

File No.DPAR/145/EGM/2020-DESK1-dparegovsec

ಕರ್ನಾಟಕ ಸರ್ಕಾರ

ಸಂಖ್ಯೆ: ಸಿಆಸುಇ 145 ಇಜಿಎಂ 2020

ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಸಚಿವಾಲಯ,  
ಬಹುಮಹಡಿಗಳ ಕಟ್ಟಡ,  
ಬೆಂಗಳೂರು, ದಿನಾಂಕ:21ನೇ ಆಗಸ್ಟ್ 2020

ಇವರಿಂದ:

ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿ,  
ಸಿಬ್ಬಂದಿ ಮತ್ತು ಆಡಳಿತ ಸುಧಾರಣೆ  
ಇಲಾಖೆ (ಇ-ಆಡಳಿತ)

ಇವರಿಗೆ:

ಮುಖ್ಯ ಮೌಲ್ಯಮಾಪನಾಧಿಕಾರಿ,  
ಕರ್ನಾಟಕ ಮೌಲ್ಯಮಾಪನ ಪ್ರಾಧಿಕಾರ,  
5ನೇ ಮಹಡಿ, 2ನೇ ಹಂತ, ಬಹುಮಹಡಿಗಳ ಕಟ್ಟಡ,  
ಬೆಂಗಳೂರು.

ಮಾನ್ಯರೇ,

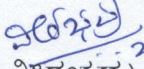
ವಿಷಯ : ಮೌಲ್ಯಮಾಪನ ವರದಿಗಳ ಶಿಫಾರಸ್ಸುಗಳ ಕುರಿತು.

ಉಲ್ಲೇಖ: ಪತ್ರ ಸಂಖ್ಯೆ: ಕೆಇಎ/51/ಎಟಿಆರ್(ಸಿಆಸು)2019,  
ದಿನಾಂಕ:20-05-2020

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ಮೇಲ್ಕಂಡ ವಿಷಯ ಮತ್ತು ಉಲ್ಲೇಖಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ, ಸಿಬ್ಬಂದಿ ಮತ್ತು ಆಡಳಿತ ಸುಧಾರಣೆ ಇಲಾಖೆ (ಇ-ಆಡಳಿತ) ವ್ಯಾಪ್ತಿಯಲ್ಲಿನ ವಿದ್ಯುನ್ಮಾನ ನಾಗರಿಕ ಸೇವಾ ವಿತರಣಾ ನಿರ್ದೇಶನಾಲಯಕ್ಕೆ ಸಂಬಂಧಪಟ್ಟ ಅನುಸರಣಾ ವರದಿಯನ್ನು ಇದರೊಂದಿಗೆ ಲಗತ್ತಿಸಿ, ಮುಂದಿನ ಕ್ರಮಕ್ಕಾಗಿ ಕಳುಹಿಸಿಕೊಡಲು ನಾನು ನಿರ್ದೇಶಿತನಾಗಿದ್ದೇನೆ.

ತಮ್ಮ ವಿಶ್ವಾಸಿ,

  
21-8-2020  
(ವಿರಭದ್ರ)

ಪೀಠಾಧಿಕಾರಿ-1,  
ಸಿಬ್ಬಂದಿ ಮತ್ತು ಆಡಳಿತ ಸುಧಾರಣಾ  
ಇಲಾಖೆ (ಇ-ಆಡಳಿತ)



ಸರ್ವಾಧಿಕಾರಿಗಳಿಗೆ ಹಾಗೂ ಇತರ ಅಧಿಕಾರಿಗಳಿಗೆ  
ಇವರಿಗೆ, ಪರಿಷತ್‌ನಿಂದ ಮತ್ತು ಪ್ರಾಚಾರ್ಯರು  
ಮಾನ್ಯತೆಗಳನ್ನು ನೀಡುವುದು

