9 Institutions of governance and legal institutions

9.1 Introduction

The actor-oriented analysis of socio-cultural, economic and financial institutions raised questions concerning government coordination and the legal embeddedness of institutions in the development of the airport as a cityport in the city-region. The institutional analysis in this chapter focuses on governance and the legal framework of the development process, before drawing conclusions on institutional learning. The analysis answers research questions 2b and 2c: What are the institutions that determine the acting playing field for the actors involved? If so, where do inefficient institutions, path-dependent behaviour and institutional lock-ins lead to obstacles in the spatial-economic development of airports as cityports?

Institutions of governance refer to organisation between government levels and sectors, and increasingly to cooperation between (semi) private actors that co-determine policies. This chapter distinguishes institutions of governance in vertical coordination, horizontal coordination and public-private coordination. The analysis of vertical coordination in section 9.2 focuses on the relations between levels of governments, in particular the tension between centralisation and decentralisation of policy-making and implementation. Horizontal coordination, between sectors of the same government, will be discussed in section 9.3. As urban and regional planning involves various policy sectors, coordination problems between economy, infrastructure and environment raise. As argued in chapter 2, strategies of connectivity between public and private actors to create economic networks in the city-region are becoming more important than formal re-organisation of levels, sectors and territories of governmental coordination. This shift from government to governance is explicitly addressed in section 9.4, and in particular focuses on the involvement of the private sector in policy-making in the Schiphol area.

Legal institutions are the legal rules of the game for actors involved in area development, ranging from land-use plans to property rights and tendering. Since legal institutions are the outcome of policy-making of institutions of governance, these groups of institutions are jointly discussed. Legal institutional arrangements for the development of airports as cityports can be distinguished on the international level, in particular air space laws and trade agreements (section 9.5), the national level, with a focus on noise and safety contours (9.6) and local and regional level, where final urban development is planned and implemented (9.7). Section 9.8 draws conclusions for both institutions of governance and legal institutions. These conclusions are an upbeat for institutional reflection in chapter 10.

9.2 Vertical institutions of governance

The overview of government actors in chapter 6.2 demonstrated the main power relations between national, regional, and local levels. The following section elaborates the actors' position in the playing field by analysing the formal and informal institutions of governance that are considered as problematic by the actors. The vertical institutions of governance discussed in this section are the rules for the area development game played between levels of government. In particularly the focus is on (r) the coordination role of governments in the development of the airport as a cityport, (2) power struggles between levels of government and (3) the fragmentation of competences between local, regional and national government levels.

Decentralisation in the Netherlands

The coordinating role of airport area development is located at different levels in the case studies. The national and regional levels play a coordinating and enforcing role in policy implementation in the Schiphol area. The national government focuses on the airside policies in the airport area, whereas the regional and local governments are involved in the landside development. The steering role of the national government consists of four tracks: ownership; law making and enforcement; policy-making; and a steering philosophy (Com. De Grave 2005:72). Airport ownership has been discussed in chapter 8.7, whereas legal institutions will be discussed in sections 9.6 and 9.7 Section 9.3 analyses policy-making within different ministries. Here we focus on the role of national government in the steering philosophy.

The current paradigm is 'decentral where possible, central where necessary' (VROM 2004). This regulatory principle leaves the regional level with more responsibilities and tasks than before, whilst also creating opportunities for centralisation of governing tasks of national interests. The essential question in the case of Schiphol is, which elements need steering at the national government level and which elements can be decentralised to the regional and local levels. In the 1990s, actors have formed a consensus on airside development as coordination task for the national government, which includes the number of flights, runway and terminal construction, safety and environmental zoning, and air routes. However, landside development should according to actors be a task for the regional level and co-operating municipalities. There is considerable debate in landside development on how vertical coordination should be organised. Proponents of decentralisation argue that in line with the current steering philosophy, national government should not interfere in airport area landside planning directly of decentralisation. Opponents doubt the ability of the regional and local level to take up this responsibility:

Mr. Smilde (DHV): "Policy-making is now being decentralised to the regional level, with implementation in Noordvleugel cooperation. (...) The question is whether the region is politically and financially equipped for policy-making and has enough feeling for the Schiphol issues. At the national level, tying up and overruling should be possible."

The actors interviewed for this project and the Committee De Grave report (2005) express severe criticism of the landside-coordinating role of the province of Noord-Holland. Although formal cooperation amongst the actors involved has improved in the 1990s (*ibid.*), the province of Noord-Holland is considered by the actors to be too weak in its role as an (independent) negotiator between the actors involved. Furthermore, Noord-Holland lacks power, as it has no

substantial influential financial resources to enforce and achieve policies. However, the more hidden role of the province is to channel and defend interests of weaker smaller municipalities and environmental groups. The province's weakness in negotiations can furthermore be explained by its historically grown mindset of dependency on subsidies and other financial resources from the national government.

National ministries play a decisive role in the process of airport expansion, appointing housing locations and motorway construction. Ultimately, local and regional actors expect the national government to take a leading role in this process. For example, actors were initially sceptical about the decentralisation of infrastructure budgets under 6227 million from the Ministry of Transport to the ROA. Although the budget was spent efficiently and effectively, it was not sufficient for light rail or major road construction. Moreover, the Noordvleugel claims far more money for regional infrastructure than can be reasonably expected from the Ministry of Transport's MIT (*Meerjarenprogramma Infrastructuur en Transport*) long-term infrastructure budgets. As a result, the Schiphol area is currently in a transition process between centralised policy-making with 'old' characteristics of subsidy- and policy-making dependency and having a more equal relationship with regional governments with own budgetary responsibilities.

Despite these recent changes, the regional actors as well as the VROM and Economics Ministries struggle with their involvement in the Schiphol airport area development. A particularly controversial issue is the national governments' combination of a passive supervisory role overall and an active risk-taking approach to mega-projects, such as the mainports and particularly the Zuidas (Interview Migchelbrink 2005, cf. Kreukels 2005).

Decentralisation in Japan

The vertical institutions of governance for coordinating airport and airport area development in centralised Japan are similar to the decentralised unitary state of the Netherlands. In Japan, the Ministry of Land, Infrastructure and Transport (MLIT) is in charge of airside development, and regional and local governments manage landside development. Legally, MLIT is not even allowed to be involved in landside development, while regional and local levels were not involved in airside development of Haneda and Narita, despite the clear impact of airport development on these lower levels of government.

Japan's mindset of centralisation and dependency has deep roots and is embedded in all institutional levels. Sorensen (2002) even considers the dominance of central government as one of the five core characteristics of Japan. If local governments receive more legal authority, this is compensated by strict control or fiscal centralisation. Planners at the national level tend to distrust local planners, who are considered to be too vulnerable to use funds for the appropriate aims (*ibid.*).¹

Despite the existence of decentralisation policies, few things have changed for the local and regional actors involved in the case of Narita and Haneda since the introduction of decentralisation (Interview Yamada and Kawaguchi 2004). Chiba remains the main negotiating partner for companies. In recent years, Chiba has also led business park projects near the airport (Interview Tanizami and Kumuda 2004). Cities of moderate size such as Narita and Kawasaki have seen few changes in the decentralisation process during the last fifteen years and remain dependent on airport authority and national government acting (Interviews Yamada and Kawaguchi 2004; Suzuki and Muramatsu 2004).²

The construction of Centrair International Airport is not directly managed by MLIT and therefore considered an exception. Within the current policy framework, it is not expected that this decentralised Toyota management model will be repeated elsewhere, but a success of the chosen institutional arrangement might lead to a break with centralised institutional lockin for other public works. Furthermore, this case fits in the decentralisation of capabilities and responsibilities as one of the core policies and central challenges for the Koizumi government.³

Regional cooperation in Frankfurt Rhein-Main

Problems in vertical institutions of governance in a federal state like Germany are different from the discussion on centralisation and decentralisation in the Netherlands and Japan. Because of Germany's constitutional structure, the federal level is not actively involved in either airport development or airport area development. For this reason, the analysis in this section is limited to vertical coordination institutions at the state and local levels.

For airside development, the administrative district of Darmstadt has the final say, followed upon political agreement at the level of the state of Hessen. Landside development is considered a local issue for the city of Frankfurt and bordering towns. For instance, in the case of the AIRRAIL Center, Hessen's Ministry of Construction is not involved in the planning process. The AIRRAIL Center is considered to be an urban design project of the city of Frankfurt. Project manager Klärner can write his plans, submit it to the city hall, while receiving a signature within three days from the project development department. This department defines itself as:

Mr. Buchholz (City of Frankfurt): "The project development department is a special counter where every project developer demands a specific product, which we try to deliver within days."

Cooperation on the regional level has a problematic history (see chapter 6), in particular the transfer of planning competences from the local to the regional level to avoid a 'tragedy of the commons' in a rapidly urbanizing city-region. A crucial explanation of the inefficiency of regional cooperation is the lack of interest shown by the state of Hessen within a stronger Frankfurt Rhein-Main city-region, which can make the state of Hessen a superfluous governmental level as the government levels will overlap (Esser 2004). The inequality between the Hessen regions is not the only reason for a lack of interest, but the threatening superfluous state itself. It is unlikely that Hessen, like other layers of government, is willing to transfer power to other regional authorities.

The problem of transfer of authority touches upon the more general problem of the large number of governmental layers involved in planning: not only communities, but also *Kreise*, *Regierungsbezirke* and the state of Hessen are involved in planning. Most interviewees considered this as too much and doubted the necessity of involvement of administrative districts and Kreise.

Mr. Schultheiss (Frankfurter Rundschau): "Times have changed and the Kreise are now the most frustrating factor in regional development and projects."

The Kreise were first created in the Prussian era, when villages were too small and incapable of self-government, set under authority of the *Landrat* of the Kreis. Since the counties have become an irrelevant level of coordination today, most strategic actors interviewed tend to favour abolishment of these counties or favour transfer their planning powers to the communities or

the regional level. Although the interviewees furthermore doubted the need for administrative districts, they objected to abolish the administrative districts in order to avoid direct conflicts about financial redistribution between northern, central and southern Hessen.

