A Transaction Cost Analysis of Scheduled international Air Transport of Passengers

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Chapter V - Comparison of the Bilateral and Community structures

5.1 - Introduction

Section 2.7 described three alternative governance structures, namely non-specific, semi-specific and transaction-specific. The purpose of the analysis performed below is to allocate the exchange of air transport rights to the governance structure that concludes and executes this transaction in a way that is both effective and transaction cost efficient. The exchange of air transport rights was defined in Chapter I as the right to enter an air transport market, to use foreign airspace for traffic and transport purposes and to capture the benefits flowing from that use. Chapters III and IV described two alternative governance structures, namely the Bilateral and the Community structures, and the process that generally guides such transactions. These chapters concluded that each structure is a hybrid between a transaction-specific structure called the ‘State’ and the semi-specific structure of regulation. The state as a party to the transaction has elaborate powers in exchange for which it must pursue social welfare. The ‘State’ as a governance structure has certain features that enables the state to do so. For instance, the state’s monopoly in violence enables it to coerce others. The attainment of social welfare is difficult to measure, however, because it covers many individual objectives. On this account, it was decided in Chapter II to measure the effectiveness of the State via a translation of the state’s objective (based on, for instance, policy documents and legislation) into concrete requirements. More specifically, the state’s social welfare objective has been treated as a collection of sectoral goals, of which the air transport goal has been translated into detailed subgoals. These have been formulated in terms of requirements that must be included in any interstate agreement and that must be met by airlines and airports. The effectiveness of a governance structure is the extent to which instruments and mechanisms derived from the structure lead the industry to meet the given requirements. The transaction cost efficiency of the structure is evaluated in terms of the transaction costs that are incurred to meet the requirements. These costs, in turn, depend on the core dimensions of the transaction. The entire analysis is conducted from a qualitative perspective, focusing on the abstract nature rather than exact size of the various interactions.

The air transport goal of the Netherlands has been defined as the realisation of a ‘selective network’ of airlinks to and from the Netherlands. It comprises the creation and operation of an air transport network that contributes to the psychological goal of national prestige, the financial goal of generating (tax) income and derived benefits, the political goal of maintaining good interstate relations and various social goals, of which environmental protection is the most important. Section 3.3.1 noted that the goal contains elements of selection and differentiation. In the presence of scarce environmental and airport capacities the state aims to select the transaction partner that economises on these resources. The elements of the air
transport goal that fall into the domain of social welfare are environmental protection, the facilitation of transport and trade, which creates new business opportunities, the protection and enhancement of efficiency, and any public service element. In translating the air transport goal into specific requirements, the state focuses on the following areas:

1. traffic volume,
2. fleet composition, and
3. market behaviour.

The analysis below builds on the description of the Bilateral and Community governance structures and the transaction process given in the previous chapters. The analysis will take place from the viewpoint of the Netherlands, as a Member State of the European Community. The chapter is organised as follows. Section 5.2 describes some characteristics of and trends in the industry. Section 5.3 applies the determinants of the core dimensions identified in Chapter II to the context of air transport, Section 5.4 looks at the features of the Bilateral structure, and Sections 5.5 and 5.6 discuss the effectiveness and transaction cost efficiency of this structure. The same is done for the Community structure in Sections 5.7, 5.8 and 5.9. Finally, Section 5.10 answers the questions of which structure is more effective and which structure is more transaction cost efficient.

5.2 - Characteristics of and trends in the air transport industry

5.2.1 - International nature

Air transport is an important industry for the Netherlands, given its traditionally open economy and strong service sector. In 1999, approximately 56% of the passenger traffic at Schiphol airport was subject to the Community structure, which means that the remaining 44% was subject to Bilateral and Open Skies agreements (e.g. with the United States and Singapore)1. Domestic transport accounts for less than 1%. These numbers illustrate the international nature of air transport services.

5.2.2 - Co-operation

A second feature of the air transport industry is strong co-operation. There are close relationships between the state and the airlines and airports, as well as various co-operative agreements between industry players. An important role is played by airline alliances. The term ‘alliance’ is generic, with no precise definition. It can mean some degree of equity ownership, but more often it is interpreted in looser terms. Alliances may take many forms, such as code sharing,

1 Supra, p. 99.
blocked space agreements\textsuperscript{2}, frequent flyer programmes\textsuperscript{3}, scheduling agreements, joint marketing agreements, service agreements and purchasing agreements. Joint marketing agreements especially, such as the Sabena-Swissair alliance known as ‘Qualiflyer’\textsuperscript{4} or the ‘Star Alliance’\textsuperscript{5}, are important because the requirement of substantial ownership and effective control generally prohibits conventional corporate mergers. The Northwest-KLM alliance is an example of an alliance that is based on a significant share transfer\textsuperscript{6}.

Co-operation among airlines is stimulated by various factors, such as institutional factors, the existence of scale-related economies and strategic behaviour. Institutional factors include the fair and equal opportunity requirement prevalent in Bilateralism. This requirement has motivated joint efforts to circumvent some of the limitations created by states and to secure access to otherwise closed markets. Second, the Bilateral policy of single designation has divided the market at the route level into a duopoly. In addition, when states believe that the principle of fairness and equality is not being met in practice, they can impose a 50-50 division of traffic by requiring the carriers to enter into a pool agreement. Liberalisation is a third institutional factor inducing co-operation as it can reduce the uncertainties and risks associated with free markets. The past ten years have shown a widespread emergence of significant airline alliances, extending far beyond the more traditional pool or marketing agreements.

Air transport exhibits economies related to the nature and size of operations (Berechman and De Wit, 1996: 253, OECD, 1997: 58, Button et al., 1998: 16-17). International airlines produce a range of outputs: they usually operate more than one service on any city-pair route and provide a number of interconnected routes. Co-operation with the aim of combining routes enables the creation of scale-related economies, such as economies of scope, density and experience. There are economies of scope if the total cost of producing multiple outputs (e.g. both scheduled and chartered services) using a single firm is less than the total cost of producing each product separately using different firms. These economies arise from the

\textsuperscript{2} A blocked space agreement is a contractual arrangement between an airline and a third party, e.g. a travel agent, tour operator, freight forwarder or another airline, whereby a specified number of passenger seats or amount of cargo space is allocated between two or more points on a carrier’s route for a given period of time. A code-sharing agreement is a variation. In essence, this is an agreement between two airlines by which an aircraft from one airline operating a given flight carries its own flight number as well as that of the other airline, thus allowing the non-operating airline to sell the flight as its own. The agreement may include the sale of an agreed number of seats. Code-sharing frequently includes scheduling, whereby schedules are co-ordinated so that two airlines feed traffic to each other (Groeneveld, 1996).

\textsuperscript{3} A frequent flyer programme is an incentive programme, whereby a frequent passenger is rewarded for accumulated mileage with free or discounted travel privileges on future flights. This type of travel incentive programme may vary across airlines and participation might involve non-airline parties, such as hotels or car rental companies (ibid.).

\textsuperscript{4} At the time of writing, Qualiflyer consisted of Sabena, Swissair, TAP, AOM French Airlines, Turkish Airlines, Austrian, Crossair, Laudam Air, Tyrolean, Air Littoral and Air Europe.

\textsuperscript{5} At the time of writing, Star Alliance was formed by Air Canada, SAS, Lufthansa, Thai Airways, Varig, Air New Zealand, All Nippon Airlines, Ansett Australia and United Airlines.

\textsuperscript{6} This alliance was the first major international alliance given anti-trust immunity by the United States (Button
opportunity to concentrate resources and better utilise crew and aircraft in a network type of operation, such as a hub-and-spoke system. In addition to the cost savings that these systems generate, they are used to create a diversity of services, thereby increasing market visibility and enhancing the attractiveness of frequent flyer programmes. As a result, hub carriers can realise additional income and reach a level of service that rival airlines not operating from a hub cannot easily match. Hub-and-spoke systems thus form an effective barrier to entry (Williams, 1993: 18, 28, 53). Apart from scope effects, the air transport industry also seems to exhibit economies of standardisation, i.e. economies in operating a standard fleet of aircraft, as well as considerable economies of density. Economies of density exist when unit costs fall as the size of the market increases. They stem from the ability to use larger aircraft that are cheaper to operate per seat kilometre and that can offer more frequent services (OECD, 1997: 59). Finally, incumbent carriers often benefit from economies of experience, which capture goodwill, knowledge and organisational skills (ibid.: 60).

Extensive regulation in domestic and international air transport markets of routes, market entry, capacity and fares has created considerable sources of economic rents. The consequent moves to liberalise the industry have threatened those rents, motivating the airlines to limit competition through strategic alliances (Youssef, Hansen, 1994).

While institutional factors may stimulate co-operation, they may also complicate co-operation. In many instances states interfere in negotiations because of the special rights that have been granted to airlines and the nationality requirement. In addition, different rules govern the foreign ownership of airlines. Principles are tempered in practice, allowing some investment and a measure of foreign influence when it can be politically supported (Havel, 1997: 65, 77-78), perhaps because the trade partner is important. The US DOT, for example, allowed a continued designation of Aerolíneas Argentinas, although the nationality requirement was no longer met (see Section 3.3.2). In some cases the states have linked their approval of an alliance to Bilateral negotiations. The Northwest-KLM alliance, the Lufthansa-United alliance (ibid.: 2.5.2.1.2, 2.5.3.1, 107, 116) and the OneWorld alliance between American Airlines and British Airways are illustrations.

Co-operation may be easier to realise when states have a common set of rules. Thus, the harmonisation of rules on proposed co-operation agreements in the EC may facilitate co-operation. Chapter IV observed that co-operation among European airlines has been a familiar feature for many years, reflecting a common background and close trade relations. The introduction of the Community structure has stimulated and facilitated co-operation further. Some contributing factors are the harmonisation of rules more generally, the right of establishment and the introduction of the Community carrier concept. However, the reasons

et al., 1998: 100, 103-104, 109).
for alliances listed earlier suggest that these factors alone do not determine the form, success, or members of an alliance. The nationality requirement still applies to Bilateral traffic and third countries may resist the transfer of Bilateral rights to a carrier that is no longer substantially owned or effectively controlled by its contracting partner. Member States may be afraid of losing control over their carrier. The fear of a ‘Dutch invasion’, for example, has prevented the possibility of a share transfer under the KLM-Alitalia agreement. At the same time, most Community carriers already had agreements with carriers from third countries. The investments in these relations constitute sunk costs and limit the opportunity of switching to a Community partner. Furthermore, an intercontinental partner offers better prospects for network synergies. In practice therefore, existing alliances are mostly structured around a number of large airlines which form the core of the alliance and give global reach. Usually, one airline is American, at least one is European and one Asian. The most important members have tended to be the major United States carriers, which in 1998 held 34% of the total volume of scheduled passengers, freight and mail service (ICAO, 1998b). Finally, the competition provisions of the EC Treaty may prevent co-operation. Section 3.3.2. noted the dissolution of the agreement by which KLM would obtain the remaining part of Martinair shares because of the conditions that would be tied to the acquisition. The most obvious example of European co-operation is ‘transborder franchising’, whereby a carrier is (partly) owned and effectively controlled by a carrier from another Member State. An example is the arrangement between Deutsche BA and its franchiser, British Airways, which has a 65% shareholding (ICAO, 1998a: 18). The Dutch airline ‘BASE’ is another franchisee of British Airways, but this agreement is not based on any shareholding.

