

COVID-19 e-Pass

A ServicePlus Success Story

The Covid-19 menace was spreading vigorously in the country. On 24th March 2020, honourable Prime Minister of India declared a nationwide lockdown for three weeks. It was part of a preventive measure to tackle the pandemic. Lockdown limited the movement of the entire population of the country, but the fact is that no society can afford a complete standstill. To run the system, to ensure proper governance, a controlled movement was essential.

Initially, the movement was limited to essential service providers as well as for those who were in medical urgency. The expected volume of application as well as the mandate of shorter response time demanded an IT solution to handle the movement pass. Responding to the need of the hour, many agencies from many states started creating applications to handle the situation. Within no time, the solution providers were loaded with multiple change requests as the scenarios and approaches were undergoing frequent changes.

To handle the continually recurring change requests and to comply with the functional and security requirements were the challenges faced by these agencies. It was necessary to have a configurable framework to handle such a scenario. Being a service delivery framework, ServicePlus was designed and equipped to handle any such scenarios. This was realised by many states and they decided to use ServicePlus to handle the various services related to COVID-19 pandemic.

Introduction

ServicePlus (<https://serviceonline.gov.in>) is a meta-data based e-Service delivery framework which is built on LowCode-NoCode (LCNC) architecture. It offers a wizard-like interface for defining the meta-data of the service and finally, the newfangled rendering engine correlates the metadata to generate an e-Service on the fly. It offers Multi-Tenancy, that enables each tenant to configure and manage their e-Governance services as per their requirement. As on date,

more than 1400 services are being offered through ServicePlus by various states.

During the lockdown period, this framework was extensively used by different stakeholders. The e-Pass services offered by 18 states were configured using ServicePlus. All the services related to COVID-19 have undergone frequent version updates to accommodate the frequent policy changes of various governments. Over the years, ServicePlus has adopted many functionalities/features that are essential for e-service delivery. The features are incorporated in ServicePlus in such a manner that, it can be configured to suit the requirements of any client.

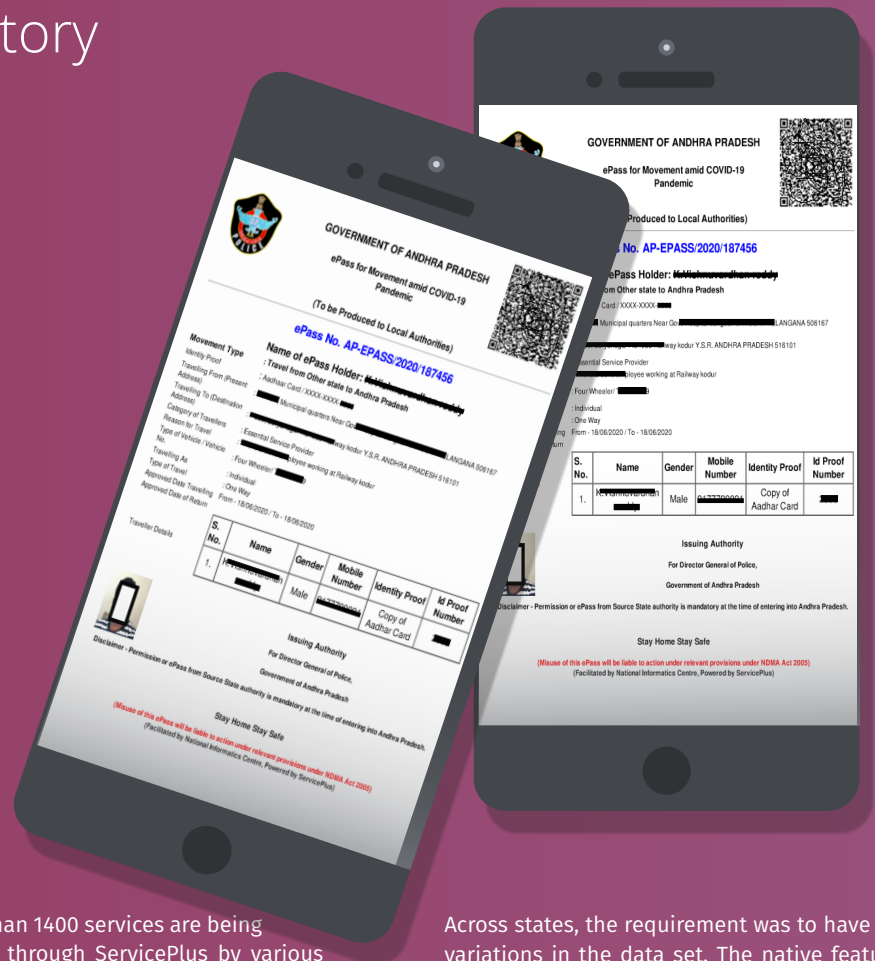
Versatile Features provided in e-Pass Service(s)

The versatility along with the inbuilt version control mechanism made ServicePlus the most suitable framework to deal with COVID-19 menace. The base data set collected across the state was more or less same in all e-pass services.

Across states, the requirement was to have some variations in the data set. The native feature of ServicePlus framework supports varying data set and different workflows across states and services.

Most of the e-Pass services were to be availed by the public without logging on to the site. In ServicePlus, to make a service accessible with or without login is decided by a single check box selection. While configuring the service, answer to the question "Whether the applicant needs to logon to the system to avail this service?" is the deciding factor which enables or disables this functionality. Things are that simple in ServicePlus.

While describing the ePass system through ServicePlus, we have to mention one underlying application which provides entity codes to the system. It is the Local Government Directory (LGD) which accords a unique code for each entity. This code is being used by all states in their various applications. Thus the implementation of LGD codes ensures interoperability.