In sum, the vertical institutional analysis in this section shows that in the Netherlands and Japan centralisation developed (subsidy) path-dependent mindsets for lower levels of government. However, financial decentralisation in the Netherlands demonstrates some signs of institutional change. In airport area planning, centralisation is stricter, but the recent experience with Centrair might be an institutional innovation for Japan. In contrast, Germany lacks these problems of sharing planning responsibilities, but this led to a lack of cooperation on the regional level, in particular complicated by the number of regional governments and municipal competition.

9.3 Horizontal institutions of governance

The analysis of vertical institutions of governance raises two crucial issues. First, this section discusses the coordinating role of Ministries in airport and airport area development at the national level between the ministries. Second, this section analyses cooperation between municipalities at the regional level, where conflicting interests in the field of infrastructure, economics, urban planning and the environment become apparent.

Interdepartmental competition and airport coordination

According to Priemus (1999), competition between policy-making sectors in urban and regional development is considered to be a persistent problem in the Netherlands. Every ministry involved in planning creates it's own national plan for the urban development of the Netherlands. The Ministry of VROM's advisory council argued that the Ministry did not give enough attention to infrastructure and economic interests in the preparation of the Fifth Memorandum on Spatial Planning (VROM-Raad 2001). Also, the Ministry of Economic Affairs and the Ministry of Transport and Water Management developed their own long-term vision plans. The conflicts of Ministries involved in Schiphol area development were severe in the 1990s, in particular the conflict of developing the economic impact of the airport versus environmental interests in the vicinity of the airport.

However, horizontal coordination problems are not only due to ministerial bureaucrats who are not willing to co-operate with colleagues at other ministries, a frequently heard argument. The political reality and the ministers' ambition are crucial for the lack of interdepartmental cooperation, not merely unwilling bureaucrats locked-in in the own ministry.⁴

The interviewees mentioned that cooperation among ministries has improved recently, as found in integration sector policies in VROM's latest national planning memorandum (VROM 2004). VROM considers this national report as a cross-sector umbrella with further sector elaboration in the reports *Pieken in de Delta* of the Ministry of Economic Affairs (2004) and Ministry of Transport's *Nota Mobiliteit* (2004, Interview Vink 2005). Nevertheless, VROM does not have a financial budget to empower and enforce the leading role it aspires, while the Ministry of Transport does have financial resources available.

In the case of Schiphol, cross-sector cooperation can be found in the infrastructure-oriented policy in the 1990s, which changes into a broader mainport policy of:

"The connectivity and synergy between the international airport Schiphol and the surrounding international metropolitan business environment. It is an important pillar for the international competitiveness of the Randstad" (Netherlands Ministry of Transport 2003:2).

The Ministry's mainport policy not only addresses airport infrastructure, but also metropolitan business environment and international competitiveness. The airport is not only considered as necessary infrastructure, but can develop as a cityport in a city-region. However, the policy does not address environmental and other local concerns. The coordinating role in airport policies becomes apparent, with the Ministry of Transport and Water Management being the formal coordinator of the mainport project, and the VROM Ministry evaluating the noise effects according to Aviation Law. The continuing lack of coordination in the case of the Schiphol dossier has led insiders to suggest a specific Schiphol minister who is responsible for overall coordination.

Both Ministry of VROM and the Ministry of Transport and Water Management claim that their Minister should be in charge of overall policy. The Ministry of Economic Affairs is regularly set aside as a Ministry that should be closed, as concluded in a recent study of the temporary governmental economic advisors board, whose remit is to advice on de-bureaucratisation (REA 2005). An argument in favour of a continued role of the Ministry of Economic Affairs in the airport debate is that actors generally overemphasise environmental problems (sour), while economic interests (sweet) are underestimated (Interview Kerckhoff 2005). Either the Ministry of Economic Affairs or the aviation sector in the growth coalition should clarify the trade-off between airport development, airport spin-offs and environmental problems, Kerckhoff argues. This would re-establish the role of Economic Affairs in the Schiphol debate.

In the meantime, the Ministry of Transport is redefining its role to a more distant and supervisory role, rather than being involved in promoting the aviation sector. This strategic change can be partly explained by decreasing inter-sector competition within the Ministry of Transport, as a result of the merger of the departments of freight and civil aviation. Ministries are thus re-arranging and re-inventing their actual and desired role in the Schiphol institutional arena, including a search for leadership in mainport policy.

The issue of inter-departmental competition and the leading role of national government in airport development is not only apparent in the Netherlands, but also in Japan. Johnson (1982) found that in the era of the developmental state, the Ministry of Trade (MITI) fulfilled a crucial role in nurturing industrial development, whereas in Western countries, governments tend to simply set the rules. MITI was the driver of economic successes in the 1960s and 1970s and thereby minimised the role of other ministries. MITI competed and co-operated effectively with the liberal democrats (LDP), the Ministry of Finance, Ministry of Post and Telecommunication, Bank of Japan, the Economic Planning Agency and *keiretsu* business groups, while excluding other actors and outsiders. Ministerial competition among bureaus within ministries sometimes discouraged new market needs or delayed innovation.⁵

Although Johnson emphasises the role of MITI, the ministries of Finance and Transport are other powerful and relevant ministries in airport area planning (see chapters 6 and 8). Conflicts

between ministerial departments are also running through the sectors of urban planning and infrastructure. Before their merger in 2001 into the Ministry of Land, Infrastructure and Transport, urban planning and infrastructure public works construction were separate worlds. During the 1970s and 1980s in particular, it became clear that several infrastructure projects were not economically viable and had a devastating effect on the local environment (Sorensen 2002).

As yet, it remains unclear if the merger of the ministries into one spatial-economic unit contributed to better inter-departmental cooperation. Initially, the merger led to different 'tribes' inside MLIT: on the one hand, the majority of the old transport bureaucrats focus on completion of already initiated infrastructure projects, including the second runway for Kansai International Airport. On the other hand, the substantial minority of younger bureaucrats also take environmental, economic and financial elements of public works into consideration (Anonymous interview 2004).

As in the Netherlands, the discussion on the lack of cooperation and the merger of ministries in Japan is reflected in political reality. The merger can be seen as breaking down the dominance of the former Ministry of Transport, enforced by a reduction of ministers and initial conflict over the dominant policies within the new ministry of MLIT (Interview Suzuki 2004). The merger has increased the power of the Ministry of Finance. In contrast to MLIT, the Ministry of Finance prefers not to give out infinite loans for airport construction, especially after the Kansai International Airport debacle. It also favours privatisation, as recently achieved at Narita International Airport, and supports a reduction of financial dependence, as achieved in the case of Centrair.

In the Frankfurt Rhein-Main airport area development, inter-departmental competition runs more smoothly than in the Dutch and Japanese cases. The departments merged in 1995 into one Hessen Ministry of Economy, Transport and Regional Development, in which all relevant sectors are combined. Although the Hessen Ministry of Environment is not without conflicts, these are considered minor compared to the lack of regional cooperation among municipalities (Interview Müller 2003).

Sectoral pillarisation is considered to be problematic in Frankfurt Rhein-Main, where the project is not accommodated in a project team at the local level. Even though Frankfurt city bureaucrats are well trained, they do not necessarily work in the interest of project realisation, but prefer to defend their own specialisation. The hierarchic tree structure of local government ensures that these specialists lack a general overview since they are wheels within wheels. The current coordination problems within the city bureaucracy led to the more innovative and efficient operation of smaller municipalities, despite their less well-trained staff, compared to cities like Frankfurt (Interviews Schien; Messener and Sachleber 2003). However, in the case of complicated projects, such as the AIRRAIL Center, the project manager praised the support and the quality of cooperation with the city of Frankfurt (Interview Klärner 2003).

The lack of cooperation and fine-tuning between departments is perhaps an unavoidable coordination problem. According to Boltze, even re-organisation is not a solution, as it will create new coordination problems in other policy fields (Interview Boltze 2003). More frequent and flexible communication is necessary between sectors at all levels, particularly higher levels of decision-making.

In sum, competition between ministries is a common problem in policy-making. Competition is not merely a matter of bureaucrats unwilling to co-operate, but also involves a political clash. The merger of ministries in Hessen and Japan represents interesting institutional changes. In Japan, the merger happened as a result of a sense of urgency among dominant ministries. In the Netherlands, ministries sought closer cooperation, albeit with mixed results. The following section continues the analysis of this puzzling process of dealing with spatial and economic developments at the national level.

Regional cooperation

This section analyses the second area of horizontal governance institutions, regional cooperation. Regional cooperation is a problematic institution of governance. Its focus on territory and government policy has been a subject of debate for decades, with shifting ideas based on planning practise experiences (see for instance Barlow 1991, WRR 1990, Heinz 2000, Salet *et.al.* 2002). Chapter 2 and 6.2 introduced and discussed the history of regional cooperation and coordination for the case studies. The discussion on institutional arrangements in regional cooperation in this section is limited to the impact on spatial-economic airport area development. Cooperation among local communities at the regional level has caused complications, particularly in the case of Frankfurt Rhein-Main and Randstad.

In Frankfurt Rhein-Main, tax competition is a difficult financial institutional arrangement (as discussed in chapter 8), which needs to be considered in a wider context of the problems of regional cooperation. The *Ballungsraumgesetz*, creating the *Planungsverband Frankfurt Rhein-Main* replaces the faltering regional cooperation arrangement in the era of the Umlandverband Frankfurt (UVF). This arrangement combines a larger and more relevant territory, including municipalities surrounding the airport, but it has limited planning authority.

The regional planning association has a – for Germany unique – competence to draw up the regional structure plan, which transfers the final decision on new site development from the municipal level to the regional level. Eastern counties, in particular Wetteraukreis and Main-Kinzigkreis, oppose the plan, as they are afraid to lose vital planning jurisdiction. Also, municipalities near the airport hesitate to transfer local planning competencies to the regional level. The airport's neighbours worry that decisions of regional interest might either increase noise pollution near the airport, or stop these communities from taking advantage airport economic spin-off in the *Speckgürtel*.