The airline alliances and their dynamic nature also motivate co-operation between airlines and airports. One consideration is the enormous influence that the formation of alliances can have on the traffic flow at an airport. Changes in the number of destinations served, the mix of long-haul and short-haul services and passenger throughput can be significant for a hub airport (Arthur Andersen, 1999) and demand closer co-operation between industry players. Another reason for co-operation is that strong growth in air travel is generating capacity problems. The airports are seeking commitments that will guarantee a fair return on any new investments. At the same time, the airlines are facing fiercer competition in a liberalised environment and are exerting pressure on airports to reduce charges. Co-operation might thus be aimed at spreading risk, improving efficiency or introducing innovative charging structures. One example is the Dutch Optimisation strategy, whereby the main Dutch airlines, Dutch Air Traffic Control and Schiphol airport meet frequently to co-ordinate actions. Another example is the ACI-AEA project on the development of standard airport use agreements (see Section 4.5.8). Again, EC competition law may pose a constraint. In line with the development of airline networks, co-

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7 On international services, United States carriers accounted for 18% of all traffic.
operation among airports has also increased. Examples include the position that BAA is establishing in Europe and the rest of the world. Schiphol airport is also pursuing this strategy with shareholdings in New York and Brisbane. Alliances between airports are scarce. There is an agreement between Schiphol and Vienna Airport, with a 1% shareholding as well as a master agreement. In 1999, Schiphol entered into an alliance agreement with Frankfurt.

5.2.3 - State intervention and deregulation

Another feature of air transport is a high degree of state intervention. Section 3.3 listed the reasons for state intervention in air transport, including the existence of negative externalities. There are two other types of market failure associated with air transport. These are information asymmetries and market power (Schipper, 1999). Travellers, for example, are limited in their ability to compare airline services, especially if computerised reservation systems are biased towards a certain airline. Market power can stem from technology and from entry barriers caused by congestion, the ownership of computerised reservation systems and strategic airline behaviour (ibid.: 21). As an example, the airline alliances discussed in the previous section may restrict competition and encourage higher fares and poorer service, as has happened in some instances in the deregulated United States air transport market. These market failures are a reason for state intervention. One form of intervention is regulation. Some regulations formulate requirements in the areas of market entry and the conduct appropriate to market participants. Information asymmetries are a source of safety regulation as well as regulation to protect the general public. Regulatory instruments include permits, price regulation and competition policy. In many cases regulation has taken the form of restricting competition (ibid.: 91). Intervention designed to handle externalities includes direct regulation (e.g. noise contours) and sometimes charges (ibid.: 12). The level of regulation is determined by more than market imperfections alone. Political and financial objectives in the area of trade also play a role in regulatory decisions, as does the widespread perception of air transport as a public service that must be provided to the community (among others: Wheatcroft, 1964: 46, Fennes, 1997: 65-66). Finally, regulators often show a proclivity to expand the reach of regulation thereby including ancillary activities. On their part, regulated companies want to protect their economic rents and generally defend regulation.

The state also holds important property rights to the airspace above its territory and any state wishing to use the airspace of another state needs to obtain the approval of that state. In other words, a transaction between states has to occur. The states entrust the airlines and airports with the special rights needed to execute the transaction. Furthermore, the state often

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8 The existence of multiple market failures has implications for public policy. The welfare gains of higher output due to liberalisation may have to be traded off against welfare losses to agents that incur output related environmental damage (Schipper, 1999: 91).
holds shares in airports and airlines. Each of these factors makes the state a crucial market player.

Over the years, state involvement in air transport and the extensive level of regulation have come under scrutiny and have been reduced as a result. An example is the United States market, which was deregulated more than twenty years ago. The Community market has also been opened up to more competition, but in this structure the states have retained a greater influence. They also opted for a more gradual liberalisation process, beginning in the late 1970s and lasting until 1997.

5.2.4 - Industry environment

Section 2.6 introduced the industry environment as a factor influencing the performance of a governance structure. This section will discuss some elements of the industry environment.

At the start of the deregulation process in the United States, some economists opined that the air transport industry was a ‘contestable market’, i.e. a market where economies of scale and scope may exist, but barriers to entering or leaving the industry are absent. Any such barriers result from regulation, physical factors, and special costs or investments that cannot be recouped at the time of exit. Potential carriers have the same information as incumbents, they use the same production methods and face the same demand conditions. A new firm looks at the possibility of entry on the basis of the existing price level. Entry occurs when the carrier expects that it can charge a lower price, whilst still covering costs. If incumbents respond by lowering their prices, exit is possible without any loss of investments made. For instance, aircraft can be sold at the time of exit or used on a different route. Under these circumstances, the potential threat of entry and hence competition has a disciplinary effect on the incumbents, since too high a price will attract entry, and can generate performance that maximises market welfare (Morisson, Winston, 1997: 484). A further test of these criteria and the experience with US deregulation, however, have shown an absence of contestability (among others: Barrett, 1993: 104, Williams, 1993: 34, 58-59). Before an airline can enter a new market it has to establish a relationship with the state and acquire a permit. It also has to organise capacity, which is difficult because the interdependence of the frequencies operated in a network reduces the opportunity to reallocate aircraft to another route. Market entry includes the need to make non-trivial unrecoverable investments in advertising, initial operations and facilities in order to assemble the gates and landing slots required in a hub-and-spoke system (Oum et al., 1995: 840). In addition, a hub-and-spoke system enables a hub carrier to dominate the hub and to behave strategically (Borenstein, 1989, Oum et al., 1995). Important barriers to entry and exit thus exist. Airport investments constitute an even higher barrier. Providing landing and take-off facilities requires the airport to make substantial specific investments, which can only be recouped if there are sufficient air transport operations. The state in turn has to make
significant investments in the ground infrastructure and facilities for ground transportation around the airport. These factors reduce the disciplinary effect from any potential competitors, making actual competition more important in securing economic efficiency. At best, the industry is imperfectly contestable.

The air transport industry has also been studied using core theory. This approach focuses on cost and demand structures as determinants of market structure. An empty core arises whenever capacity (defined as the output associated with the minimum short-run average cost) in the industry exceeds the quantity demanded at the price equal to that minimum average cost. Competitive equilibrium in such an industry requires that at least one firm shut down in the short run, with the resultant price above minimum average cost. As a result competition may be destructive and may not lead to an efficient outcome (among others: Telser, 1978, Button et al., 1998: 122-123, 158). Competition might be destructive because firms may be led to reduce prices to cover only marginal costs in order to drive out rivals, thus weakening themselves. As an example, suppose that there are indivisibilities in supply: a route would ideally be served by 1.5 planes of a given size but obviously only 1 or 2 can be used. In this case, one airline may offer the service and obtain high profits on its daily flight but, in doing so, attract a second carrier. Two carriers cannot generate sufficient revenue to maintain a viable operation and so one or both drop the service. If the carriers have rational expectations, no carrier will even start to offer a service knowing that the probable outcome will be destructive competition. In such a case the core is said to be empty. A number of conditions need to be satisfied to generate an empty core. For instance, demand has to be divisible, and capacity indivisible. Furthermore, entry has to be restricted. Empirical tests in the air transport market by Button (1996) and Button et al. (1998) have given only tentative support for an empty core. They do opine, however, that the concept of the empty core is implicitly present in recent air transport debates in the European Community, and in some regulatory instruments, such as the block exemptions enabling co-operation and the opportunity provided by Article 9 of Regulation 2-408/92 to freeze capacity when there is a structural market disequilibrium.

The air transport market is not contestable and (presumably) does not have an empty core. Analyses by, among others, OECD (1997) have found that the industry has features enabling it to function sufficiently well (in terms of market clearance) if left to competitive devices. The most realistic characterisation may be that, on the basis of cost structures and demand characteristics, the air transport industry seems to work more or less like a competitive market (Forsyth, 1998)¹⁰.

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⁹ The entry and exit barriers faced by the industry are similar to the notion of asset specificity as defined in transaction cost analysis (Baumol et al., 1982, Zajac, Olsen, 1993: 136).

¹⁰ Various documents (for example, OECD, 1997, Button et al., 1998: 19, 116) use the term 'workable competition' to characterise the functioning of the air transport market. There are, however, 'as many definitions of this term as there are workable economists' (Henripin, 1966: 19-21, referring to Mason, 1957)
5.2.5 - New market players

A final industry trend is the emergence of low fare carriers, such as Ryan Air and Easy Jet. Unlike traditional carriers, these carriers consider prices as the main instrument of competition. Low fare carriers do not offer many of the service elements provided by traditional carriers, so as to avoid costs that cannot be recovered through their pricing structures. Thus, they operate direct short-haul services on very tight schedules and focus intently on cost containment through a rapid turnaround of aircraft, an approach that is essential to achieving a sustainable competitive advantage. From an airport management viewpoint, the network and low fare carriers have different needs. Network carriers look at airport services from a broad perspective (which includes quality), whereas low fare carriers are primarily interested in costs. Their operations have exacerbated current capacity problems and have contributed to the complexity of the environment.

Having described some features of and trends in the air transport industry, the analysis now turns to the core dimensions in the context of air transport.

5.3 - Core dimensions

Chapter II described an integrative framework of analysis, in which the core dimensions of the transaction were identified and analysed in terms of their determinants. The description of the Bilateral and the Community governance structures in the last two chapters permits the application of this framework to air transport. The following table applies the abstract description of the determinants in Sections 2.4.1-2.4.5 to the air transport context.

<table>
<thead>
<tr>
<th>Determinant</th>
<th>Application to air transport</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perishability</td>
<td>Rights to use foreign airspace</td>
</tr>
<tr>
<td>Existence of alternatives / competition</td>
<td>Alternative suppliers of freedom rights, conditions attached to (the use of) those rights</td>
</tr>
<tr>
<td>Dynamism of the environment</td>
<td>Changes in balance between originating and destination traffic, travel trends, instability of alliances, institutional reform</td>
</tr>
<tr>
<td>Flexibility of the relationship</td>
<td>Ability to tailor rights and obligations into unique relationship, rigidity of agreement,</td>
</tr>
</tbody>
</table>

and the term lacks a clear and unambiguous meaning. For this reason, the term is not used in this thesis.