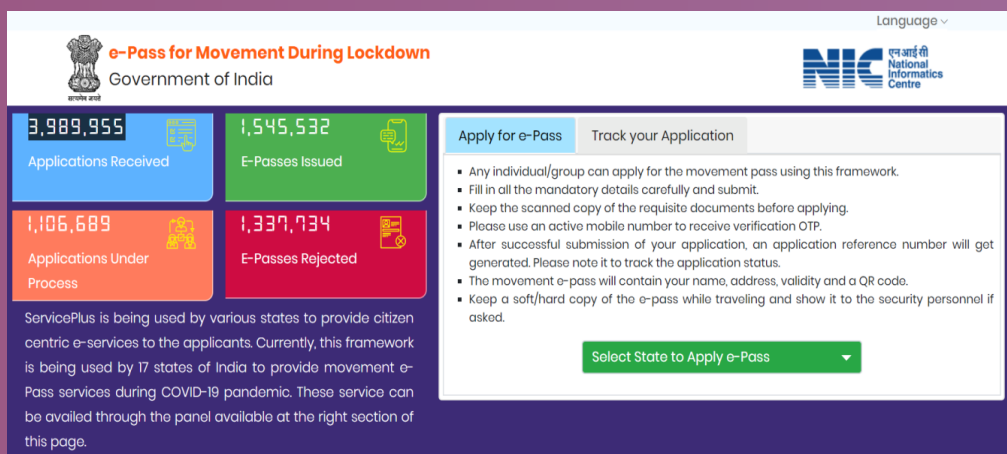


Facilities offered by National e-Pass System

In e-Pass service, every government was interested to collect a minimal or essential data-set. Across states, one of the main requirements was to have an easy and intuitive interface for the applicants. It was envisaged to provide a hassle-free experience to the end-user. The configurable interfaces of ServicePlus allowed each state to have its design for their respective services.

The base structure of e-pass system was adhering to the following points:

- User Identification through mobile OTP verification; embedded in the application form
- Collected Essential and Minimal data sets
- Applicant's Name, Present and Destination Address, Date of Travel, Details of members of the team, if any, Vehicle Details, Operational Email ID (as an additional mode of communication) & Aadhaar can also be captured (Can be validated through OTP if available)
- Captured COVID -19 Zone details of Source and Destination Address
- Instant notification on Mobile and Email upon Application Submission and Approval or Rejection
- Automatic routing of the applications to the respective approving authorities
- Applicant(s) health status as available in Aarogya Setu made visible to the approving authorities during application processing. (Only when, if the applicant(s) are using Aarogya Setu App)



▲ To avail the ePass service, a new portal having URL <https://serviceonline.gov.in/epass/> was launched. Fig 2. snapshot of the single window portal.

- Multi-Location Approving Authorities for Source and Destination Address (for interstate and inter-district movement)
- Issued e-Pass pushed to the respective Aarogya Setu App
- Alerts for Approving Authorities, while a change in source/destination zone status
- Facility to revoke the issued e-pass at any point of time with proper notifications to the applicant

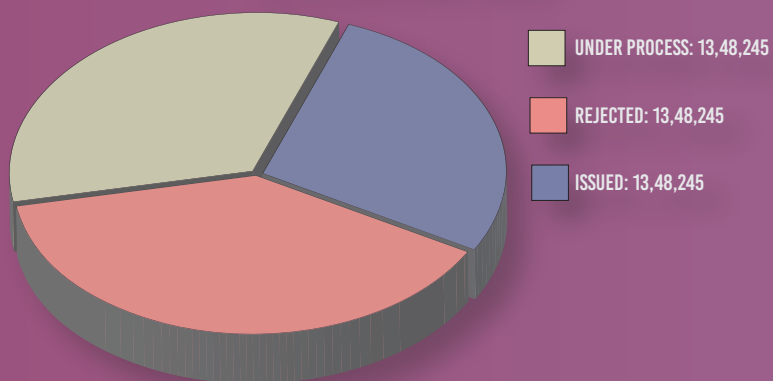
- Server signed QR code to ensure no tampering of e-pass. Ensure instant verification by any third party in server-less architecture.

Aarogya Setu was another initiative from the Government of India to help people assess the possibility of Covid-19 infection as well as to identify the proximity of any Covid-19 positive case. It was required by the different stakeholders to have an integration with Aarogya Setu to identify the possibility of Covid-19 infection for the migrants. Based on the demands from the users, ServicePlus has integrated with Aarogya Setu, which connects essential health services with the people of India in our combined fight against COVID-19.

Following features have been developed:

- Aarogya Setu status of the applicant has been shown to the workflow player to ensure an informed decision
- Pushing ePass to the respective area of Aarogya Setu, once the pass is issued
- Direct Download Link in Aarogya Setu
- The validity of e-passes issued to an individual
- Direct downloading of ePass through Aarogya Setu

TOTAL APPLICATION RECEIVED: 4,929,520**



D.C. Misra
Dy. Director General



Manie Khaneja
Dy. Director General



Adesh Chand Gupta
Sr. Technical Director



N.P. Sreejith
Scientist-D



Ashwin Ayyapan
Scientist-C



Sajjad Abid
Scientist-B



Priya Agrawal
Scientist-B

Contact for more information

Manie Khaneja
DDG & HOD
Panchayat Informatics Division
National Informatics Centre
A-Block, CGO Complex
Lodhi Road, New Delhi-110003
Email: manie@nic.in
Phone: 011-24360563