Furthermore, the lack of regional cooperation in the region produces financial problems for the city of Frankfurt, which offers, and pays for, most services in the region, e.g. opera, stadium, etc. This situation also leads to lock-in situations and unwillingness to cooperate. In planning the *Regionaltengente West* light rail that connects the airport to other communities in the west of Rhein-Main, mayors use blackmail tactics: 'if you don't pay for renovating our stadium, we don't build your missing railway.'

However, as can be seen in the case of interdepartmental competition, the lack of cooperation and coordination is also reflected in political reality. The SPD preferred more regional planning competencies, but was itself unable to implement its ideas for a county at a larger scale (*Regionalkreis*). These Regionalkreise would consist of four or five cooperating counties and would have reduced the current large number of counties (Heinz 2000, Freund 2003). Currently, however CDU and FDP govern Hessen. The CDU/FDP coalition introduced

the *Ballungsraumgesetz* of regional coordination, but this arrangement was flawed, whereas the SPD seems to consider that a 'bad law' is better than no law at all (Interview Harting 2003). As a result, the vertical institutions of governance in Frankfurt Rhein-Main demonstrate path dependency of being unable and unwilling to improve regional cooperation or coordination since the era of the independent cities (*Reichsfreie Städte*). In particular, forced municipal rearrangements and mergers increased distrust of the regional level, e.g. the case of Bergen-Enkheim, Maintal and Bad Homburg. Small communities are aware of coordination problems, but view mergers as a bad medicine for solving these problems (Interview Schien 2003).

In the case of the Randstad, regional cooperation is problematic in different ways. In the Randstad the problem of tax competition is absent. The scale increase of activities however makes the regional level the current appropriate level of planning and the institutions of governance are not yet prepared to deal with the problems that come along with this scale increase (cf. Janssen-Jansen 2004).

In order to make the government structure fit to the new socio-economic realities, various governmental bodies made attempts to restructure local and regional government. The plan for a city-province (*Stadsprovincie*) failed because of a lack of support at the national level and a lack of support from citizens, who opposed the plan to split up of the municipalities of Amsterdam and Rotterdam into smaller units within the Stadsprovincie. According to Kreukels (2000:486), although there no clear winners or losers in the debate on the introduction of a city-province, at least the major cities lost their ambition to lead and dominate the region. In later years, other plans to create regional authorities more or less failed: for example, the regional public organs *Kaderwetgebieden* and provincial mergers, as proposed by the Committee-Geelhoed (2002). In addition, in 2005 and 2006, the Minister of Home Affairs attempts to merge the provinces of Noord-Holland, Zuid-Holland, Utrecht and Flevoland in order to make the Randstad internationally competitive (see chapter 2.8 on the formation of city-regions). Currently, the Noodvleugel discusses and introduce more informal and sector-oriented forms of intra-regional coordination in the Northwing of Randstad.

These problems in regional cooperation are also relevant for regional cooperation in the Schiphol area, which is located in the border area of three provinces, which have limited steering power and equipment. As discussed in section 6.6, several regional cooperation bodies are involved in the Schiphol airport area. The province of Noord-Holland has a coordinating role, but lacks power and equipment necessary to have a leading role in the Schiphol area planning process.

Examples of regional cooperation bodies involved in the planning process are *Bestuurlijke Regiegroep Schiphol* (BRS), *Bestuursforum Schiphol* (BFS), *Regionaal Orgaan Amsterdam* (ROA) and *Commissie Regionaal Overleg luchthaven Schiphol* (CROS). As argued in Chapter 6, these arrangements complicate regional decision-making, particularly since these public bodies have limited decision-making powers (Committee De Grave 2005). In order to introduce policies, all of these organs should be consulted before further steps can be taken. In practise, this leads to an impossible formal working situation, circumvented by informal meetings (Interview Meijdam 2005). The same actors meet each other regularly at different locations in different sector meetings, each with a different role (Comm. De Grave 2005:6). These meetings are not transparent and democratic, and depend on the personal cooperation of the actors involved or "old boys" networks (Siddiqui 1997). One of the effects is the delay of industrial and office

site development caused by sector competition at the regional level, with a lack of integrated planning procedures and an unwillingness to start procedures as long as the Ministries do not provide financial guarantees. Another effect is the lack of an integrated approach as a result of the current regional policy arena. For instance, the secretary of CROS argues that CROS can only be held accountable on environmental issues and that it does not join economic sector meetings, since BRS is the actor involved in that. Although the actors agree that the current situation is far from ideal, it is still unclear why alternative governance institutional arrangements could not be implemented and empowered politically. The lack of decision-making power and in particular consensus culture can explain this lack of perseverance of institutional change.

A major additional problem in the patchwork of governance structures is that, in order to avoid political conflict, new public bodies are introduced without removing existing bodies. Teisman argues that the regional structure currently consists of so many organisations that every addition of a new governance structure complicates the current and thereby undermines the jurisdiction of existing structure (Teisman 2002) Due to path-dependencies and fear of actors to lose their current position, this lock-in situation can not be easily solved by institutional innovation. Ultimately, 'controlled chaos' is created in this regional patchwork with checks and balances, as no change is reached without consensus of the actors involved (Interview Weijs 2005).

Regional cooperation is also an issue in Japan. In the case of Narita, regional cooperation problems overlap with prefecture-municipality coordination problems. In the Chiba prefecture, many villages and towns are considered too small to act with sufficient authority, and are controlled by the prefectures. In the 1990s, eleven municipalities attempted to merge, but Narita opposed this merger. More recently, Daiei and Shimousa asked Narita to merge with them. Because this would lead to a wider distribution of airport tax revenues, Narita citizens opposed the merger (Interview Yamada and Kawaguchi 2004). Redistribution of tax revenues is therewith for Narita the winning argument over the potential stronger position in Chiba prefecture of a larger municipality.

In the case of Haneda, due to the dominant role of MLIT regional cooperation became fruitless. The city of Kawasaki wanted to co-operate with Tokyo, Ota ward and Yokohama on the development of the airport region, but all actors focused for any kind of decision-making on MLIT as airport island owner and operator (Interview Suzuki and Muramatsu 2004).

In sum, regional cooperation in the Tokyo Metropolitan Area, the Randstad and Frankfurt Rhein-Main has been problematic in different ways. Tax competition as a basis for the lack of regional cooperation is apparent in Frankfurt Rhein-Main, but surprisingly also in the Narita airport region. These problems are different from the patchwork of coordinating bodies with limited legislative power in the Randstad, and the absence of regional cooperation due to centralisation in the case of Haneda.

9.4 Public-private institutions of governance

During the 1990s and 2000s, awareness among policy-makers is growing that governments are not the only actors in policy-making, as private actors play an increasingly important role

in this institutional arena. These networks of public and private actors are not new, but they are increasing in number and importance (Rhodes 1999). In this actor-oriented institutional analysis we focus on governance seen as a concept for the analysis of societal capacities beyond government; there is no longer a strict separation between policy making by governments and market actors. Policy-making is increasingly characterised by interaction, bargaining, negotiation and entrepreneurship (Gualini 2001).

The engagement of economic actors in their organisations and networks is indispensable for improving governmental structures in the region as well (Kreukels 2000). As discussed in chapter 2, this engagement contributes to institutional competitiveness as a major component of regional economic competitiveness (cf. Hall and Soskice 2001). According to Salet *et.al.* (2002), the challenge for metropolitan policies is to find the keys to 'unlock the connections between different spheres of action', where the focus on strategies of connectivity of public and private actors and different levels of government with global economic and cultural networks is considered more urgent than formal re-organisation of local and regional governments, adjusted to boundaries of the new economic and spatial realities.

The analysis of actor coalitions in chapter 6 and the development of city-regions in chapter 2 has introduced the most important networks of actors in public-private institutions of governance in the city-regions. Section 2.8 discussed the shift from government to governance and the increasing importance of market actors in network formation alongside governments at the level of the city-region. This section focuses on the changing institutional arena of private actors involved in airport area planning.

The analysis of actors and actor coalitions in chapter 6 showed that the position and role of Schiphol Group in public-private governance is unorthodox. The role of airports in the Tokyo Metropolitan Area and Frankfurt Rhein-Main is limited to the role of airport authority. Airport authorities in Tokyo are generally hardly involved in area development. In Frankfurt, jurisdiction is limited and real estate development is usually contracted out to specialised developers.

In contrast, in the case of Schiphol, the Ministry of Transport is at the core of the airport development coalition, influencing policy-making in informal ways and being involved in the legal process of planning and implementation in the vicinity of the airport. The Committee De Grave (2005) argued that, on the one hand, co-operation among formal actors involved in the region has improved since 2000. On the other hand, the Committee Eversdijk (2006) reported that shown regional tensions based on a lack of trust. In particular here we point at effects of the joint public-private policy-making by governments and the airport authority can lead to conflicts in the institutional arena. The public-private institutions of governance in the Schiphol vicinity of the airport are problematic in three fields where Schiphol has a privileged position:

- 1. The position of Schiphol Group as a private actor in the Bestuursforum (BFS);
- The position of Schiphol Group as shareholder of the Schiphol Area Development Company (SADC);
- 3. The exclusion of other private developers from the development coalition.

Firstly, in order to cooperate and initiate spatial and economic development in the Schiphol area, the *Bestuursforum Schiphol* (BFS) was founded. The BFS, chaired by the province of Noord-Holland, has no legal status and is composed of the municipalities of Amsterdam and

Haarlemmermeer, and Schiphol Group. BFS aims to designate locations, which are ready for urban development. The municipal councils take the final decision on these and the decision has to fit in the regional plan of the province. Formally, the municipal council's final say, combined with the separate entity *Bestuurlijke Regiegroep Schiphol* (BRS, see chapter 6), without the participation of Schiphol Group should safeguard public interests from Schiphol Group's private interests. In reality however, tensions exist between the economic interests of Schiphol Group companies versus the interests of municipal land suppliers on the one hand, and on the other hand, the same actors are responsible for policy-making and coordination in the wider airport area.