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<table>
<thead>
<tr>
<th>Complexity of the transaction</th>
<th>including ability to amend agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information gathering capacity</td>
<td>Predicting demand, interpreting objectives, coalition formation, barter, (absence of) uniform rules</td>
</tr>
<tr>
<td>Information processing capacity</td>
<td>Existence of sources of information and mechanisms for collecting information, accessibility of information</td>
</tr>
<tr>
<td>Scope of the relationship</td>
<td>Organising contact and contract phases, co-ordinating between various branches of government and industry, interpreting policy goals</td>
</tr>
<tr>
<td>Susceptibility to lobbying</td>
<td>Extent to which states depend on other states as a source of supply, extent of hold-up in state-industry relationships</td>
</tr>
<tr>
<td>Technical necessity or regulation</td>
<td>Institutional environment, room for interest group representation, intensity of state-industry relationships</td>
</tr>
<tr>
<td>Institutional guarantees</td>
<td>Requirements on runway layout (length, location), facility layout, equipment, nature of operations</td>
</tr>
<tr>
<td>Perceived fairness of the transaction</td>
<td>Symmetrical access to information, enforcement system, mutual exposure to risk of deviation</td>
</tr>
<tr>
<td>Net gains from opportunistic behaviour</td>
<td>Interpretation of reciprocity requirement, conditions attached to use of air transport rights</td>
</tr>
<tr>
<td>Harmonisation of interests</td>
<td>Trade diversion, loss of future trade opportunities, mutual dependence on continuation of trade</td>
</tr>
<tr>
<td>Control</td>
<td>Overlap between objectives of states or of state and industry</td>
</tr>
</tbody>
</table>

Table 5.1

Although the air transport sector can be governed in a variety of ways, the present thesis is
limited to an analysis of the Bilateral and the Community governance structures because these
are the most important structures for the Netherlands. The following sections analyse each
structure in terms of its features and the implications of these features for the effectiveness and
transaction cost efficiency of the structure.

5.4 - Features of the Bilateral structure
Chapter III described the Bilateral structure and transaction process. This section highlights the
essential features of that structure:

1. Sovereign states and agreements based on equality,
2. Reciprocity requirement,
3. Allocation of property rights to states,
4. Multiple state goals,
5. Informal transaction process, emphasis on relationships,
6. Secrecy,
7. Barter exchange via a treaty,
8. Two party agreements,
9. Flexible negotiations, rigid agreements and
10. Compliance mechanism dominated by non-legal enforcement.

The following briefly expands on each of these features.

**Sovereignty and equality of states**
Bilateralism proceeds from the notion that participant states are sovereign and that explicit
approvals are needed to use foreign airspace. States are considered equal, regardless of any
differences in wealth, population or natural resources.

**Reciprocity requirement**
In line with the principle of equality, exchange has to be reciprocal. This is exemplified by the
requirement of a fair and equal opportunity, which takes into account potential third freedom
traffic (i.e. traffic from the flag state to the grantor state). This requirement is often interpreted
as a need to reach an equal outcome, but even when a looser interpretation applies, there must
always be some form of equality (Havel, 1997: 195). A quid pro quo requirement can also be
derived from the regulation of cabotage or foreign ownership.\(^{11}\)

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\(^{11}\) Havel (1997: 79) cites an article in Airline Business (1993) reflecting airline comments on the attitude of the
US in negotiations with the UK, when the US applied the nationality requirement to a BA shareholding in US
Allocation of property rights to states
States hold the property rights to the airspace. These rights have to a very limited degree been delegated to industry players. The rights to use the airspace and to capture the resulting benefits are divided into eight different rights.

Multiple state goals
The states’ air transport goals derive from their obligation to promote social welfare. The objective of the Dutch state has been identified as the creation of conditions that are favourable to realising an efficient and effective air transport sector and that will optimise a selective network of air links. The selective network goal captures psychological, financial, political and social subgoals.

Informal transaction process, emphasis on relationships
The Bilateral transaction process has a diplomatic character and is thus relatively informal. Negotiations are not limited in time and factors such as credit, confidence, consideration, politics and compromise are important. There is a strong emphasis on relationships. For instance, the interpretation of a fair and equal opportunity, the interpretation of the nationality requirement, and the level of foreign ownership that is allowed in an alliance may all be tailored to the interstate relationship.

Secrecy
Notwithstanding the compulsory registration of every Bilateral with ICAO, secrecy is a feature of Bilateralism. It is reflected in the lack of formal position papers at the start of negotiations, the incomplete provision of information to parliament at the moment of domestic approval, as well as the use of secret Memoranda.

Barter exchange
Exchange occurs via a treaty without a separate medium of exchange (such as a form of money).

Two party agreements
The Bilateral involves only two parties.

Flexible negotiations, rigid agreements
Bilateralism is a flexible structure because contracting is relational (an aspect of its transaction-
specific character) and because of the two-party element. The content of Bilateral agreements can vary significantly from very liberal to very restrictive. At the same time, Bilateralism is a rigid structure. It focuses on two-party negotiations and so precludes the accommodation of international network traffic flows, which are multilateral by nature; it imposes the requirement of a fair and equal opportunity; and it lacks mechanisms that facilitate adjustment to changes in the environment.

Compliance mechanism dominated by non-legal enforcement

The Bilateral is governed by multiple systems of international and national rules. In addition to differences in content, the record of enforcement differs across states. The parties may use a variety of instruments to stimulate compliance. Because of the sovereign nature of states, an external enforcement system is largely absent and disputes are resolved via non-legal methods. The relationships with airlines are close and long-term, power is distributed evenly, and disputes are therefore primarily solved through negotiation. Legal enforcement features more often in the state-airport relationship.

The implications of these features for the effectiveness and transaction cost efficiency of the Bilateral structure will become apparent in the next two sections

5.5 - Effectiveness of the Bilateral structure

The assignment of property rights to the state in the Bilateral structure gives the Dutch state control over the transaction process and enables it - at least in theory - to realise its selective network goal. Certain features of Bilateralism enable the state to impose requirements on the industry and foreign state and to use various instruments optimally and thus realise all its subgoals. More specifically, relational contracting, barter and secrecy enable the state to differentiate its relations with other states. The limited number of people participating in the exchange also enhances the state's ability to prepare and co-ordinate the entire negotiation process. The state can thus negotiate Bilaterals selectively. The state can also specify how air transport services are to be provided by stipulating in the agreement the nature of equipment or time of operation. In this way, the state can make progress towards the important social goal of environmental protection. In addition, Bilateralism enables the state to pursue the psychological goal of prestige, although this subgoal is less important than it used to be. The two-party nature of Bilateral agreements limits the number of people taking part in the exchange, which fosters a close bond between the state and industry and so contributes to the nation's prestige. The nationality requirement applicable to the flag carrier strengthens the bond between state and industry even further.

However, relational contracting and the feature of reciprocity imply that a state's political
weight and bargaining power influence actual demands made in negotiations and thereby the content of Bilateral agreements (e.g. equipment specifications). This is disadvantageous to those states that lack physical, economic or political size. They are limited in their ability to force other states to use certain equipment, prescribe the destination airport or the time of operation. A small capacity of originating and destination traffic, coupled with a strict interpretation of the reciprocity requirement, may also limit the state’s ability to attain the financial goal. A further weakness of Bilateralism that has implications for all of the state’s goals is the system’s rigidity. Although the negotiation process itself is flexible, new agreements are concluded infrequently and existing agreements are difficult to amend. As a result Bilaterals concluded earlier are not geared towards goals introduced in later years. Thus, in the Dutch case, some Bilateral agreements may lack clauses aimed at environmental protection and may therefore fail to reflect this social goal.

Small size and a lack of economic importance notwithstanding, the Bilateral structure has allowed the Netherlands to build a strong position in air transport. The country’s size disadvantage has been partly offset by good co-ordination, the informal nature of the transaction process and compliance mechanisms, a creative negotiating strategy and by barter exchange, which has enabled the use of non-aviation quid pro quos. These features have also allowed the state to negotiate requirements that target environmental protection. It has been more difficult to compensate for a lack of equality in traffic potential. A creative approach towards freedom rights (e.g. devising the sixth freedom right) has contributed to a successful transfer concept, which is essential to the operation of hub-and-spoke networks. The country’s preference for liberalisation has been especially important in making the Netherlands an attractive partner for some stronger countries that, because of their strength, have been unable to conclude liberal Bilaterals with larger countries. This has partly compensated for the lack of traffic potential.

An important contributor to this success has been the US encirclement strategy (see Section 3.2), which made the Netherlands an attractive partner for an Open Skies agreement with the US. Havel (1997: 403) points out that the encirclement strategy has led to a ‘KLM syndrome’12. In 1999 passenger travel on the North Atlantic route accounted for 14% of the passenger traffic at Schiphol airport, which is far higher than traffic to and from Asia (8%) or Africa (4%) (Amsterdam Airport Schiphol, 2000). However, the Open Skies Bilateral differs considerably from the traditional Bilateral. In particular, there are no restrictions on such variables as price and quantity. When the contribution of the Open Skies agreement is excluded, the Netherlands’ lack of physical and economic size has limited the country’s ability

12 DOT, Issues Papers, International Aviation Policy - US Negotiation Policy, in Airline Commission Documents, Dkt. No. 000000, at 75. This syndrome derives from the fact that small countries welcome US entreaties to sign pro-competition agreements, while major players, defending inefficient flag carriers, shun the open skies promised by liberal Bilaterals. US carriers then face intensified competition from well-positioned smaller country carriers, without compensating access to larger, more lucrative gateway markets.
to attain the financial goal.

The need for reciprocity does not play a role in the state-industry relationship. The Dutch state’s position in air transport has been enhanced by the strong performance of and good coordination with the industry. The state’s control over the property rights to airspace enables it to formulate requirements that must be met by the industry during the execution phase. Tight state control as well as interest harmonisation through interdependencies and close relations put the state in a position to realise its air transport goal. In particular, the state and industry have similar financial objectives, and close relations, sometimes based on ownership, induce the industry to incorporate the other subgoals into its continuity objective.

5.6 – Transaction cost efficiency of the Bilateral structure

The transaction cost efficiency of the Bilateral structure will be analysed in terms of the core dimensions and their determinants.

5.6.1 – Transaction frequency

The determinants of the transaction frequency were identified in Section 2.4.1 as the perishability of the object exchanged, the existence of alternative sources of supply, the dynamism of the environment and the flexibility of the transaction process and agreement.

The transaction involves the exchange of air transport rights, which can be effected over an indefinite period of time. Unlike the transport services governed by these rights, the rights themselves do not perish. If an agreement is re-negotiated, it is not because a right has ceased to exist in any physical sense. Furthermore, the idiosyncrasy of the interstate relationships and differences in the value attached to these relationships imply that a Bilateral with one state cannot be considered a substitute for a Bilateral with another state. Likewise, a traveller typically needs to arrive at a specific destination for which there are no close substitutes. These factors limit the availability of alternative sources of supply and the degree of competition. Some competition exists among small states in their air transport relations with distant states, because in such situations the time needed to travel to an airport in a neighbouring state will not weigh heavily in the choice of route. The airports of Brussels and Schiphol and thus the states of Belgium and the Netherlands are competitors to some extent. A similar reasoning applies to alternative transfer locations in the case of sixth freedom traffic. The facilities for such activities at Schiphol airport and the KLM network contribute to a significant extent to the Dutch air transport position and take away some traffic from neighbouring states. Ultimately, however, no state will be motivated by competition to completely substitute one Bilateral relationship for another.

