AWARDS SCHEME FOR EXEMPLARY IMPLEMENTATION OF e-GOVERNANCE INITIATIVES

NAME OF CATEGORY- 'INNOVATIVE USE OF MOBILE TECHNOLOGY IN e-GOVERNANCE'

1. **Coverage – Geographical and Demographic** :-

(i) Comprehensiveness of reach of delivery centres,

> **Mobile Seva: National Rollout of Mobile Services Delivery Gateway** is a nationwide initiative launched by Department of Electronics and Information Technology (DeitY) to provide public services to all the citizens, businesses and other stakeholders in the country through mobile phones and tablets. Under Mobile Seva, a centralized platform, named as Mobile Service Delivery Gateway (MSDG) has been created and **mobile based services of over 1100 Government departments and agencies across the nation at central, state and local levels have been integrated and made live** through the platform. The platform provides a one-stop solution for all Government departments and agencies in the country at central, state and local levels for delivering all their mobile based services through various mobile-based channels such as SMS, IVRS, Mobile Apps, USSD and location based services. **All the over 900 million mobile phone users in the country can avail these services.**
>
> Mobile Seva users constitute:
> a. All Government departments and agencies in the country at central, state and local levels
> b. All citizens, businesses and other stakeholders in India across the geographical length and breadth of the nation and across all demographic segments
>
> **It can be said that every mobile phone in India is in itself a service delivery centre.**

(ii) Number of delivery centres

> Mobile Seva provides a centralized mobile enablement platform **through which already over 1100 Government departments and agencies across the nation at central, state and local levels have integrated** their mobile based services for delivery through various channels such as SMS, IVRS, mobile apps, USSD and location based services. On the Pull SMS channel, over 340 services are available to citizens. Through Push SMS, already **over 121 crore electronic transactions** have been delivered to the citizens and

other stakeholders. The services are available to all citizens, businesses and other stakeholders through mobile devices. **All the over 900 million mobile phone users in the country can avail these services. It can be said that every mobile phone in India is in itself a service delivery centre.**

(iii) Geographical

(a)National level – Number of State covered

36

(b) State/UT level- Number of District covered

Approx. 670

(c) District level- Number of Blocks covered

Approx. 7,000

Please give specific details:-

"Mobile Seva: National Rollout of Mobile Services Delivery Gateway" is a nationwide initiative to provide public services to the citizens through mobile phones and tablets. It provides a centralised, open standards, open source and cloud-based platform named as Mobile Service Delivery Gateway (MSDG) to all Government departments and agencies in the country at central, state and local levels.

Already, over 1100 Government departments and agencies across the nation at the centre, state, and local levels have integrated their mobile based services on the Mobile Seva platform for delivery through various mobile-based channels such as SMS, IVRS, mobile apps, and USSD.

Mobile Seva users constitute:
   a. All Government departments and agencies in India at central, state and local levels.
   b. All citizens, businesses and other stakeholders in India

(iv) Demographic spread (percentage of population covered)

The entire population of India with direct or indirect access to mobile phones is covered.

2.   Situation Before the Initiative (Bottlenecks, Challenges, constraints etc with specific details as to what triggered the Organization to conceptualize this project) :

a) **Absence of ready and widely-available medium for electronic delivery of and access to public services**: In India, millions of less privileged individuals without access to computers and internet have low chances of accessing electronic government or public services. The sparseness of landlines, particularly in rural areas, coupled with the relatively high cost of PCs, has kept Internet usage very low. Now mobiles are fast bridging the digital divide and have become the most convenient channel for people to access information and communication technologies (ICT) based services for work, education and leisure. Before Mobile Seva became available, there was no centralized approach and framework to leverage mobile devices as alternative access and delivery channels for public services, especially in rural areas.

b) **Absence of an institutional driver towards mobile-enablement**: Before Mobile Seva was made available along with a notified policy framework for mobile governance, the absence of a policy on mobile-governance was resulting in lower visibility and acceptability of the concept by various government departments both at the central and state levels.

c) **The challenge of investment and infrastructure requirements for mobile-enablement**: At the time of conceptualization of the e-Governance service delivery strategies in the country during the beginning of the last decade, the penetration of mobile devices was very low and the capabilities of the devices to carry out data transactions were also minimal. However, the scenario has changed completely during the last decade, both in terms of penetration of mobile devices as well as their computing and other technical capabilities. Before Mobile Seva was made available with complete funding by DeitY and with a centralized Mobile Service Delivery Gateway (MSDG) platform that any government department at the central, state or local levels could expeditiously onboard, it was a challenge for most government departments and agencies across the nation to be ready with the requisite strategy, investment and infrastructure for mobile-enablement of both existing and new e-governance projects and/ or their various public services.

d) **Shortage of in-house skilled manpower**: Before Mobile Seva was made available with complete handholding support by DeitY for departments,

absence of requisite skilled manpower for implementing mobile-enablement was a major challenge for most government departments that otherwise were interested in adopting mobile-governance.

e) **No convenience of a single number for citizens**: Before Mobile Seva became available and offered the convenience of single, easy to remember short code for various public services across the nation, citizens faced the challenge of having to remember and recall scores of phone numbers for accessing various public services through their mobiles. It may also be noted that before Mobile Seva made available a single short code across the nation for all mobile governance needs after consultations with the Department of Telecom and all the Telecom Service Providers (TSPs), individual departments faced the challenge of getting their separate short codes opened across all TSPs. Multiplicity of short codes and the inconvenience of remembering many short codes for citizens made it difficult to mainstream mobile governance in the country across various government departments and agencies.

f) **No "single window" solution for departments**: Before Mobile Seva was made available, there was no single one-stop gateway for mobile enablement on all available mobile channels such as SMS, Voice/IVR m-apps, m-payment, USSD, location based services, etc.

3. **Scope of Services** (Relevance of application for e-governance, Extent to which service is delivered through mobile #)

i) **Relevance for e-governance:**

a. The prime motivator for this initiative was the realization that massive and growing penetration of mobile phones in India can substantially enhance access to electronic services, especially in rural areas. In India, the sparseness of landlines and absence of broadband, particularly in rural areas, coupled with the relatively high cost of PCs, has kept Internet usage very low. Mobiles are fast bridging the digital divide, and have become the most convenient channel for people to access information and communication technologies (ICT) based services for work, education and leisure. **This emergent scenario provides a ready and widespread base for access to and delivery of public services electronically**, hence contributing significantly

to the cause of e-governance across the nation.

b. Another motivator for this initiative was that **its implementation complemented efforts to realize the vision of the National e-Governance Plan to bring public services closer home to citizens at affordable costs**. In the country, Government departments and agencies at central and state levels touch over 1.2 billion citizens in their day to day lives. Implementation of Mobile Seva is helping to **bring all these government departments and agencies at central, state, and local levels on to this common platform and reach over 900 million mobile subscribers in the country with public services, again contributing to the national e-governance movement**.

ii)   **Extent of mobile enablement:**

a. The Mobile Service Delivery Gateway (MSDG) has been created by DeitY through its technical development agency, Centre for Development of Advance Computing (C-DAC) around open standards, open source and cloud-based solutions and is a key implementation strategy under the Framework for Mobile Governance that was notified earlier by DeitY in February 2012.

b. Mobile Seva provides a **one-stop solution to all the central and state Government departments and agencies across the nation for all their mobile service delivery needs**. It provides a centrally hosted cloud based mobile enablement (m-enablement) and mobile based delivery (m-delivery) infrastructure and platform **that allow all Government departments and agencies to expeditiously start offering their services through mobile phones without having to invest heavily in creating their own separate mobile platforms**.

c. Mobile Seva enables integration of mobile applications with the common e-governance infrastructure in the country consisting of State Data Centres (SDCs), State Wide Area Networks (SWANs) and the middleware comprising National/State Service Delivery Gateways (NSDG/SSDGs) for delivery of public services to the users. Availability of Government wide shared infrastructure and

services enables rapid development and reduced costs for the integrating departments.