Secondly, Schiphol Group also plays a – more passive – role as shareholder of SADC, the company that develops most designated airport-related industrial sites. The current attractiveness of the airport area to project developers, asset managers and end-users makes the playing field more problematic. Schiphol Group is formally shareholder, but Schiphol Real Estate as a competitor of SADC is closely related institutionally to the Schiphol Group. Competitors already consider the monopoly position of Schiphol Real Estate in the airport territory as a disadvantage. The awareness of their setback position has increased since Schiphol Real Estate has become increasingly active outside the airport territory and competes with SADC, Chipshol and Mainland on the regional real estate market. Schiphol Real Estate and Schiphol have an privileged position, as Schiphol (as BFS member) not only knows where to buy land and how to choose timing, it can even co-decide on the locations that are proposed for development. According to the opponents of the current situation in public-private policy coordination in the region, this is a clear example of different rules for similar actors on the market, leading to unfair competition.

The main argument in favour of the privileged position of Schiphol Group in SADC and BFS is the fact that the airport and governments invested most in the airport and the vicinity of the airport infrastructure since airport's establishment at its current location in 1958 (Interview Bussink 2005). The public sector has the right to see a return on investment by claw-back constructions in the current constellation: why would land speculators near the airport pick the cherries without investing in the airport and infrastructure in the vicinity of the airport?

Furthermore, local governments are used to playing a dual role as policy-maker and land supplier, while at the same time managing potential conflicts of interest (see chapter 8). The potential dual role of the government as developer and arbiter is daily business for municipalities with public land development agencies.

Another argument brought forward in the interviews is the notion that Schiphol Group is an expert in airport-related development and would always protect the site for its core business, which implies that urban development will not harm aviation. Ultimately, the Anti-Trust Board NMa provisionally concluded that, in the case of Schiphol, there was no sign of monopolisation of development rights that needed further investigation.

The third problematic public-private governance institution is the exclusion of project developers in Schiphol area development. Actors that are not part of the airport area development coalition (see 6.6 and 6.7) argue that chances of regional co-operation are missed because they are excluded from several coordination platforms. Another complaint put forward by those excluded

from airport area development is that Schiphol uses its dominant and privileged position in relation to competing projects.

Two examples underline this argument: the legal conflict over the development of the Groenenbergterrein; and the test of airport-related activities in the vicinity of the airport. In the first example, the airport considered construction on the Groenenbergterrein as too dangerous for landing airplanes and therefore banned construction. When the airport and province had to compensate project developer Chipshol, the airport authority removed the ban on construction on the Groenenbergterrein. In the second case, regulations on testing airport-relatedness of activities in the airport area are not implemented very strictly in the airport territory as well as in the vicinity of the airport. These two cases of problematic legal institutions will be discussed in more detail below, in 9.7. The common factor in these cases is the conflicting role of Schiphol in hindering competing project developers and favouring its own activities by using debatable protection guidelines for aviation growth and checks on the airport-relatedness of the activities in the airport area.

In summary, public-private coordination is mainly a topic in the case of Schiphol. Arrangements such as SADC and BFS were major institutional innovations at the time of their establishment, because airport and local governments started to jointly develop the grasslands near the airport and thereby create more economic airport spin-offs. This model is a public-private institutional arrangement *avant-le-lettre*, despite its shortcomings. More recently, the efficient and effective institutional arrangement of the 1990s has shown signs of inertia and need of institutional change when the playing field of actors involved in area development became larger: in particular in the position of Schiphol in the Bestuursforum Schiphol and the position as shareholder of SADC, but also in relation to competing real estate developers.

9.5 International legal institutions

Legal institutions are the outcome of policies and politics, and set formal rules of the game for actors in area development. Legal institutional arrangements also administer juridical protection to actors and actor coalitions. This section discusses the international rules and regulations that set the playing field for actors involved in the development of the airport as a cityport in the cityregion case studies. Within the international legal regulatory framework, airside and landside can be distinguished, with legal force at the global, European and national level.

Airside

Since the Chicago Convention on International Civil Aviation in 1944, countries have complete and exclusive sovereignty over the airspace above their territory. Airlines, however, require access to airspace of other countries, but attempts to develop multilateral agreements have failed since 1944 (Malanczuk 1997, Mendes de Leon 1992). Therefore, a complex lobby network for lucrative bilateral agreements of access to air routes between nation states has developed.

The rapid development of aviation in Europe and the US forced a shift towards further liberalisation (see chapter 4). This shift concerns the nine 'freedoms of the air', is ranging from the right to fly over a third country, to the right to carry traffic between two points in a foreign country (Mendes de Leon 1992). Since 1997, bilateral treaties are gradually replaced

by free competition inside the EU territory and by a continuation of bilateral contracts with countries outside the EU. The 'open skies' treaty between the US and eight European countries discriminated against other EU members according to a 2002 European Court of Justice ruling and needs revision. The European Commission should take over air space contract negotiation in the near future, which according to Burghouwt might challenge the international system that is based on bilateral contracts (Burghouwt 2005). These changes are critical, as the EU transport regime sets the playing field for airlines to develop their hub-and-spoke networks and to choose their hubs, which has a substantial spatial and economic impact in the city-regions.

The Chicago Convention is also the basis for the International Civil Aviations Organization's (ICAO) technical regulations over construction, operation, safety, and security aspects of airports. In recent years, economic interests became important, as airport charges need regulations, particularly in the case of regional monopolies. Within the EU, the regulatory framework for airport charges was further developed since 1985, based on the principles of non-discrimination by flight origin, cost relatedness of the charges and transparency (Graham 2001).

One of the most urgent issues for the EU today is creating a level-playing field for modes of transportation including competing airports, with complications arising from the wide variety of airport-airline institutional arrangements in the EU (COM 2001). In this context it might be possible in the long run to increase competitiveness and efficiency advantages as found in the US. In the European case studies the issue of the level-playing field became relevant after the merger of Air France and KLM. In the interviews, concerns were expressed that the relationship between KLM and the Dutch government would distant, while the French government and Air France would be closer, which would favour the competitiveness of Charles de Gaulle over Schiphol as a hub. The outlook is nevertheless that favourable economic conditions at Schiphol guarantee a serious role in the dual hub structure with Charles de Gaulle in the medium term.

Landside

It can be argued on the basis of the European case studies that EU regulation also plays a role in landside development of the airport area. In Germany and the Netherlands, EU environmental legislation is blamed for a focus on protecting rare species and reducing exhaust gases rather than contribute to the urban development process. The main problem in the Netherlands is not the directive itself (Directive 96/62/EG), but the self-imposed obligation that no single urban construction project can lead to deterioration of air quality. This effect is exacerbated by the fact that, in contrast to other EU member states, EU legislation has direct jurisdiction in the Netherlands. Currently, VROM attempts to solve this problem by allowing air quality deterioration at the regional level to be compensated for by general air quality improvement. Nevertheless, in 2005 major projects were halted by the Dutch constitutional court *Raad van State*.

International trade agreements force governments to accept international bids for large public works. Therefore, international tendering legislation is also relevant for airport infrastructure construction. After steel prices and car dumping, the construction of Kansai International Airport became the third major US-Japan trade conflict in 1987. Despite US pressure, Japan refused foreign constructors bids for the development of the airport island near Osaka. At a later stage, international bidding became part of the legal system in Japan, but, ultimately, informal institutions continued to hamper bidding and construction of public works, as could be seen in

the bidding process for the construction of the fourth runway at Haneda (see chapter 8). The vocational school of the Ministry of Transport, Land and Infrastructure in Kunitachi is currently the only public works built by foreign constructors (Interview Suzuki 2004)

In the EU, bidding regulations in the open market became more urgent with the merger and streamlining of tendering directives, and the lowering of threshold prices that require European tendering. Currently, EU-wide tendering procedures should be followed in case public works cost more than five million euro. All publicly financed actors – governments, public companies and utilities, universities and hospitals, are subject to this legal institution. In the future, it is expected that international competition in tendering processes will increase, widening the playing field of developers and investors, making the process more competitive with new opportunities for the airport as a cityport.

9.6 National legal institutions

In the decentralised nation-state of the Netherlands and Japan's unitary state rule making at the national level is a particularly crucial level for institutional arrangements that provide incentives or hurdles for the airport as a cityport in the city-region. The noise and safety regulations of airports, as well as building permissions near the airport are critical rules in this playing field. In harmony with international regulations, contours for airplane approaching routes are drawn in order to secure safety, environmental and noise protection.

Each case study discussed here uses different definitions for marking the safety- and noise contours. The permission for economic activities and building regulations within these contours also varies between the cases. In the case of Schiphol, as long as there are no safety risks, most activities and buildings are allowed in the vicinity of the airport with the exception of new housing areas. A comparable policy can be found in Frankfurt Rhein-Main, where new housing is less planned and happens at a larger scale. In Japan, only airport infrastructure and airside building near the airports were allowed until recently. This airport-infrastructure orientation is a legal institution that is directly relevant for understanding limited urban development in the vicinity of the airport.

In airport area development, legal institutions on the national level in particular focus on noise and safety contours surrounding the airport. Below we will elaborate on the different policies and their consequences in the three case studies.

Schiphol

In the Schiphol area, a distinction is made between airport-related economic activities, other economic activities and housing as urbanisation. Permission for the construction of offices and warehouses in the airport territory is a legal issue discussed at the regional level (see 9.7). In the Netherlands, large-scale housing areas are designated at the national level, which is the focus of this section. The debate on housing areas and contours of noise and safety regulations are all closely related.

