



Solutions oriented Workshop

Designing unique e-Passports

Cutting edge security for your e-passport

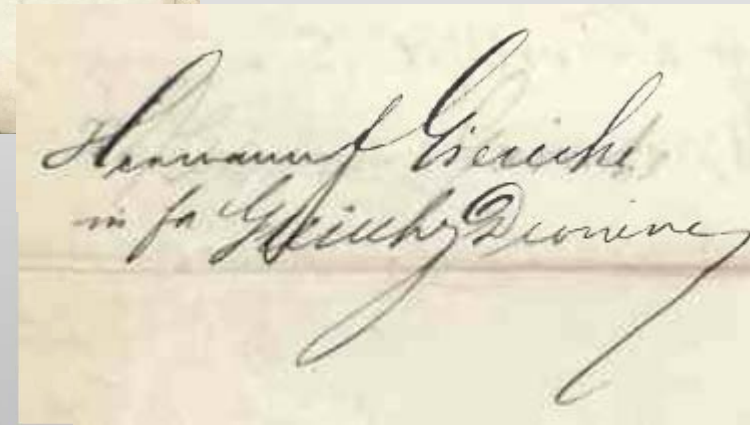
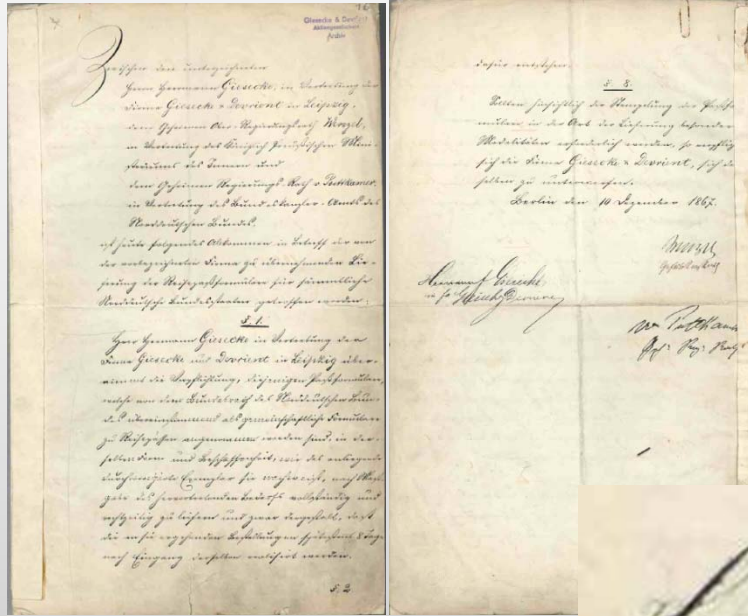
22.10.2013 | Montreal

Dr. Bernhard Deufel



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Creating Confidence.