d. Mobile Seva aims to **enable all integrating departments and agencies to provide their services on various mobile channels such as Short Message Service (SMS), Voice/ Integrated Voice Response System (IVRS), Unstructured Supplementary Service Data (USSD), mobile applications (m-apps) and location based services.**

e. SMS channel under MSDG:
    i. Pull SMS is a citizen-initiated SMS in a predefined format. It is operational on 51969 (all telcos), 166 (major telcos), and 9223166166 (all telcos), offering 340+ services.
    ii. Push SMS has seen massive adoption by government departments/ agencies at the central, state/UT and local levels. Over **1100** departments/ agencies are already on board and over **121 crore** SMS transactions have already been delivered to citizens/ businesses by the integrated departments.

f. The Mobile Seva portal www.mgov.gov.in (or https://mgov.gov.in) is available round-the-clock for both departments and citizens with live up-to-date information on all features and solutions. From the "Department Services" tab on the portal, interested departments/ agencies can quickly register themselves online for availing Mobile Seva services from https://services.mgov.gov.in/. Information and interaction is also provided through regular posts on the Mobile Seva social page. www.facebook.com/DIT.MGOV.

g. The mobile AppStore of the MSDG is a centralized government AppStore for mobile apps around public services. It currently hosts over 305 free-to-download mobile apps (www.apps.mgov.gov.in or https://apps.mgov.gov.in/index.jsp). These apps have been downloaded over 2.05 lakh times by the citizens and other stakeholders.

4. Strategy Adopted

(i) The details of base line study done,

Driven by the vision of providing public services to all the residents in the country, especially in the rural areas by utilizing the reach of mobile phones and the innovative potential of mobile applications, Department of Electronics and Information Technology (DeitY), Government of India, took up the initiative of baselining the current scenario regarding mobile-governance and also formulating a comprehensive policy framework on the same to make government services available to the residents of the country through mobile devices. In this regard, a Draft Consultation Paper on Mobile Governance Policy Framework was prepared by the National e-Governance Division (NeGD) within DeitY in March 2011, and circulated and also made available online for feedback and comments from stakeholders across Government departments, industry, civil society and citizens.

Multiple rounds of consultation were held. Part of these consultations was a written consultation, which started with the publication of the draft consultation paper on mobile governance framework on the website of DeitY in April 2011. Interested parties were invited to respond to the consultation paper and to the questions included in it. In addition, face to face consultations were held with various stakeholder groups such as telecom players, industry associations, telecom equipment providers, IT and VAS industry representatives and civil society organizations.

It emerged from the consultation process that the mobile platform was ideally suited for increasing access to and widening the reach of public services in view of the very high penetration of mobile phones in the country, particularly in the rural areas. It was also recognized that a wide range of services offered by Government departments at both central and state levels could be mobile enabled and offered through mobile devices. Services such as status tracking of applications submitted, notifications for receipt of applications and delivery of services, and complete end to end services through intuitive mobile applications were specifically identified for delivery through mobile devices.

After holding several rounds of detailed consultations with all the stakeholders, the final Framework on Mobile Governance was notified by DeitY in Feb. 2012.

(ii) Problems identified,

(A) Some key concerns identified during the aforesaid activity were as

follows:

1. It was recognised that the majority of rural citizens in rural areas use low end 2G mobile phones. Hence, the services to be delivered through mobiles should also be compliant with these devices to ensure maximum uptake of the services. However, smart phone users, that seem to be growing in numbers by the day, should not be neglected and there should be considerable focus on mobile apps for the smart devices.

2. The current (as of then, i.e. first quarter 2011) premium level of pricing (for usage of channels such as Pull SMS through short codes) was too high making it unaffordable for poor rural people who are the main target segment of the m-Governance initiative. Also, revenue sharing, if any, should also not contribute to higher prices for the end user. Given that unlike the normal scenario, here the content provider is the Government; hence the pricing should not be decided by the telecom operators alone and/ or only left to market forces.

3. The need for the mobile devices to support regional languages was important from the viewpoint of rural public to access these services.

4. The role of DeitY to play an anchoring role as well as be the custodian of the proposed centralized Mobile Services Delivery Gateway (MSDG) was unanimous. It was also proposed that Mobile Service Delivery Gateway should not merely end up as another bulk SMS gateway. All channels of services including voice portal and payment transaction engine should be integral parts of the MSDG.

(B) The consolidated findings of the aforesaid study and consultation process are as follows:

1. Identification of priority services for mobile governance deployment

The respondents suggested a large number of application areas where mobile governance can be deployed. Some of the contributors suggested the proposed services under various categories such as push/pull services, information based services, transaction based services etc. Majority of the respondents highlighted the need to keep the services, operator and device agnostic to the extent possible.

2. Handling Interoperability issues and identification of key features of MSDG

It was suggested by majority of respondents that services developed under mobile governance initiative should have seamless integration across departments, telecom operators and devices. It was also decided that the applications submitted for availability through MSDG and mobile app store should compulsorily follow the principles of open standards and reliability as specified in DeitY's Policy on Open Standards for e-Governance. It was also suggested that the issues of privacy and security also need to be duly addressed. The majority of contributors also emphasised that MSDG should have a state of the art and redundant technical architecture including SMS, USSD, GPRS, Payment Gateway, Voice and all the current modes of service delivery built in rather than merely being an SMS based platform. Also, it was specified by many respondents that the government should be careful in ensuring that multiple agencies were provided an opportunity to partner for creation of MSDG rather than relying on a single agency/vendor.

3. Ensuring uniformity of services across telecom operators and end user devices

All the respondents were unanimous in their view that government should notify uniform codes for mobile governance services which should be compulsorily opened/ made available by all the telecom operators across the country.

4. Promoting Innovation

It was proposed in the consultation paper that an Innovation Fund for Mobile Governance be established for promoting research and development on mobile governance as well as incubating/ supporting the value added services (VAS) on mobile governance. The participants were unanimous in their view that a transparent mechanism for accessing the fund by various government / private players be developed and published in the public domain.

5. Ensuring inclusivity of Services

The prime concern of both the government agencies and respondents from the private sector was on ensuring that the services developed under the proposed policy were available to all sections of the society rather than only in urban areas.

6. Identification of appropriate Public Private Partnership Models

It was the unanimous view of majority of respondents as well as the expert panel that the strategic control of the mobile platform including the mobile AppStore should be with an agency of Government of India so that the interest of citizens is protected at all stages of deployment and delivery of services.

7. Collaborative Production of m-Governance services – connected initiatives among various line ministries/MMPs/ states

Most of the respondents suggested collaborative production of mobile governance services among various ministries. However, mandating collaborative production for all the ministries was not recommended. It was however suggested that if the Mobile Seva platform is able to showcase the benefits to various ministries/departments at centre and in the states/UTs, they would readily want to use the shared infrastructure made available by the government.