The aviation law *Wet Luchtvaart* (2003) is the successor of the 1995 *PKB Schiphol en Omgeving*. It is generally acknowledged that the PKB, a former direct binding national plan, failed due to the short time horizon and its failure to accommodate the rapid development of

aviation. The new aviation law was formulated in 2001 and became effective in 2003. One chapter of the aviation law focuses on Schiphol, the so-called *Schipholwet*. Two policy implementation directives (AMvB) support this Schiphol law: the airport aviation directive (LVB or *Luchthavenverkeersbesluit*) and the airport-planning directive (*Luchthavenindelingsbesluit* or LIB).

Mr. Van Voorn (Municipality of Aalsmeer): "According to aviation law, major parts of Aalsmeer are considered to be uninhabitable, even though many citizens have lived here for decades"

The airport planning directive LIB sets the borders of the airport territory on the one hand, (environmental and safety limits to the usage of Schiphol airport) and the limitations of land use on the other hand (for example safety zones, noise contours, construction height limits and construction limits for houses and businesses), in order to avoid concentration near the airport.

The airport aviation directive sets the environmental rules and regulations for the aviation sector, dealing with noise pollution, smells and gases, the usage of runways and approaching routes in air territory and safety measurements. The single implication for land use is the 35 KE (Kosten Units) noise contour with a ban on environmental sensitive land uses. However, the PKB in the *Nota Ruimte* decided that, in order to avoid noise inconvenience for future citizens, new housing areas in the stricter 20 KE noise contour area (later included the border of the 20 KE noise contour) and therefore neighbouring large-scale future housing locations could not be build —

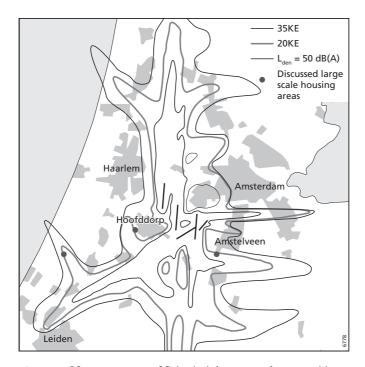


Figure 9.1 Noise contours of Schiphol Airport and potential housing locations (Source: Comm. Eversdijk (2005))

Hoofddorp-West in Haarlemmermeer, Legmeerpolder in Amstelveen and Noordwijkerhout (the black dots in Figure 9.1). This small policy change caused a lot of friction with the municipalities and province, which struggled in their efforts to achieve regional housing constructions goals. However, it has also led to more innovative housing policies with more intensive and mixed land use inside the cities instead of green-field development between towns and airport (see Gerritsen 2005).

The Committee Eversdijk evaluated the aviation law in 2006. The results of the aviation law area are as disappointing as the PKB precursor, showing severe distrust between airport and environment. These results contradict the dubbeldoelstelling policy goals of environmental protection and aviation growth in which urban areas would suffer less from airplane noise and aviation could grow more rapidly. Many actors, however, including airport and environmentalists, are disappointed by the outcomes of the new aviation law. The airport itself considers the noise contours as rigid and too tight. Eversdijk (2006) proposed to change the calculation-based method of KE into the measuring-based method of L_{den} (Level day-evening-night), which is becoming the European standard. Furthermore it concluded that the aviation growth policy has fundamentally undermined local trust in fair and open policy-making. Amsterdam's noise pollution has significantly decreased since the opening of the fifth runway, but noise pollution problems for Aalsmeer and other smaller municipalities have worsened, while a new and wider area from Leiden in the south to Beverwijk and Castricum in the north are outside of the noise contours, but suffer from new aviation noise (Figure 9.1). The main causes of these problems are similar: the policy's aim was to defend environmental interests by creating technical and strict containment zones for aviation. However, in practice wind directions and aviation growth differed from what was expected in research and policy reports, which causes tensions.

A second problem in the Schiphol case is safety zones. As a result of the 1992 El Al airplane crash in Amsterdam, politicians agreed to increase safety in the Schiphol area. In this context, aviation growth, including further urban development next to the airport territory became socially and politically unacceptable. This is one of the reasons for not permitting construction buildings near runways and approaching routes, making it impossible to develop the Groenenbergterrein, for example. In the interviews for this project, project developers argued that this is a false argument, since it is very unlikely, in reality, that an airplane crashes just in front of the runway. For this reason, Schiphol and the Ministries of Transport and VROM are currently looking for more flexibility and freedom of movement in the system in general. The issue at stake is whether increased movement is just another step to open the way for airport expansion, which will lead to new noise and safety problems in the near future or that citizens will be receive increased protection through the new contours.

Frankfurt

Frankfurt Rhein-Main's adjusted noise contours from 62 db (A) in 1985 to 60 db (A) in 1998 are shown in Figure 9.2. The standard of noise pollution is lower than in the case of Schiphol, with roughly 50 dB (A) as its inner contour. A similarity between the two airports is the growth of the area affected by the airport between 1995 over 1998 to 2000. Figure 9.2 also shows that the entire surface of the Bischofsheim and Raunheim municipalities is affected by aviation noise, joint by large parts of Büttelbon, Flörsheim, Offenbach and Neu-Isenburg. This is different from

Schiphol, where the worst affected municipalities, such as Aalsmeer, are only partly affected by noisy airplanes.

Different from the Randstad, there are no large-scale housing policies in Frankfurt Rhein-Main, nor is there market pressure to develop housing near the airport. With an increase in flights as a major discouragement, the affected municipalities have shown a rapid population decrease of over ten percent since the 1970s, in contrast to Frankfurt Rhein-Main's average of 24% population increase (KSR 2000). Unorthodox measures, such as financial compensation, buying off complaints and demolishing houses, are common in the affected areas of Frankfurt Rhein-Main. This policy is different from the housing isolation policy in the Schiphol area, where buying off complaints was considered as 'immoral' until recently: citizens should be protected from aviation noise by the government (Raad V&W 2005, Interview Tan 2005).¹⁶

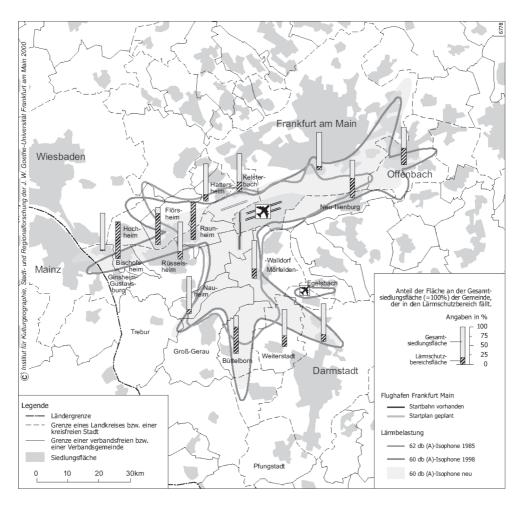


Figure 9.2 Noise contours of Frankfurt International Airport and affected areas (Source: KSR 2000)

The areas with a general building ban near the airport are more strictly defined than the noise contours shown in Figures 9.1 and 9.2. Local communities have challenged the borders of the building ban areas strategically, in order to limit future airport expansion. Darmstadt, for instance, is forced to concentrate in the built-up area because of the *Siedlungsbeschränkungsbereich* building ban (FR 7.11.2003). Kelsterbach and Raunheim oppose future airport expansion and even pro-actively designed a business site, located exactly in the centre of the landing route of airlines on the proposed new runway – the communities won this case in court, since their plans were first (FNP 16.12.2003). A similar effort by environmentalists in the Schiphol area to prevent the construction of the fifth runway by creating the new Bulderbos forest failed and had to be removed after court appeal (Smit 2001).

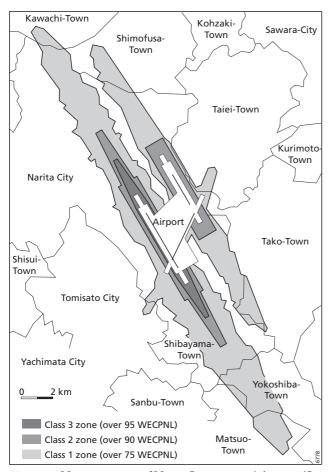


Figure 9.3 Noise contours of Narita International Airport (Source: Chiba Prefectural Government (2005))

Narita and Haneda

Noise and safety contours are also under discussion in the case of Haneda and Narita, despite their relatively remote locations. Japan uses the WECPNL standard to express noise levels: Weighted Equivalent Continuous Perceived Noise Level. WECPNL ranges from 95 near the runway, 75-90 with land use limitations and isolation to under 75 suitable for living (Chiba Prefectural Government 2005).¹⁷

At Narita International Airport noise problems were avoided by choosing a remote location 78 kilometres east of Tokyo. Figure 9.3 shows the impacts of the airport on the local rural area. The noisiest part of Narita with full compensation is category 3 in Figure 9.3 (WECPNL 95) and category 2 (90) in Narita and Shibayama. Category 1 (75) can also be found in Shimofusacho in the north, Yokoshiba-cho in the south, and Takomachi in the east.

Noise problems are increasingly problematic for Haneda, Asia's largest airport. Approaching routes currently harm the new waterfront islands, particularly housing in Odaiba (Figure 9.4,

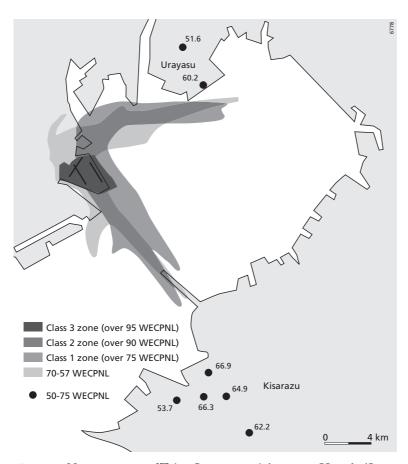


Figure 9.4 Noise contours of Tokyo International Airport at Haneda (Source: Chiba Prefectural Government (2005))

between WECPNL 70-95). The current three runways furthermore affect Chiba at the other side of Tokyo bay, in particular Kiserazu in the east (66.9, 66.3, and 64.9 in Figure 9.4), and Urayasu in the north (60.2 and 51.6) (Chiba Prefectural Government 2005). In addition, the planned fourth runway at Haneda would cause noise problems at the other side of Tokyo bay in Eastern Chiba. After local opposition, the direction of the runway in sea was changed slightly (Nikkei Shimbun 12.09.2004). However, because the Japanese Ministry of Transport's aviation department dominates the noise and safety zoning discussion, it needs less local support than is required in the case of Schiphol and Frankfurt.

