

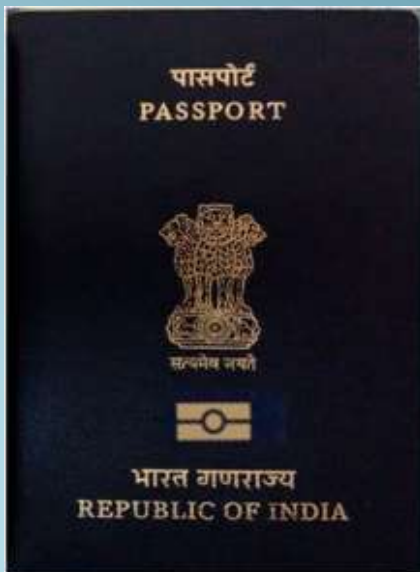
## Landmark ePassport project for MEA-75<sup>th</sup> Year of Independence Smart Card Technologies Division, NIC

The MEA has entrusted NIC to design, develop and implement the ePassport project for the issuance of ePassports to Indian citizens, officials and diplomats. NIC/MEA will coordinate with other stake holders NXP,ISP Nasik, nCode, TCS/Thales for the overall implementation of the project.

A need was felt by NIC to develop a home grown O/S which shall provide a secure, interoperable, absolutely generic and deployment-ready Identity applications for smart cards. The SCOSTA O/S was developed in 2002 by NIC in collaboration with IIT Kanpur and Smart card Industry. Subsequently SCOSTA-CL O/S (contact less chip) was developed in the year 2007 especially for contactless e-Passports. The contactless chip with 64KB was embedded in the e-Passport. In 2008, NIC has done a PoC for MEA to issue ePassports for 20,000 officials. About 120 countries worldwide have already implemented ePassports for their citizens.



