



ICAO

INTERNATIONAL CIVIL AVIATION ORGANIZATION

A UN SPECIALIZED AGENCY

**Electronic Personnel Licence
Briefing to EDC TF**



09 February 2023

EPL Briefing - Overview

01

EPL - Origins

02

EPL - Implementation

03

EPL – Key Takeaways

01 – EPL - Origins

2016/10 – A39 – 2 Working papers supported by the Assembly

2018/05 – First EPL Task Force (EPL-TF) meeting

2019/05 – Second EPL-TF meeting

2019/11 – Third EPL-TF meeting

2020/11 – ANC – 215th Session – preliminary review of the EPL-TF amendment proposal



- Increase **time efficiency** in issuing EPL
- Increase **economic efficiency** and cost savings
- Same of **higher level of security** than hard-copy licenses
- **Immediate access** to up-to-date license data for the holder and inspectors
- **Positive environmental impact** – paperless



Keypoints:

- EPL is **optional**
- Obligation to **accept** an EPL issued by a State
- provisions include a means for online and **offline** verification methods **without putting an additional administrative burden on the accepting State**
- Active security features on the EPL – **No static image**

01 – EPL - Origins



2020/12 – State Letter SL 20/112 – proposal for the amendment to Annex 1



2021/11 – ANC – 218th Session – final review of the EPL-TF amendment proposal



Keypoints:

- High level description in the Standard

WHY?

Evolution cycles are different

Standard
amendment



Technology



Technical description to be
inserted in GUIDANCE

- **Avoid proliferation** of verification systems

01 – EPL - Origins

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2022/03 – Council - 225th Session – Adoption the amendment 178 to Annex 1

2022/03 – State Letter SL 22/12 – Adoption the amendment 178 to Annex 1



APPLICABILITY – 03 NOVEMBER 2022



HOW TO IMPLEMENT THE EPL STANDARD

- ☐ Avoid 193 different systems
- ☐ Maintain data and network security
- ☐ Maintain interoperability
- ☐ Maintain the “no burden” aspect on inspecting States

2022/02 – EPL-TF Implementation



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02 – EPL - Implementation

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2022/02 – EPL-TF Implementation

MANDATE:

Develop guidance to support the EPL implementation

16
meetings

WHAT THE EPL-TF IMPLEMENTATION DID SO FAR

EXPLORATION



- ☐ Brainstorming sessions
- ☐ Several presentations on existing or potential solutions
 - Blockchain
 - PKD/VDS – electronic passports
 - Current States implemented solutions
- ☐ Discussion on information security aspects

TODAY



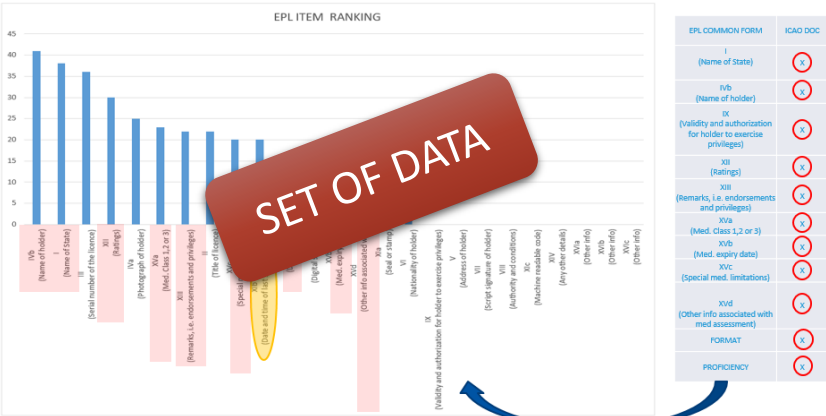
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02 – EPL - Implementation

16 meetings

2022/02 – EPL-TF Implementation

WHAT THE EPL-TF IMPLEMENTATION DID SO FAR



SET OF DATA



02 – EPL - Implementation

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2022/02 – EPL-TF Implementation

WHAT THE EPL-TF IMPLEMENTATION DID SO FAR

CONCEPTION

16
meetings

SET OF DATA

RISKS

ENABLE EPL
VERIFICATION

INTERROPERABLE
&
RISKS SAVVY

SCALABLE
(geographic, other
aviation
professions)