Introduction to Giesecke & Devrient

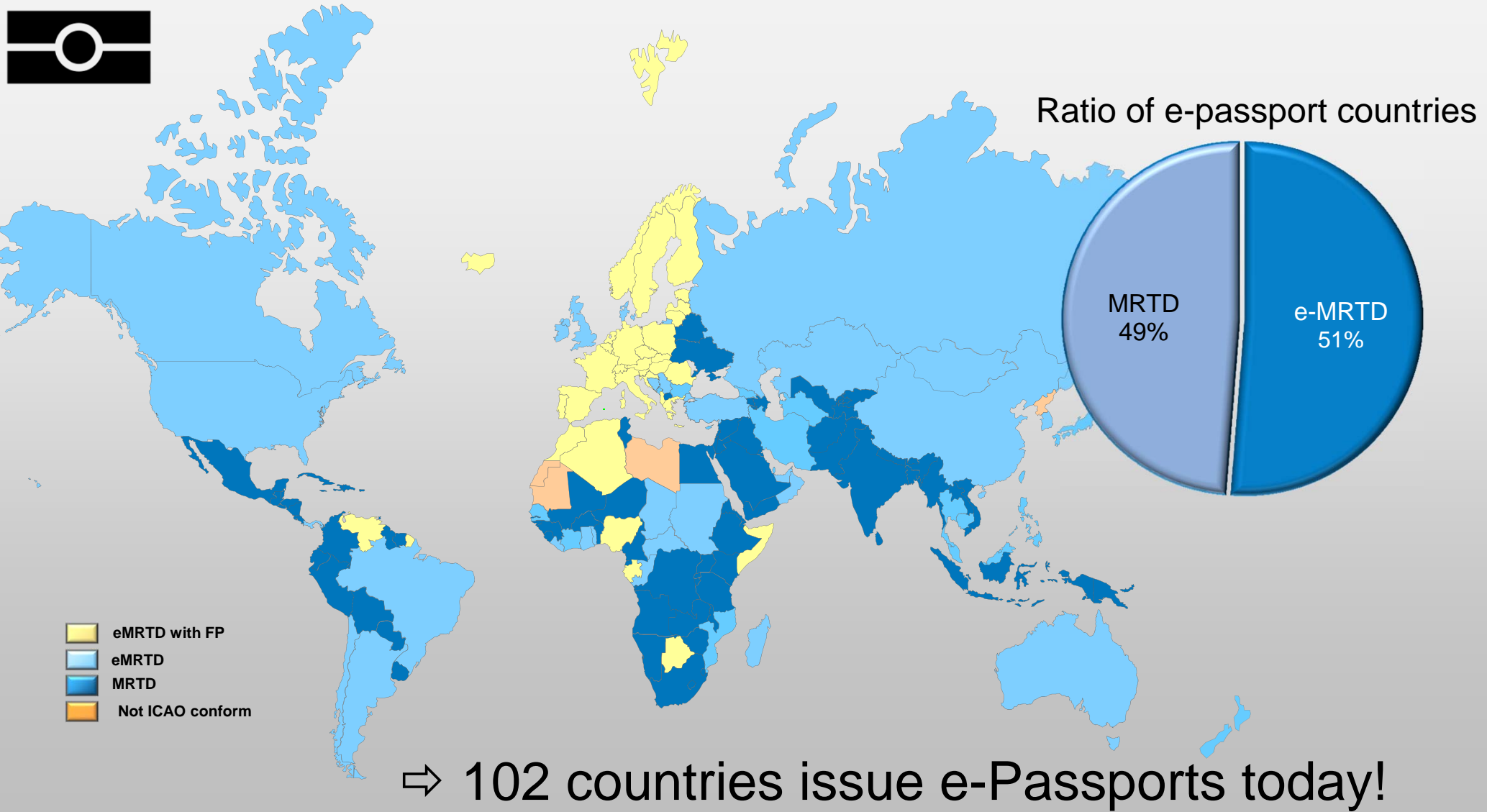


Passport Security since 1867!



