

Electronic passport and biometrics, winter 2006
MICHAEL NÜSKEN

8. Exercise sheet

Hand in solutions until Tuesday, 16 January, 12¹⁵.

Exercise 8.1 (RFID physics).

(8 points)

- Which frequencies are used? 1
- How much energy does an RFID get and need? 1
- Where could RFIDs be used? Where are they already used? 1
- At which distance can RFIDs be activated? 1
- What are the requirements for the RFID in the electronic passport? (In particular, concerning frequency, energy, distance, lifetime.) [Requirements means two things. First, what is needed, second: what is required by the ICAO electronic passport standard.] 2
- Which objections do people have? 2

Exercise 8.2 (Biometrics).

(4 points)

Describe enough about the Vucetich system for classifying fingerprint that define at least 10^9 different fingerprints. 4