(iii) Roll out/implementation model,

a) **Formulation of a policy on mobile governance**: This was the most important strategy adopted to bring about the transformation. DeitY formulated and notified the Framework for Mobile Governance in February 2012 after extensive consultations across Government departments, industry, civil society, and citizens.. The notified framework now acts as the prime driver for Government departments across the nation towards mobile enablement of their services.

b) **Bringing all telecom service providers (TSPs) on board and making a single number nationally available for all mobile-based services**: Shortcodes 51969 and 166 have been operationalized by DeitY for the national mobile-governance initiative. A long code—92231661666—has also been operationalized for user convenience for allowing the users to send Pull SMS requests at P2P rates as per their own tariff plan. A strategic vision of the project is to offer all non-emergency public services to the citizens through a single nationally available number. After direct engagement with all TSPs & Department of Telecom (DoT), 51969 has been opened by all TSPs and 166 by most TSPs across the nation in all

circles at normal, non-premium rates. The long code 9223166166 is available across all TSPs in the entire country.

c) **Strategic development and deployment of a one-stop (single window) solution for all mobile-enablement needs of all departments, with solutions across all mobile-based channels of service delivery:**

- The strategic direction taken by Mobile Seva is to provide a comprehensive mobile-enablement platform that is not only focused on just SMS solutions, but enables all integrating departments and agencies to provide their services on all possible mobile channels such as Short Message Service (**SMS**), Voice/ Integrated Voice Response System (**IVRS**), Unstructured Supplementary Service Data (**USSD**), and through mobile applications (**m-apps**).
- Mobile Seva is open nationwide to all central and state government departments and agencies for immediate onboarding through an online self-service module.
- As a result of the strategic direction, departments need not worry about creating their own mobile platform, thereby saving significantly in time, efforts, and monetary expenditure. They can start providing mobile based services through this platform without any delay. Departments can access the services or upload them just by registering on the Mobile Seva services portal (https://services.mgov.gov.in/).

d) **Strategies for expeditious onboarding of integrating government departments with Mobile Seva and for capacity building**:

- An extensive awareness and communication drive was launched to convey the unique value proposition, the cost-benefits and uniqueness of the platform as a one stop gateway for all mobile enablement needs. This has resulted in adoption of the Mobile Seva platform by over **1100** departments across the country already.
- A decision has been taken to provide complete handholding support to government departments in the beginning and involve their own technical teams, wherever available, in integration and developing the applications. If a department does not have any technical capability, then complete support including regular support for operation and maintenance is being provided by DeitY through its team from C-DAC. As a result, as on date, over **1100** departments are already on board and over **340** public services are already available through the Mobile

Seva project. Over **305** mobile applications for a wide range of Government services from both central and state government departments and local bodies have also been developed, fully integrated and made live.

- The entire initiative is owned, funded and implemented by DeitY. The initiative has received full support of the Ministry of Communications and IT and the Prime Minister's Committee on National e-Governance Plan (NeGP). The PM's Committee on NeGP in its second meeting on 1st July 2013 directed all ministries and departments both at the central and state levels to integrate their services with the Mobile Seva platform for delivery through mobile devices.

e) **Strategic focus on open technology**: The Mobile Seva platform has been developed on open standards using open source and is a scalable and highly interoperable solution. The solution is deployed on a cluster of dedicated servers with virtual machines running CentOS open source OS. Open source databases have been used to store the data and JBoss Application servers which is also an open source application server has been used to deploy the solution. Other open source software like Kannel, Mobicents Communication Platform, Asterisks, Hyperic, etc have also been used.

f) **Complete transparency in providing information and access**: Another important strategy adopted was to ensure complete transparency in providing information and access to all the stakeholders. All project related information as well as usage statistics for all departments and services have been made available in real time in public domain, round the clock, on the Mobile Seva portal at http://mgov.gov.in. This has acted as a key driver for faster dissemination of information and easy onboarding of departments.

g) **Emphasis on mobile applications**: Mobile Applications or m-Apps are fast becoming the preferred mode for accessing a particular solution or service, especially amongst the young users in the country. In cognizance of this trend, Mobile Seva has placed strategic emphasis on m-Apps and has created a mobile application store (m-AppStore). It is available at https://apps.mgov.gov.in/index.jsp and currently hosts over **305** live and fully integrated m-Apps, all developed in-house by the implementation team at C-DAC Mumbai. Over **2.05 lakh** downloads have already taken place from the AppStore. Amongst the live m-apps is the Polling Station Location App that has been used by the Election Commission of India (ECI) along

with complementary methods for mapping over 9.13 lakh polling stations in the country. These locations have been placed in public domain on Google Maps by ECI for public use.

h) **Enabling participation of private application developers**: Involving the industry and private mobile application developers has been another key strategy adopted to ensure that the coverage of applications to include more public services can be widened and the skills from the private sector can be tapped. DeitY organized a contest in 2013 to involve the private developers to develop and submit mobile applications that can be hosted on the Mobile Seva AppStore. It generated excellent response from the private developer community. The winning apps were awarded cash prizes and have been hosted on the Mobile Seva AppStore.

i) **Use of social media to create awareness**: Another important strategy was to engage with the stakeholders directly through the social media sites like Facebook (www.facebook.com/DIT.MGOV), Twitter (@mgovindia), and Youtube (goo.gl/nCpTUP) to obtain feedback and comments and create awareness about the entire initiative. This has been done throughout the entire project, starting from consultations during the policy formulation stage to the present phase of its implementation.

j) **Assessment/ evaluation & course correction**: Another strategically important part of the Mobile Seva solution is an active "evaluation and correction" module, under which, a mid-term evaluation exercise was undertaken in June 2013 by the Narsee Monjee Institute of Management Studies (NMIMS) Mumbai. The report is based on a survey of 60 departments that have integrated their services with Mobile Seva. It is available online at www.mgov.gov.in.

k) **A measure of success of the strategies adopted:** The Mobile Seva project is a winner at the United Nations Public Service Awards for 2014 under the category "Promoting Whole-of-Government Approaches in the Information Age". It is the only winner from India during 2014. Mobile Seva also won the mBillionth Award South Asia 2013 under the m-governance category.

(iv) Communication and dissemination strategy and approach used.):

a) An extensive awareness and communication drive was launched to convey the unique value proposition, the cost-benefits and uniqueness of

the platform as a one stop gateway for all mobile enablement needs over all subsisting mobile channels. This has resulted in adoption of the Mobile Seva platform by over **1100** departments across the country already.

b) Extensive participation of stakeholders across Government, industry, civil society and citizens during the formulation of the Framework for Mobile Governance.

c) Extensive consultations with all the TSPs (telcos) for opening of the short codes 51969 and 166 in all the telecom circles in the country.

d) Real-time usage statistics of the Mobile Seva platform in terms of no. of departments on board, no. of public services integrated, no. of m-apps developed and hosted, no. of SMSes sent and received by the integrating departments, etc. These are available round-the-clock in a user-friendly and transparent manner on the Mobile Seva portal at www.mgov.gov.in.

e) Regular posts made through social media sites – Facebook, Twitter, youtube – and also citizen feedback solicited and addressed totally transparently.

f) Regular meetings between the owner and implementer, technical development and consulting support organizations (DeitY, CDAC and NeGD respectively) in a fully participative environment with focus on consensus building on priority items and strategic directions towards desired outcomes, and also for monitoring and review of the implementation of the project.

g) Open communication channel with all the **1100+** integrated central and state departments across the country through both electronic and traditional modes.

h) Using in-house creative briefs, the Mobile Seva logo was developed and launched on 23-Dec-2013. Using iterative creative briefs for content and layout, the first informational advertisement was created and released in newspapers, which also announced that the already operational initiative was being dedicated to the nation. User-friendly flyers have also been developed for awareness purposes. Doordarshan News was requested o carry scrolling messages in Hindi and English during newscasts on the Mobile Seva initiative and its AppStore, which DD News carried free of

cost.

i) For engaging citizens and as a first step towards a larger ecosystem, a mobile-app development contest was organized in which any citizen could participate. Prize winners were selected for the app-development contest and awarded on 23-Dec-2013.

j) Mobile Seva participated in and won the mBillionth Award South Asia, 2013 during July 2013 under the m-governance category. The project also won at the United Nations Public Service Awards 2014 under the category "Promoting Whole-of-Government Approaches in the Information Age". It was the only winner from India at the 2014 UN Public Service Awards.

5. **Technology Platform used-**
   (i) Description,

   1)SMS Gateway: Kannel Open source SMS Gateway, JAVA, SQL Data Base
   2) USSD: Mobicents open source USSD gateway, SQL Data Base
   3) IVRS: Asterisk* open source voice platform
   4) Mobile application Appstore : JAVA
   5) Mobile Application Development: Android,iOS,J2ME,Blackberry, Windows

   (ii) Interoperability

   Open APIs are made available for easy integration with existing architecture of Govt. departments.