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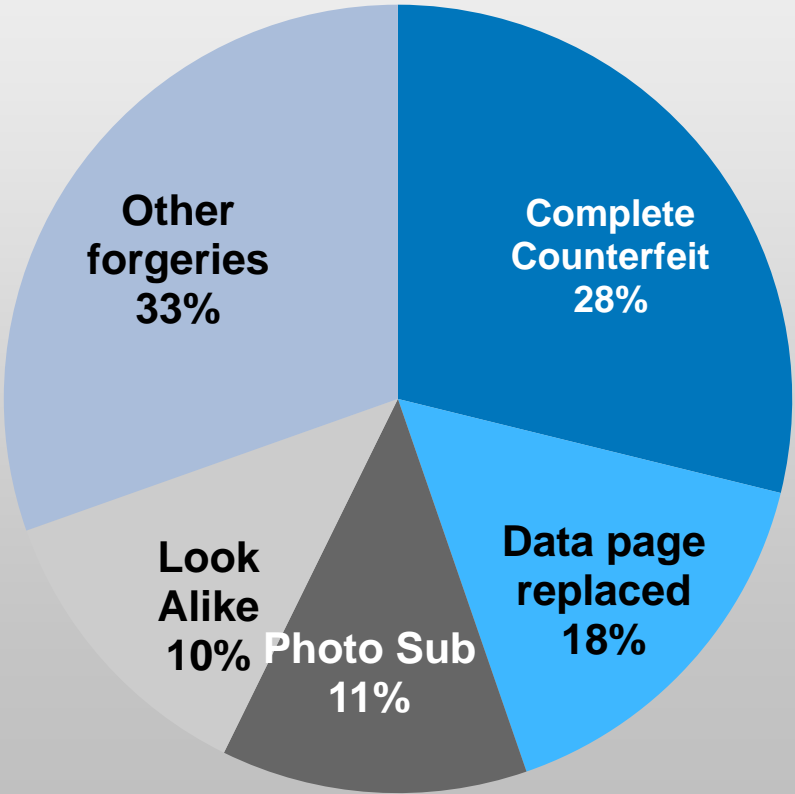
The e-Passport world today



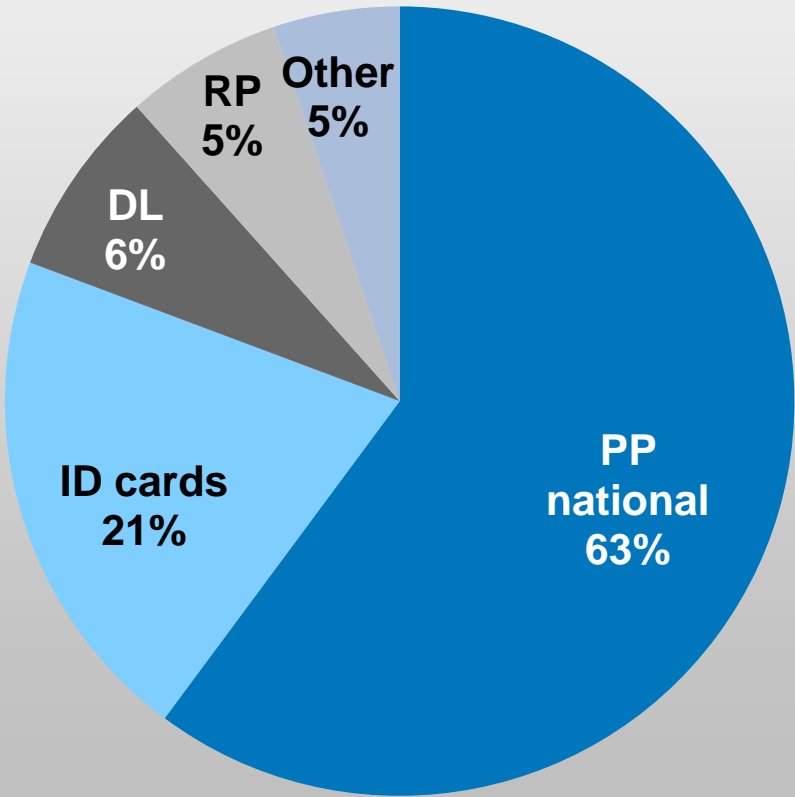
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Most common forgeries in the market

