2017/RBCC/7/10/eOffice/DSCPolicyforIR   Dated: 09-11-2020

The General Managers   Director Generals
All Indian Railways,   NAIR, Vadodara
CORE & Production Units   RDSO, Lucknow

Pr. CAO   Director Generals/ Directors,
COFMOW,DMW/Patiala   All Centralised Training Institutes

Sub: Provision of Digital Signature Certificate (DSC)/Digital Encryption Certificate (DEC) to Officers/staff in Indian Railways.

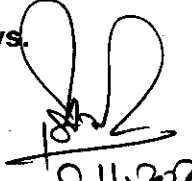Ref: This office letter No.2017/RBCC/7/10/e-Office/DSC Policy for IR dated 27/07/2017.

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Policy guidelines for provision of DSC to all officers & staff in Indian Railways were laid down vide letter referred above. Keeping in view the new developments in this field, it has been decided to make certain changes in the policy and issue a comprehensive policy in supersession of the earlier policy letter referred above. The Comprehensive DSC policy is attached herewith.

This issue with the concurrence of Finance Directorate of Ministry of Railways.

Please acknowledge receipt.

Encl: DSC Policy.

09.11.2020

(Rajnesh Singh)
Director ME(C&IS)

2017/RBCC/7/10/eOffice/DSCPolicyforIR   Dated 09.11.2020

Copy to :

1. The PFAs, All Indian Railways, PUs, CORE, COFMOW, PED/Finance, RDSO/ Lucknow.
2. Principal Directors of Audit, All Indian Railways/PUs (as per standard list).
3. The Dy. CAG of India (Railways), Room No. 224, Rail Bhawan, New Delhi.
4. Pay & Accounts Officer, Railway Board.

For Member (Finance)

Copy to :

1. Finance(X), Budget, Cash Branches, Railway Board.
2. PSs to MR, MSR(B) & MSR(M).
3. PSOs/ Sr. PPSs/ PPSs/ PSs to CRB & CEO/Board Members, Secretary, DG/RHS, DG/RPF, Additional Members, OSDs, Advisors, JSs, Executive Directors, DIP, Editor/Indian Railways, Editor/Bhartiya Rail, All Other Officers & Directorates/ Sections Railway Board.
4. All Associations (as per standard list)

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

Policy on Lifecycle Management of Digital Signature Certificates on Indian Railways

Version History:

S. No.	Version Date	Version No.	Reasons for Issue
1.	21.07.2017	1.0-d0	First DSC Policy for Indian Railways.
2.	09.11.2020	2.0	Life Cycle Management in view of proliferation of e-office & SPARROW in Indian Railways, inclusion of DEC and procurement through GeM portal.

Modifications in the existing DSC policy dated 21.07.2017 and revised DSC policy are tabulated below:-

Description	Provision of DSC Policy issued on 25/07/2017	Provisions of Revised DSC Policy
Process of procurement of DSC/DEC (Para 3.5)	Process of procurement of DSC through department was not covered.	Process of procurement of DSC through department is incorporated. {Para 3.5 (i) (a)}
	Rate of DSC for limit of reimbursement was taken from NICSI rate contract.	Actual cost of purchase from CCA approved vendor and Based on price of DSC on GeM portal whichever is lower. {Para 3.5 (i) (a)}
Inclusion of Digital Encryption Certificate (DEC) (Para 3.4)	Digital Encryption Certificate (DEC) was not covered.	As DEC has been used on IT applications like IREPS & iMMIS and the asymmetric encryption achieved through DEC, there is need to incorporate the life-cycle management of DEC in the policy. Hence DEC is incorporated. {Para 3.4.2 (A)}
Action on transfer/deputation of officials (Para 3.7)	DEC was not covered.	Action to be taken on transfer/deputation in case of DEC is issued to the official, has been incorporated. (Para 3.7.2)
Action in case of retirement of officials (Para 3.8)	DSC was to be deposited to department	Department will not take back DSC. (Para 3.8)
	DEC was not part of policy	As indicated in Para 3.7.2

C1)

09.11.2020

1. Background

1.1 Electronic (Digital) Signatures were introduced by the Information Technology Act 2000 and elaborated further in its amendment in 2008. The act provided for the creation of the Controller of Certifying Authorities (CCA) which in turn created Certifying Authorities (CA) which formed the Public Key Infrastructure (PKI) for the country. Digital Signature Certificate(s) (DSC) are being used on Indian Railways for applications like e-tendering, issue of e-Gazette, e-Office, SPARROW etc. Digital Encryption Certificate (DEC) is a system for asymmetric cryptography in order to ensure confidentiality of bid data and reserve price in e-tendering or e-auction. It has been employed on the Indian Railways E-Procurement System (IREPS) and Integrated Materials Management Information System (iMMIS).