### ePassport-Project in 75<sup>th</sup> Year of India's Independence

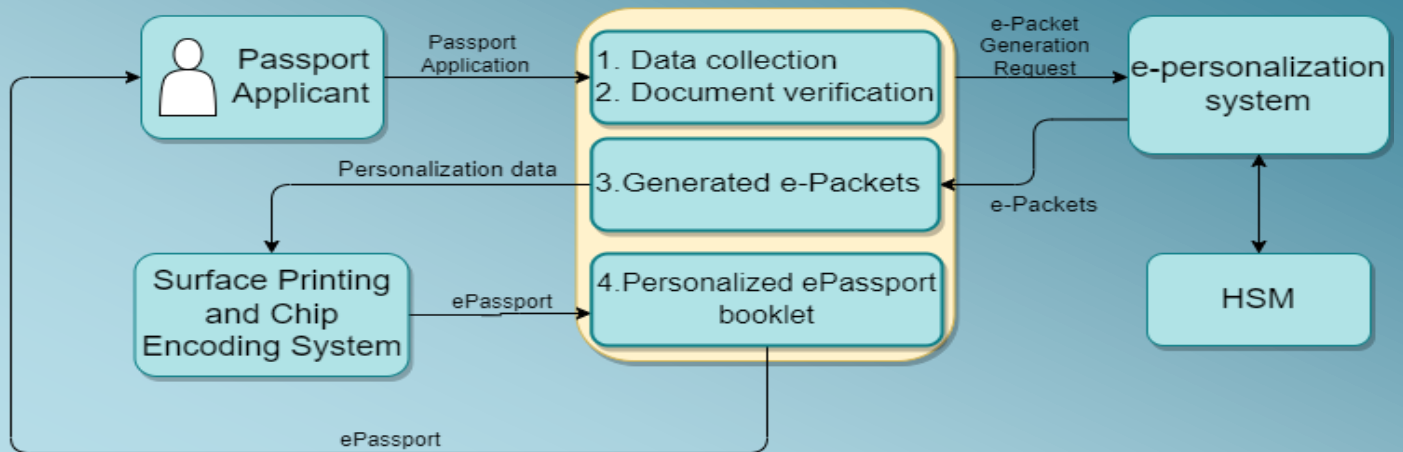


### Roll Out Process

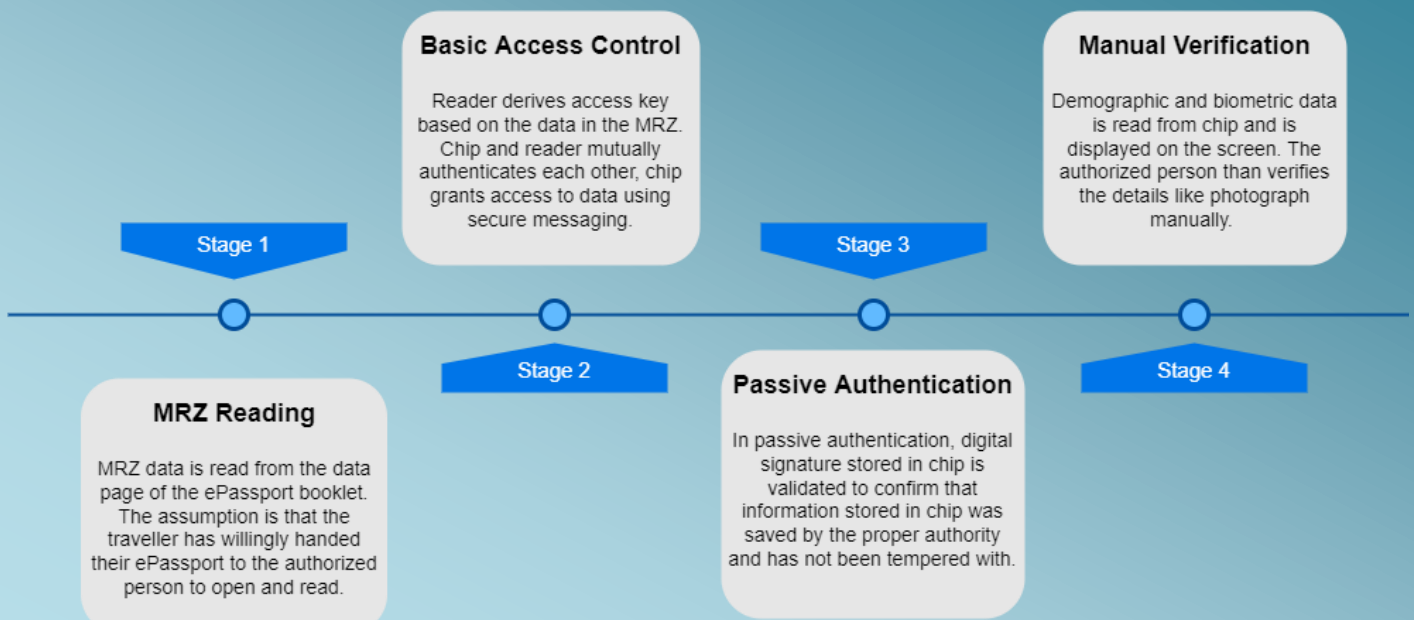
- Periodic Testing of ePassport at NIC Test bed for SCOSTA-CL compliance, reading and verification.
- Interoperability testing of Indian ePassport by NIC shall be carried out in at least ten countries initially before the formal launch and later on for 2-3 countries on yearly basis, based on International travel requirements.
- Reading and verification of Indian ePassport shall be carried out in 10 RPOs yearly.
- There are 36 RPOs in India, which can issue approximately 50,000 ePassports per day. The issuance of ePassports can be scaled up to 1 lakh per day as per the requirement.
- The reading and verification application shall be developed by NIC and the same shall be used for immigration at various airports and border control.
- A NFC enabled mobile App for reading and verification will be developed for ePassport holder verification and at the KIOSKS at RPO's.

## Process flow for the creation of ePassports

### PSP



## Process flow for the Verification of ePassports



## Future Road Map

For a robust and enhanced security, the next generation ePassport may be rolled out on Indian designed, developed and manufactured contactless chip along with upgraded operating system thereby saving considerable foreign exchange with the following inclusions under the Atamanirbhar Bharat Abhiyan.

- Encryption algorithms support like AES, RSA, ECC and Hashing algorithms support like SHA256 or SHA512
- Provide Active Authentication(AA)
- Provides Extended Access Control(EAC) along with PA/BAC

For Further Details Contact :

Y. Sree Ramakrishna, HoD

Smart Card Technologies Division, National Informatics Centre,

A-Block, C.G.O Complex, Lodhi Road, New Delhi-110003

Tel: 91-11-24305212, 24305814, 24305716

E-mail: [ysrama@nic.in](mailto:ysrama@nic.in)

Website: <https://www.scosta.gov.in>