

Airport Noise Abatement as an International Coordination Problem

- The Case of Zurich Airport -

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Agenda

- **Introduction**

- **Environmental Policy Instruments**
 - Available Environmental Policy Instruments
 - Selection Criteria
 - Ranking with Regard to Aircraft Noise Emissions

- **The German-Swiss ‘noise war’ over Zurich Airport**
 - Zurich Airport Key Figures
 - Runway Configuration
 - A Chronology of Events

- **Analysis – Why Was no Compromise Reached?**

Introduction

- **Social costs of airport noise**
(Eger/Köhler/Rübelke et al. 2007; European Commission 1997;
Cohen, Events Krantz et al. 1980)
- **Externality in the traditional sense of being a byproduct**
(should be internalized at its very source; most efficient instrument available)
- **Airport noise is a local problem**
(conventional wisdom: internalization efforts should be simple)

Available environmental policy instruments

- **Regulatory (command-and-control) measures**
(input-oriented technology/design standards vs. output-oriented performance standards)
- **Market-based/market-oriented incentives**
(pollution taxes and charges to discourage polluting activities)
- **Market-creating instruments**
(tradable permits)
- **Others**
(land-use planning techniques)

Selection Criteria

- **Economic and environmental efficiency**
- **Low information requirements**
(for policy-makers and enforcement agencies)
- **Cost-effectiveness**
(including low transaction, administrative and enforcement costs)
- **Adaptability**
(to changing technology, climatic conditions etc.)
- **(Dynamic) Incentives**
(for further improvement and innovation)
- **Minimum impact on competition and international trade**

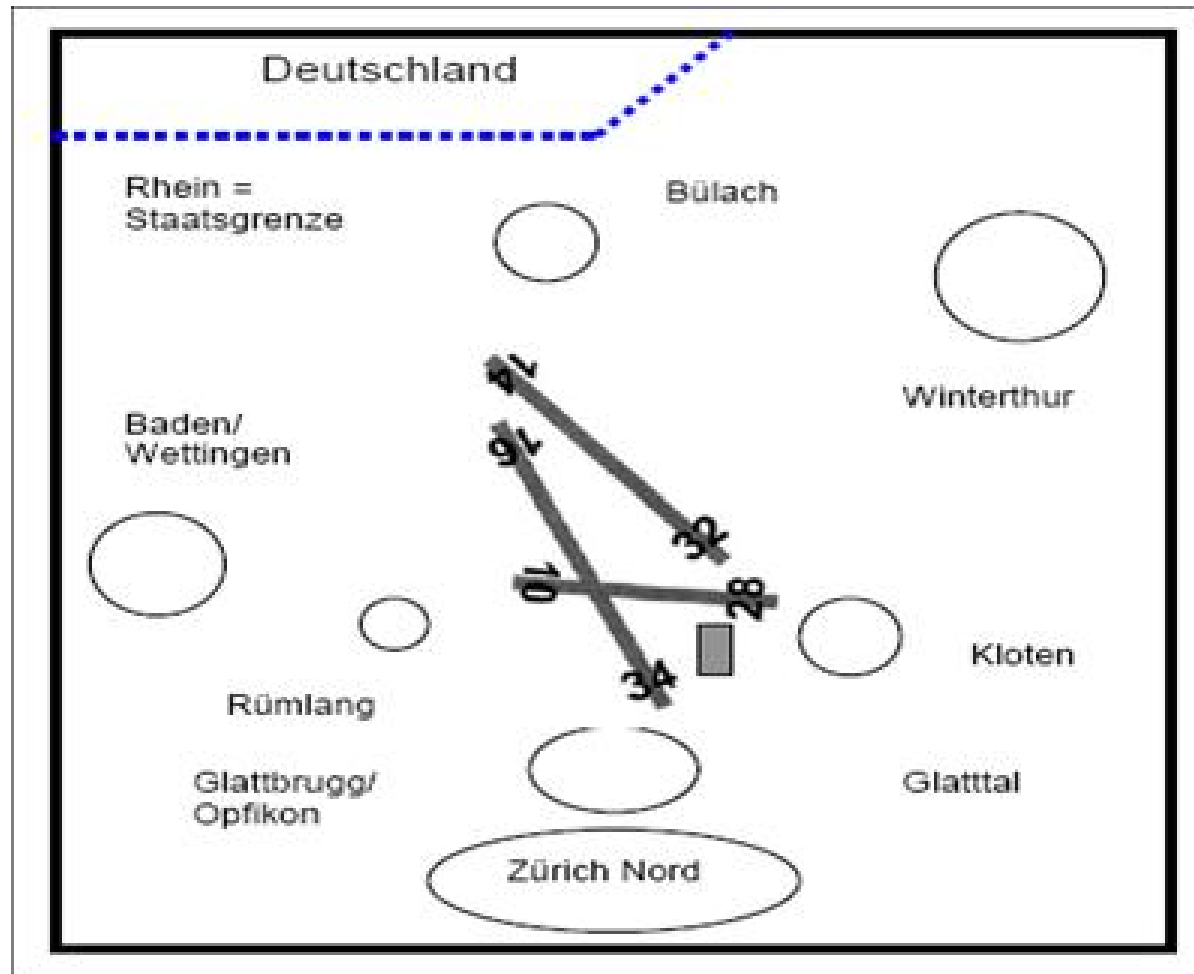
Ranking the Instruments

	Noise-related charges	Tradable permits	Standards		Land-use planning
			Performance	Technology (Design)	
Economic and environmental efficiency	–	+	–	– –	
Low information requirement	+	+ +	+ +	+ +	
Cost-effectiveness	+	– –	–	–	
Adaptability	+ +	+	+	–	
(Dynamic) Incentives	+ +	+ +	– –	– –	
Minimum impact on competition and international trade	+ +	–	+	– –	

Zurich Airport's Key Traffic Figures (2006)

- **260,776** flights
(2.5 % less than in 2005)
- **23.1 %** of intra-European passenger connections with German airports
- **19,237,216** passengers
(climbed 7.5 %)
- **363,325 t** freight
(- 2.4 %)
- **Lufthansa's third hub after FRA and MUC**

Runway Configuration at Kloten Airport (not to scale)



Source: Bossonet (2002: 6)

A Chronology of Events

Early 1970ies	Affected countries in Germany urged politicians to intervene
September 1984	Bilateral Agreement was signed
June 1995	Referendum for the expansion of Zurich airport
March 2000	Germany terminated the 1984 agreement
October 18th, 2001	A new “Staatsvertrag” was concluded and signed, but not ratified
October 21st, 2001	Germany implemented an unilateral regulation
November 2007	New referendum was held in the canton Zurich

Analysis – Why Was no Compromise Reached?

- **Uneven distribution of aircraft noise and economic benefits**
- **German regulations resulted in a redistribution of noise**
- **Question: why did the negotiation fail?**
 - Economic theory: deals have to result in economic and/or political benefits
 - Negotiation strategies: profit-orientated or distribution-orientated

Why did the negotiation fail?

- **Switzerland could have expected the German reaction**
- **Swiss Side erred on two counts:**
 - German side accept uneven distribution of costs/benefits
 - In case of non-agreement: no German unilateral action
- **Astounding for two reasons:**
 - Zurich airport would have gained from a deal
 - No scope for a successful Swiss retaliatory action

Thank you for your attention!

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