EUROCONTROL
Air Traffic Management and Contingency Planning
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EUROCONTROL
One day’s traffic in Europe
Scope

• EUROCONTROL – History, Membership, Vision, Mission, Roles,

• EUROCONTROL Network Manager - EUROPEAN Aviation Crisis Coordination Cell (EACCC)

• ATM – What is air traffic management?

• ATM reaction to unusual/emergency events

• Volcanic Ash Crises

• ATM Contingency Planning
The European Organisation for the Safety of Air Navigation
EUROCONTROL - History

39 member states & the European Community

1960s
1980s
1990s
2000s
2010s
Mission

EUROCONTROL
Working together to deliver the Single European Sky
EUROCONTROL - where are we?

Brussels (HQ, CFMU, CRCO)

Bretigny (near Paris)
EUROCONTROL Experimental Centre (EEC)

Luxembourg
Institute of Air Navigation Services (IANS)

Maastricht Upper Area Control Centre (MUAC)
EUROCONTROL - What do we do?

• Single European Sky (SES)
• Single European Sky ATM Research (SESAR)
• Centralised Air Traffic Flow and Capacity Management (CFMU)
• Collect Route Charges (CRCO)
• Air Navigation Service Provider (MUAC)
• Training (IANS)
• Research (EEC)

New 2011: ATM Network Management (NM)
EUROCONTROL - What else do we do?

• Safety

• Aeronautical Information Management (AIM)

• Airspace management and organisation (ASM)

• Civil-Military ATM Coordination (CMAC)

• Communications, navigation and surveillance (CNS)

• Environmental impact of aviation

• Human performance in ATM

• Statistics and forecasts

• ATM Performance
Network Crisis Management

Network Manager

- Coordinating response
- Coordinating activation national contingency plans

Elaborate mitigation:
- Monitoring situation 24h
- Information mgt and communication
- Collection and storage of data

Requesting external support (EC, EASA, MS etc)

Liaison with other modes of transport

Recovery

When crisis, NM with EACCC shall activate and deactivate the Cell

Makes available capacities and resources to EACCC
Uses as appropriate

EACCC rules of procedure approved by Network Management Board

Coordinating activation national contingency plans

Elaborate mitigation:
- Monitoring situation 24h
- Information mgt and communication
- Collection and storage of data

Requesting external support (EC, EASA, MS etc)

Liaison with other modes of transport

Recovery

When crisis, NM with EACCC shall activate and deactivate the Cell

When crisis, NM with EACCC shall activate and deactivate the Cell

Calls

Both address

Network Manager

European Aviation Crisis Coordination Cell

MS President of EU Council

European Commission

EASA

ANSP, Military, Airports Airspace Users

EUROCONTROL

Additional Experts (case basis)
EUROCONTROL – New Structure

SINGLE SKY

NETWORK MANAGEMENT

SESAR and RESEARCH

Route Charges

Maastricht Upper Air Centre

Corporate
What is ATM?

- Air Traffic Control
- Airspace Management
- Air Traffic Flow and Capacity Management
What is ATM?
ATM Today

**ICAO:** The contracting States recognise that every State has complete an exclusive sovereignty over the airspace above its territory.

**EUROCONTROL**

- 39 Member States, typically each with its own ANSP
- Approximately 65 Area Control Centres (ACC)
- Over 600 sectors when at full capacity
- Approx. 16,000 Air Traffic Controllers
- Approx. 36,000 support staff

Total Employees 52,000
Total revenue B€7.6/year
ATM and Unusual and Emergency Situations?
Impact of Eyjafjallajökull ash cloud

- 100,000 lost flights in April 2010
- Equivalent to 1% of European flights in 2010
- Only some 7,000 flights lost in May 2010
- Initial formation of Crisis Coordination Cell
- Later formalised EACCC thro’ EC 671/2011 – 7July 2011
Revised approach
Grímsvötn May 2011

- 21st May – ash plume up to 20km
- DNM volcanic ash procedure activated – NOP Portal, teleconferences
- 22nd May - EACCC activated
- Impact: Iceland, Scandinavia, UK, Germany
- ~900 flights cancelled
- 29th May – end
- Future ESAA Rule Making
Volcanic Ash v Public Health/Pandemic issues

- State sovereignty
- Harmonisation
- EUROCONTROL/EACCC
- EASA Rulemaking?
ATM and Unusual and Emergency Situations? – Contingency Planning
ANSP Requirements

• ICAO: Annex 11, Air Traffic Services, 2.30 – Attachment C.
  • Public health - Attachment C, Para 4.2b

• EU: EC/2096/2005 – Common Requirements

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• PANS ATM, Doc 4444, Air Traffic Management – For notification of communicable diseases.
European Air Navigation Services – Contingency Planning - 2009

EUROCONTROL Guidelines for Contingency Planning of Air Navigation Services
(including Service Continuity)

Reference Guide to EUROCONTROL Guidelines for Contingency Planning of Air Navigation Services
(Including Service Continuity)

https://www.eurocontrol.int/eatm/gallery/content/public/library/Guidelines_Contingency_20071001.pdf
European Air Navigation Services – Contingency Planning – Pandemics

APPENDIX I - SPECIAL CASES

1. GENERAL

It’s important to recognize that the disruption associated with pandemics can be significant and far-reaching. Organizations need to be prepared with appropriate measures. The following guidelines provide a framework for organizations to develop effective pandemic contingency plans.

2. COMMON

There are several key areas to consider when developing a pandemic contingency plan. These include:

- **Risk Assessment:** Identify potential risks and vulnerabilities.
- **Communication:** Establish clear communication channels.
- **Resource Allocation:** Ensure adequate resources are available.
- **Training:** Regularly update staff on best practices.

These guidelines can be adapted to suit the specific needs of each organization.

3. SPECIFIC REQUIREMENTS

**PLANNING**

**PREPARATION OF PLAN**

**Planning Phase 1:**

- Conduct a risk assessment to identify potential pandemics.
- Develop a contingency plan that includes
  - **PREVENTION**
  - **PREPAREDNESS**
  - **RESPONSE**
  - **RECOVERY**

**PLANNING Phase 2:**

- Develop a detailed plan for each phase.
- Ensure all stakeholders are involved.

4. SOFTWARE BUGS

The introduction of this section is to highlight potential software failures that might occur in the planning, development, and deployment of pandemic-related systems. This section provides a framework for organizations to develop effective pandemic contingency plans.

5. CONCLUSION ON - COMMON MODE - FAILURES

It is important to acknowledge that the common mode failures that can affect all other components of the pandemic response system can be significant and far-reaching. Organizations need to be prepared with appropriate measures. The following guidelines provide a framework for organizations to develop effective pandemic contingency plans.

The site is to encourage ANSPs to consult and prepare for the aforementioned issues and take appropriate steps to mitigate the impact of pandemic-related failures.
ANSP Lessons Learnt - 2009 H1N1 “Swine Flu” Pandemic

• Speed.

• Minimal traffic disruption/few traffic restrictions.

• Inconsistency.
CFMU Operational Contingency Plan

Edition: Summer 2011

http://www.cfmu.eurocontrol.int
The European Organisation for the Safety of Air Navigation

http://www.eurocontrol.int/