These factors generate a low transaction frequency and long-term agreements, which
induces states to expend considerable resources during the contact and contract phases to secure a good position during the execution phase. Bilateralism makes this possible because the contract phase is governed by diplomacy and negotiations are not subject to any time limits. Furthermore, negotiations are complicated as barter trade entails difficult comparisons of the nature and value of the various rights being exchanged (OECD, 1997: 92). Practice shows that negotiations tend to be long. States will therefore incur considerable ex ante transaction costs.

Section 2.4.1 also made clear that a long-term agreement enables low ex post transaction costs. The long duration eliminates the need to negotiate and draft new agreements, while ongoing relationships foster trust and so enhance self-enforcement. Environmental dynamism is one important variable determining whether ex post transaction costs will in fact be low. Liberalisation and changes in patterns of travel make the air transport environment very dynamic. As a result, after a Bilateral has been operative for some time, the actual division of traffic will frequently no longer reflect the terms agreed. Although airline pool agreements may capture some inequalities, any substantial divergence will often require an adjustment in the states’ positions. If this is not possible, the states have an incentive to deviate from the agreement. It is therefore important that the interstate relationship (i.e. the transaction process and the ultimate agreement) should be flexible.

The description of the transaction process in Chapter III shows that the contact and the contract phases are very flexible. The quid pro quo requirement, however, causes rigidity. Furthermore, the two-party structure of Bilateralism cannot accommodate multilateral route networks. For example, a state may acquire fifth freedom rights, but it cannot use them unless they are also specified in the Bilateral with the third country in question\(^\text{14}\). Most importantly, once a Bilateral is entered into, it is not easy to amend the agreed balance of rights and obligations. Section 3.5.3 noted that the ease of amending the Bilateral agreement is influenced by the mechanisms available to guide the process. Any mechanism should protect parties against manipulation. Short of a full re-negotiation, the states are essentially limited to the use of Memoranda and ex post facto review clauses. The latter mechanism is an objective mechanism and thus provides protection, but the use of the mechanism has decreased, while the more widely used Memorandum carries the risk of manipulation. On the whole, it is not easy to amend agreements, providing the transacting parties with an incentive to deviate. Compliance monitoring is therefore important, contributing to ex post transaction costs.

At the level of the airlines and airports, the contact and contract phases do not generate high costs. Although airlines actively prepare for and participate in negotiations, it is the CAA

\(^{13}\) Competition might, however, influence the frequency of operations agreed within one Bilateral.

\(^{14}\) Another example is cabotage. Most states refuse to grant any state the right of cabotage because they fear that every other state will then automatically claim the same right.
that leads the negotiations. The airport's role is limited. Moreover, the element of regulation that characterises state-industry relationships facilitates adjustment to any new Bilateral agreement. The costs are limited to an amendment of the permit. KLM is exempted from even this requirement (because of its open permit), as is the airport. Despite the ease of adjusting relations with the state, industry players, like the state, are severely limited by the rigidity of Bilateral agreements and are prevented from making the changes needed in a dynamic industry. Two inhibiting factors are the Operations Plan and slot allocation at Schiphol. They prevent not only the airport but also carriers operating at Schiphol - home carriers especially - from adjusting their operations whenever there is a change in the environment. The transaction costs from executing the agreement are commensurately high.

In conclusion, a low transaction frequency and an absence of procedures and negotiation deadlines contribute to high ex ante transaction costs. The long-term interstate relationships reduce the need for new transactions and create opportunities to build trust, so that ex post transaction costs tend to be relatively low. However, the dynamic nature of the industry and the rigidity of agreements make it less likely that agreements are self-enforcing. Frequently, actual conditions will eventually start to diverge from the terms of agreement made, but amending agreements to bring them back into line with reality is difficult. The consequent friction increases the need for monitoring and so raises ex post transaction costs. The industry also incurs significant costs during the execution phase. Both the state and industry players thus face high transaction costs on account of the frequency variable.

5.6.2 - Uncertainty

The determinants of uncertainty were identified in Section 2.4.2 as the complexity of the transaction, the dynamism of the environment, as well as the information gathering and information processing capacities of the parties. Bounded rationality will also be treated in this section given its close link with the concept of information processing capacity (see Section 2.4.4).

The Bilateral transaction is complex for a number of reasons. Contracting states have multiple goals that are often vague, the wide differences between states increase the likelihood that statements made in negotiations are vague and general, and there is an absence of rules structuring the transaction process. Moreover, the feature of barter trade frequently makes the elements of an agreement hard to measure. This not only complicates negotiations but impedes monitoring and creates considerable uncertainty during the execution phase. Equally complex is the process of predicting the future development of air transport in what is a dynamic

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15 The existence of a 'slot pool' as introduced by Community legislation, enables some adjustment by new entrants. However, the party deciding the issuance of new slots is the slot co-ordinator and not the industry. Furthermore, an airline may be required to retain slots in order to protect its future interest.
environment. While income growth has traditionally been a central factor in forecasting the demand for air transport services, other interdependent factors such as the rapid transformation of the world economy, general transport trends and developments in the air transport industry itself have also started to influence that demand (Commission, 1999: 5, 7-10).16

To cope with these difficulties the state is engaged in a continuous process of information gathering and processing. The process enables the state to formulate its foreign policy, of which air transport is a part, translate its own goals into strategies that can be used in a negotiation, and form an opinion on the position of the foreign state. States are never able to meet all their informational needs. This is because interstate relations tend to be rather loose and the text of Bilateral agreements vague, while there may also be secret Memoranda with third states or secret airline agreements. The relational and diplomatic nature of the transaction process and the nature of interstate relations prevent available information from being fully exploited (Havel, 1997: 48). These findings may seem to conflict with the long-term nature of Bilateral relationships, which tend to generate ample information and high levels of trust. However, only a few states maintain close relations. Domestically, information processing entails co-ordination between various branches of government in order to prepare for negotiations. In the Bilateral structure, it is important to co-ordinate between the Ministries of Transport, Foreign Affairs and VROM. The small number of parties involved in the negotiation process and clarity on the role of the Ministry of Transport facilitates co-ordination. Sections 2.4.2 and 2.4.4 observed that the capacity to process information partly depends on the extent to which rationality is bounded. At the interstate level, bounded rationality has a strong influence. The states differ in their backgrounds, rules and traditions, and the meaning of terms used in agreements differs across domestic systems of legislation. The states have only partly succeeded in reducing the influence of bounded rationality through standardisation. Examples include the use of Standards and Recommended Practices17 and the ECAC Standard Clauses. Similarly, the IATA standard conditions were introduced to create uniformity in airline operations. Bilaterals are also standardised and often require that the official language should be English.

The complexity of the transaction and dynamism of the environment influence the state-industry relationship in a number of ways. Multiple state goals and the absence of a hierarchy of goals make the transaction complex. The state is unable to prescribe consistently the behaviour required of the industry. One cause is the Dutch 'poldermodel', which encourages compromises at the expense of clear instructions. The airlines face many technological innovations that affect their operating costs, the changing environment makes alliances

16 The existence of these factors highlights the importance of information and partly explains the airlines' widespread use of data-interchange and computerised reservation systems.
17 Supra, p. 70.
unstable, principles vary and are almost never applied in their pure form, and there are no uniform rules and conditions (apart from the IATA conditions noted above). There are, for example, different rules governing the foreign ownership of airlines so that investors are not certain as to what is allowed. The airports have to make long-term investments in a dynamic environment as well as differentiate their services to meet the needs of various types of airlines. It may seem that long-term relationships, a limited number of parties, close co-operation and clarity on roles and responsibilities should limit the effect of bounded rationality in the state-industry relationships, implying strong information gathering and processing capacities. The state-airport relationship affords good monitoring opportunities, but the state has found it very difficult to monitor the behaviour of airlines. In the absence of a hierarchy of requirements, industry players incur costs as they have to interpret the various goals and validate their interpretations. The airport especially is in a poor position to acquire information as there are no mechanisms to elicit information from the state or airline.

Internationally, the requirement of an explicit permission to use foreign airspace provides the airlines with a relatively certain operating environment. However, rights and obligations are not always explicitly laid down, and an airline starting up a new service incurs costs as it searches for information on the local environment and relevant rules. Information about rule enforcement in the grantor state is especially tricky as it does not become available until the execution phase. Although the airport is not subject to foreign rules, its long-term, capital-intensive investments create strong information needs. On the whole, the state and industry incur high transaction costs as they try to deal with uncertainty.

In brief, Bilateralism relies heavily on information gathering and processing. This is because air transport relations are a foreign policy element, because air transport services involve activities outside the state, and because the environment is very dynamic. In addition, the states are required to process multiple goals as well as the elements of what is essentially a barter exchange. Only few interstate relationships are truly close, which means that trust is generally too weak to eliminate the need for information, detailed agreements and performance monitoring. Uncertainty therefore generates high transaction costs at the interstate level.

Industry players, too, operate in a very complex and dynamic and hence uncertain environment. The airlines lack information on local conditions and gathering this information is costly because of the absence of uniformity in legislations. Despite close state-industry relations, both airlines and airports incur costs as they try to interpret the requirements imposed by the state. The state itself incurs costs as it needs to stipulate these requirements and monitor industry compliance.

5.6.3 - Asset specificity

The determinants of asset specificity were identified in Section 2.4.4 as the scope of the
relationship, the susceptibility of decision-makers to lobbying, requirements of a technical or regulatory nature, and the existence of institutional guarantees against the loss of investments. Most investments in the air transport industry do not seem to satisfy the strict definition of asset specificity, because it is often not possible to relate investments (e.g. in runways) to one specific transaction. Nevertheless, these investments are specific to air transport in that they can only be used for other purposes by incurring extra costs.

As there are no alternatives to a given relationship between states (see Section 5.6.1), the scope of the agreement is important. Even though the interstate relationships go far beyond the element of air transport, the sectoral nature of Bilateral negotiations, barter exchange and the need for an approval prior to transport may produce investments that are specific to a transaction. An investment in the form of a non-aviation quid pro quo might be made in response to a request from a state that is important politically or otherwise. An example is the air force base in Iceland, which resulted from the United States-Iceland Bilateral (see Section 3.3.1.3). Under Bilateralism lobbying at the state level is minimal and performed mainly by the Ministry of Foreign Affairs. An important factor limiting the need for transaction-specific investments by the state is the state’s reliance on airlines and airports to execute the transaction. This generally eliminates technical and regulatory specific investments at the interstate level and so also eliminates the need to protect such investments.