Reason of seized document



Type of seized document



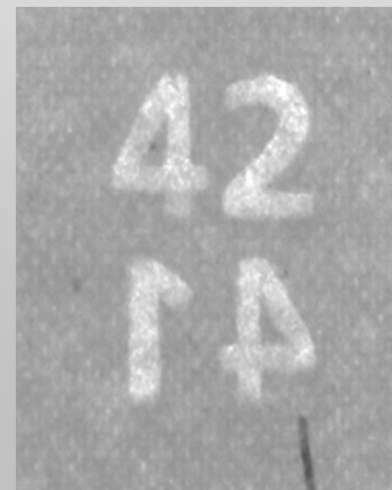
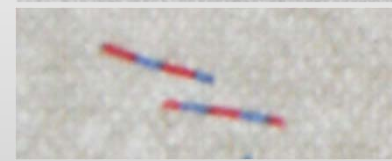
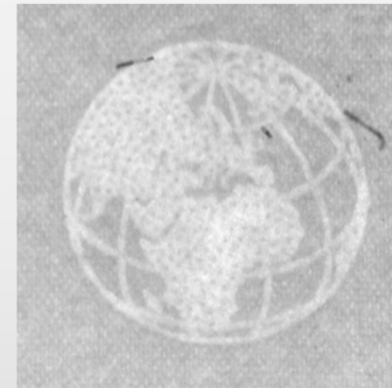
The five pillars of security of a passport

Five technical types of security features are feasible:

1. Features integrated into the **materials** used for document manufacturing (eg. paper)
2. Features generated with **security printing techniques** and/or applied by **lamination of security materials**
3. Features of document **booklet production**
4. Features based on **secure personalization techniques**
5. Features enabled by **embedded secure data carriers** (e.g. microprocessor chips) into the materials
⇒ ePassports and their enrolment, issuance and personalization systems

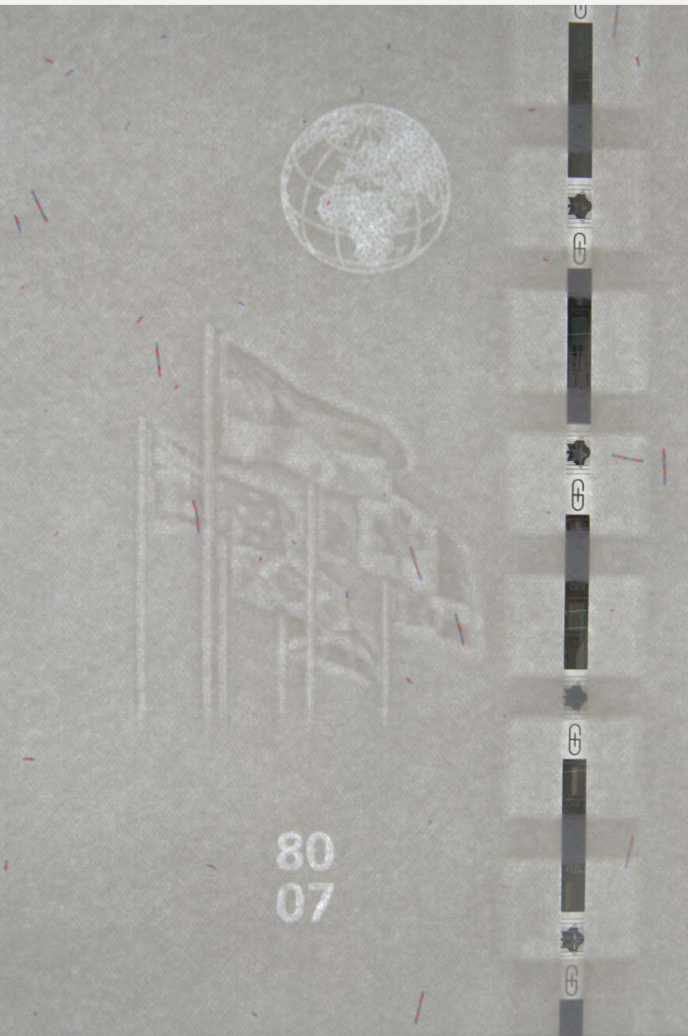


Ultimate Security for passport paper



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Ultimate Security for passport paper