ಪರಿಷತ್‌ನಿಂದ ಮತ್ತು ಪ್ರಾಚಾರ್ಯರು  
ಮಾನ್ಯತೆಗಳನ್ನು ನೀಡುವುದು

ಪರಿಷತ್‌ನಿಂದ ಮತ್ತು ಪ್ರಾಚಾರ್ಯರು  
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ಮಾನ್ಯತೆಗಳನ್ನು ನೀಡುವುದು

ಪರಿಷತ್‌ನಿಂದ ಮತ್ತು ಪ್ರಾಚಾರ್ಯರು  
ಮಾನ್ಯತೆಗಳನ್ನು ನೀಡುವುದು

ಪರಿಷತ್‌ನಿಂದ ಮತ್ತು ಪ್ರಾಚಾರ್ಯರು  
ಮಾನ್ಯತೆಗಳನ್ನು ನೀಡುವುದು



1606371/2020/EDCS-M1

**DIRECTORATE OF ELECTRONIC  
DELIVERY OF CITIZEN SERVICES (EDCS)  
e-Governance Department**

No. 13, CRN Chambers, 2nd Floor, Kasturba Road,  
Above Dhanalakshmi Bank, Bengaluru - 560 001



**ವಿದ್ಯುನ್ಮಾನ ನಾಗರಿಕ ಸೇವಾ ವಿತರಣಾ  
ನಿರ್ದೇಶನಾಲಯ (ಇಡಿಸಿಎಸ್)**

**ಇ-ಆಡಳಿತ ಇಲಾಖೆ**

ನಂ. 13, ಸಿಆರ್‌ಎನ್ ಚೇಂಬರ್ಸ್, 2ನೇ ಮಹಡಿ, ಕಸ್ತೂರ್‌ಬಾ ರಸ್ತೆ  
ಧನಲಕ್ಷ್ಮಿ ಬ್ಯಾಂಕ್ ಮೇಲೆ, ಬೆಂಗಳೂರು - 560 001

ಸಂಖ್ಯೆ: ಇಡಿಸಿಎಸ್/23/ಎಂ ಒನ್ /29/2019

ದಿನಾಂಕ: 13-08-2020

ಗೆ,

ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು,  
ಸಿಬ್ಬಂದಿ ಮತ್ತು ಆಡಳಿತ ಸುಧಾರಣಾ ಇಲಾಖೆ( ಇ-ಆಡಳಿತ )  
ಬೆಂಗಳೂರು-560001

ವಿಷಯ : ಸಿಬ್ಬಂದಿ ಮತ್ತು ಆಡಳಿತ ಸುಧಾರಣಾ ಇಲಾಖೆಯ ಯೋಜನೆಗಳ ಮೌಲ್ಯಮಾಪನ ವರದಿಗಳ  
ಶಿಪಾರಸುಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಕ್ರಮ ಕೈಗೊಂಡಿರುವ ವರದಿಗಳನ್ನು ಒದಗಿಸಿರುವ ಬಗ್ಗೆ.

ಉಲ್ಲೇಖ (1): ನಿಮ್ಮ ಕಛೇರಿಯ ಪತ್ರ ಸಂಖ್ಯೆ ಸಿಆಸುಇ145ಇಆಇ2020 ದಿನಾಂಕ ; 20-06-2020

(2) : ಸರ್ಕಾರದ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು ಕರ್ನಾಟಕ ಸರ್ಕಾರ ಇವರ ಅರೆ ಸರ್ಕಾರಿ ಪತ್ರ  
ಸಂಖ್ಯೆ:ಕೆಇಅ/51/ಎಟಿಆರ್/ ಗೃಹ /2019 ದಿನಾಂಕ ; 20-05-2020