Note: For better understanding of the concept of DSC / DEC and Public Key Infrastructure (PKI) please refer Brochure issued by the CCA on Digital Signatures. **(www.cca.gov.in)**

1.2 Upto 2014, NIC-CA handled the task of providing CA services for all Government offices. Instructions for obtaining DSC from NIC-CA were issued vide letter number 2007/RBCC/516/Tender Portal dated 06/06/2012. However, in July 2014, NIC-CA temporarily stopped issuing / renewing DSC. In order to circumvent this development, further instructions were issued to permit procurement of DSC for official use from any of the Certification Authorities approved by the Controller of Certification Authorities of India (CCA). The instructions were issued vide letter number 2012/RBCC/5/3/Digital Certificate dated 13/08/2014.

1.3 A large number of DSCs are already in use in the offices of Indian Railways. These numbers are continuously increasing with the introduction of applications like eOffice & SPARROW etc. There is a need to ensure uniformity of DSC and its associate software such that these can be used universally across all applications which are already functional or are likely to be deployed in the future.

2. Objectives and Scope this document.

The policy details the lifecycle management of DSC/DEC for use on the Indian Railways to provide appropriate user guidance, systematize the use of DSC/DEC and streamline the procurement process. This policy will help to ensure uniformity and avoid incompatibilities among various applications that use DSC &/or DEC.

Note: Normally, DSC & DEC should be procured on two different USB tokens.

3. Instructions regarding - Lifecycle management of DSC /DEC.

3.1 Prerequisites for obtaining DSC/DEC

The following pre-requisites may kindly be ensured from every applicant of DSC/DEC:-

3.1.1 Aadhaar ID and linked mobile number

(A) Every applicant shall have an Aadhaar number.

(B) The Aadhaar number shall be linked to the applicant's mobile number. The number used should preferably be such that it remains permanent with the user. Use of officially issued mobile number should be avoided, as the process of change of registered mobile number adds additional complexity during transfers / postings.
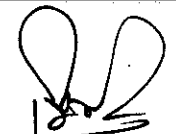
Note: Kindly refer instructions for Aadhaar and linking of mobile number at the UIDAI website: https://ssup.uidai.gov.in/web/guest/update

3.1.2 Email-ID on gov.in domain

(A) Every applicant should have his/her registered & functional email on the "nic.in/gov.in" domain.

(B) The email account on "nic.in/ gov.in" domain mandatorily requires the user to register a mobile number. The mobile number used should preferably be such that it remains permanently with the user. Use of officially issued mobile number should be avoided, as the process of change of registered mobile number adds additional complexity during transfers / postings.

Note: Kindly refer instructions for obtaining email-ID on gov.in at the REIS website at http://www.reis.railnet.gov.in

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3.2   Planning for procurement.

3.2.1   Selection of Class of DSC
(A) DSC is classified into different classes by the CCA, namely: Class 1, Class 2 and Class 3.

Note: Refer webpage of CCA detailing the classes of DSC. **(http://www.cca.gov.in).**

(B) Class 2 DSC shall be used in general for applications on Indian Railways.

(C) Class 3 DSC shall be mandated, where required, especially for e-tendering purpose.

3.2.2   Selection of Type of Key Store
The private key associated with the digital signatures needs to be stored securely.

Note: Please refer instructions on Storage of private key used by subscribers for creating Digital Signatures, issued by CCA for better understanding of the features of different types of storage options. **(http://www.cca.gov.in)**

For applications on Indian Railways, USB Crypto Tokens shall be used by default for storage of the private key and associated certificates.

Any other option for storage shall require prior approval of the C&IS Directorate of Railway Board.

3.2.3   Sources for Procurement
DSC/DEC services and required crypto-tokens shall be purchased only from the CCA approved Certification Authorities (CA). The website of CCA shall be checked to ascertain the approved agencies.
Note: Please refer the CCA website at: http://www.cca.gov.in/

3.3   Filling the Registration form for DSC.
The application forms for DSC/DEC and tokens are service provider specific. Forms and instructions may be followed on service provider's website. Name of service provider are available at CCA website (cca.gov.in/licensed_ca.html)

3.3.1   Use Registration Form for Digital Certificate (Government)
Use the form specifically meant for "**Government**".

3.3.2   Selection of Class of DSC
Select "Class 2" by default or, Class 3 if required, especially.

3.3.3   Select Validity
Select Validity of "two years" by default. If any user desires to take lesser period of validity i.e. less than 02 years, he may apply accordingly.

