গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
তথ্য ও যোগাযোগ প্রযুক্তি বিভাগ
ইলেক্ট্রনিক স্বাক্ষর সার্টিফিকেট প্রদানকারী কর্তৃপক্ষের নিয়ন্ত্রক-এর
কার্যালয়
আইন শাখা
আইসিটি টাওয়ার, আগারগাঁও, ঢাকা-১২০৭
www.cca.gov.bd

স্মারক নম্বর: ৫৬.০৩.০০০০.০০২.২২.০০৩.২০.৬

তারিখ: ১৭ মাঘ ১৪৩০ বঙ্গাব্দ
৩১ জানুয়ারি ২০২৪ খ্রিস্টাব্দ

বিষয়: **PKI Enabled Application** (খসড়া) **Guideline** প্রণয়ন প্রসঙ্গে।

উপর্যুক্ত বিষয়ের পরিপ্রেক্ষিতে জানানো যাচ্ছে যে, ইলেক্ট্রনিক স্বাক্ষর সার্টিফিকেট প্রদানকারী কর্তৃপক্ষের নিয়ন্ত্রক-এর কার্যালয়ের বার্ষিক কর্মসম্পাদন পরিকল্পনা ২০২৩-২৪ এর কার্যক্রম ২.৩ মোতাবেক **PKI Enabled Application** (খসড়া) **Guideline** প্রণয়ন করা হয়েছে।

০২। বিষয়টি সদয় অবগতি ও প্রয়োজনীয় ব্যবস্থা গ্রহণের নিমিত্ত এতদ্সঙ্গে প্রেরণ করা হলো।

সংযুক্তি: ১. PKI Enabled Applications Guideline.

৩১-০১-২০২৪
এ. টি. এম. জিয়াউল ইসলাম
নিয়ন্ত্রক (অতিরিক্ত দায়িত্ব)
০২৪১০২৫৬৬৪

সচিব, সচিবের দপ্তর, তথ্য ও যোগাযোগ প্রযুক্তি বিভাগ।

দৃষ্টি আকর্ষণ:
উপসচিব, কর্মসম্পাদন ও কৌশল শাখা, তথ্য ও যোগাযোগ প্রযুক্তি বিভাগ।

সকল সংযুক্তিসমূহ:
(১) PKI Enabled Applications Guideline.docx
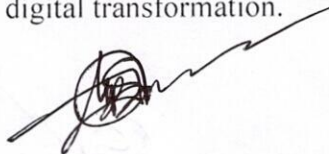
PKI Enabled Applications Guideline

Controller of Certifying Authority

Government of Bangladesh

Introduction

Government of Bangladesh has adopted a vision of SMART Bangladesh by 2041. The vision envisages

Bangladesh emphasizes on digitization of work processes for timely decision and ensuring ease of doing business. This will require secured PKI enabled transaction, email, e-commerce etc. The Government has already established the Office of the Controller of Certifying Authority (CCA) to regulate, promote and encourage the use of PKI in the business and daily online e-commerce, e-payments, service delivery etc.

The Government of Bangladesh has already issued the following legislation, rules, guidelines to promote interoperable and secured digital transformation.

1. ICT ACT 2006 (amendment 2013)
2. CCA Rules
3. Guidelines for Certifying Authorities
4. Time Stamping Guidelines
5. Digital Signature Certificate Interoperability Guideline
6. eSign Guideline
7. PKI Auditing Guidelines
8. Bangladesh National Digital Architecture Guideline 2019

PKI Application Objective

The Office of the CCA has drafted this guideline to ensure hassle free transition from paperwork to digitization. The digitization of business processes must meet the challenges of the emerging threats from cybersecurity, artificial intelligence, machine learning, deep fake etc. The objective of theis guideline is to increase the number of Government's e-services by providing