STRONG NEED FOR A STANDARDISED SOLUTION

TODAY

INTERNATIONAL
STANDARD

ISO/IEC
18013-5

First edition
2021-09

ADAPTATION



Personal identification — ISO-
compliant driving licence —

Part 5:
Mobile driving licence (mDL)
application

*Identification des personnes — Permis de conduire conforme à
l'ISO —
Partie 5: Application permis de conduire sur téléphone mobile*

- For mobile device
- Encryption/security
- Offline mode as default
- Online mode as a backup
- Used cases
- Well documented
- Interoperable



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02 – EPL - Implementation

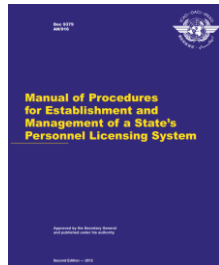
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2022/02 – EPL-TF Implementation

WHAT THE EPL-TF IMPLEMENTATION DID SO FAR

PLAN

Update of ICAO DOC 9379 – General guidance
Under PART II PROCEDURE – Chapter 2 – Section 2.6



INTERNATIONAL
STANDARD

ISO/IEC
18013-5

Personal identification — ISO-
compliant driving licence —
Part 5:
Mobile driving licence (mDL)
application

Identification des personnes — Permis de conduire conforme à
l'ISO —
Partie 5: Application permis de conduire sur téléphone mobile



New ICAO DOC 10190 – Technical Specifications for
Implementation and Verification

TIMING ISSUE

NEED FOR AN INTERIM SOLUTION

16
meetings

TODAY



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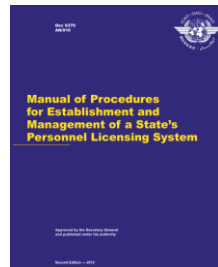
02 – EPL - Implementation

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2022/02 – EPL-TF Implementation

WHAT THE EPL-TF IMPLEMENTATION DID SO FAR

EXECUTION



- Writing sessions
- Peer review
- Editorial review
- **PUBLISHED**



- Adaptation of ISO STD
- Definition of the data model
- Definition of the communication means
- Peer review
- Editorial review
- **To be published Q2-Q3 2023**

INTERIM SOLUTION
DEVELOPMENT

- Support to “EPL-ready States”

LONG-TERM SOLUTION

16
meetings

TODAY

02 – EPL - Implementation

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2022/02 – EPL-TF Implementation

WHAT THE EPL-TF IMPLEMENTATION DID SO FAR

INTERIM SOLUTION

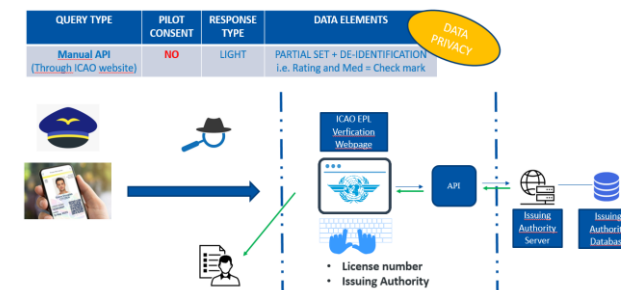
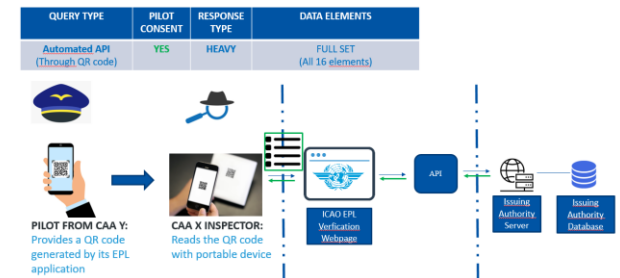
16
meetings

- ❑ 3 components:
 - Offline – Visual verification
 - Online – Automated query
 - Online – Manual query

- ❑ Information website
- ❑ Information document

- ❑ 3 States – EPL-ready States

TODAY



02 – EPL - Implementation

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2022/02 – EPL-TF Implementation

