Report of the
Logical Data Structure 2.0
Optional Expanded Chip Functionality

ICAO Technical Advisory Group

on Machine Readable Travel Documents

07 September 2011

Introduction

- Background

- Present Status

- Next Steps

- Action by the TAG/MRTD

Background

- TAG-MRTD/19 approved on-going work of the NTWG to develop a Technical Report and recommendations on the current Logical Data Structure.

- The Logical Data Structure Sub-Working Group conducted several meetings, developed drafts, and sought comments resulting in Version 2.0 Technical Report Draft.

- Technical Report Draft is informed by government and non-government policies and considerations surrounding current implementation, capabilities, and uses of electronic machine readable travel documents.

Background (continued)

- Current Logical Data Structure or LDS1 facilitates the electronic transfer and secure use of the interoperable elements of the data page in the eMRTD.

- LDS Version 2.0 (LDS2) represents the next logical step in the electronification of the remainder of eMRTD.
  - Evidence of travel visa
  - Travel stamps
  - Additional biometrics

- LDS2 is optional for States to choose to use or not.

- LDS2 will allow States to add data to eMRTDs after personalization.

Present status

- The Sub-Working Group decided the current LDS remains intact.

- The new LDS2 would be optional.

- LDS2 ensures backward compatibility with LDS1.

- LDS2 allows for optional data to be implemented as separate and individual applications on the chip.

- Draft technical report is LDS 2.0 – Optional Expanded Chip Functionality – Version 1.0.

Present status (continued)

- LDS2 applications can only be deployed under the direct policy control of the travel document issuing State.

- LDS2 applications will focus on the writing or appending of data by the issuer and other States.

- Reading or writing of data to the chip requires a certificate chain that starts with a certificate verifiable by the eMRTD issuing State.

- LDS Sub-Working Group proposes that the ICAO Public Key Directory evaluate the broker service.

Present status (continued)

- LDS Sub-Working Group considered inclusion of an "identification feature" data element for the LDS2 visa application and determined that:

  o Visa application does not imply the need for an added traveler biometric unless it proves to be a necessity due to national visa issuance policy.

  o Inclusion of this data component may prematurely exceed storage capacity as travelers add more visas.

Present status (continued)

- LDS2 additional biometrics application supports storage of biometrics on the eMRTD post issuance at the request of the eMRTD holder for use with trusted traveler programs.

- LDS2 may support automated border clearance processes.

- LDS Sub-Working Group encourages the TAG to examine further effort to develop a Technical Report for ABCs.

Next Steps

- Upon approval by the TAG, LDS Sub-Working Group will develop the technical specifications that implement the applications defined in this report.

- The operational timeline for next steps is:

  o Solicit all comments and incorporate revisions from TAG-MRTD/20.

  o Final draft of policies / functionalities and preliminary draft of technical specifications ready for submission to TAG-MRTD/21.

  o Complete the Technical Report through to publication of final technical specifications in late 2013 or early 2014.

Action by TAG-MRTD/20

TAG-MRTD/20 is invited to:

- Approve the LDS2 Report as Draft Technical Report 1.0.

- Ask the ICAO PKD Board to evaluate a broker service for LDS2.

- Endorse the continued work on this Technical Report.

Merci !

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