   (iii) Security concerns

   The security concerns have been overcome by the use of electronic signature for two way authentication for the integrated services

   (iv) Any issue with the technology used

   No Issues

   (v) Service level Agreements(SLAs) (Give details about presence of SLA, whether documented, whether referred etc. #)

The entire Mobile Seva platform is hosted at the National Data Centre (NDC) at Shastri Park, New Delhi which provides SLAs for Tier III DC which is 99.982% uptime.

6. **Citizen Centricity** (Give specific details on the following#)
   (i) Impact on effort, time and cost incurred by user,

Mobile Seva **users** constitute:
- All Government departments and agencies in the nation, at the central, state and local levels.
- All citizens, businesses and other stakeholders in India across the entire geographical length and breadth of the nation and across all demographic segments.

The citizen-centricity aspects of Mobile Seva are discussed below:

i) **Efficient usage of existing resources and significant savings in time, effort, and costs:**

   a. As the Mobile Seva platform is centrally hosted and cloud based, departments need not invest any resources in creating their own infrastructure. Hence, it has led to very significant savings in time, efforts, and costs for them.

   b. It has resulted in **greater efficiency** in use of existing departmental resources and has reduced time required for delivery of services. For example, the Polling Station Location m-app developed under Mobile Seva and hosted on the AppStore (apps.mgov.gov.in) has been used by the Election Commission of India (ECI) for mapping the polling station locations across the nation. ECI has successfully captured the locations from 9.13 lakh polling stations out of the total 9.23 lakh polling stations in the country using this m-app and complementary methods. These locations have been mapped on Google map and have been provided to the citizens for use (http://www.eci-polldaymonitoring.nic.in/psl/default.aspx).

   c. Mobile Seva enables integration of mobile applications with the common e-Governance infrastructure in the country

consisting of State Data Centres (SDCs), State Wide Area Networks (SWANs) and National and State Service Delivery Gateways (NSDG and SSDGs). There is no need for departments to create separate back-ends for mobile based services.

ii) **Efficient module and enabling policy framework for onboarding Departments:**

a. Departments can access the services or upload them just by registering on the Mobile Seva services portal (https://services.mgov.gov.in/).

b. As a precursor to the National Rollout project, DeitY formulated and notified the Framework for Mobile Governance in February 2012 after extensive consultations across Government departments, industry, civil society, and citizens. The notified framework now acts as an efficient driver for Government departments across the nation towards mobile enablement of their services, and thereby, towards greater efficiency in their processes and interfaces.

iii) **Efficient access to project-related information and statistics:**

a. Real-time usage statistics of the Mobile Seva platform in terms of no. of departments on board, no. of public services integrated, no. of m-apps developed and hosted, no. of SMSs sent and received by the integrating departments, etc. are available round-the-clock in a user-friendly and transparent manner on the Mobile Seva portal at www.mgov.gov.in .

b. Regular posts are made through social media sites – Facebook and Twitter – and also citizen feedback is solicited and addressed totally transparently.

c. Regular and recorded meetings are held among the owner and implementer, technical development and consulting support organizations (DeitY, CDAC and NeGD respectively) in a fully participative environment with focus

on consensus building on priority items and strategic directions towards desired outcomes, and also for monitoring and review of the implementation of the project.

d. The aforementioned features also contribute to **efficient audit trails**.

iv) <u>**More efficient interface with citizens**</u>: Departments are now able to interact with citizens and businesses far more efficiently as they can send notifications on mobile phones for processing and delivery of services in real time which was not possible earlier. They can interact with citizens through multiple channels, viz., Push and Pull SMS, m-apps and Voice/IVRS. This has led to tremendous savings in time, efforts and costs for both departments and citizens.

v) <u>**Greater efficiency in procedures**</u>: Mobile Seva has enabled departments to simplify their internal procedures and achieve greater efficiency in delivering their services. This was not possible earlier in the absence of this initiative.

vi) <u>**Effectiveness of outcomes**</u>: The effectiveness has been enhanced significantly for all the stakeholders including the citizens, businesses, etc. Citizens can now submit a request for a service anytime anywhere using their mobile devices and obtain the service without any need for personally visiting the concerned Government office. They do not need a laptop and there is no need for them to visit a Common Services Centre (CSC). They can now obtain the status updates on their service requests instantly.

vii) <u>**More efficient reach and access to government services:**</u>

a. Mobile Seva provides a new and complementary channel for delivery of public services. It has efficiently expanded the access to these services in electronic mode as the penetration of mobile phones in the country is much higher when compared to that of internet and computers, especially in rural areas. While just around 15% of the population has access to the Internet, over 70% of the population has access to mobile phones.

b. This initiative has significantly enhanced the outcomes of e-governance services through increasing access to them for the citizens and is helping realize the vision of the National e-Governance Plan to bring public services closer home to citizens.

c. Given that Mobile Applications or m-Apps provide an efficient and user-friendly way to access a particular service, they are fast becoming the preferred mode of access to services, especially amongst the young population in the country. In cognizance of this trend, Mobile Seva has placed strong emphasis on m-Apps and has created a mobile application store (m-AppStore). It is available at apps.mgov.gov.in and currently hosts **over 305** live and fully integrated m-Apps. Amongst the live m-apps is the Polling Station Location App that has been used by the Election Commission of India (ECI) for mapping over 9.13 lakh polling station locations (out of a total of 9.23 lakh polling stations) in the country.

viii) **<u>Efficiency metrics</u>:** An important and critical part of the Mobile Seva solution towards efficiency metrics is an active "evaluation and correction" module, under which, a mid-term evaluation/ impact assessment exercise was undertaken in June 2013 by the Narsee Monjee Institute of Management Studies (NMIMS) Mumbai.

a. The report is based on a survey of 60 departments that have integrated their services with Mobile Seva. It is available online at www.mgov.gov.in.

b. As per the evaluation, Mobile Seva fares well on:

- Implementation of innovative schemes/projects
- Making public delivery systems efficient and corruption free
- Customization and adaption to meet stakeholders' requirements
- Setting high standards of services and continued

improvement

c. **However, 'Making Public Delivery Systems Efficient and Corruption Free' emerged as the most important central theme.**

d. Notably, as per the aforementioned independent evaluation of the departments:

- For 78% respondents, Mobile-Seva has brought in efficiency.
- For 90% respondents, Mobile-Seva has led to better citizen interface.
- For 90% respondents, Mobile-Seva has simplified their procedures.
- For 78% respondents, Mobile-Seva has resulted in cost savings
- Mobile-Seva's participatory-design, performance & reliability, and team's responsiveness have been highly appreciated.

(ii) Feedback/grievance redressal mechanism,

24X7 feedback service is available on portal and email and a helpline is available for grievances. A Facebook page is also available for users to post any comment including grievances.

Complete contact details of the senior leadership are provided under "Contact Us" section on the portal and all incoming mails, phone calls and comments are addressed at the earliest.

(iii) Audit Trails,

All components of Mobile Seva platform have been audited and certified by a CERT-IN empanelled agency.

Audit trails within the project are generated through the following activities:

- Real-time usage statistics of the Mobile Seva platform in terms of no. of departments on board, no. of public services integrated, no. of m-apps developed and hosted, no. of SMSes sent and received by the integrating departments, etc. are available round-the-clock

> in a user-friendly and transparent manner on the Mobile Seva portal at www.mgov.gov.in and also to individual account holders on the portal.
> - Regular and recorded meetings between the owner and implementer, technical development and consulting support organizations (DeitY, CDAC and NeGD respectively) in a fully participative environment with focus on consensus building on priority items and strategic directions towards desired outcomes, and also for monitoring and review of implementation of the project.