3.3.4   Sign & Encrypt
Select the option for both "**Sign & Encrypt**" use for the DSC.

3.3.5   Follow all instructions correctly
Follow all instructions provided on the registration form to ensure a error free submission. The colour of the ink used for filling the form is mandated. It needs to be followed correctly.
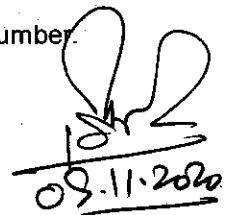
3.3.6   Unique Email-ID
Use the personal Email-ID created on the "**gov.in/nic.in**" domain as the Unique Email ID.

3.3.7   Unique Mobile Number
Use the personal mobile number (the one which is linked to Aadhaar) as the unique mobile number.

3.3.8 Identity Details of Applicant

Use the "**Government Identity Card**" as the document of identity of the applicant. The attested copy shall be attached along with the duly filled form.

3.3.9 Organization Name

This is an important field and shall be filled-in by providing the information of the applicant as illustrated below:

Officer Group	Information to be filled in
Group A	**Organization Name : Ministry of Railways**
	Office Address: Service & Year (e.g. IRTS 1994) C/o Confidential Cell, Room No. NNN, Ministry of Railways Rail Bhawan, Raisina Road, New Delhi – 110001.
Group B	**Organization Name : Ministry of Railways**
	Office Address: Service & Year, C/o Confidential Cell, Room No. NNN, HQ Address of ZR / PU / CTI etc.
Group C	**Organization Name : Ministry of Railways**
	Office Address: Service & Year, C/o Confidential Cell, Room No. NNN, Provide Address of the Cadre Controlling Authority

3.3.10 The above method of filling the registration form ensures that the DSC can be used by the officer for the full duration of the validity and irrespective of incumbency on any post. This saves a significant cost by utilizing the full validity of DSC and also conserves resources which otherwise shall be needed to cancel and reissue DSC whenever an officer is transferred.

3.3.11 Authorization Letter part of the Registration Form

The Authorization Letter part of the form shall be verified and signed by officer(s) nominated by the Confidential Cell of the Railway Unit. All officers in **JAG and above grade** are empowered to sign the authorization letter. Other officers may be nominated by the respective officers (JAG & Above) to sign the authorization letters. The following details of these nominated officers shall be maintained by the respective confidential cells and to be produced on demand:
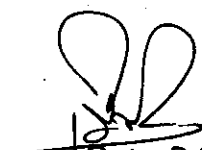
1. Name

2. Service / Year

3. Designation

4. ID Card Number

5. Email ID (NIC personal on gov.in domain)

6. Aadhaar Number

7. Cell Number

3.4 Eligibility for DSC & DEC for Railway officials.

3.4.1 Official issue of DSC

(A) Only one DSC shall be issued to a Railway official. In case, there is a requirement to have Class 2 and Class 3 DSC to any Railway official then the higher Class DSC shall be issued. Group A & B Railway Officers are empowered to sanction DSC for themselves as well as subordinate Railway officials under their direct control.

(B) Any eligible official may apply for DSC one month prior to expiry of DSC.

3.4.2 Official issue of Digital Encryption Certificate (DEC) on need basis for tendering & auction purpose

(A) Each individual tendering unit or auction conducting unit shall require one DEC. Since the usage of DEC is limited and specific, the issue needs to be regulated. Therefore, all officers in JAG and above grade are empowered to sanction DEC for tendering & auction conducting Railway Units.

(B) Officer may apply for DEC 03 months before the expiry of DEC.

3.4.3 Any contravention of the above limit by an officer will be treated as breach of under the Railway Services Conduct Rules.