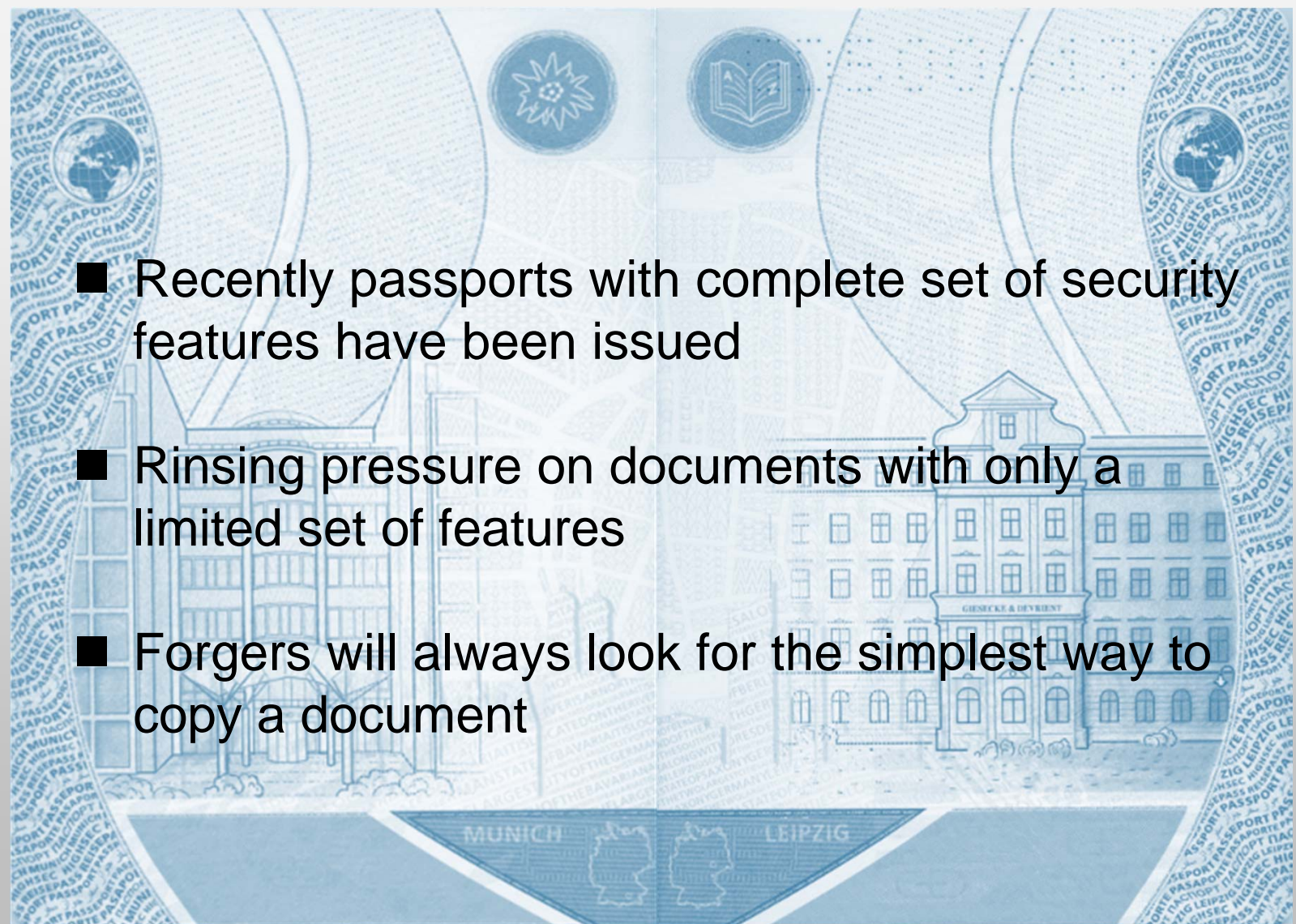


- Integration of a second security thread e.g. a holographic window thread offering three verification levels



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High security passport design: G&D'S new sample passport