(iv) Interactive platform for service delivery,

> The Mobile Seva platform is highly interactive, covering all relevant mobile-based channels:
>
> 1. <u>SMS Gateway Service</u>: The SMS Gateway Service acts as a common service to e-Gov exchange and is used to deliver SMS based services to all citizens. SMS Gateway supports both push and pull based services.
>   a. Departments: Departments can use SMS Portal or API to push SMS to its users / citizen.
>   b. Citizens: Citizen can also request for specific information through pull based SMS services. Short codes 51969 and 166 and long code 9223166166 have been made operational by DeitY for the m-governance services.
>
> 2. <u>USSD based services</u>: Unstructured Supplementary Services Data (USSD) is a session based service unlike SMS which is a store and forward service. USSD can be used by the user to send request / command to an application in text format.
>   a. Departments: Departments can use USSD services to send flash messages to its users / citizens.
>   b. Citizens: Citizens can also request / apply for specific information / service through USSD services (through USSD code *166#)
>
> 3. <u>IVRS Based Services</u>: Interactive Voice Response Systems (IVRS) are the most common way for phone to communicate with a computer through the tones generated by each key on the phone keypad. These

are known as dual-tone multi-frequency (DTMF) signals. In the context of mobile governance, the IVRS application is intended to serve the C2G and G2C domains of the e-governance model. Many government services (passport, ration cards, etc.) draw a lot of enquiries from the citizens. These enquiries are an overhead for the government and such processes if automated through the use of IVRS, can reduce the undue overheads.

   a. **Departments:** Departments can integrate with Mobile Seva IVRS to offer their services through IVRS.
   b. **Citizens:** Citizens can also request for specific information through the IVRS services. Citizen can avail this service by calling the Mobile Seva IVRS number 022-26209367 and also 166 on some TSPs.

4. <u>Mobile Applications and M-Gov Application Store</u>: M-Governance application store (m-AppStore) hosts the various mobile applications for government services. Applications can be developed by independent developers, which after testing and verification processes, can be hosted on the Mobile Seva app store. There are different views for the citizens, developers and the administrators. Citizens and developers need to register before they access it.

   a. **Citizens:** Citizens can download applications from the m-AppStore on their handsets and using these applications they can access various government services anytime from anywhere.
   b. **Developers:** Developers can host their applications on the m-AppStore.
   c. **Departments:** Departments can develop and host mobile applications for their services on the m-AppStore.

(v) Stakeholder consultation

- Extensive participation of stakeholders across Government, industry, civil society and citizens during the formulation of the Framework for Mobile Governance.

- Extensive consultations with all the TSPs for opening of the short codes 51969 and 166 in all the telecom circles in the country.

- Real-time usage statistics of the Mobile Seva platform in terms of no.

of departments on board, no. of public services integrated, no. of m-apps developed and hosted, no. of SMSes sent and received by the integrating departments, etc. These are available round-the-clock in a user-friendly and transparent manner on the Mobile Seva portal at www.mgov.gov.in.

- Regular posts made through social media sites – Facebook and Twitter – and also citizen feedback solicited and addressed totally transparently.

- Regular and recorded meetings between the owner and implementer, technical development and consulting support organizations (DeitY, CDAC and NeGD respectively) in a fully participative environment with focus on consensus building on priority items and strategic directions towards desired outcomes, and also for monitoring and review of the implementation of the project.

- Open communication channel with all the integrated central and state departments across the country through both electronic and traditional modes.

7. **Demonstrate Innovation in use of Mobile Technology for e-governance**
(Give details about the mobile technology used (platforms, SMS, Pull & Push, Apps, Mobile Payment,), innovation applied in use of mobile technology to deliver information or Services to target audience #)

i)	**Technology used:** It is the first centrally hosted and cloud based platform for delivering mobile based public services in the entire country through all possible mobile based delivery channels such as SMS, USSD, Voice, mobile apps and location based services. The Mobile Seva platform is based on open standards and open source. The solution is deployed on a cluster of dedicated servers with virtual machines running CentOS open source OS. Open source databases have been used to store the data and JBoss Application servers (open source application servers) have been used to deploy the solution. Other open source software like Kannel, Mobicents Communication Platform, Asterisks, Hyperic, etc have also been used. The entire platform has been developed in-house by the technical implementing agency, C-DAC Mumbai.
ii)	**Innovative and unique one-stop solution for all mobile-enablement**

needs:

a. Mobile Seva is a unique nationwide initiative which any central or state government department or agency can onboard immediately through an online self-service mode.

- Departments need not worry about creating their own mobile platform, thereby saving significantly in time, efforts, and monetary expenditure. They can start providing mobile based services through this platform without any delay.

- Departments can access the services or upload them just by registering on the Mobile Seva services portal (https://services.mgov.gov.in/).

b. Mobile Seva is not focused on just SMS solutions, but enables all integrating departments and agencies to provide their services **on all possible mobile channels** such as Short Message Service (**SMS**), Voice/ Integrated Voice Response System (**IVRS**), Unstructured Supplementary Service Data (**USSD**), location based services and through mobile applications (**m**-**apps**). As on date:

- Already over **1100** Government departments and agencies across the country have integrated their services with the Mobile Seva platform, with more than **121 crore PUSH SMS** transactions already delivered by them to the citizens and businesses. The daily average number of Push SMS based transactions is over 30 lakhs per day.

- For citizen-sought services through the Pull SMS channel, two short codes, **51969** and **166** and one long code 9223166166 have been made operational and over **345** services have been made live on these codes. A long term vision of the project is **to offer all non-emergency public services in the nation to the citizens through a single 3-digit nationally available number**. For this purpose, as noted earlier, the short code 166 has already been operationalized.

- A Mobile Applications Store (**AppStore**) has been created and made operational with **over 300 live and fully integrated mobile apps (m-apps)**, all developed in-house by the Mobile Seva team.

- Mobile Seva has also integrated a mobile payment gateway that allows citizens to make electronic payments for various services through mobile phones. The payment modes include all possible mechanisms, such as IMPS, Credit/debit cards, net banking, cash cards, mobile wallets, etc.

- **USSD** and **IVRS** based services have also been developed and made operational on this platform.

8. **Adaptability and Scalability** (Give details about Local language support, ability to leverage shared Government infrastructure, Standardization of technology used (hardware, software, application etc. #)

a) Mobile Seva platform provides full support for all Indian languages. It has developed Indian language keyboards for mobile devices in 11 Indian languages. The mobile apps for these keyboards have been hosted on the Mobile Seva AppStore. The services on the SMS channel have been made available in 11 Indian languages. IVRS inbound service is available in English and Hindi. IVRS outbound call service is available in all local language languages. Web portal is available in bilingual i.e. English and Hindi.

b) The platform is fully integrated with and leverages the shared Government core ICT infrastructure consisting of State Data Centres (SDCs), State Wide Area Networks (SWANs) and National/State Service Delivery Gateways (NSDG/SSDGs). The Government departments and agencies need not develop separate backend infrastructure for mobile based services.

c) The platform is cloud-based and uses open standards and open source in application development and follows DeitY's notified technical standards in various areas. It also publishes open APIs for integrating the services of various departments and agencies.

9. **Adaptability Analysis**

(i) Measures to ensure adaptability and scalability

> Ease of the onboarding process due to extensive documentation of service level integration and 24x7 support from the implementing team ensures, open standards and open source based development of the application ensure easy adaptability of the platform. The entire platform is cloud-based and follows the notified technical standards by DeitY. As it is cloud-based and open standards and open source have been used, the entire platform is highly scalable. The infrastructure and the technology used ensure high performance and easy and fast scalability.

(ii) Measures to ensure replicability

> The implementation model is highly replicable as any department/agency can integrate its services with the platform in a completely online manner. As it is based on open standards and open source, technical replicability without any additional cost implications is also assured. The implementation methodology can also be replicated for any other geography or agency with minimum customizations. Already the entire platform has been made available in a high available mode with active Disaster Recovery (DR).

(iii) Restrictions, if any, in replication and or scalability

> There are no restrictions in replication and scalability.