Specific investments play a larger role at the industry level. The Netherlands are a small country with one flag carrier occupying a central position in the industry. The single designation policy and industry shareholdings reinforce KLM’s dominant position. Similarly, only one Dutch airport has the status of ‘mainport’ and the size of the market is too small to accommodate any competitors. These factors increase the scope of the agreement and the risk of hold-up. The susceptibility to lobbying may differ among states. Lobbying is carried out mainly by the airlines in the grantor state during the contact and contract phases to increase the chance of being designated given a successful negotiation outcome. Close relations with the state reduce the need for lobbying on the domestic front. Technical requirements, however, frequently entail transaction-specific investments. Prior to a new operation, an airline has to make agreements with local parties, acquire slots, arrange aircraft capacity and rearrange flight schedules. The airport needs to invest large sums of money in terminal and runway capacity without being able to dispose of these assets. Regulatory requirements are another source of asset specificity. An important reason is that the state uses regulation to pursue its transport goal. The consequent investments are sizeable. However, the need to protect these investments is generally limited due to the existence of various institutional guarantees. To begin with, the state-industry relationships are long-term and sometimes involve ownership relations. The state and industry are also mutually dependent: the state has granted special rights to the industry
and the industry depends on the state for market access. Similarly, the state has invested in ground infrastructure, and the airport has invested in airport facilities. The state is exposed to retaliation in the interstate relationship, and the airline has to invest in the transport network. Both state and industry are exposed to the risk that the agreement will be infringed and investments jeopardised. These factors greatly reduce the need to create external guarantees (Williamson, 1999b: 138-141). Nevertheless, when significant investments are at stake, industry players might search for additional protection. In such a case they may turn to the state in particular because the state is closely involved. Protection might be in the form of financial aid, such as subsidies and loans at below market prices, or a best effort obligation on the part of the state to amend regulations. Chapter III mentioned the use of covenants to specify relationships in greater detail. By improving monitoring capabilities a covenant can offer better protection of specific investments. In the Netherlands, the PASO covenant (Section 3.3.1.2) binds Schiphol, KLM and various government players and improves the protection of investments without generating high transaction costs. In addition, the covenant offers the state an additional instrument to stimulate co-operation by the industry. The industry benefits from greater clarity on the nature of any requirements and the state’s intentions. As a result, transaction costs at the state-industry level are low.

In conclusion, the states make transaction-specific investments essentially to maintain relationships, but the size of these investments is negligible. The transaction cost effects of asset specificity at the interstate level are therefore minimal. The industry players are confronted with state-imposed requirements that target the state’s policy goals and need to make more specific investments than the state. However, close relations and mutual exposure to hold-up limit the need to protect any investments made. The transaction costs arising from asset specificity are therefore low in the state-industry relationship.

5.6.4 - Opportunism

The determinants of opportunism were identified in Section 2.4.4 as the perceived fairness of the transaction, net gains from opportunistic behaviour, the mechanisms of control and harmonisation of interests. This section will discuss opportunism in the various phases of the Bilateral transaction process.

A. - Contact phase

The Bilateral principles of reciprocity and a fair and equal opportunity seem to enable an outcome that is considered fair by both contracting states. Yet, the Netherlands do not

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18 The state’s exposure to hold-up is greatest in the relationship with the airport. This is one reason for a greater reliance on legal enforcement to secure the airport’s compliance (see Section 3.5.4).
consider a strict interpretation of these principles fair. The requirement of an explicit permission prior to any transport also reduces the element of volition in any agreement. The sectoral nature of Bilateralism enables states to identify possible gains from opportunistic behaviour relatively easy. However, the states cannot realise any gains, as they are merely surveying the possibilities of an exchange. Thus, the contact phase does not require significant control at the state level and the degree of interest harmonisation is not very important either.

During the contact phase, the potential gains from opportunistic behaviour by the airline are limited because, as noted above, the states are merely trying to determine whether there is a basis for an exchange. In addition, it is easy to monitor the airline because it actively participates in preparing the negotiations and because any information on transport opportunities or industry trends provided by the airline can be checked against alternative sources. The airline may enter into secret airline agreements but secrecy is essentially irrelevant in this phase as interests are largely harmonised. Harmonisation derives from the single designation policy, the preference for KLM, and long-standing relationships. The airlines depend on the state’s success in negotiations, while the negotiators take airline interests into account (Button, 1996: 284). Airlines will therefore often share private information to increase the chance of a successful negotiation outcome. Button et al. (1998: 164) refer to the politicians as ‘the negotiating arm of the airlines’, pointing out the overlap between the goals of the state and airlines in this phase. Section 5.2.2 further noted the close link between air transport negotiation and the formation of airline alliance. The airport does not play a role in the contact phase other than through the provision of information. Its ability to provide information selectively is limited (but not ruled out entirely) by the existence of various sources of information on airport capacity and use.

B. - Contract phase

When the transaction is concluded, the states should feel that they have reached a fair outcome. As suggested by the previous section, whether an agreement is considered fair depends on the trading partner’s attitude in formulating Bilateral conditions. A strict interpretation of the fair and equal opportunity requirement might tempt a state with only a small traffic potential to act opportunistically and so secure a larger portion of the traffic to be transported and agreed in the Bilateral. Such a state may, for instance, add the amount of sixth freedom traffic to its originating traffic to obtain the contractual right to a higher volume of traffic. Further, the difficulty of amending an agreement increases a state’s incentive to be vague about its own responsibilities and to obtain the authority to change a situation during the

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19 Section 2.4.3 mentioned that the specification of rights and obligations in agreements has the effect of raising transaction costs. In this situation the higher costs are more than compensated by better guarantees.
The contract phase gives rise to gains from opportunistic behaviour. Again, the sectoral nature of Bilateral negotiations is conducive to identifying such gains, while the limited number of people involved in negotiations facilitates domestic co-ordination and increases the chance that those gains materialise. Furthermore, the vagueness inherent in the diplomatic process governing negotiations leaves ample room for manipulating information in an advantageous way. The permanent nature of interstate relations may seem to constrain opportunism, since any current behaviour will influence the execution of the transaction (e.g. the foreign state might discriminate against the flag carrier) and may jeopardise future transactions. However, this applies only to those situations where a foreign state is important to realising the goals of the state (i.e. where the interstate relationship is valuable) and where there is a high risk of retaliation. Only here are the net gains from opportunism correspondingly low. In general, the net gains from deviation are not low enough to protect against opportunism. Notwithstanding long-term agreements, the need for prior permission to operate and equality between states, the bond between states is weak and hence the extent of mutual trust is low.

State control over the transaction tends to be limited because of physical distance and the predominance of informal over formal rules in the transaction process. Moreover, the Bilateral feature of secrecy implies that states have no knowledge of the contents of other Bilaterals and cannot determine whether a condition is fair. Even though the absence of negotiation deadlines enables states to spend many years negotiating until they fully understand all the issues, this aspect does not compensate for the effects of secrecy and physical distance.

Finally, interest harmonisation is enhanced by the permanence of state relationships. States may also share some objectives, but the differences between states imply a wide range of goals.

The fairness of negotiation outcomes as perceived by the airline depends on the attitude of the foreign state and on the competitive strength of the airline. Close and long-term state-airline relations limit the risk of adverse selection during the domestic selection process\textsuperscript{22}. Although the secrecy of commercial agreements between designated airlines limits the effectiveness of any control mechanisms, the danger of harming relations and more or less overlapping interests reduce the risk of opportunism in this phase.

The airport’s behaviour during the contract phase resembles its behaviour in the contact phase.

\textsuperscript{20} While these factors are strongest in the relationship between the state and KLM, the latter’s shareholding in two of the three other main Dutch carriers extends the argument beyond KLM (see Section 3.3.2).

\textsuperscript{21} Supra, p. 77.

\textsuperscript{22} Section 3.3.2 showed that the importance of selection is limited whenever KLM expresses an interest in operating a service. Should there be any risk of adverse selection, it can be reduced by having an independent party check the plans submitted by carriers, and giving those plans a greater weight in the designation process. Moral hazard can be alleviated by monitoring compliance with the plans that were submitted to obtain designation.
C. - Execution phase

This phase starts after agreement has been reached. Usually, the Bilateral provides for provisional application in anticipation of domestic approval. A new agreement generally takes into account the interests of both parties and should, as a result, enhance feelings of fairness on both sides. As in earlier phases, whether an agreement is perceived as fair will largely depend on the conditions attached to the exchange.

Even if an agreement is initially regarded as fair, as the actual execution unfolds, one or both states may begin to feel that the terms of the agreement are no longer fair (see Section 5.6.1). As the feeling intensifies, the incentive to deviate from the agreement increases. The agreement should then be amended, but an amendment is generally difficult to realise. In the first place, a state is unlikely to co-operate in a proposed amendment if it benefits disproportionately from the current division of rights and obligations. Sections 3.5.3 and 5.6.1 further noted that the mechanism used to guide an amendment determines the ease of amendment. If there are no formal obligations to amend the agreement, if the parties have failed to incorporate a mechanism for change into the agreement or if the mechanism is prone to manipulation, negotiations may be protracted. The mechanism most commonly used to amend Bilateral agreements is the Memorandum, which provides opportunities for manipulation. It is therefore difficult to effect a change under Bilateralism. The resulting divergence between actual conditions and the terms of the Bilateral stimulates opportunistic behaviour and necessitates closer monitoring.

There are various ways in which the parties can gain from opportunism. An airline may, for instance, transport more passengers than what is allowed (a state may induce or allow the airline to behave in this way), generating higher financial gains for the state. These gains are more easily captured if the terms of the Bilateral are vague. As in the contract phase, elements limiting the gains from opportunistic behaviour include the permanent nature of the interstate relationship, the intensity and value of the relationship, as well as the degree of system trust and character trust. In many instances the costs of deviating are not high enough and so fail to protect the agreement, which means that there is a strong need for control mechanisms during the execution phase.

Generally speaking control mechanisms are limited. The features of relational contracting, secrecy, diplomacy and barter exchange all limit the opportunities for monitoring. To a certain extent, the state’s monitoring ability is a function of the Bilateral’s content. The rights exchanged may, for example, be expressed as load factors. However, subjective criteria which might not even be related to air transport are frequently chosen. Monitoring abilities are

23 Section 3.3.3 noted that the Netherlands were willing to make domestic carriers give up slots following claims from US Airways because of the value of Dutch-US relations.
reduced further by differences across domestic regulatory systems and by the international nature of airline activities. The Bilateral compliance system does not help to control state behaviour since it relies mainly on informal compliance mechanisms. These mechanisms are complicated, relying on retaliation, the need to maintain equality, and so on. The most commonly used mechanism of consultation, for example, leaves considerable uncertainty, is time-consuming and centres around the state rather than an independent party. Arranging compliance under Bilateralism is a costly affair\(^\text{24}\).

The absence of adequate control mechanisms creates an additional role for interest harmonisation. The permanent nature of interstate relationships and any overlap between the states' objectives, which are important factors in the contract phase, continue to be important in the execution phase.

The industry's perception of the fairness of a Bilateral also depends on its content. An airline may be highly competitive, yet impeded in its activities by strict Bilateral conditions. The airline may then be tempted to act opportunistically. The vagueness of the Bilateral generates opportunistic gains and reinforces the temptation to deviate. The Bilateral control mechanisms fall short here. The state can check the airline's use of equipment and the time of domestic operation via the slot system at Schiphol airport and information provided by the airport, but its ability to adequately supervise the airline's behaviour is limited by the international nature of the airline's activities and by secret airline agreements. The instrument of output control (i.e. checking tax and foreign exchange income) provides some protection but cannot prevent the airline from using private information to pursue its own goals rather than those of the state\(^\text{25}\).