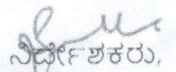
1) 2018 ರಲ್ಲಿ ಹೊಸ ಹೊಂದಾಣಿಕೆಯ ಆವೃತ್ತಿಯಲ್ಲಿ ಮೊಬೈಲ್-ಒನ್ ಅಪ್ಲಿಕೇಶನ್ ಅನ್ನು ಪರಿಷ್ಕರಿಸುವ  
ಸಮಯದಲ್ಲಿ ನಾವು ಐಕೆಆರ್ ಅನ್ನು ತುರ್ತು ಸೇವೆಯಾಗಿ ಬದಲಾಯಿಸಿದ್ದೇವೆ. ಬಳಕೆದಾರರು ರೈಸ್ ಅಲಾರ್ಮ್  
ಬಟನ್ ಒತ್ತಿದರೆ SOS ಅನ್ನು ಸಕ್ರಿಯಗೊಳಿಸಲಾಗುತ್ತದೆ ಮತ್ತು SMS ಅನ್ನು ಅವರ ನೋಂದಾಯಿತ ಮೊಬೈಲ್  
ಸಂಖ್ಯೆಯಾಗಿ ಕಳುಹಿಸಲಾಗುತ್ತದೆ.

2) ಪ್ರಸ್ತುತ ಮೊಬೈಲ್ ಒನ್‌ನ್ನು ಮೊಬಿಕ್ವಿಕ್ ಮತ್ತು ಯುಪಿಐನೊಂದಿಗೆ ಸಂಯೋಜಿಸಲಾಗಿದೆ, ಇದರಲ್ಲಿ  
ವಹಿವಾಟು ಶುಲ್ಕಗಳು ಶೂನ್ಯವಾಗಿರುತ್ತದೆ.

3) ಏಪ್ರಿಲ್ 2020 ರಲ್ಲಿ, ಮೊಬೈಲ್ ಒನ್ ಪೈಲಟ್ ಸೋಷಿಯಲ್ ಮೀಡಿಯಾ ಅಭಿಯಾನವನ್ನು ಮಾಡಿತ್ತು, ಮತ್ತು  
ವಹಿವಾಟಿನಲ್ಲಿ ಗಣನೀಯ ಹೆಚ್ಚಳ ಕಂಡುಬಂದಿದೆ. ಮೊಬೈಲ್ ಒನ್ ನಲ್ಲಿ ಜನ ಸೇವಕ ಎಂಬ ಸಮಗ್ರ ಸೇವೆಗಳ  
ಮೂಲಕ ಮೊಬೈಲ್ ಒನ್ ಪ್ರಚಾರವೂ ನಡೆಯುತ್ತಿದೆ.

ನೀವು ಕೋರಿರುವ ಮಾಹಿತಿಯನ್ನು ಪತ್ರದೊಂದಿಗೆ ಲಗತ್ತಿಸಲಾಗಿದೆ.

ತಮ್ಮ ವಿಶ್ವಾಸಿ,

  
ನಿರ್ದೇಶಕರು,  
ಇಡಿಸಿಎಸ್ ನಿರ್ದೇಶನಾಲಯ

*Evaluation of the performance status effectiveness and impact of mobile governance in Karnataka*

