Passenger asymmetries in aviation security

The case of risk based passenger screening

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SEVENTH FRAMEWORK PROGRAMME

XP-DITE

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Outline of the presentation

1. The traditional screening paradigm

   - Two functions of passenger screening

   - Undifferentiated screening and alarm resolution

2. Risk Based Screening as a new paradigm

   - Interests of different stakeholders

   - Three versions of Risk Based Screening

3. Identification of ethical and societal risks

   - Likely trade-offs in Risk Based Screening

# Conceptualizing passenger screening

- Goal of passenger security screening:

  Prevent potential attackers from bringing tools and means with them that allow attacking an airplane (e.g. bombing or hijacking).

- Two main functions of security screening:

  1. Access control
  2. Revelatory function

Traditional screening paradigm

- Primary screening measures

- Secondary screening for "alarm resolution"

- Also random alarms in some countries

- Undifferentiated screening:

    1. Screening independent from passengers' identity
    2. All "lanes" look the same (with some exceptions)
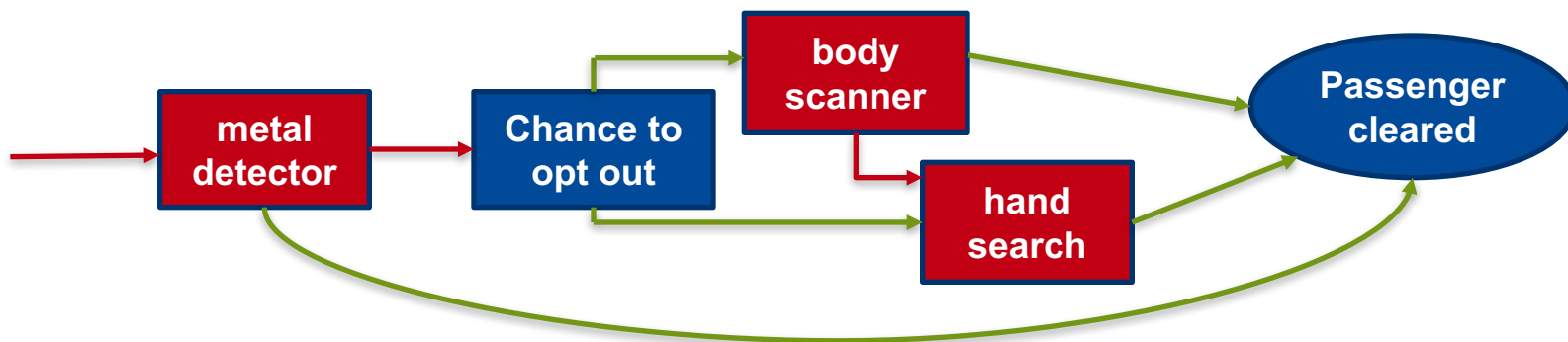
Idealized stakeholder/interests matrix

- **Typical trade-offs**
  - Security provision
  - Costs and customer satisfaction
  - Impact on the passengers' privacy and other ethical aspects

Stakeholder	Interests
Governments	• **Security provision** • Public opinion, cost
Aviation industry	• **Cost** • Passenger satisfaction, security
Passengers	• **Less impact** • Security, cost

Risk based screening paradigm

- **Proposed changes in the screening approach**
  - IATA: "more security, lower costs, less intrusive"
  - Don't always screen passengers the same way
  - Differentiate screening according to risk data

- **Three versions of the new paradigm, as promoted e.g. by IATA, US TSA, UK DfT**
  1. Flexibility depending on an overall "risk context"
  2. Passenger differentiation by external risk data
     IATA: "Screen different passengers in different ways"
     - ➢ Different lanes or different screening sensitivity
  3. Passenger differentiation based on their behavior

IATA's Checkpoint of the Future

Image removed for copyright reasons.

IATA's three tunnel concept
Source: http://www.dailymail.co.uk/travel/article-2046416/Airport-security-Body-scanner-future-unveiled.html

XP-DITE's typology of ethical risks

Risk Categories	Privacy intrusion	Error and Discrimination	Restrictiveness
Types of risks	**Bags, pockets, luggage**	**Alternative screening**	Restriction of **free movement**
	Body	**False alarms**	Lack of **accountability**
	Private life	**False or incomplete external data**	**Misuse of data**
	Disclosure to others	Affecting **non-travellers**	Lack of **transparency**

Please note: (1) In XP-DITE, research on RBS as such is out of scope, but the concepts developed remain applicable even with introduction of RBS; (2) XP-DITE's risk typology draws from DETECTER's table of relative moral risks.

Likely ethical trade-offs with RBS

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Summary of likely ethical trade-offs

- **Likely ethical benefits**
  - Less overall impact on passengers privacy
  - Less impact on freedom of movement

- **Likely negative ethical impact**
  - Deliberate difference in distribution of impact
  - Less accountability and transparency in screening mechanisms due to dependency on opaqueness
    - ➢ Higher dependency on reliable risk data usually coming from intelligence activities.
  - Higher risk of data misuse as it is necessary to record and confirm passengers' identity

Literature and Thank You!

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