Recent Japanese airport construction in Kansai and Chubu has shown some changes in airport noise and safety regulations. First, new environmental legislation was introduced in 1997, which has to be applied in the case of airport construction, including a strict assessment procedure before plans are approved. In the case of Centrair for example, the shape of the island had to be changed in order to deal with water flows in the Nagoya bay in a environmentally sensitive way, and fifty billion yen had to be paid to compensate local fishermen. In total, one-sixth of the construction budget was used for environmental protection, which strongly increased the cost of airport island construction. Critics argue that in particular local fishermen became rich as a result of financial compensation (Interview Ueda and Tsuchiya 2004). It has however not hampered further airport development, as the Japanese government primary focus remains economic development (Interview Noguchi 2004).

Secondly, and especially relevant for the airport as a cityport, airside and landside development is strictly separated through zoning laws, which are the most relevant legal institutions in Japan. Japanese Airport Law enforced in 1990 requires economic activities to be far away from the airport for safety and environmental reasons. This law was changed in 1998, allowing distribution and manufacturing near airports. Currently, economic activities and airport operation are not allowed close to Narita International Airport, but NAA continues to buy land, expecting that a more flexible Chiba prefecture will approve changes of land use for airport operation and related industries at a later stage (Interview Namekata 2004). At Haneda, the airport authority's competencies, rather than zoning laws are the main problem. The Japan Airport Terminal Co. is only allowed to manage the airport. The airport area is owned and managed by MLIT, but this Ministry has a primary focus on airside infrastructure and is not allowed to be involved in landside development according to the Japanese Airport Law.

In sum, noise contours vary between the cases, based on the existence of different measuring methods. In addition, urban densities vary, so the figures do not express the impact on citizens. In terms of legal institutions, the legal implications of the noise contours also vary among the cases. Although in all cases building bans and housing isolation regulations exist, financial compensation differs, and is increasingly discussed as compensation policy.

9.7 Regional and local legal institutions

At the regional and local levels, the main legal institutional arrangements in urban and regional planning are structure plans and land use plans. As chapter 8 pointed out, land supply and land policy instruments can be important additional instruments, setting the playing field and co-

determining the development of the airport as a cityport. For this reason, this section focuses not only on local and regional land use plans, but also on legal instruments, such as expropriation, pre-emption, exemption, cost share, and benefit tax.

The economic activities allowed in the airport territory and the vicinity of the airport by the land use plans and structure plans vary between the cases as a result of the discussion on protecting versus exploiting airport sites (see chapter 4). In the case of Narita and Haneda, no direct building near the airport is allowed (yet). In the newer airport areas of Kansai and Chubu any kind of economic activity is welcomed and allowed, but land is still too expensive for offices, warehouses, distribution centres or manufacturers. The Frankfurt forest prevents urban development near the airports and pushes towards a polycentric airport city with centres in Rhein-Main (discussed in chapter 3 and 4), with former military sites near the airport under redevelopment. In the case of Schiphol, a strict separation has been made between platform-related activities, airport-related activities and non-airport related activities in the regional plan in order to make a balance between exploitation and protection of core activities.

Schiphol airport area

In the Schiphol airport area, three issues of legal institutions on the regional and local level are at stake. First, local land use planning is discussed. Then, legal conflicts over construction bans in airplane approaching routes are brought to the front. Finally, municipal pre-emption rights play a role in the regional debate of airport planning.

The regional plan *Streekplan Noord–Holland–Zuid* (Provincie Noord–Holland 2003) is not legally binding in a direct sense, but local land use plans should fit in the framework of regional plans for land use. Although Schiphol banned non-platform related activities in the airport territory until the beginning of the 1990s, it is now much more open to new businesses as an additional form of income for the airport. Considering the interests of the airport area in the long run, the Streekplan restricts land use in the Schiphol area based on airport-relatedness. With Schiphol as a centre, three circles were drawn for office and industrial locations with Schiphol relations.

- Schiphol-Centrum is designated for platform-related activities and high-dynamic internationalised business services (the dotted area in Figure 9.5).
- 2. The locations Elzenhof, Schiphol-Oost, De Hoek-Noord and Badhoevedorp-Zuid are in circle two, which allows all activities of the centre plus aviation industry offices, airport-related offices, industries and distribution etc., where the added value or volume of goods is at least 25% air cargo (areas with double triangle in Figure 9.5).
- 3. The third circle allows all previously addressed activities and international operating companies in the areas Beukenhorst-Zuid and Beukenhorst-Oost-Oost, De Hoek-West, Zuidas, IBM-location, Riekerpolder and Oude Haagsewegzone (all other purple areas in Figure 9.5).

Distinguishing three zones encircling the airport is ideal-typical and eventually clear strategies, to avoid urbanisation near the airport. Planning practise in the airport region show partly different results more recently, nevertheless. The actors observed a loosening of the definition of airport-relatedness over the years. In the era of globalisation, it is hard to find economic activities that have no relationship with the airport at all. For Schiphol Real Estate, airport-relatedness is the main formal criterion for establishment in the airport territory, but in fact Schiphol Real

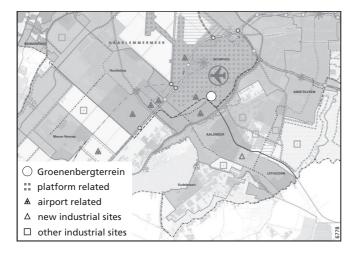


Figure 9.5 Schiphol area industrial sites in the regional land use plan (Source: Provincie Noord-Holland (2003))

Estate looks at the loosely defined added value of the business for the airport city concept (Interview Mast and Schaafsma 2005).

The province of Noord-Holland, as a supervisor on SADC sites, has also expressed criticism of the degree of airport-relatedness of business activities (Interview Bijvoet 2005). In spite of this, project developers praise the flexibility of the airport-relatedness concept, which serves to keep the mainport area competitive, and criticise the stricter and slower bureaucracy and legislation in the case of Frankfurt compared to Amsterdam (Interviews Wade 2005; Peters 2005; Sodekamp 2005). The increase of car traffic in the region attracted to the business sites, whether airport related or not, is, however, of increasing concern.

The second issue in the airport region on the regional and local level at stake in the Schiphol area is the legal conflict between project developer Chipshol and Schiphol Group. This legal conflict touches institutional problems as well; as for Schiphol several interests and roles are at stake, including protecting aviation as core business and real estate development. Chipshol's aim is to develop business parks and already in the 1980s bought land close to the airport.

In 2002, Chipshol asked the municipality of Haarlemmermeer for permission to build at the Groenenbergterrein on land that it already owned (see figure 9.5). The Groenenbergterrein is located directly near the Aalsmeerbaan runway and the airport was worried that approaching routes would become less safe when warehouses were build at the planned location. The municipality of Haarlemmermeer first refused a building permit, but later allowed building at the site. The reason was a 'legal loophole', so the the building permit had to be provided (Ministry of Transport and Water Management 2005, see for a detailed legal discussion Duivesteijn 2006).

However, Schiphol informed the Ministry of Transport and Water Management about the building permit and a rarely used building ban was issued. The planning directive used in this case was prepared within a week. The Ministry however, accepted other constructions with a provisional building permit, such as the new air control tower.¹⁸ Chipshol legally objected to the

building ban but withdrew the objection after an official advisory committee on aviation safety recommended a continuation of the building ban.

Project developer Chipshol indicted the province of Noord-Holland and Schiphol Group in court for her financial loss of \$697,2 million. The material damage (planschade) was proven and the defendants Schiphol and Noord-Holland were ordered to pay (Court of Haarlem ruling, 12-1-2005). According to Article 50 of the Schiphol Law, the construction prohibition has to be paid by Schiphol, but Schiphol claims the Ministry of Transport should contribute to the costs. A specialist committee set the level of financial compensation at \$\epsilon 16,8\$ million. Chipshol's CEO Mr. Poot has challenged the independence of this committee, since the two of its members, Mr. Toornend and Mr. Bekvers, have close contacts and/or are former employees of Schiphol Group and the Ministry of Transport (Vastgoedmarkt 2006).

Remarkably, in October 2005 the Netherlands Air Traffic Control withdrew its safety concerns, since no claims of potentially dangerous situations could be proven (Vastgoedmarkt 2005). As a result, in 2006 Chipshol claimed e30 million from the Ministry of VROM and e67 million from the air traffic control NVNL (PropertyNL 2006). In the meantime, Chipshol has started to prepare another legal battle over the area Badhoevedorp-Zuid, where Chipshol owns 110 hectares of grassland, where it plans its own airport city, inspired by Atlanta. At the same time, Schiphol is hoping to develop the land, of which it owns 85 hectare, for a second terminal (NRC-Handelsblad 11.05.2006).

The continuing legal battle over the Groenenbergterrein and the (suspected) entanglement of interests of Schiphol, Schiphol Real Estate and the Ministry of Transport is a much-debated issue. The Ministry of Transport (2005) emphasises that there is no conspiracy between the Ministry and Schiphol, although one could argue that the airport in this case uses the Ministry of Transport for public backing, indicating conflicts about role differentiation. Furthermore, the legal conflict raises questions over the position of Schiphol Real Estate as a competitor of Chipshol, but likely to be backed by the Schiphol as airport authority. In all cases, an unclear role differentiation is at the heart of institutional problems, but suspicion and distrust as a result.