Sl no.	Description	Action Taken report	Action To be taken / Remarks
<b>Short Term Recommendations</b>			
1	1 A 24 7 363 call centre Dr ICAR E service manned with well trained and highly professional executives is essential to achieve high standards of service and responsiveness that the Mobile Governance team strives for. This will also streamline response effectiveness and closure of various query/complaint tickets in the prescribed resolution time.	We have changed care as distress service under revamped android as well as ios app. If users press raise alarm button then SOS will be enabled and SMS will be sent to the registered mobile number.	Completed
2	In all the payment related services transaction charges using internet banking is INR 5 for transaction amount upto INR 500 and INR 10 for transaction amount above INR 500. There are many other payment applications available got example- paytm which do not charge extra transaction amount for the online payment. Due to this, the user might not use Mobile One application payment based service which incurs additional transaction charges	Mobile one now has Mobikwik and upi gateway which don't charge any fee for transactions.	PAYTM will also be onboarded soon.
3	When the user requests for forgot password, the application asks to enter his/her registered mobile number followed by a captcha. A 4-digit new password is sent to the registered user. The hacker may brute force the new password with all possible combinations from 0000 to 9999, thus gaining access to the user's account by just knowing the mobile number of the victim/user. However, the solution is to introduce an OTP pass-word option or reset password link or by increasing the password length of at least 8 characters along with alphanumeric. However, a detailed description in regard is presented in Section 9.2.2	Forgot password : an OTP with 5 digit otp is being sent to that registered mobile no and without signup. We have 4 type of login under revamped 1. Signup 2. Google + login 3. Aadhar based login 4. Facebook login  OTP is one time used until users needs to change else it will be saved in DB.	Completed
4	The entire Mobile One source code can be decompiled using various tools such as apktool. Decompilation is a type of reverse engineering that does the opposite of what the compiler does. There are a number of different reasons for decompilation. But decompilation is sometimes used unethically to reproduce the source code for reuse or adaptation without permission of the copyright holder. The hacker can also add malicious code to the application source code and spread it over the internet through various social engineering techniques, however, the application source code can be designed to be resistant to decompilation through protective means such as obfuscation however a detailed description in this regard is presented in Section 9.2.2.	We have reviewed our source code with android studio and ios studio before making our revamped LIVE. And even code level review was performed from security team before making live	Completed
5	Work on strengthening client relationships by working closely with partnering/line departments and communicating periodic updates and conducting regular feedback exercises.	Relationship between Managed Services partner and Department have been strengthened by regular updates on daily reconciliation cases on daily basis	In progress
6	Adequate training on the mobile service usage especially for rural citizens is also essential.	Video module training and services wise videos manuals to be made available on in Mobile one platform.	In progress
7	In addition to the above short term recommendations, the following provides a set of specific (technical) recommendations that may be implemented on priority basis.		
7a	The GUI of an application is designed with minimalist look and feel and thus it doesn't burden the user from fast accessing. However, the smart users may not get attracted to this style. Hence, there is a need of better interfaces and interactions for rich user experience.	We are using android 8.2 latest version and ios in our revamped app. The design was earlier discussed with CIO teams.	Completed
7b	Once the user requests for new password by entering the registered mobile number, the application should redirect to login page to login with new password rather than starting at the same page.	New password id being modified by using password policy which should contain Numeric no Capital Special characters min 8	Completed
7c	Since the Mobile One application consists of 658 fully functional and operational services, it would be better to provide a search option inside the application to get the particular service in addition to traversing all the services	We have kept search functionality in our revamped app where in users type any possible type of service by typing first few letters of the service	Completed
7d	Recent viewed/used services tab can be introduced in the users account. Providing this facility will enable the users to access frequently used services quickly thus enhancing their experience.	Recent Activity Most used tabs in Home screen of our android & IOS app has already been implemented	Completed
7e	Content of the application should be to avoid scroll down. This can be achieved by reducing the size of the logos (icons) of different services. However, providing larger icons can be separate settings as part of accessibility or periatric option.	In our revamped we have upgraded to the new android 8.2 version which doesn't require scroll down or up	Completed
7f	Point-of-interest (POI) of users or most viewed/used services can be displayed on the main screen.	This is being already there as Most used tab in revamped	Completed
7g	Instead of displaying more items and back arrow to access services, swipe left/right of the whole application screen to traverse between different screens/services list could be a better option.	We have made list of all services under Hamburg menu where in users can select category and sub category to select and make use of it	Completed