- Electronic digital identity and authentication
- Electronic signature for online transactions with non-repudiation service
- To prevent identity fraud and increase the level of confidence to exchange information over Internet
- Through the use of public and private cryptographic key pairs
- To leverage Data Protection
- compliant with e-transaction laws
- To empower the e-Government Transformation by providing (1) Data integrity (2) data confidentiality, (3) strong authentication and (4) Non-repudiation

a) GOVERNMENT PAPERWORK ELIMINATION-

    1. USE AND ACCEPTANCE OF ELECTRONIC SIGNATURES BY EXECUTIVE AGENCIES-

        a) DEVELOPMENT OF PROCEDURES- The CCA shall, in consultation with the relevant authorities develop and implement procedures for the use and acceptance of electronic signatures by agencies.
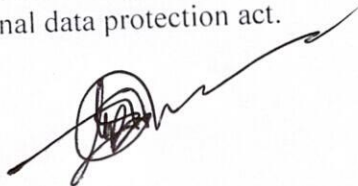
        b) REQUIREMENTS FOR PROCEDURES-
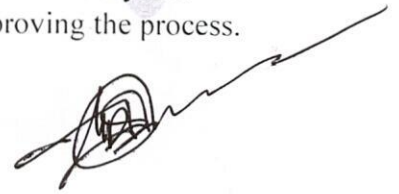   The procedures developed under subparagraph (A)--

           I.   shall be compatible with standards and technology for electronic signatures that are generally used in commerce and industry and by State governments;

II.   may not inappropriately favour one industry or technology;

III.   shall ensure that electronic signatures are as reliable as is appropriate for the purpose in question and keep intact the information submitted;

IV.   shall provide for the electronic acknowledgment of electronic forms that are successfully submitted; and

V.   shall, to the extent feasible and appropriate, require an executive agency that anticipates receipt by electronic means of 50,000 or more submittals of a particular form to take all steps necessary to ensure that multiple methods of electronic signatures are available for the submittal of such form.

c) DEADLINE FOR USE AND ACCEPTANCE OF ELECTRONIC SIGNATURES- The CCA in consultation with ICT Division shall ensure that, agencies provide--

i.   for the option of the electronic maintenance, submission, or disclosure of information, when practicable as a substitute for paper; and

ii.   for the use and acceptance of electronic signatures, when practicable.

2. ELECTRONIC STORAGE AND FILING OF EMPLOYMENT, PROCUREMENT, TAX RETURN, SERVICE REQUEST FORMS- The CCA shall, in consultation with the stakeholders develop and implement procedures to permit public and private employers to store and file electronically with a forms containing information pertaining to the relevant activity.

3. STUDY ON USE OF ELECTRONIC SIGNATURES- The CCA shall, in consultation with the licensed CAs and the relevant authorities conduct an ongoing study of, and periodically report to ICT Division, the use of electronic signatures under this subsection on--

a) paperwork reduction and electronic commerce;
b) individual privacy; and
c) the security and authenticity of transactions.

4. ENFORCEABILITY AND LEGAL EFFECT OF ELECTRONIC RECORDS- Electronic records submitted or maintained in accordance with procedures developed under this subsection, or electronic signatures or other forms of electronic authentication used in accordance with such procedures, shall not be denied legal effect, validity, or enforceability because such records are in electronic form as per the ICT Act 2006 (Amended 2013).

5. DISCLOSURE OF INFORMATION- Except as provided by law, information collected in the provision of electronic signature services for communications will be governed by the national personal data protection act.

b) ELECTRONIC GOVERNMENT- The CCA shall, assisted by the PKI Implementation Committee and other interested persons as selected by the CCA with approval from ICT Division, monitor the implementation of the requirements of subsection (b), the Electronic Signatures in relevant Act, and related laws to ensure that the Ministries/Divisions/Departments/Public and government Organizations--

1. develops and maintains an efficient and effective information infrastructure for undertaking government operations using PKI;

2. provides efficient and effective means for members of the public to interact with the public / private entities by means other than electronic information processes; and

3. manages its increasing reliance on information technology in a manner consistent with the purposes and requirements of Government of Bangladesh Vision for SMART Bangladesh by 2041.

c) ESTABLISHMENT/ STUDY OF STANDARD SETTING PROCESS- The CCA shall, in consultation with the CAs, establish a process for periodic review and study of the standards setting process and report to the ICT Division on the efficiency and effectiveness of the process and any recommendations for improving the process.