A clearer role differentiation can be found in Japan and Germany, as opposed to the situation in the Netherlands, where the active role of local and regional governments tend to lead to tensions between the government's role as supervisor and developer (see 9.4). Provinces and municipalities use their legal authority to realise their own goals, which is sometimes seen as abuse of public authority by private developers. For instance, the province has delayed a Schiphol land use change approval in order to force the airport to contribute more to the N201 road bypass (Interview Mast and Schaafsma 2005).

Third, another legal conflict emerged when Schiphol bought land to develop just before the land had to be sold to the municipality of Haarlemmermeer in 1999. In the Netherlands, municipalities have the first right to buy agricultural land for development. This municipal preemption right (*voorkeursrecht*) assures land at reasonable prices to be developed for housing. Thirty minutes before the law would be enforced, Schiphol bought the land and this could be seen as a case of illegal advance knowledge. In 2006, the Haarlemmermeer municipal council proposed a motion to further investigate this case (Vastgoedmarkt 2006a), but the Public Prosecutor dropped the case since there were no signs of unlawful prescience (ANP 2006).

The legal issues analysed above should also be viewed in the light of the general discussion about the revision of the Spatial Planning Act (WRO) in the Netherlands. The current act, enforced in 1965, needs further adjustment to the current spatial and economic dynamics (see chapter 6). In the case of Schiphol, three crucial elements of the new Spatial Planning Act are at stake.

Firstly, land use changes within the legally binding land use plans should be more flexible, up-to-date and transparent, and should be made available electronically. For Schiphol, although land use plans officially need be revised every ten years, only an outdated 1967 land use plan is available. Most updates of the land use plan are made by the WRO Article 19 exemption procedure, which is currently under revision. Shorter planning procedures with fewer appeal moments are also expected to be included (VROM 2006). The VROM-Raad (2000) also recommends a more important role for dynamic local structure plans, which would return a balance between projects and plans, or, in other words, between spatial dynamics and legal securities.

Secondly, the municipal pre-emption right needs a wider legal remit (*ibid.*) in order to avoid land speculation as in the Schiphol case. Furthermore, the proposed tax or cost-sharing instruments are difficult to use in planning practice, when governments invest in infrastructure, leaving free riders to take most of the economic advantage. In the Schiphol area, developers like Chipshol are considered to be land speculators and they benefit from investment in the airport without paying for the infrastructure themselves. The interviews show that this free-rider problem and the lack of claw-back constructions are the main reason that Schiphol Group and public actors co-operate in developing the land, while tending to exclude commercial actors.

Thirdly, another potential effect of the revised Dutch WRO is the possibility that the national government will start defining land use plans when national interests are at stake or when regional and local actors cannot agree on the land use plan – a likely scenario in the case of Schiphol's development as a mainport. The question is whether this indicates a general tendency to increase control at the national level and whether this will leave enough space on the playing field for local actors to manage major projects.

Frankfurt Rhein-Main

In Frankfurt Rhein-Main, actors favour the bottom-up approach (*Gegenstromprinzip*): if local developments do not fit in the regional frameworks, the community can convince the Planungsverband and the Regierungsbezirk of the need to change the legal framework.

As in the case of shared interests in the Netherlands, land can be expropriated or the owner has to prove its ability to build the planned project. Land expropriation and the first right to buy the land for municipalities is more problematic in Germany and Japan than in the Netherlands. Almost all land is in private hands in Germany, making it harder to steer developments and making expropriation necessary. Expropriation of landowners on the ICE-railway track Köln-Frankfurt lasted over ten years. The city's right to buy land (*Vorkaufsrecht*) is rarely used, as the financial risks are often too high.

Shortening planning procedures and limiting moments of court appeal are also at stake in Frankfurt Rhein-Main. The public participation processes started in the 1970s disappointed many actors. Public participation is also frustrating rail infrastructure development (Interview Lunkenheimer and Stanek 2003). The groups participating in the process are mainly and frequently environmental groups or political parties that oppose the proposed plans.

Mr. Schien (Neu-Isenburg): "The activists are the same: the young students who tied themselves to the western runway in the 1970s became family men and now go to court to complain about the new runway. The current younger generation doesn't mind airport expansion."

The participation models appear to have failed and need new input, using information technology, for example. When planners propose rough outlines, the public does not express an interest, often inhibiting the realisation of ambitious goals. When planners present concrete plans, the audience tends to think that the plans are already finished and cannot be influenced anymore. One can create a sense of understanding, but citizens will ultimately oppose plans that harm their interests (Interview Rautenstrauch 2003).

Mr. Sachleber (Bouwfonds Frankfurt): "Maybe I am a typical German when I find that every law defends a particular interest."

These quotes underline the importance of the rule of law and fits to the legalistic style of Germans over Dutch and Japanese consensus orientation.

Narita and Haneda

In Japan, the most problematic legal institution is land ownership and expropriation. Despite what is often argued, land ownership did not become a problem after American intervention and the resulting emphasis on ownership rights, but as a result of the deep-rooted historical and cultural meaning of land ownership in Japan (Sorenson 2002). As embedded in the Land Expropriation Law, land can only be expropriated in the case of crucial national interests. The project planner can ask for recognition by the Ministry of Transport, Land and Infrastructure, which then sets the extent of land needed, how it will affect the public and the environment, the exact list of interested parties, and how much compensation the owner deserves (Kotaka *et.al.* 2001).

However, the violent opposition against the Narita International Airport construction has undermined the implementation of this law. After violent personal attacks, the Chiba Expropriation Committee withdrew and never returned nor became re-installed (see also chapter 4.3). Expropriation was discontinued and MLIT and the airport authority chose to use a communication and consensus model. Since legal opposition to the airport was no longer an option, violent opposition has created a precedent for not using expropriation laws in Japan after 1988. If necessary, railroads or highways are diverted or by-passed but this cannot be done in the case of airport runways, so Narita International Airport has to wait for landowners to sell their land voluntarily and negotiate about the land price.

Furthermore, the Japanese Airport Development Law strictly separates design and construction of airports. MLIT sets building standards and is obliged to make the design itself, before constructors can bid for the project. Although the design has to be made by MLIT, the ministry hires consultants as in-house engineers. These engineers do not only have an interest in finishing the project, but are also interested in obtaining more and continuous work and in retaining their status as hired expert inside MLIT.

According to insiders, the separation of construction and design by law and the role of in-house engineering consultants are a key to understanding institutional problems in the

construction industry. Among other political considerations, the problems of in-house engineer consultants and job dependency is illustrated by the efforts of MLIT policy makers to keep Haneda airport under governmental control and not to privatise the airport. Perhaps an even more problematic legal institution is the fact that many governmental interventions are not clearly supported by law. In Japanese airport area development there is neither free market competition, nor clear rules that manage the bidding and development process (Interview Noguchi 2004). The lack of competition and clear rules exists despite the growing importance of *kiyoi-seiji* ('clean politics') in public management during the 1990s, which aims to make political and bureaucratic intervention more transparent and to provide a legal basis.

9.8 Conclusion

In order to discuss the factors that determines the institutional position of the airport as a cityport in the city-region, this chapter focused on institutions of governance and legal institutions for the three case studies. This actor-oriented institutional analysis is complementary to the socio-cultural, financial and economic institutions discussed in the previous chapters.

Vertical institutions of governance vary from decentralised to centralised. In the case of Schiphol, airside development is a task for the Ministry of Transport. Landside development is a local and regional task, but the national level (VROM) regularly interferes in issues such as designating large-scale housing areas and formulating noise contours. Although the current paradigm is 'Decentral where possible, central where necessary', trends of (infrastructure) budget decentralisation and planning centralisation (particularly in the case of projects of national interest) can be found in the Schiphol case. The role of the Ministry of Transport and Water Management in managing airside development has changed from development to a supervisory role. It can be concluded that Schiphol is currently moving from a centralised situation characterised by subsidy- and policy making dependence towards being a more mature and independent partner with its own budget authority and responsibilities.

Japanese policies also aim at decentralisation. Local budgets are already substantial, but ministerial approval is decisive in the planning process of new public works. Despite the existence of decentralisation policies, the dependency-mindset is deeply rooted in all levels of Japanese institutions; it is one of the core characteristics of the Japanese political system. The larger playing field at the local and regional level resulting from decentralisation is regularly compensated for by stricter control and budget restraints by the ministries, which hesitate to reduce control. However, airport privatisation at Narita and a private approach at Nagoya are signs of institutional innovations.

Vertical institutions in Frankfurt Rhein-Main are decentralised and clearly defined with few tensions between national, state and local levels. Problems arise at the regional level, where a number of actors compete in the implementation of government tasks: counties, administrative districts, regional planning associations, and the state of Hessen. Counties and administrative districts in particular are considered as out-of-date and superfluous levels of government.

The long tradition of problematic regional co-operation in Frankfurt Rhein-Main has led to an institutional lock-in, with a widespread sense of urgency but no signs of formal institutional change. Since formal institutions (official governmental bodies and tasks) are unable to cooperate horizontally at the regional level, business interest groups, media and other actors are increasingly active in attempts to improve the business climate of the city-region. The start of informal institutional change has become more effective and might ultimately lead to formal institutional change. A similar problem in the case of *horizontal institutions* can be found in the Schiphol area of the Randstad, where governmental bodies have to co-operate at the regional level but hesitate to transfer decision-making powers. As a result, a large number of platforms for voluntary co-operation were set up, although with limited and opaque decision-making procedures. In Japan, regional co-operation is even absent in the airport area planning process, due to the centralised approach to airports and a strict separation between airside and landside development.

A second element of horizontal institutions of governance explored in this chapter is competition between policy sectors, in most cases between ministries. The 'tribe wars' of 1980s and 1990s between Dutch ministries involved in transport, urban planning, and economic affairs were notorious. The conflicts were (temporarily) decreased by inter-departmental co-operation and job rotation between ministries. The lock-in of governmental distrust in airport planning among citizens and developers in the airport area also forced the ministries to reconsider their role. The Dutch Ministry of Transport and Waterworks is in the process of redefining its role to being more distant and taking on a supervisory role, rather than being directly involved in development and the promotion of the aviation sector. The roles of the ministries are different from the past, challenging the traditional growth coalition of airport, airlines and national ministries.