WHAT THE EPL-TF IMPLEMENTATION DID SO FAR

LONG-TERM SOLUTION

- ☐ 2 years timeframe
 - Process and software development
 - Procurement process
 - Communication
 - Training
- ☐ ICAO Doc 10190 to evolve
 - Need for at least 2 States
 - Experience feedback
 - New information security threats update
- ☐ Is providing a framework, **not the application**



- ☐ Attached to licensing system
- ☐ Trust framework

16
meetings

TODAY

02 – EPL - Implementation

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2022/02 – EPL-TF Implementation

WHAT THE EPL-TF IMPLEMENTATION DID SO FAR

LONG-TERM SOLUTION



16
meetings



- Each data is encrypted
- Each data is signed by the CAA (Private/public key)
- Default consent profile or user set consent profile
- Mobile device data retrieval (Bluetooth, wifi)
- Server retrieval as a fallback

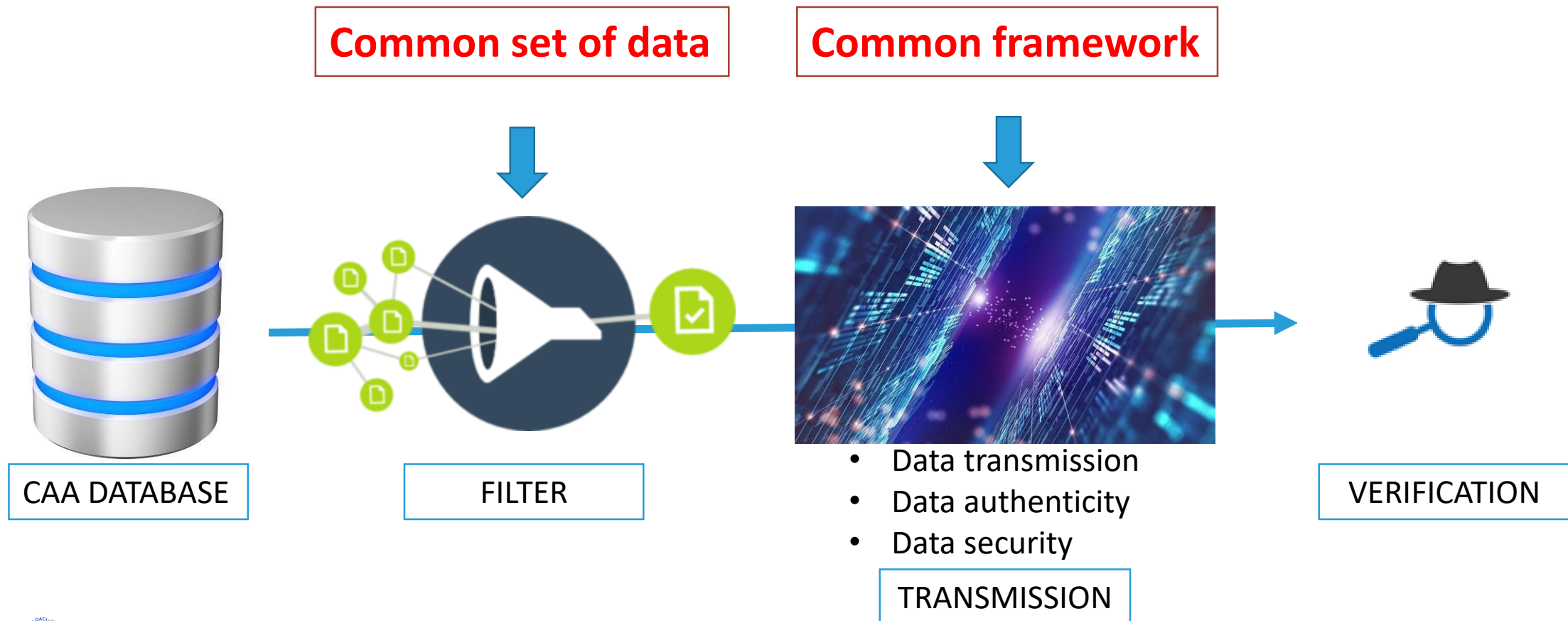


TODAY

03 – EPL – Key Takeaways

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Define the expectations - Define the needs – Identify information security risks





Thank You!