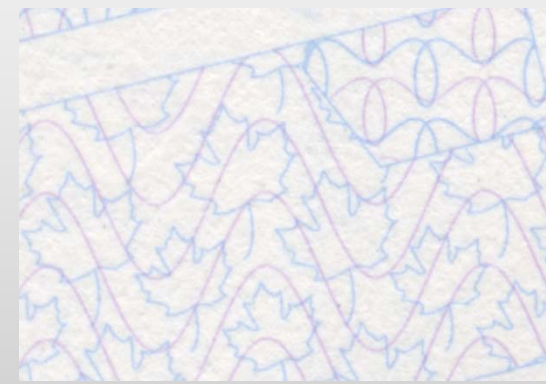
- Recently passports with complete set of security features have been issued
- Rinsing pressure on documents with only a limited set of features
- Forgers will always look for the simplest way to copy a document



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High security passport design: G&D'S new sample passport

- Incorporation of latest security features in paper and through printing technologies
- Specific and modern design on all inner pages being a trend in latest most advanced passports
- About ~10 passports worldwide show differently designed inner pages
- Supplemental Access Control enabled electronic chip with G&D's STARCOS® 3.5 (fully CC certified) operating system



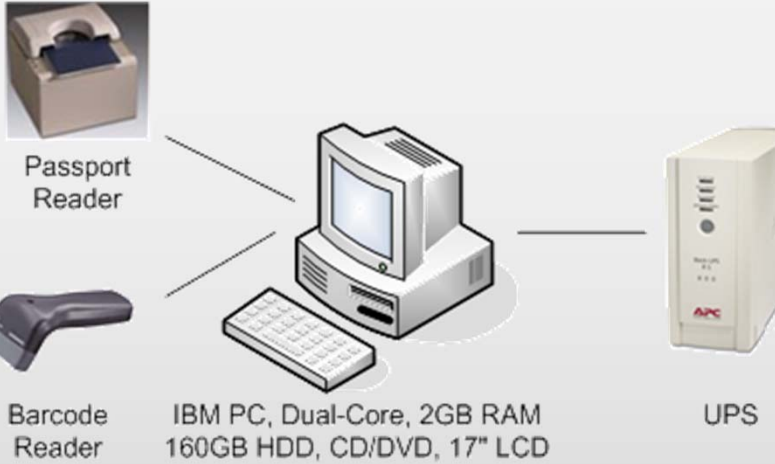
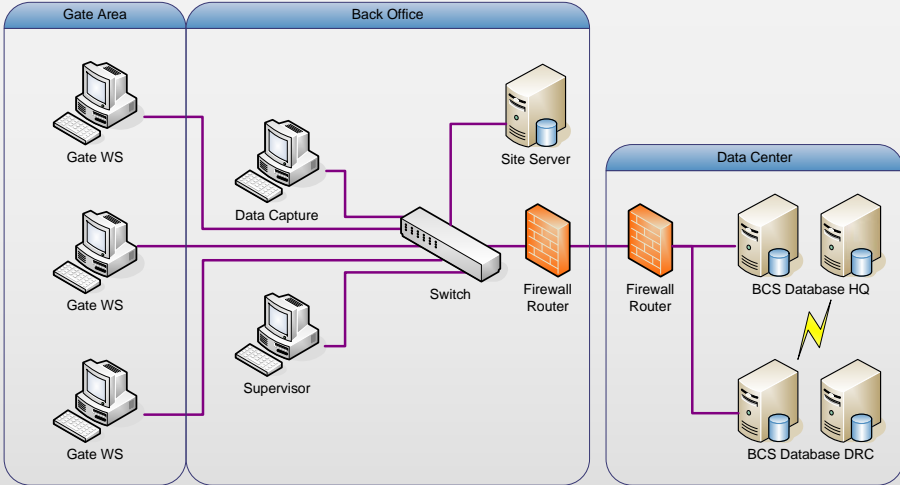
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Passport Border Control System (BCS)



secunet
IT security beyond expectations



Thank you for your attention.

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