(iv) Risk Analysis

> The platform has been developed on open standards and open source technology and the IP is owned by DeitY and C-DAC. Hence, the technical risk of the initiative, including its strategic control, is been taken care of. As the implementation of the initiative is being done by DeitY through its technical implementation agency, C-DAC, there are no significant risks in its implementation. The financial sustainability of the initiative is also assured as it is fully owned, funded and supported by DeitY. It is also fully supported by the Prime Minister's Committee on NeGP, the highest policy making body in e-governance in the country.

10.   **New Models of Service Delivery** (Give details about type of partnership model used, Links to/Supported by Public/Private Organization, Links provided to relevant websites etc. #)

i)   **Implementation:**

a. Mobile Seva is a unique, first of its kind, nationwide, centrally hosted and cloud-based mobile platform which is a one-stop gateway for mobile-enablement (across all mobile channels including SMS, IVRS, USSD, and m-apps) for all government departments and agencies across the nation. There is no other similar nationwide centrally hosted mobile platform that provides mobile-enablement solutions (across all mobile channels) to all government departments and agencies in the nation.

b. The entire initiative is owned, funded and implemented by DeitY. The initiative has received full support of the Ministry of Communications and IT and the Prime Minister's Committee on NeGP. Technical development of the Mobile Seva platform is being done by C-DAC, a DeitY organization. The platform has been developed on open source technology and the IP is owned by DeitY and C-DAC. C-DAC will continue to develop and manage the platform in future. The entire project is owned and funded by DeitY. At present, the Push SMS services and mobile app development and hosting is being done free for Government departments and agencies. For Pull SMSs, citizens pay normal charges to the telecom service provider. A revenue model is being evolved based on the platform's service offerings and capabilities and shall be put in place before the end of the current funding in 2016.

ii)   **Onboarding by Departments:**

a. <u>Designed for all central and state government departments</u>: Mobile Seva is a unique nationwide initiative which any central, state or local Government department or agency can onboard immediately through an online self-service mechanism. They need not worry about creating their own mobile platform, thereby saving significantly in time, efforts, and monetary expenditure. They can start providing mobile based services through this

platform without any delay.

    b. <u>No need for technical expertise within departments</u>: Departments need not have any technical expertise on their own for mobile enablement as DeitY provides complete handholding and 24x7 support.

    c. <u>Service-based model</u>: Departments can access the services or upload them just by registering on the Mobile Seva services portal (http://services.mgov.gov.in/).

iii)   **Relevant links:** Real-time status and information are available round-the-clock on the Mobile Seva portal which can be accessed from www.mgov.gov.in . Updates and stakeholder-engagement are also carried out through social media (facebook – www.facebook.com/DIT.MGOV, twitter - @mgovindia), youtube – goo.gl/nCpTUP).

11.   **Efficiency Enhancement** (Give specific details about the following #)
    (i)   Volume of transactions processed,

SMS: The Mobile Seva platform has delivered more than 121 crore push SMSes so far for over 1100 Government departments and agencies and, as of 27-Aug-2014, so far in August 2014 alone, over 10.95 crore transactions have been delivered. Also, there have been nearly 31 lakh pull SMSes for over 345 services available through pull SMS to Mobile Seva short codes 51969 and 166 and long code 9223166166.

Apps: There have been over 2.05 lakh downloads from the Mobile Seva AppStore that hosts over 305 live and fully integrated mobile apps related to government and public services, most of which have been developed in-house by the Mobile Seva team.

(ii) Coping with transaction volume growth

The first phase of implementation of Mobile Seva was focused on developing a Proof of Concept (PoC) for a period of 12 months starting in July 2011. In view of the tremendous success of the PoC and also in light of the growing demand from departments and agencies across the nation for such a

centralized and easy-to-board platform, a need was felt to scale up the infrastructure and provide a nationwide rollout. Subsequently, the 'National Rollout for Mobile Services Delivery Gateway' project was approved in Nov 2012 for scaling up of the existing MSDG infrastructure. Thereafter, the existing infrastructure was scaled up with Data Centre (DC) in Shastri Park and Disaster Recovery (DR) in NIC Data Centre Pune. The scaled-up infrastructure is fully capable of handling the expected growth in transaction volumes in future. Today, the platform can handle 1200 transactions per second and can be easily scaled up to handle even higher volumes in future.

(iii) Time taken to process transactions,

Within 2-3 secs

(iv) Accuracy of output,

Nearly 100 % with dependency on the TSP networks.

(v) Number of delays in service delivery

There have been no delays due to the platform. However, there is some dependency on the performance of the TSP network for receipt of requests from end users and delivery of services to them.

12. **User convenience** (Give specific details about the followings #)
   (i) Service delivery channels (Web, email, SMS etc.)

   a) Mobile Seva is a revolutionary whole-of-government mobile governance initiative of DeitY, enabling government departments and agencies across the nation to deliver public services to citizens and businesses through mobile devices across various mobile-based channels such as SMS, USSD, mobile apps, voice and location based services.

   b) Mobile Seva aims to provide a one-stop solution to all the central and state government departments and agencies across the nation for all their mobile service delivery needs. The objective of the initiative is to provide a centrally-hosted mobile enablement platform that allows government departments and agencies across the entire country to expeditiously start offering their services through mobile phones without having to create their separate mobile platforms. As part of Mobile Seva, a centralized Mobile Services Delivery Gateway (MSDG) was operationalized in July 2011 and

has now become the core infrastructure of choice for delivering public services through mobile devices.

c) The SMS channel.
- Pull SMS is a citizen-initiated SMS in a predefined format. It is operational on 51969 (all telcos), 166 (major telcos), and 9223166166 (all telcos), offering 345+ services.
- Push SMS has seen massive adoption by Government departments/ agencies at the central, state and local levels. Already, over 1100 departments/ agencies are on board and over 121 crore SMS notifications have already been sent to citizens/ businesses by the integrated departments.

d) The Mobile Seva portal at www.mgov.gov.in is available round-the-clock for both departments and citizens with live up-to-date information on all features and solutions. From the "Department Services" tab on the portal, interested departments/ agencies can quickly register themselves online for availing Mobile Seva services from https://services.mgov.gov.in/. Information and interaction is also provided through regular posts on the Mobile Seva social page www.facebook.com/DIT.MGOV

e) The mobile AppStore of the MSDG is a centralized Government Mobile AppStore for mobile apps for public services. It currently hosts over 305 free-to-download mobile apps at www.apps.mgov.gov.in

(ii) Completeness of information provided to the users,

Comprehensive and complete real time information is available 24x7 on web, email and SMS to all the Government departments and users through the Mobile Seva portal at www.mgov.gov.in .

(iii) Accessibility (Time Window),

The Mobile Seva portal and the platform is accessible 24x7 at www.mgov.gov.in to all the stakeholders, i.e. Government departments and agencies, citizens, businesses and all the other stakeholders. Citizens and businesses can avail the services from the Mobile Seva platform 24x7 through their mobile devices.

(iv) Distance required to travel to Access Points

> Citizens, businesses and other stakeholders need not travel anywhere to avail the services. The services are available in electronic mode through their mobile devices 24x7 from anywhere.

(v) Facility for online/offline download and online submission of forms,

> All the services are available to citizens and businesses in electronic mode through mobile devices through various mobile channels, such as SMS, USSD, IVRS and mobile apps. For Government departments, online registration facility is available 24x7 through the Mobile Seva portal. They can provide all their mobile based services through the portal. Offline submission of registration details by the departments is also available.

(vi) status tracking

> Citizens and businesses can track the status of their services in real-time through Pull SMS and through mobile apps. Government departments can track the status of their services delivered online through the service portal (https://services.mgov.gov.in/). They can also track the status offline through helpline and email.

