

# Driving Permits

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Use of Domestic & International Driving  
Permits: Minimum Security Features

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# Introduction

## Amalgamated Option:

- A DDP compliant with Annex 6 (of the 1968 Convention) and with **minimum security features** which are recognised at international level, **or**
- An IDP compliant with Annex 7 (of the 1968 Convention) and with **minimum security features** recognised at international level.
- A DDP not compliant with Annex 6 could only be used domestically.
  - From a road safety perspective there should always be **security feature requirements for a DDP**, even if the permit is only used domestically

# Minimum Security Features

- Informal Group considered the European Commission Directive 2006/126/EC
- Annex 1 prescribes minimum security features for EU Driving Licence
  - Card material must be polycarbonate
  - The material shall be made secure against forgery using following techniques
    - card bodies shall be UV dull
    - security background pattern designed to be resistant to counterfeit by scanning, printing or copying, using rainbow printing with multicolour security inks and positive and negative guilloche printing. The pattern shall not be composed of the primary colours (CMYK), shall contain complex pattern designs in a minimum of two special colours and shall include micro lettering

# Minimum Security Features

- The material used for driving licences shall be made secure against forgery by using following techniques (continued)
  - optical variable elements providing adequate protection against copying and tampering of the photograph
  - laser engraving
  - in the area of the photograph the security design background and photograph should overlap on at least its border (weakening pattern)

# Minimum Security Features

- In addition, the material used for driving licences shall be made secure against forgery by using at least three of the following techniques (additional security features):
  - colour-shifting inks
  - thermochromic ink
  - custom holograms
  - variable laser images
  - ultraviolet fluorescent ink, visible and transparent
  - iridescent printing
  - digital watermark in the background
  - infrared or phosphorescent pigments
  - tactile characters, symbols or patterns

# Minimum Security Features

- Informal Group considered minimum security features in ISO Standard
- ISO not prescriptive as EC Directive by allowing several options
- Flexibility result in lower compliance cost relative to EC Directive, eg
  - Card material matched to validity period of driving permit, allowing less costly PVC Composite instead of Polycarbonate to be used for cards with validity of 5 years only
  - Various printing options instead of laser engraving only
- Yet, all prescribed security features in EC Directive are also incorporated in ISO Standard and all EU Driving Licences compliant with Directive 2006/126/EC are also compliant with security requirements in ISO Standard

# Minimum Security Features

- ISO Standard classifies attacks and security counter features
  - Counterfeiting:
    - Reproducing by scanning or copying
    - Re-origination
  - Falsification:
    - Modification of existing valid documents
    - Reuse of valid or invalid documents
  - Misuse of a genuine document:
    - Theft of original blank documents

# ISO Minimum Security Features

- Card body security options to choose from:
  - UV-A dull substrate material
  - Fixed printed and/or dynamic data on different layers
  - Tamper evident card body
  - Taggant substances for genuine authentication
  - Look through element (transparent) such as window element
  - Look through element comprising grey levels
  - Card core inclusions
  - Pre-printed serial number on card blanks
  - Embossed surface pattern
  - Embedded thread or fibre



# ISO Minimum Security Features

- Design security options to choose from:
  - No CMYK colours and at least 2 special colours
  - Guilloche design
  - Micro printed text
  - Anti-scan pattern
  - Duplex security pattern
  - Rainbow printing
  - Deliberate error into the design or microprint
  - Use of non-standard type-fonts

# ISO Minimum Security Features

- Security ink/Pigment security options to choose from:
  - Security background printing
    - UV fluorescent ink in security background printing
    - Optical effect pigments (other than UV or IR pigments)
    - IR-fluorescent ink
    - IR-drop out inks
    - Non-optical effect pigments
  - Personalised data
    - Optical effect pigments (other than UV or IR pigments)
    - IR fluorescent ink
    - IR drop-out inks
    - Non-optical effect pigments
    - UV fluorescent ink in personalized data

# ISO Minimum Security Features

- Printing security options to choose from:
  - Electro-photographic printing;
  - Thermal transfer printing;
  - Ink-jet printing;
  - Photographic process;
  - Laser engraving.

# ISO Minimum Security Features

- Personalisation security options to choose from:
  - Printing dynamic data elements using digital imaging technologies
  - Sub-surface personalisation technique, or laminate, overlay or coating for surface printed data and portrait
  - Visible security element overlapping the portrait
  - Security background overlapping the portrait image area
  - Embedded data in the portrait image
  - Redundant personalized data
  - Optical Variable Element
  - Areas of different surface reflection
  - Personalized tactile elements
  - Lenticular patterns (such as variable laser element CLI/MLI)
  - Random pattern resulting in unique codes
  - Magnetic/Optical media "finger printing"

# Conclusion

- Minimum security features for DDP:
  - ISO Standard
- Minimum security features & Format of IDP:
  - Card with layout corresponding to DDP, but for inscription “International Driving Permit”
  - Lower cost than “passport” style booklet
  - Security features and printing in conformance with ISO Standard
- Future direction
  - Incorporate provision for Mobile Driving Permit/Licence