The mechanisms used by the state to tie the airline's reward to performance provide no more than weak incentives. Legal enforcement is scarcely used. At the same time, the airline risks severely damaging its relations with the state if it deviates and - given its dependence on the state for market entry - this may form a high enough cost to prevent any deviant behaviour.

The state-airport relationship is more conducive to state control. The state has many instruments to monitor the airport's behaviour and resorts to legal instruments and severe sanctions to enforce compliance. The discussion of the various instruments in Section 3.3.3 illustrated that the state-airport relationship suffers from a lack of performance incentives. In addition, elaborate regulations limit the flexibility of the airport's operations and tend to harm its continuity objective. This increases the potential gains from opportunism, while the absence of an equivalent airport alternative reduces the costs of deviating. In practice, it is difficult to guarantee compliance and to eliminate moral hazard completely. To illustrate, even though the

\(^{24}\) Inefficiencies can become so burdensome (e.g. when there is a need for stability or when substantial financial interests are at stake) that states are willing to give up some sovereignty and turn to formal compliance mechanisms. This is what has happened with soft rights.

\(^{25}\) In some cases, the state's representation on the supervisory board may help in controlling the airline. The same applies to the airport.
airport is obliged to accept all traffic, it is able selectively to assign gates and allocate ground handling facilities to those parties that are important to the airport’s revenue stream (e.g. passenger spending in the air terminal).

Both the state-airline and state-airport relationships show closely aligned interests. The state’s financial goal overlaps with the continuity objective of the industry (see Sections 3.3.2 and 3.3.3). The closeness of their ties, overlapping views on the ‘mainport’ strategy and the state’s position as an important stakeholder provide the industry with incentives to act in line with the other subgoals. As an example, Schiphol’s airport charges policy imposes lower charges on transfer traffic than on originating and destination traffic. Such a policy benefits the airport, KLM’s sixth freedom traffic as well as the Dutch transport network. The interests of the state and airline are harmonised further by the state’s part ownership of KLM, by KLM’s contribution to the transport network and by the airline’s dependence on the state for market entry. Schiphol airport also depends on the state for market entry. Moreover, the airport’s future development depends on the state’s position and decisions taken in parliament. In addition, Schiphol is fully owned by the state. Finally, there is substantial cross ownership contributing to interest harmonisation.

To summarise, the conditions attached to the exchange are often perceived as unfair by the Netherlands. As the mechanisms for control are limited, any constraints on opportunistic behaviour derive mainly from the costs associated with deviation and the extent of interest harmonisation. The difficulty of amending agreements encourages opportunism whenever agreements grow out of line with reality. Interest harmonisation between distant states is generally limited and the resolution of disputes generates considerable costs. Opportunism thus creates high transaction costs at the state level. The state’s system of controlling the industry lacks adequate performance incentives. Nonetheless, its relations with airlines and airports are generally, albeit not entirely, protected against opportunism by limited net gains (airline), various control mechanisms (airport) and strong interest harmonisation. The transaction costs arising from the state-industry relationships are correspondingly low.

The analysis now moves to the Community structure to see whether this structure comes closer to achieving the state’s air transport goal and minimising transaction costs than the Bilateral structure.

5.7 - Features of the Community structure

The essential features of the Community structure are summarised below and can be compared directly with the essential features of the Bilateral structure in Section 5.4.

1. Absence of traditional state sovereignty and equality,
2. Absence of reciprocity requirement,
3. Delegation of property rights to industry,
4. Multiple state goals,
5. Formalised transaction process,
6. Absence of secrecy,
7. Regulation,
8. Multiparty agreements,
9. Flexibility and
10. Supranational compliance mechanism.

Absence of traditional state sovereignty and equality
The Member States have lost some of their sovereign rights as a result of legal constraints and various interdependencies. Decision-making in air transport takes place via the co-decision procedure, which uses qualified majority voting. The states are no longer equal as votes are allocated on the basis of economic importance.

Absence of reciprocity requirement
It is no longer necessary to base agreements on reciprocity. Equality is interpreted as an equal starting position.

Delegation of property rights to industry
In the Community structure air transport rights are largely delegated to the industry players, while the Community institutions have restricted the exercise of property rights remaining at the state level. There is no categorisation of rights to use the airspace. The property rights that remain with states enable them to change any legislation and so indirectly engage in transactions regarding the use of Community airspace. The Member States still hold the property rights to third country traffic.

Multiple state goals
Domestic goals have been supplemented by Community goals. There is a greater risk of conflict between the various goals.

Formality
The process of creating and amending Community legislation is governed by formal rules. Time limits as well as procedures structure the transaction process.

Absence of secrecy
Community legislation is published, starting in the contract phase. Their exact content is
publicly known.

Regulation
The exchange of air transport rights is captured in regulation. The EC Treaty, secondary legislation and the Community’s policy documents formulate ultimate goals, and aim to provide a just return, in exchange for which the Member States have agreed to give up some of their powers.

Multiparty agreements
The transaction involves 15 Member States, the Community institutions and the EEA states.

Flexibility
The Community structure is a framework structure. It comprises the EC Treaty, secondary legislation and other elements of the ‘acquis communautaire’ as well as domestic legislation.

Supranational compliance mechanism
The Community structure has facilitated compliance via a substantial harmonisation of rules. There are supranational courts that may adjudicate states. The Commission has a supervisory role. The option of a preliminary ruling helps to standardise enforcement. There are greater opportunities for self-enforcement while, in case of disputes, formal enforcement systems have begun to replace consultation at the interstate level.

The following sections analyse the performance of the Community structure in terms of its effectiveness and transaction cost efficiency.

5.8 - Effectiveness of the Community structure
The Bilateral and Community structures share certain features of the transaction-specific and semi-specific structures but operate within radically different institutional environments. Some important features of the Community structure are the considerable delegation of air transport rights to industry players, and the absence of traditional state sovereignty. These features constrain the state in its ability to differentiate its relations with other states and to pursue domestic goals. Moreover, the multi-party nature of agreements implies that not individual states but Member States and EC institutions collectively determine the opinions of the Council and the outcome of negotiations (Corbey, 1993: 76-77, 154). The Community has introduced new goals which have to be met by the state, yet may be in conflict with domestic goals. At the Community level, this has increased co-ordination requirements, which have become more difficult to meet as a result of multi-party dealings and the absence of a veto. The Community

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structure does not preclude pursuit of the selective network. For instance, respect for, knowledge of and close relationships among Member States constitute a substitute for the psychological goal of prestige. The right of market access and absence of reciprocity make it easier to realise the financial goal and the broad scope of Community co-operation is consistent with the political goal of maintaining good relations. Realising the environmental goal has proved more difficult. To be sure, the close relationships have led to a convergence of the Member States’ views on environmental protection. The EC Treaty calls for an integration of environmental policy with other policy fields (Article 6 EC) while Article 174 EC extensively describes the objectives of the Community’s environmental policy, expressly mentioning the Community’s right to co-operate and conclude agreements with third states and international organisations. Moreover, the Subsidiarity principle has tended to centralise decision-making as a result of externalities and prisoners’ dilemmas. Externalities exist in the form of pollution, which has spillover effects on other states. Section 3.3.1.3 already pointed out that no state would have an incentive to internalise external effects beyond those with immediate national implications. Moreover, states are not equally affected by pollution externalities. Both conditions support a centralised approach. Prisoner’s dilemmas may arise from flexible environmental regulations, such as those governing the use of Chapter II aircraft and noise emission levels, which may be exploited to attract foreign firms. States may also be lax in implementing Directives or monitoring compliance. Where there are international rules to alleviate transport-related pollution externalities, a different problem arises. If a state is too small to influence pollution levels, it is rational for the state to free-ride on the pollution-abatement efforts of larger states. Even if other states fail to implement any pollution measures, it is again optimal for a small state not to implement such measures. Yet every state would ultimately benefit if all the states actively tackled pollution. Reflecting these concerns, Community legislation to some extent captures the environmental goal. Regulation 92/14, for example, prohibits the operation of Chapter II aircraft within the Community as of 1 April 2002. On the whole, however, the volume of Community measures targeting the environment in air transport is limited. Member States want different levels of environmental protection and superior local information may favour decision-making at the local level. Decision-making has proved difficult. Existing legislation or international agreements may constitute a problem. Directive 92/81, for instance, exempts the taxation of commercial aviation fuel. Finally, the fact that environmental problems often have a strong local effect means that environmental

26 Chapter IV observed that, prior to the introduction of the Community structure, KLM’s competitive strength was feared by other European carriers, which accounted for strict interpretations of reciprocity in Bilaterals with European countries. However, KLM’s limited home market provides a strong incentive to find an European alliance partner.

27 The following is partly based on Van den Bergh (1994: § 3.1) and Button (forthcoming).

lobbyists are most effective at this level than at the Community level. The Dutch selective network goal goes beyond the level of environmental protection required by the EC. The Community’s framework structure enables a state to do so. In the case of the Netherlands a local approach may be more fruitful, for instance, because of superior local information. At the same time, the Netherlands are aware that they might damage their competitive position by taking unilateral action. Section 4.5.2 noted that this was why the Netherlands tried to get the Commission interested in regulating CO₂ emissions. Further initiatives include actions at the Community and ICAO levels to introduce VAT on airline tickets and a surcharge on kerosine, while the Dutch aim to remove fiscal advantages to stimulate the use of other modes of transport. These initiatives are unlikely to be successful given the Dutch domestic co-ordination processes (see Section 4.7.2). At the interstate level most traditional instruments that target the environment are no longer available in the Community structure: there are no Bilaterals and hence no clauses on the environment such as those prescribing the type of equipment.

In the Netherlands, the main effect of the reduction in state powers has been an increase in the domestic regulation of the industry. New requirements have been introduced geared specifically to the way in which air transport and airport services are to be provided. There are, for instance, restrictions on the permitted time of operation and aircraft type. The state has also introduced slot co-ordination as a way of meeting environmental considerations. Many instruments targeting the selective network were introduced in the second half of the 1990s, concurrent with the introduction of the Community governance structure. By unduly restricting market access rights, this strategy carries the risk that the Netherlands will breach their obligations under the EC Treaty and harm the competitive position of the industry. Furthermore, the use of domestic regulation has led to a divergence of state and industry interests. A further factor influencing the performance of the governance structure is the growing use of co-operation agreements between industry players. Within the Community, harmonisation of rules, the ‘Community carrier’ concept, a relatively small territory and the prospect of consolidation and general economic integration, all stimulate co-operation and facilitate intra-European agreement. This development hampers the state’s control over the industry. The existence of firms with multiple nationality restricts the state’s ability to prescribe behaviour or to control output and may diminish state revenues. Firms may no longer fall within a certain jurisdiction or may choose to transfer activities to other countries. A multiple

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29 The opposite is true for the industry. To be sure, these problems are not specific to the Community structure. They may be encountered in any international approach to environmental pollution.
30 Section 4.5.5 already noted that the competitive position of the industry also plays a role at the Community level, e.g. in relations with the U.S.
32 To be sure, these regulations apply without regard to the destination of the transport. Nonetheless, they have been invoked by the EC and are therefore discussed in the context of the Community structure.
nationality also poses problems in connection with the Bilateral nationality requirement. The greater freedom implied by liberalisation, a greater use of international co-operation agreements among industry players, and the greater delegation of air transport rights have made it more difficult to motivate the industry to meet state-imposed requirements and to monitor its compliance. These developments have made the absence of performance incentives more apparent.