13. **Sustainability** (Give details about sustainability w.r.t. technology (technology used, user privacy, security of information shared – Digital Encryption etc. #), Organization (hiring trained staff, training etc. #), financial (Scope for revenue generation etc. #)

> i) **Technological Sustainability:** The platform has been developed on open standards and open source technology and the IP is owned by DeitY and C-DAC. The solution is deployed on a cluster of dedicated servers with virtual machines running CentOS open source OS. Open source databases have been used to store the data and JBoss Application servers (open source application servers) have been used to deploy the solution. Other open source software like Kannel, Mobicents Communication Platform, Asterisks, Hyperic, etc. have also been used. No user data is stored on the platform, hence user privacy is assured. The entire platform has been certified for security by a Cert-In empanelled agency. The security concerns have also been taken care of by the use of electronic signature for two way authentication for the integrated services. The entire platform has been developed in-

house by the technical implementing agency, C-DAC Mumbai. C-DAC will continue to develop and manage the platform in future. Hence, the technical sustainability of the initiative, including its strategic control, is ensured.

ii) **Institutional sustainability:** The entire initiative is owned, funded and implemented by DeitY. The initiative has received full support of the Ministry of Communications and IT and the Prime Minister's Committee on National e-Governance Plan (NeGP). The PM's Committee on NeGP in its second meeting on 01 July 2013 has directed all ministries and departments both at the central and state levels to integrate their services with the Mobile Seva platform for delivery through mobile devices. In its first meeting on 23 Nov 2011, it had mandated that all Government departments shall deliver their services through mobile devices as well. As the initiative is owned, funded, and implemented by DeitY with full support from the highest decision making authority on NeGP in the country, its institutional sustainability in the long term is assured.

iii) **Financial sustainability:** The entire project is being funded by DeitY. At present, the Push SMS services and mobile app development and hosting is being done free of cost for Government departments and agencies. For Pull SMSs, citizens pay normal charges to the telecom service provider. A revenue model is being evolved based on the platform's service offerings and capabilities and shall be put in place before the end of the current funding in 2016.

14. **Result Achieved/ Value Delivered** to the beneficiary of the project-(share the results, matrices, key learning's, feedback and stakeholders statements that show a positive difference is being made etc):

(i)   To organization

The owning and implementing organization for the project is DeitY. For, DeitY, the initiative has proved to be highly successful as it has brought over 1100 Government departments and agencies across the country on board this platform. The cloud-based, scalable, open source and open standards based design of the platform has saved tremendous time, costs and efforts for DeitY as it has been able to

rapidly scale up the platform to meet the requirements for mobile enablement of such a large number of departments across the country.

For the over 1100 Government Departments and agencies already using this platform, the initiative has resulted in several highly significant outcomes, as noted below:

- <u>Significant Savings in Time, Efforts and Costs for Departments</u>: As the Mobile Seva platform is centrally hosted and cloud based, departments need not invest any resources in creating their own infrastructure. Hence, it has led to very significant savings in time, efforts, and costs for them.

- <u>Access to All Government Departments</u>: Departments need not have any technical expertise or an in-house technical team to integrate with Mobile Seva. DeitY provides complete handholding and full 24x7 support to all departments through its C-DAC technical team.

- <u>Simplified Procedures/ Processes</u>: Integration with the mobile platform has resulted in significantly simplified procedures and processes within the departments as the entire process of sending notifications and interaction with the citizens for service requests and delivery has become automated with no manual interventions required. It has resulted in greater efficiency in use of existing departmental resources and has reduced time required for delivery of services. For example, the Polling Station Location m-app developed under Mobile Seva and hosted on the AppStore (http://apps.mgov.gov.in/home.jsp) has been used by the Election Commission of India (ECI) for mapping the polling station locations across the nation. ECI has successfully captured the GPS location co-ordinates from 9.13 lakh polling stations (out of total around 9.23 lakh polling stations in the country) using this m-app and complementary methods. These locations have been mapped on Google map and have been provided to the citizens for use (http://www.eci-polldaymonitoring.nic.in/psl/default.aspx). This has saved tremendous time, costs, and efforts that would otherwise have been required on the part of ECI. Similarly, Ministry of

Agriculture has leveraged the SMS channel of MSDG for the benefit of farmers across the nation.

- <u>Increased Access to Government Services for Citizens:</u> Mobile Seva has helped the Government in widening the reach of electronic services tremendously as the penetration of mobile phones is over 70% in the country whereas just around 15% of the population has access to the Internet. This has resulted in much better access to these services especially in the rural areas as the access to Internet is extremely low in these areas.

- <u>E-Governance:</u> For DeitY, the prime motivator for this initiative is the realization that massive and growing penetration of mobile phones in India can substantially enhance access to electronic services, especially in the rural areas. In India, the sparseness of landlines and lack of broadband, particularly in rural areas, coupled with the relatively high cost of PCs, has kept Internet usage very low. Mobiles are fast bridging the digital divide, and have become the most convenient channel for people to access information and communication based services for work, education and leisure. This emergent scenario provides a ready and widespread base for access to and delivery of public services electronically. Another motivator for this initiative is that its implementation complements efforts to realize the vision of the National e-Governance Plan to bring public services closer home to citizens at affordable costs. In the country, Government departments and agencies at central and state levels touch over 1.2 billion citizens in their day to day lives. Implementation of Mobile Seva would bring all these Government departments and agencies at central, state, and local levels on to this common platform and reach over 900 million mobile subscribers in the country with public services.

(ii)   To citizen

The initiative has resulted in several highly significant outcomes for citizens as below:

- <u>Significant Savings in Time, Efforts and Costs for Citizens:</u>

Citizens can submit service requests on their mobile phones and can get instant real time responses from the departments. This has led to huge savings for them in time and travel costs to Government offices or physical service delivery points.

- Greater Transparency and Improved Interface: The citizens can obtain information and services from the departments instantly without any intermediary or manual intervention. This has resulted in much greater transparency, improved service delivery, better interaction with the citizens and better citizen satisfaction.

- Increased Access to Government Services for Citizens: Mobile Seva has helped the Government in widening the reach of electronic services tremendously as the penetration of mobile phones is over 70% in the country whereas just around 15% of the population has access to the Internet. This has resulted in much better access to these services especially in the rural areas as the access to Internet is extremely low in these areas.

(iii)   Other stakeholders

The platform has resulted in significant outcomes for other stakeholders such as businesses, Non-Governmental organizations etc. as well as it has increased access to government services and saved them tremendous time, efforts and costs in availing these services as they need not travel to government offices or common service centres. The outcomes mentioned for citizens above are also applicable for all the other stakeholders.

15.   Extent to which the Objective of the Project is fulfilled-(benefit to the target audience i.e.G2G, G2C, G2B, G2E or any other, size and category of population/stakeholder benefited etc):

The objectives of the project have been fully achieved and exceeded in most areas as noted below:

a) Already over **1100** Government departments and agencies across the country have integrated their services with the Mobile Seva platform, with more than **121 crore** PUSH SMS transactions already delivered to the citizens through the Mobile Service Delivery Gateway (MSDG) under Mobile Seva. These

numbers are growing every day.

b) For citizen-sought services on SMS, two short codes, 51969 and 166, and one long code 9223166166, have been made operational and over **340** services have been made live on these codes through PULL SMS. A long term vision of the project is to offer all non-emergency public services in the nation to the citizens through a single 3-digit nationally available number. For this purpose, as noted earlier, the short code 166 has already been operationalized.

c) A Mobile Applications Store (AppStore) has been created and made operational with over **305** live and fully integrated mobile apps (m-apps), mostly developed in-house by the Mobile Seva team. These have already been downloaded over **2.05 lakh** downloads by the citizens/ users.

d) Mobile Seva has also integrated a mobile payment gateway which also allows citizens to make electronic payments for various services through mobile phones. USSD and IVRS based services have also been developed and operationalized.

e) Real-time status and information is available round-the-clock on the Mobile Seva portal which can be accessed from www.mgov.gov.in. Updates and stakeholder-engagement are also carried out through social media (Facebook: www.facebook.com/DIT.MGOV).

f) Mobile Seva users/ beneficiaries constitute:

- All the Government departments and agencies in the nation, at the central, state and local levels
- All the citizens and businesses in the country across the geographical length and breadth of the nation, and across all demographic segments

g) A mid-term impact assessment/ evaluation exercise was undertaken in June 2013 by the Narsee Monjee Institute of Management Studies (NMIMS) Mumbai. The report is based on a survey of 60 departments that have integrated their services with Mobile Seva. It is available online at www.mgov.gov.in .

