The impact of major threats like pandemics on business continuity and operations (the FRA model)
Source: Brockmann et al 2004, Göttingen
Coughs and sneezes......
Goal of Airports

Keep the Airport running………..
Goal of Public Health Services

Keep the Pandemic Outside…. 
Legal Responsibility and Consequences

Public Health Service

Airports
The next Medical „Disaster“

Triggered
- Politicians
- Media
- Public Health Services
- WHO
- (board members, employees......)

Medical Impact

Economical Impact

Airport closure
She comes – she does not come....
Need of medical staff within of hours (time exposure)
till 15.05.2009; after 15.05.09 only airplanes are checked if suspected cases are reported
Time allotment for medical staff if US flights have to be screened

Zeitaufwand USA und Mexico Flüge
Beispielhafte Darstellung Verkehrstag Sonntag mit 44 Flügen und einer durchschnittlichen Einsatzdauer von 60 min pro LFZ

PEAK 1
07:25 - 08:35 Uhr
bis zu 11 Teams
zeitgleich

PEAK 2
09:35 - 10:20 Uhr
bis zu 9 Teams
zeitgleich

PEAK 3
11:15 - 11:50 Uhr
bis zu 7 Teams
zeitgleich

43 LFZ's mit ca. 11.050 Paxen aus 22 Zielen mit 10 verschiedenen Airlines innerhalb von 12 Stunden = Aufwand ca. 40 h
Airport Closure and the Consequences
(international Airport, 50 % Transit Passenger)

The complete Air Traffic must be shut down due to

- **weather**
  - freezing rain, long lasting snowfall

  or

- **engineering**
  - (for example a total breakdown of the electrical electronical airport-systems)

  or

- **disastrous accident**
  - (crash landing of a 747 with 300 victims)

  or

- **medical disaster**
The complete Air Traffic is still shut down

- 4 long-haul aircrafts could not start
- 27 medium-haul aircrafts could not start
- 8 short-haul aircrafts could not start
- 12 long-haul aircrafts could not land
- 20 medium-haul aircrafts could not land
- 9 short-haul aircrafts could not land

- 9,960 passengers are at FRA
- 8,766 passengers are not at their destination
- 1,500 tons of freight are not at their destination
- 80 aircrafts are not available at their scheduled intermediate airports

18,726 Px = 27 ICE ‘s
1,500 to = 58 trucks

The effects are noticeable nationwide (Germany)
The complete Air Traffic is still shut down

- 13 long-haul aircrafts could not start
- 80 medium-haul aircrafts could not start
- 25 short-haul aircrafts could not start

- 44 long-haul aircrafts could not land
- 62 medium-haul aircrafts could not land
- 24 short-haul aircrafts could not land

- 31,596 passengers are at FRA
- 26,490 passengers are not at their destination

- 4,139 tons of freight are not at their destination
- 248 aircrafts are not available at their scheduled intermediate airports

The effects are noticeable worldwide
Pictures taken in Hongkong during SARS
Pictures taken in Frankfurt during the test (hand held), 2009
Pictures taken in Frankfurt during the test (hand held) inside the aircraft*, 2009

*not recommended (takes to much time)
Bangkok Airport Experience

02.09.2009 (RAMT meeting, BKK)

1,600,000 passengers have been screened with thermo scan

2 (1!) have been tested /confirmed positive (in the first month)
Procedures at Frankfurt Airport:

All direct flights from Mexico

- Screening
- No gate position
- 2 physicians (generally 1x Fraport and 1x Public Health Authority)
- Announcement by physicians in German and English
- First Visual Medical Screening (public health officer)
Procedures at Frankfurt Airport:

**All direct flights from Mexico with an airline physician on board (gate position)**

- On bord screening by LH-physician during the flight
- One of Fraport’s physicians goes on board after aircraft’s arrival
- Medical handling over in written form (Doc to Doc)
- Announcement by physician in German and English
- Short visual medical screening (public health officer)
Arrival LH499 with company physician (LH)

Handover Doc to Doc

EMS waiting for LH 499
Announcement and information by public health officer before deboarding
Medical Team: left to right
2 paramedics, medical coordinator, emergency physician/public health officer
Planed for the future

Sichtung:
Einsatz additiv zum ICAO Tag geplant
Color Coding through Fraport ‘s or Public Health Authority ‘s physician on duty

Because of the disease ‘s pattern and course, it was agreed by mutual consent with the Public Health Authorities that only the color codes RED and GREEN are to be applied.

The color code YELLOW remains valid, but is not to be used at the moment.
No signs of physiological symptoms

Information leaflets from the Public Health Authority are distributed to all passengers

Physiological symptoms

1. Index patient
   → Protective mask
   → Transport through FPA
   → University Hospital
2. Prevention measures EMS
3. PLC is distributed to all passengers
4. HA’s information leaflet is distributed to all passengers

Key: FPA = Fire Protection Authority Frankfurt  EMS = Emergency Medical Services
     HA = Health Authorities  PLC = Passengers locator card
Communication and information

- daily coordination meetings on operational level
- regular information of the executive board
- regular information of the employees (Intranet, departments...)
- poster and information material displayed in the Terminals for passengers
Mexikogrippe has been changed to Influenza A H1N1
Present storage at disposal:

50.000 Masks FFP1

5.000 Masks FFP3 (for medical staff and first responder)

50 Thermometer (ear checking)

1 Thermoscan camera in place

Disinfection……..

Labority for H1N1 detection in place september 09, 2009

Medication
11.000 units of Tamiflu (for employees only)
**International Health Regulation (IHR 2005)**

**Questions to be answered**
- Are you aware of IHR?
- Legal Responsibility?
- Designated Airports?
- Trained Staff?
- Equipment?
- Training/Drill?
- Tool Box?

**To Do List**
- Procedures
- Checklists
- Entry Screening and
- Exit Screening
- Communication (national/int.)
- int. Network (ICAO, IATA, ACI e.g.)
- Modify present Emergency Plan
- Close contact to PHS
Our Service

✓ White Paper „pandemic“ for airports

✓ Draft – Pandemic Plan (Catalogue of Measures for highly infectious diseases)

✓ German Pandemic Plan (procedures at Frankfurt Airport)

✓ Emergency Procedures (defense against infectious diseases)

✓ Flowchart for high inf. Diseases

✓ e.g.
Thank you very much for your attention!