The next section will analyse the transaction cost efficiency of the Community structure.

5.9 - Transaction cost efficiency of the Community structure

5.9.1 - Transaction frequency
The determinants of the transaction frequency are the perishability of the object exchanged, the existence of alternative sources of supply, the dynamism of the environment and the flexibility of the transaction process and agreement. An analysis of these determinants within the Community context leads to the following conclusions.

The gradual change of the governance structure implied by the learning by doing approach led to a relatively high transaction frequency during the period 1987-1992. The current rules are mostly permanent, as is the co-operation among Member States. The remarks made in Section 5.6.1 on perishability also apply in the Community structure, which means that this determinant implies a low transaction frequency. The form and intensity of EC co-operation rule out alternatives outside the EC, since no third country can offer the use of its airspace under the same conditions as a Member State. However, the consequent low transaction frequency does not lead to the usual upward effect on transaction costs because there are procedures governing the transaction process, including time limits and decision-making with qualified majority. Liberalisation has made the environment more dynamic (although this trend cannot be attributed to the Community structure alone) making the flexibility of the relationship a crucial factor. Flexibility is offered by the framework nature of the Community structure, which enables states to respond to change within existing relationships. This lower both ex ante as well as ex post transaction costs.

The framework structure of the EC has also put the airlines in a better position to adjust their operations to changed circumstances in a dynamic environment. Although an airline needs a route permission (and sometimes a slot) to start a new Community operation, the procedures are objective and harmonised and contain time limits. Domestic operations at Schiphol airport,

33 The EEA states are an exception, since their participation in the internal air transport market approximates the position of Member States. Havel (1997: 276) mentions some differences, such as the intergovernmental character of the EEA and the absence of tax harmonisation.
on the other hand, are strictly regulated and severely constrain the industry’s ability to adjust its position. In addition to domestic requirements, Community rules on ground handling and the competition provisions have restricted the airport’s freedom to conduct its operation.

In brief, the current rules and co-operation among Member States are mostly permanent, resulting in a low transaction frequency. Any upward effects on ex ante transaction costs are limited by the formalisation of the contract phase. The environment has become more dynamic, but the framework character of the Community makes it a flexible structure and so keeps down the costs associated with executing the agreement. The Community structure has facilitated operational adjustments for the airlines, but not the airports. For both airlines and airports domestic regulations have become stricter. Overall, the transaction costs attributable to the frequency variable have remained high in the state-industry relationships.

5.9.2 - Uncertainty
The determinants of uncertainty are the complexity of the transaction, the dynamism of the environment, as well as the information gathering and information processing capacities of the parties.

Some elements that make the Bilateral structure complex also prevail in the Community structure. These include the difficulty of predicting demand and the existence of multiple state goals. The Community has in fact introduced additional goals (see Section 4.5.5). Furthermore, the exact division of powers between the Community and domestic levels is obscure, as is the extent to which states may use domestic instruments. The transaction process is also complex because many parties are active in various phases and it is unclear exactly where, when, and by whom a decision is taken (Kirchner, 1992: 6, Hirsch Ballin, 1992: 19-21). The broad range of subjects dealt with in COREPER or in Council meetings requires delegates to make package deals and to find compromises on often more than just air transport issues. At the same time, the Community has simplified the environment. The transaction process has been formalised to a large extent and there is a greater use of legal language. The use of the semi-specific structure of regulation implies that transacting parties have accurate and up-to-date information when renegotiating agreements. Most importantly, the Community structure, with one legislative package governing a multitude of mini-exchanges, has shifted the emphasis to the execution phase, which has become less complex at the state level due to the considerable delegation of air transport rights to industry players. This has reduced the state’s need to monitor the behaviour of other states and has, on the whole, simplified the interstate relationship.

34 The lack of co-ordination in the Dutch ex ante phases generates some additional costs.
35 Note that this may facilitate agreement. See Broncker’s (1999: 414) discussion of the World Trade Organization.
The Community structure is well-suited to deal with environmental dynamism. Some factors are its framework nature and an absence of the predetermined price, access and quantity variables that are part of Bilateralism. These features reduce the informational burden created by the need to adjust to new developments.

The Community structure has improved information gathering capacities by fostering close and long-term interstate relations. Close relationships, in turn, have increased the level of trust, thereby reducing the need to gather information. The transaction process and Community legislation are well-publicised. The Commission uses green papers to provide information and initiate debates. There are many sources of information, such as the media, weekly Commission press conferences, Parliamentary press releases, specialised publications (e.g. Agence Europe), various Internet pages and databases, and a large group of lobbyists. The use of A and B points during the contract phase provides information on various positions and sheds light on possible coalitions, which makes the system transparent with the exception of Council meetings, COREPER meetings (De Zwaan, 1993: 138) and voting outcomes. Although the layered structure of the EC Treaty and secondary legislation may make it difficult to stay fully informed about applicable rules, there are many opportunities to overcome this problem. For example, some rules require states to inform the Commission of the way in which domestic legislation has been changed to comply with the relevant provisions.

The picture of the states’ information processing capacities is less clear. On the one hand, close and long-term relationships, the emphasis on legal wording and harmonisation of rules reduce the need to process information and limit the effects of bounded rationality. On the other hand, smaller domestic powers and increased dependencies necessitate additional information processing activities, as states try to attain their own policy goals. Domestically, civil servants have to co-ordinate between the two potentially conflicting views of ministers and their officials on the one hand and the various levels of government and the private sector likely to be affected by new legislation, on the other. This involves far more people than does Bilateralism, as proposed Community legislation entails meetings with all the appropriate ministries and various domestic and Community committees. The absence of clear responsibilities at the domestic level creates the risk of other policy goals being introduced. States must also ensure that domestic goals are correctly voiced and that representatives in Brussels stay attuned to these goals. This may be difficult because frequent meetings and contacts between the permanent representatives create strong ties with the Community. These contacts can harmonise relations, and so generate information, but can also lead to an opaque decision-making process in which communication is effective only among knowledgeable initiates (Westlake, 1995: 115-116). These features, the differences that remain in the political

36 These include rules on the drafting and layout of secondary rules. Resolution of the European Council of 8 June 1993, OJ C 166.
systems of Member States and the fact that Community legislation is issued in all of the official languages suggest that bounded rationality may still constitute a constraint.

The Community structure has also affected the industry’s ability to deal with a dynamic environment. The airports have been confronted with stricter domestic regulations, while the Community structure has not liberalised their environment. Airlines have benefited from certain Community measures which facilitate airline co-operation and hence risk spreading. The absence of designation enables airlines to easily adjust their operations. Moreover, the Community structure has simplified their environment. Licensing criteria are objective and non-discriminatory. The harmonisation of rules has improved the capacities to gather and process information on local rules. The Community structure also seems to have made the state-airline relationship less dependent on information. The licensing criteria have been harmonised and, unlike the Bilateral structure, where a new Bilateral agreement requires an amendment of a permit, the Community structure involves periodic revisions using standardised information. However, the reduction of state powers and restrictions on licensing criteria have increased the uncertainty faced by states. Greater freedom at the Community level has reduced the information gathering and processing capacities of the state in its relations with the industry.

The Dutch state has responded by imposing new regulations on the industry. The state incurs higher ex ante transaction costs as it needs to stipulate industry behaviour as well as higher ex post costs of monitoring compliance. The industry, in turn, has to meet an increasing number of requirements and may feel uncertain about what constitutes appropriate behaviour.

To sum up, although the contact and contract phases have introduced new complexities and have increased the importance of information processing, overall the transaction has become less complex at the state level. Many rules have been harmonised and legal wording has gained importance. The fact that only one transaction covers a multitude of transport possibilities with many states puts the emphasis on the execution phase, which has become a less complex phase at the interstate level. In addition, the Community’s framework structure makes it flexible and so better able to deal with a dynamic environment. The opportunities for information gathering have improved, while close and long-term relationships have increased the availability of information and reduced the need for a costly specification of the terms of the agreement. Thus, even though information processing requirements have increased, uncertainty has been reduced at the interstate level.

The airlines generally face less uncertainty at the Community level due to a harmonisation of rules and a greater ability to adjust operations. The airports, in contrast, have not benefited from a relaxation of rules. Both the airline and airport face stricter domestic regulation, which calls for more information gathering and processing. The state has a greater need to prescribe and monitor industry behaviour. At the level of state-industry relations, the transaction cost effects of uncertainty continue to be high.
5.9.3 - Asset specificity

The determinants of asset specificity are the scope of the relationship, the susceptibility of decision-makers to lobbying, requirements of a technical or regulatory nature and institutional guarantees. Section 5.6.3 concluded that in the Bilateral structure asset specificity at the interstate level is mainly determined by the need to achieve reciprocity. The Community structure may have broadened the scope of the interstate relationship, yet the need for transaction-specific investments has decreased with the greater delegation of property rights to industry players and limitation of state powers. Moreover, the absence of sectoral negotiations and elimination of the reciprocity requirement have lowered the need for non-aviation quid pro quos. The structure shows a greater susceptibility to lobbying because more parties are involved in the negotiations and because the EC has acknowledged the lobbying function through ECOSOC (Van den Bergh, 1994: 23). Lobbying expenditures have risen as a result but, overall, the transaction costs arising from asset specificity are even lower than in Bilateralism.

The previous section noted that at the Community level, the airlines face less regulation and greater freedom. There has been some harmonisation of working conditions and environmental legislation but the already high Dutch standards have meant that compliance has not generated any substantial new investments. The airline’s reduced dependence on the state for market entry seems to have decreased the scope of the state-airline relationship. In practice, however, the state’s loss of powers has made this relationship more important to the state in the pursuit of its goals. It has led to new regulations limiting the airline’s behaviour, such as requirements on aircraft equipment and an obligation to finance the insulation of houses in the neighbourhood of the airport. In addition, liberalisation has increased the use of hub-and-spoke networks and investments in these networks are specific. These factors have increased the airline’s exposure to the risks associated with asset specificity. The airport has to meet even more requirements. The alteration of the Schiphol terminal layout following the Schengen Treaty (see Section 4.4) is an example of an investment required at the Community level. Domestic regulations aimed at the environmental aspect of the transport goal require the airport to make various investments and to restrict its operations. For instance, the approval of continued growth at Schiphol requires significant investments in runway layout. These investment-increasing factors, combined with an increasingly dynamic environment, enhance the need for institutional guarantees. The Community structure offers some guarantees, such as the absence of secrecy, the harmonisation of rules and a system of legal enforcement. The TEN programme is a source of financial guarantees. At the domestic level, the Community structure

37 Generally speaking, harmonisation has a greater effect on transaction-specific investments than liberalisation. On the whole, the Community has embraced liberalisation more than harmonisation.
offers fewer guarantees. The domestic provision of financial guarantees has become very problematic, among other things, because of a requirement to notify aid prior to its distribution and closer scrutiny on the part of the Commission. Other preferential measures may conflict with treaty provisions such as Article 86 EC. In addition, both state and industry have become less exposed to the possibility of hold-ups. For instance, the airline is free to start operations in other Member States. Similarly, the state aims to reduce its exposure in the state-airport relationship as can be seen from the various requirements imposed on Schiphol airport in the Optimisation and IBV initiatives, which hold the sector responsible for a certain outcome. Some policy documents (for example: Ministry of Transport, 1998c: 83) refer to the industry's own responsibility to make investments and to provide finance. State and industry players have responded to these developments by an increased use of covenants and closer co-operation at the industry level, but they are to some extent restricted by the competition provisions of the EC Treaty. There is also a greater reliance on external safeguards, such as performance monitoring by the state, and Schiphol airport has made some attempts to diversify its activities. Each of these factors has raised transaction costs.