As per the evaluation, Mobile Seva fares well on:

- Implementation of Innovative Schemes/Projects
- Making Public Delivery Systems Efficient and Corruption Free
- Customization and Adaption to meet Stakeholder' Requirements
- Setting High Standards of Services and Continued Improvement

However, 'Making Public Delivery Systems Efficient and Corruption Free' has emerged as the most important central theme.

Notably,
- For 78% respondents, Mobile-Seva has brought in efficiency.
- For 90% respondents, Mobile-Seva has led to better citizen interface.
- For 90% respondents, Mobile-Seva has simplified their procedures.
- For 78% respondents, Mobile-Seva has resulted in cost savings
- Mobile-Seva's participatory-design, performance & reliability, and team's responsiveness have been highly appreciated.

16.   Comparative Analysis of earlier Vs new system with respect to the BPR, Change Management, Outcome/benefit, change in legal system, rules and regulations

Area/ Indicator	Earlier System/ Scenario	New System/ Scenario
Centrally available mobile enablement infrastructure and platform	No such centralized solution in the country; various departments forced to build and deploy own m-platforms with substantial expenditure and loss of time	Mobile Seva is a unique, first nationwide centrally hosted mobile platform which is a one-stop gateway for mobile enablement for all Govt. departments and agencies across the nation. Integrating departments and agencies need not invest in own platform, and can integrate very quickly through an online process. Already over 1100 departments across the country have been integrated and over 121 crore SMS Push transactions have been

		delivered to citizens and businesses through Mobile Seva.
One common platform for all Govt. departments for all mobile channels (SMS, USSD, Voice/IVRS, m-apps) that can be deployed for delivery of all mobile based services	No such common platform for all mobile channels in the Government domain	Mobile Seva is a one-stop gateway for mobile enablement on all available mobile channels such as SMS, Voice/IVR, mobile apps, mobile payment, USSD, location based servicesetc.
Single online portal for citizens to access all mobile based services through all mobile channels	No such portal available	Mobile Seva portal (http://mgov.gov.in) is a single national portal that provides all information about all mobile based services to citizens from all departments across the entire country.
Single mobile appstore for hosting all mobile apps for various public services	No such appstore available	Mobile Seva AppStore (http://apps.mgov.gov.in/home.jsp) is the national Mobile AppStore that hosts over **305** live and fully integrated mobile apps for a wide range of public services.
One single nationally available number for citizens to access mobile enabled non-emergency	No such single number across departments and states/ UTs; instead a surfeit of numbers, each specific to only the owner organization and/or its services	The Mobile Seva project has operationalized two short codes, 51969 and 166 and a long code 9223166166 for providing all mobile based services across the nation. A long-term vision of the project is to offer all non-emergency public

public services		services to all citizens of India through a single 3-digit number available nationally. For this purpose, a short code 166 has already been operationalized by DeitY. Over **340** public services on SMS are already operational through the two short codes and the long code mentioned above.

17. Other distinctive features/ accomplishments of the project:

> **Mobile Seva is the first nationwide and a unique centrally hosted mobile platform** which is a one-stop gateway for mobile-enablement for all Government departments and agencies across the nation. **There is no other similar nationwide centrally hosted mobile platform** that provides mobile-enablement solutions to all Government departments and agencies in the nation. *As such, there are no comparable projects undertaken in the past or the present. Nevertheless, the major distinctive features of the initiative are mentioned below:*
>
> a) <u>First centrally hosted and cloud-based mobile platform:</u> It is the first centrally hosted and cloud based platform for delivering mobile based public services in the entire country through all possible mobile based delivery channels such as SMS, USSD, IVRS/Voice, mobile apps and location based services.
>
> b) <u>Designed for all central, state and local government departments:</u> It is a unique nationwide initiative which any central, state or local Government department or agency can onboard immediately through an online self-service mechanism. They need not worry about creating their own mobile platform, thereby saving significantly in time, efforts, and monetary expenditure. They can start providing mobile based services through this platform without any delay.
>
> c) <u>No need for technical expertise within departments:</u> Departments don't need to have any technical expertise on their own for mobile

enablement as DeitY provides complete handholding and 24x7 support.

d) <u>Service-based model:</u> Departments can access the services or upload them just by registering on the Mobile Seva services portal (http://services.mgov.gov.in/).

e) <u>Novel architecture for integration with NeGP</u>: The platform enables integration of mobile applications with the common e-Governance infrastructure in the country consisting of State Data Centres (SDCs), State Wide Area Networks (SWANs), National and State Service Delivery Gateways (NSDG and SSDGs). There is no need for departments to create separate back-ends for mobile based services.

f) <u>Easy scalability:</u> The entire platform, including hardware, software and database, is easily scalable based on the requirements of the departments

g) <u>Easy replicability:</u> The implementation model of the project is highly replicable as any department can integrate its services and applications in a completely online and seamless manner. Being based on open source technology, technical replicability without any additional cost implications is also assured. The implementation methodology of the initiative can also be replicated for any other geography or agency with minimum customizations.

h) <u>Transparency and stakeholder participation</u>:

• Extensive participation of stakeholders across Government, industry, civil society and citizens during the formulation of the Framework for Mobile Governance.

• Extensive consultations with all the TSPs for opening of the short codes 51969 and 166 in all the telecom circles in the country.

• Real-time usage statistics of the Mobile Seva platform in terms of no. of departments on board, no. of public services integrated, no. of m-apps developed and hosted, no. of SMSs sent and received by the integrating departments, etc. These are available round-the-

clock in a user-friendly and transparent manner on the Mobile Seva portal at www.mgov.gov.in.

- Regular posts are made through social media sites – Facebook and Twitter – and also citizen feedback solicited and addressed totally transparently.

- Regular and recorded meetings between the owner and implementer, technical development and consulting support organizations (DeitY, CDAC and NeGD respectively) in a fully participative environment with focus on consensus building on priority items and strategic directions towards desired outcomes, and also for monitoring and review of the implementation of the project.

- Open communication channel with all the over **1100** integrated central and state departments and local bodies across the country through both electronic and traditional modes.

i) Sustainability:

- *Technical sustainability:* Technical development of the Mobile Seva platform is being done by C-DAC, a DeitY organization. The platform is being developed on open source technology and the IP is owned by DeitY and C-DAC. C-DAC will continue to develop and manage the platform in future. Hence, the technical sustainability of the initiative, including its strategic control, is ensured.

- *Financial sustainability:* The entire project is being funded by DeitY. At present, the Push SMS services and mobile app development and hosting is being done free of cost for Government departments and agencies. For Pull SMSs, citizens pay normal charges to the telecom service provider. A revenue model is being evolved based on the platform's service offerings and capabilities and shall be put in place before the end of the current funding in 2016.

- *Institutional sustainability:* The entire initiative is owned, funded and implemented by DeitY. The initiative has received full support of the Ministry of Communications and IT and the Prime Minister's Committee on NeGP. The PM's Committee on NeGP in its second

meeting on 01 July 2013 has directed all ministries and departments both at the central and state levels to integrate their services with the Mobile Seva platform for delivery through mobile devices. As the initiative is owned, funded, and implemented by DeitY with full support from the highest decision making authority on NeGP in the country, its institutional sustainability in the long term is assured.

j) <u>Recognition:</u> The Mobile Seva project won the United Nations Public Service Awards 2014 under the category "Promoting Whole-of-Government Approaches in the Information Age". This project was the only winner from India in 2014. Mobile Seva also won the mBillionth Award South Asia 2013 under the m-governance category.

This is just an indicative list of indicators. Applicant can add on more information based on suitability of the project nominated.