7h	Providing the facility for users to customize their account or creating the favourites by letting to de ne their preferred choice of services in profile details. And only those services will be visible by default and however, other services can be accessed on demand by means of searching or swiping left or right.	We have provided feature of adding favorites under login screen by clicking and selecting /deselecting fav icon in our revamp	Completed
7i	Currently, the invoice generated is sent via SMS. However, the invoice may also be sent via the user's registered email.	MSP informed to integrate email also.	In progress
7j	Provision for registered users to post their feedback and testimonials about the services.	There is a Help button in footer which will be mail generation to our support team and they take action on it.	
7k	Sending newsletters via email and push SMS about Karnataka Mobile One services and their updates.	MSP informed to integrate email also.	
<b>Detailed description for Item no. 3 and 4 of the Short term recommendations</b>			
KMO user account hijacking via forgot password Feature: KMO application has the feature to set a new password, if user forgets his/her password like any other application. As per the web application security, this feature is considered as a very high ranked potential vulnerability of account hijacking. Hence, this need to be handled properly. In KMO, when the user clicks on forgot password and the application asks to enter his/her registered 10-digit mobile number. After submitting the mobile number, the user receives a 4 digit pin to login to user account. The issue with this approach is the 4 digit pin, since the pin shared to the user consist only 4 digit numbers and thus it can be brute forced. During this, the attacker might follow the following steps to hijack KMO user account through forgot password.			
a	The attacker may have or get the mobile number of the victim by mean of social engineering.		
b	Once the attacker gets the victim's mobile number and through KMO application requests for forgot password. However, a 4 digit pin number is sent to victim's mobile number. The attacker now performs a brute force attack on the victim's mobile number with a combination from 0000 to 9999 to login into victim's KMO account.	OTP is one time used until users needs to change else it will be saved in DB.	
c	To perform the brute force attack on the KMO application, the attacker might use Human Interface Device (HID) Arduino Nano to automate this process and thus gain access to the victim's KMO account by just knowing the mobile number.		
<b>To resolve the above issue, following solutions can be considered.</b>			
1. (i)	Sending a One Time password (OTP) pin to registered mobile number rather than a 4 digit pin.	OTP is being sent in the form of guest user signup, facebook login, google + login and aadhar based login with 6 digits.	
(ii)	Increasing the password string length.	Password policy is implemented.	
(iii)	Can use captcha during login.		
2	De-compilation of source code can be de-compiled using various tools such as apk tool, jadx, etc. De-compilation is a type of reverse engineering that does the opposite of what the compiler does. There are a number of different reasons for de-compilation. But de-compilation is sometimes used unethically to reproduce the source code for reuse or adaptation without permission of the copyright holder. The hacker can also add malicious code to the application source code and spread it over the internet through various social engineering techniques.	NA	
<b>Long term Recommendations</b>			
1	During the launch of Karnataka Mobile One service in Karnataka there were 4281 services and currently based on the users feed back, there are only 658 functioning services. With this, we can conclude that the active services have dropped down to 15.37% since it's inception. Hence, there is a need to look in with regard to the services that are currently not included.	Mobile one will be integrated with many Janasevaka and Sevashidhu there by the services list will be increases and also discussion are been handled to integrate with other Departments.	
2	It is observed that only 15 services can be availed using more than or equal to 3 channels. Hence measures can be taken to include various channels to other services.	Janasevaka and Sevashidhu is also other delivery channels which will be integrated to improve the services delivery.	
3	It is observed that less than 1% of the mobile users in the State have registered to the Karnataka Mobile One. Henceforth, citizen services govt departments and private sectors could be partnered and redirected to Karnataka Mobile One service for a single point interface and to facilitate access to mobile services at free or nominal rates.	With inclusion of Janasevaka and Sevashidhu registration the counts will increase.	
4	Linking Aadhar card 12 digits Unique Identification Number (UID) issued by UIDAI to Karnataka Mobile One service especially where payment is required. Since it is becoming the Government's base for public welfare and citizen services. This may be done in congruence with the government policies.	We are using UIDAI api while signup of user fetch basic information from aadhar server save them and redirect to use services.	

<p>5</p> <p>citizens are aware of Karnataka Mobile One service in Karnataka. Therefore, a well defined branding strategy in terms of planning, advertising and popularising is necessary to make citizens start using the mobile services to full extent.</p>	<p>During the survey, it is observed that only 33.3% of citizens are aware of Karnataka Mobile One service in Karnataka. Therefore, a well defined branding strategy in terms of planning, advertising and popularising is necessary to make citizens start using the mobile services to full extent.</p> <p>A pilot promotion activity was done in month of April 2020 and it gave good result with regards to increase in transactions in Mobile one 2 to 3 times of regular. Based on the same a year long promotion activity will be planned for increase the user base and transaction in Mobile one.</p>	<p>In progress</p>
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