Inter-departmental competition in Hessen and Japan was not reduced by improved cooperation, but by the merger of ministries. The mergers led to better co-operation between the departments of economics, urban planning and infrastructure in Hessen. By merging the ministries of transport and land, Japan could kill two birds with one stone: infrastructure and public work planners are less focused on technical solutions and are more receptive to social and economic considerations on the one hand. On the other hand, the political dominance of the former Ministry of Transport was reduced in favour of the Ministry of Finance's budget deficit reduction. Both changes are particularly relevant for airport area planning in the near future.

The case of Schiphol is the most progressive in terms of public-private institutional arrangements that go beyond traditional governments. While airports in Tokyo and Frankfurt are limited to being airport authorities, Schiphol is involved in several regional coordination platforms. Schiphol is a member of a platform that initiates and coordinates spatial-economic developments in the vicinity of the airport and Schiphol is also shareholder of Schiphol Area Development Company. The model can be seen as a public-private institutional arrangement avant-le-lettre. However, with the recent attractiveness of the airport areas, the arrangement shows its shortcomings: the airport coalition tends to exclude other developers and the simultaneous role of these public actors as policy makers, policy maintainers and project developers is problematic.

The chapter conducted a legal institutional analysis at the international, national and regional/local levels. At the international level, liberalisation and integration are crucial policies for the development of the airport as a cityport. In East-Asia, the aviation market is relatively closed. Between western countries however, and particularly within the European Union, there is scope

for further liberalisation of aviation markets. Liberalisation does not only challenge current contracts between countries, but the degree of liberalisation will also have a significant impact on the airports concerned. The airports operate within the EU's increasingly competitive market, but the EU currently lacks a level-playing field for real competition due to cultural differences in policy styles. A level-playing field is necessary in order to break down regional monopolies, a policy aim that was successfully achieved in Japan by increasing airport competition, leading to higher levels of airport efficiency and better deals for travellers.

Legal institutional arrangements at the national level are also relevant for airside development, with a focus on noise- and safety contours around airports. Schiphol's search for a narrow balance between aviation noise areas and protection of urban areas was embodied in a paradoxical policy document combining economic and environmental targets. This planning ambition vanished as a result of literally changing winds, the turbulent aviation market and different perceptions of aviation noise among citizens. A common trick at the local level to dam airport expansion is to create obstacles to legal battles, which are often met with mixed results in all case studies.²⁰

Schiphol and Frankfurt both have strict land-use zoning regulations at the local level. Nevertheless, the loose interpretation of airport-related activities at Schiphol has led to rapid monocentric urbanisation and congestion of the airport city. Both the airport and local governments play an active role in this process by further exploiting their privileged institutional position as members of the airport growth coalition. In Frankfurt, political conflict and the forest as a natural barrier avoids urbanisation near the airport or at least led to a limitation of projects in the vicinity of the airport, such as the AIRRAIL Center. Other accessible and specialised locations have been developed at a distance, leading to a polycentric airport city. Japanese airport laws strictly separate airside and landside development, contributing to more problematic institutional arrangements that have been in a process of change recently. For this reason, few urban developments are found at Haneda.

Notes

- Ironically, as chapter 8.6 pointed out, it were the national bureaucrats themselves that were often involved in corruption scandals and failed investments in public works.
- 2 For example, for expanding airport services with massage centres, the airport is negotiating directly with the Ministry of Transport, and not on the local level with Kawasaki or Tokyo.
- In planning, the 'law of general development of Japan' will be merged with the 'law of regional development.' In 2005 these laws are the new 'law of basic planning of Japan.' According to the new law, municipalities have to take initiative in the proposal of new plans, before consultation with MLIT takes place (Kanagawa Shimbun 16.11.2004).
- As Mr. Bussink (Ministry of Transport) argues, since secretary-general Ms. Bakker of VROM took office, political support to stop the 'tribe wars' has increased and inter-departmental co-operation has improved gradually. The principle of not stealing a march on other ministries became common ('interdepartementaal vliegen afvangen'). The problem re-emerged a few years ago when the junior Minister of Economic Affairs Ms. Van Gennip, although warned by her civil servants, planned to co-ordinate regional economic policies for Schiphol, but later withdrew this ambition.

- Bureaucrats in the MOF hindered modern financial products, making the financial sector uncompetitive until today (Porter *et.al.* 2000). Competition and high management ambitions between MPTP and MITI led to the telecom war in 1994. Before this 'sector war' and before privatisation, the telecommunication business was not competitive; afterwards, Japan became a world leader in telecommunication in only a few years time.
- 6 Interview Messener and Sachleber 2003. Within the city, sometimes eight decisions are necessary to change a detail: executing bureaucrat, land use planner, manager planning, head of the planning department and mayor, and over the same wheels down in the other policy sector.
- 7 Regionaler Flachennutzungsplan: Flachennutzungsplankompetenz mit kooperatives Verfahren.
- 8 Communities indicting the regional structure plan are Bischofsheim, Erlensee, Florstadt, Ginheim-Gustavsburg, Hammersbach, Hanau, Karben, Kelsterbach, Langen, Mörfelden-Walldorf, Münzenberg, Neuberg, Neu-Isenburg, Niddatal, Nidderau, Nierdorfelden, Ober-Mörlen, Raunheim, Reichesheim, Rockenberg, Rodenbach, Schöneck, Wölfersheim and the counties Gross-Gerau, Main-Kinzig and Wetterau (FAZ 13.11.2003).
- There is willingness in the Netherlands to merge provinces, but actors disagree on the provinces that should be included. At the time of the Hollandwet conference (Deltametropool 2005), plans were made to merge Noord-Holland and Zuid-Holland, and to explore the possibility of including Utrecht. The minister of home affairs proposed to include Flevoland as well. These plans were acceptable for the Province of Zuid-Holland, but were opposed by Noord-Holland. The latter wants to distinguish a Northwing and a Southwing in the Randstad, and wants to exclude Zuid-Holland (Provincie Noord-Holland 2006). This disagreement undermined the unity of mayors and deputies of all four provinces that was at the root of recent government re-arrangements.
- 10 It is beyond the scope of this book to discuss the concept of governance in more detail. For a detailed discussion, see among others: Kooiman 1993, Jessop 1998, Rhodes 1999. This chapter focuses on the implications of governance for planning processes.
- Ms. Bijvoet (SADC) argues that the power of BFS in the region is often overestimated. For instance, Schiphol Logistic Parc was designated as ready for development by BFS, but was later delayed and will possibly be cancelled by the Haarlemmermeer city council a municipality that may have other preferred locations within its territory.
- In Japan, it is not uncommon to be shareholder of a rival company, but Schiphol Real Estate's BFS membership means it has a privileged position in the airport territory and advantages in other locations.
- The nine freedoms of the air are: (1) the right to over-fly one country en-route to another; (2) the right to make a technical stop in another country; (3) the right to carry traffic from the home country of the airline to another country; (4) the right to carry traffic to the home country to another country; (5) the right to carry traffic between two foreign countries by an airline of a third country, (6) which carriage is linked with third and fourth freedom rights of the airline; (7) the right to carry traffic between two foreign countries via the home country of the airline; (8) the right to carry traffic between two foreign countries by an airline of a third country, which carriage is not linked with third or fourth freedom rights of the airline; (9) the right to carry traffic between tow points in a foreign country on a route with origin/destination in the home country of the airline (cabotage); the right to carry traffic between two points in a foreign country, which is unrelated to the home country of the airline (Mendes de Leon 1992).
- The Kosten Committee (1967) introduced the Kosten-eenheden (Ke) for noise contours. The Committee calculates maximum noise levels for airplanes flying over an open field. Since Ke is only used in the Netherlands and based on calculations rather than measurements, it will be replaced by the EU standard of L_{den} , which will include noise levels inside houses and noise levels at night time. For this reason, it is impossible to convert Ke to L_{den} . The general indicator for aviation noise is expressed by L_{den} dB (A). In the

- case of Schiphol, the noise contour of 20 Ke overlaps roughly with $L_{den 45}$ dB (A). The Eversdijk Committee (2006) proposes to draw the noise contour of the inner area at the former strict 35 Ke and the outer contour between $L_{den 45}$ dB (A) and $L_{den 50}$ dB (A).
- 15 The Committee Eversdijk (2006) was installed after the Committee Berkhout refused its task after feeling too much political pressure to safeguard future airport expansion. The political pressure and academic smoke screen for established policy justification were not refuted in public (Heilbron 2005).
- Interview Mr. Tan (CROS). The discussion on compensation measures in the Schiphol area was started recently based on the report of the Ministry of Transport's advisory council's recommendation to start a debate on noise compensation payments (Raad V&W 2005).
- See note 14. WECPLN = dB (A) +10*Log N -27. The noisiest category is 95, near the runway, where there is compensation of building relocation and land purchase by the government, as well as government maintenance of green spaces. WECPLN of 90 is compensation of building relocation and land purchase by the government. WECPLN 75 is the category of noise protection subsidies for construction, and residential use has to be protected. WECPNL under 70 is suitable for living (Chiba Prefectural Government 2005).
- 18 The planning directive used is the aanwijzingsbesluit. The gedoogbesluit for the airport tower is a temporary allowance for construction with a period of time allowed for arranging the necessary legal documents.
- 19 Airport Development Law available at: http://nippon.zaidan.info/seikabutsu/1996/00607/mokuji.htm [access 12 May 2006]
- 20 Haarlemmermeer in the Randstad planned new large-scale housing areas near the noise contours; Dutch environmentalists planted the Bulderbos forest; Kelsterbach in Rhein-Main allowed expansion of the Calthex factory sites to avoid new runway approaching routes; and farmers in Narita refused to sell their land for runway enlargement.