3.5 Process of procurement of DSC/DEC.

3.5.1 The DSC/DEC procurement and limit would be governed by the following:

S.No.	Purchase Mode	Description
(i)	Purchase of DSC by the department through **GeM portal**	(a) In Railway Board, the procurement will be done by C&IS Directorate and in Zonal Railways/PUs by Sr.EDPM or as decided by GM of the Zonal Railway/PU or by DRM/CWM at Divisional/Workshop level. (b) As per Rule No.149 of General Finance Rule (GFR) 2017, it is mandatory to procure items available in GeM through GeM portal. DSC is available in GeM, therefore, bulk procurement of DSC should normally be done through GeM portal. (c) The sanctioning authority will be as mentioned at Para 3.4.
(ii)	Self purchase of DSC & DEC	(a) Group A & B officers may purchase DSC/DEC as prescribed under Para 3.4 for themselves on reimbursement basis or through imprest controlled by them. (b) The limit of reimbursement for DSC shall be the lower of the following values: • Actual cost of purchase from CCA approved vendors on production of Original Invoice **and** • Rs.928/- (Nine Hundred Twenty Eight) only (Rate reference taken from successfully completed PO on GeM portal placed by RBCC under C&IS Directorate vide Contract No.GEMC-511687750605632 placed on M/s Gujarat Narmada Valley Fertilizers & Chemicals Limited for Class 2 DSC – Sign Plus Encryption with Token for 2 years validity. (c) The limit of reimbursement for DEC shall be actual cost of purchase from CCA approved vendors on production of Original Invoice (d) The reimbursement shall self sanctioned by the officer procuring the DSC/DEC. There shall be no further separate sanctioning process
(iii)	Self purchase of DSC & DEC for sub-ordinate officials	(a) Group C & D personnel, who are required to use DSC/DEC for official work, are authorised & sanctioned to purchase DSC/DEC on reimbursement as prescribed under Para 3.4. (b) The reimbursement of expenses for the purchase shall be done on the basis of authorisation. The amount of the reimbursement shall be governed by Sr No (ii) above.

3.6 Safekeeping use & expenses during validity of DSC/DEC.

3.6.1 Safekeeping of Token and PIN

(A) Safekeeping of the crypto-token, Digital Certificates, PIN etc. is the personal responsibility of the officers to whom the DSC/DEC is issued.

(B) The officer shall ensure that the DSC/DEC remain functional **during its validity**.

Note: As per the IT Act, documents signed or messages sent using the DSC are deemed to be signed by the holder of the DSC, therefore the DSC / PIN should not be shared as the complete liability rests on the holder of the DSC..

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3.6.2 Use of DSC

(A) The officer shall use the DSC issued as required for official working. The DSC provided can be used for signing the documents and also for sending secure encrypted messages to other users.

(B) The officers can use the DSC to digitally sign their personal documents i.e. income tax returns etc. and also send encrypted messages.

3.6.3 Expenses on maintenance of DSC

The DSC procured using this procedure does not incur any maintenance or service charges over the validity. However, in case of loss / damage of token or loss of PIN, locking out due to multiple wrong PIN's, etc, the services provider may levy certain charges for recovery / reissue. Such charges shall be paid personally by the officer concerned and shall not be reimbursed.

3.7 Action to be taken on transfer/ deputation.

3.7.1 For DSC:

The DSC is issued to the officer by name, thus the officer shall take it along with him / her on transfer/deputations in Railway Units/Central/State & PSUs etc. The detail about the DSC shall be entered into the LPC of the officer clearly mentioning the CA, date of purchase and validity.

3.7.2 For DEC:

Following to be followed if DEC is issued to Railway official:-

i.   On transfer/deputation/superannuation of the DEC holder, the DEC shall be handed over to the new incumbent. **The DEC holder will under no circumstances carry the DEC along with him even though the DEC may have been issued in his/her name.**

ii.   All the expired DEC shall be kept in safe custody for the required period. A label shall be put on each such expired DEC indicating the name of the unit and the validity start and end date of the DEC. On transfer of an official having custody of the expired DEC, he/she shall handover all such DEC to the new incumbent and obtains an acknowledgement of the same.

iii.   In case of loss of DEC, it shall be responsibility of the DEC holder to inform the CA immediately for revocation of the DEC. The holder shall also immediately inform CRIS about the loss of DEC

{Ref: Railway Board's letter No.2019/RS(M)/Misc dated 27.11.2019}

3.8 Action to be taken in case of retirement of DSC/DEC holder.

3.8.1   In case of superannuation or Voluntary Retirement or in case of death of Railway official, Railway Administration will not take back DSC from him/her.

3.8.2   Same as Para 3.7.2 above.

3.9 Disposal at end of validity.

(A) At the end of validity of the DSC, the CA informs the user and prompts for renewal of the same. The officer may either opt for renewal or seek an altogether new DSC. In both cases, the process of procurement is similar to the initial process.

(B) The USB crypto-token can be reused if permitted by the CA.

(C) The USB tokens shall not be returned to the office by the officer. The officer shall follow advice of CA for safe disposal of the non-used USB crypto-token.