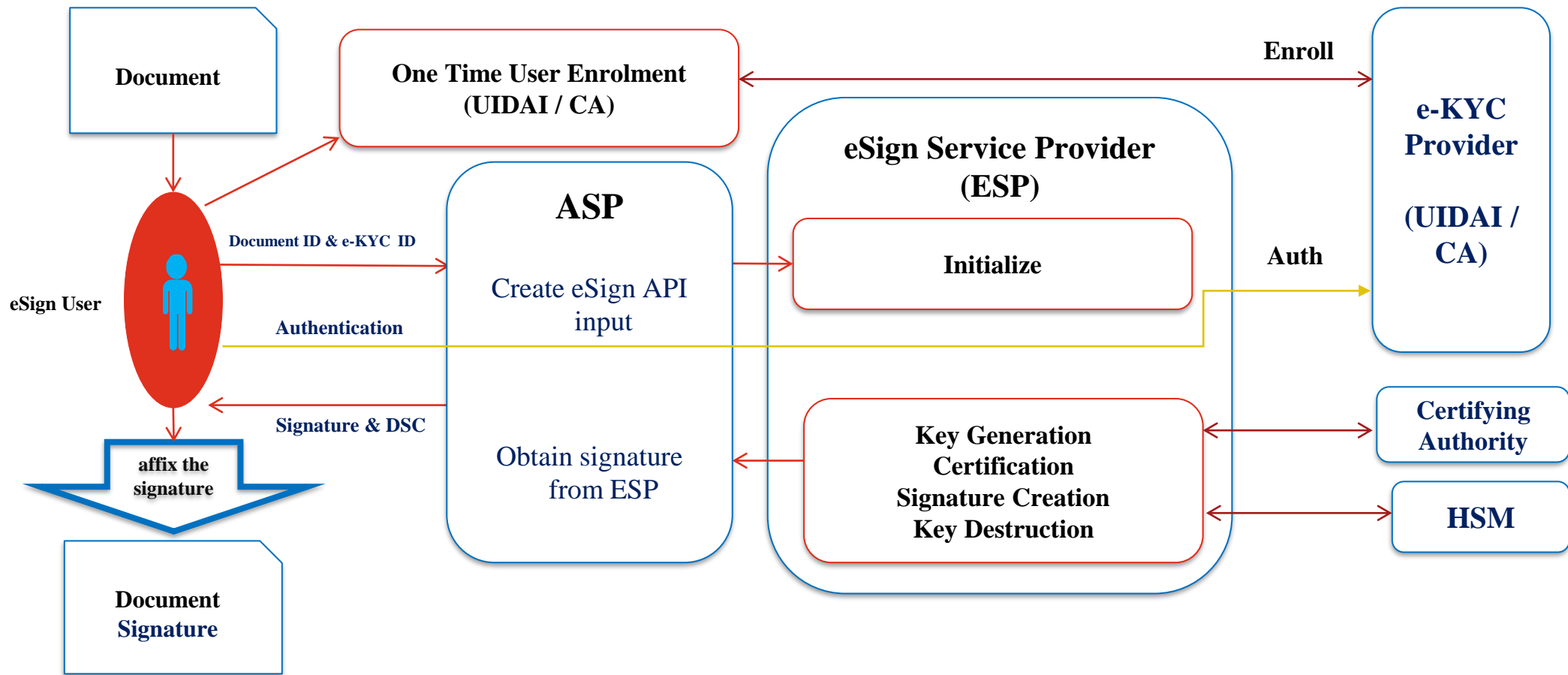
#### CA/TSP acting as KYC Provider (Since 2019): v3

- 3 Mn+ Enrolments. Seamless online enrolment with 5-10K+ users everyday.
- Easy Authentication with PIN + OTP, FIDO, Mobile App, Registered Device, etc
- Cost: USD 0.10 per transaction
- Used by all kind of use cases.

# The Enrolment Process



# How eSign (Short Lived Certificates) Work in India



HSM – Hardware Security Module

ASP – Application Service Provider

DSC – Digital Signature Certificate

e-KYC – electronic Know Your Customer

ESP – eSign Service Provider

## Quick comparison: Traditional DSC v/s Online eSign

	DSC (Long Lived Certificate)	eSign (Short Lived Certificate)
<b>Certificate Type</b>	Individuals & Org Individuals	Individuals & Org Individuals
<b>Integration</b>	Client system driver based integration	Fully online
<b>Dependency</b>	Desktop OS and crypto token is required	No dependency on Hardware
<b>Password handling</b>	After 10 failed attempt, certificate reissuance is required	Web portal based password reset options
<b>Reissuance of certificate</b>	Reissuance of certificate is required if token gets lost	No reissuance required
<b>Hardware cost for User</b>	Yes	No
<b>OS Support</b>	Limited OS support by token vendors	Cross browser cross OS support
<b>Troubleshooting</b>	Driver and other troubleshooting required	High availability of service
<b>Timestamping and LTV</b>	Local Time / Application Dependent	Integrated Timestamping & LTV
<b>Bulk signing</b>	Based on client system configuration	5 documents/transaction
<b>Sign using mobile</b>	Not possible	Yes. Compatible on any device



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