# Why are some people scared of NFC chips?

## NAME AND UČO

#### Table of contents:

- NFC and differences compared to BLE and RFID
- Rumors regarding NFC
- Accuracy of the rumors
- NFC use cases

### Main points:

- Wi-Fi and Bluetooth provide both longer range and much higher frequency than NFC.
- NFC (Near Field Communication) is derived from RFID (Radio-frequency identification)
- NFC's frequency is around 13.56 MHz, same as High Frequency RFID
- RFID can have higher as well as lower frequency -> Ultra High Frequency RFID 300 MHz up to 3 GHz, Low Frequency RFID – 30 up to 300 MHz.

#### **Rumors:**

- Spying -> not viable, range not long enough, NFC chip holds minimal information.
- Fake NFC terminals -> pay limits, algorithm checks risk criteria before approving a payment.
- Faking credit cards -> not enough information provided through NFC.
- Identity theft -> neither the name nor the CSC (Card Security Code) is provided through NFC.
- Malware installation -> user must accept the installation.

#### NFC tags

• Programmable chip programmed via NFC tools, import to the chip using NFC enabled mobile phone.

#### **NFC** implants

• NFC tag functionality inside your hand

# **Discussion topics:**

Have you ever heard of any of the rumors discussed, how would you react?

Do you use NFC for mobile payments? Why or why not?

Do you think that NFC is safe enough for use? What should be improved?

Have you encountered NFC tags or any other NFC use cases? Should they be used more, are they beneficial?

Should the range be increased or is the safety connected with the range more important?

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