Finally, lobbying at the Community level has increased. In the past, lobbying tended to occur at the national level because the function of interest aggregation was performed largely by member governments. Various state interdependencies and a reduction of domestic state powers imply that the industry has to lobby Community institutions as well. The fact that relationships between the Community institutions and industry players are weaker than domestic relationships has led to higher expenditures and a more substantial role for groups like ACI Europe and the AEA.

In conclusion, the Community structure has led to some transaction-specific investment in the form of relationship-building. The broad range of issues and the opportunities for making compromises have reduced the need for transaction-specific investments at the interstate level. Investment needs have grown at the level of the industry, which has become more dependent on lobbying and is subject to a larger number of state-imposed requirements. This has led to an increased need for information gathering, a greater use of covenants and more monitoring. The net effect is that asset specificity generates higher transaction costs at the state-industry level.

5.9.4 - Opportunism

Section 5.6.4 described how each of the determinants of opportunism, namely the perceived fairness of a transaction, the net gains from opportunistically behaviour, the mechanisms for control and harmonisation of interests affects every transaction phase in the Bilateral structure. The same will be done below for the Community structure. First, however, a general remark is

Schiphol has devised the concept of a ‘Schiphol City’, which incorporates non-aviation elements such as retail and property development into the airport’s activities.
in order. Chapter IV explained that each Member State had its own reasons for joining the Community and over time has developed its own position on the objectives of the EC Treaty, their correct interpretation in terms of domestic objectives and broader aspects of European integration. As integration proceeds, every state will find itself confronted more and more with the fact that the abstract benefits of integration may amount to tangible measures that harm domestic goals. This is certainly the case in air transport, which has been identified with such factors as prestige and good relations with other states. The development of the Community air transport policy and integration generally will continue to reduce the powers of Member States. Differences in objectives, any remaining domestic powers and information asymmetries are likely to carry a high risk of opportunism.

A. - Contact phase

Not only has the Community structure with its decision-making procedure of qualified majority accelerated the transaction process, it has also caused a shift in the point at which Member States are most effective in influencing decisions. This is now the period before the Commission submits its proposals to the Council. Small Member States, in particular, have to be active in this phase because they carry little weight in final Council decisions. This means that coordination in order to identify the positions of other states and alternative coalition strategies is very important. The Commission's support is crucial because without it a proposal will not be submitted. A coalition joined by representatives of the Ministry of Transport is more likely to contribute to the perception that an agreement is fair. Moreover, domestic co-ordination and support from domestic ministries other than the Ministry of Transport is crucial if the potential gains from opportunism are to materialise. These gains are sometimes difficult to identify, as negotiations involve many issues. Here, the Dutch procedures are lacking because they fail to set priorities and formal instructions are only given at a very late stage, namely when negotiations reach the political level. The Netherlands' ability to turn potential into actual gains is therefore not fully exploited.

The lack of ability to capture the potential gains from opportunism is reinforced by improved control mechanisms. There is an absence of secrecy, there is a European parliament, there are EC Courts and an independent Commission. Compliance mechanisms have become more sophisticated. The frequent interstate contacts and stationing of representatives in Brussels also facilitate monitoring the actions of Member States. Section 5.9.2 argued that, domestically, opportunities to monitor civil servants tend to be limited because of information asymmetries. A Brussels' representative, under the harmonising influence resulting from close relationships, may commit himself to proposals that are not consistent with domestic goals. Domestic civil servants active in negotiations may also place their own private goals above
official goals\textsuperscript{39}. Schout (1999: 198) observes that officials from expert departments sometimes accompany the international negotiators, not only to support them with technical details but also to control their behaviour. Via behaviour control the state can stimulate the agent’s contribution to realising the state’s goals. Behaviour can be specified via detailed instructions and checked via reporting requirements\textsuperscript{40}. However, the use of behaviour control requires a system of selective reward and the state generally lacks such a system. It cannot easily provide financial incentives as this may be in conflict with the legitimacy of the state\textsuperscript{41}. Alternative incentives (e.g. a promotion or budget increase) are possible, but the state relies mostly on indirect methods, such as a representative’s sense of loyalty to his own country and institutional guarantees\textsuperscript{42}.

In addition to greater control, the interstate level shows greater interest harmonisation. The EC constitutes a total of rules and codes aimed at integrating the economies of Member States. Common norms, values and beliefs are continuously being shaped in the context of an institutional framework, contributing to a high degree of interdependence. The Member States empathise with each other and their interests overlap more than in traditional interstate relationships (for instance, Westlake, 1995: 376). Nonetheless, differences between Community and domestic goals and hence the possibility that a proposal might seriously harm domestic air transport goals can stimulate opportunistic behaviour. The Dutch - as a small Member State with a relatively large amount of third country traffic - may wish to act opportunistically in negotiations on the division between Member States and Community institutions of the powers regarding air transport with third countries. The Commission has accused those Member States who re-negotiated Bilaterals with third countries of opportunistic behaviour and argues that the Netherlands is trying to benefit from trade diversion\textsuperscript{43}. States may further act opportunistically if liberalisation threatens the viability of the domestic air transport industry, and recent years have indeed seen a wider variety of financial support schemes. These factors frustrate the effective functioning of the market. They have led to a tightening of the EC rules on state aid and criteria for subsidies as well as an increasing

\textsuperscript{39} Supra, p. 38.

\textsuperscript{40} The use of output control is less appropriate because negotiation outcomes cannot be determined by the representative.

\textsuperscript{41} Supra, p. 37. Note, however, that the legitimacy problem regarding the use of financial incentives essentially amounts to an information problem as activities cannot be valued accurately (Stiglitz, 1989: 26). Were this to be solved, pay could be tied more closely to performance.

\textsuperscript{42} WRR (2000: 58) pleads for a greater use of and more explicit reliance on the instrument of institutional guarantees because a focus on the public interest is one of the elements distinguishing a civil servant from a private sector employee. This focus is not free from risk as a civil servant may deviate from instructions claiming that he has a better understanding of the public interest than his superior.

\textsuperscript{43} The same remark - addressed to all Member States - was made by the Commission in case 1/94 (supra p. 107). However, the Commission may also be accused of opportunistic behaviour, in that it uses the threat of a legal procedure as a way of extending its mandate from negotiating only soft rights to negotiating a Community Open Skies agreement with the United States.
number of Commission Decisions and court cases (Commission, 1999: 29-34).44

Both the airline and airport can participate in Commission working groups and engage in lobbying during the contact phase. There are potential gains from opportunistic behaviour, which may be captured by inducing the Commission to submit a proposal selectively benefiting industry interests (for instance, aircraft manufacturers). The industry’s behaviour is not co-ordinated with that of the Member State and the large number of groups active in this phase reduces the state’s monitoring ability. Moreover, the interests of the state and industry have diverged. The airline no longer depends on the state for designation, while the state will no longer always act in the airline’s interest because the package deals that characterise Community policy-making can divert attention to other policy fields. The fact that special rights have been granted and that any opportunistic behaviour by the airline might affect its relationship with the state does not fully compensate for the loss of state instruments needed to uncover such behaviour and to impose sanctions. Thus, the airline has less incentive to act in a trustworthy fashion.

Similarly, the interests of the airports have diverged from those of the state as a result of the state’s tighter regulation and the general trend of liberalisation.

B. - Contract phase

The framework nature of Community legislation and a preference for liberalisation over harmonisation enable the states to structure negotiation outcomes in a way that best meets their demands. In the case of the Netherlands, the abolition of the fair and equal opportunity requirement has made it easier to attain the financial goal, thus contributing to a feeling of fairness. On the other hand, Community legislation fails to fully capture the environmental elements of the Dutch transport goal.

The conclusion of the transaction, i.e. the acceptance of a Commission proposal by the Member States, often occurs without voting. When voting occurs, decision-making with qualified majority and the broad range of issues on the table encourage the formation of coalitions. This form of decision-making prevents a state from benefiting too much at the expense of others (Weingast, Marshall, 1998: 512-513). A majority will have to benefit from the proposal, which limits the ability to realise any gains through opportunism. There are also better control mechanisms than under Bilateralism. For example, an injured party may go to court if a Community principle is breached, there is a strong reliance on legal language, and close contacts between states make it possible to monitor behaviour. At the same time, the multi-party nature of negotiations and the package deals give rise to new ways of acting

44 Note that the Netherlands have not often been the accused party. The Netherlands and Dutch industry players have, however, at times resorted to compliance procedures to obtain access to markets or attack discriminatory treatment.
opportunistically. A state may, for instance, vote in favour on one issue to obtain a concession on another (Wallace et al., 1993: 13). France is said to use the veto as part of a strategy called ‘taking hostages’, whereby agreement is blocked on one issue where the veto applies so as to obtain concessions on another where the veto does not apply (Westlake, 1995: 102-103). Member States can also exploit the Subsidiarity principle. This principle enables states to manipulate decision-making by claiming that an issue is better handled at the domestic than the Community level. The international nature of air transport activities generally rules out an increase in powers at the domestic level, but the principle can be used in reverse: a Member State wanting to regulate an issue without damaging its competitive position might choose to take the matter to a European level. Section 5.8 gave an example in the field of environmental protection.

On the whole, the interstate relationships are more likely to be self-enforcing. The Community has created close and long-term relationships that are very valuable to Member States and foster character trust, while the voting procedures, equal access to information and the need to form coalitions generate system trust. Moreover, the costs generated by opportunistic behaviour have risen because of strong interdependencies.

Finally, the factors that harmonise interests during the contact phase continue to play a role during the contract phase. Interests are harmonised further by the Community’s voting procedures and strategies. The limited number of votes allocated to the Netherlands makes it crucial that the Dutch should join coalitions. In this way, the Community stimulates the interdependence between states.

The remarks on the behaviour of the airline and airport during the contact phase also apply to the contract phase.

C. - Execution phase

The description of the first two transaction phases has shown that various elements in the Community structure (e.g. extensive monitoring abilities, difficulties of acquiring potential gains) reduce the risk of opportunism in those phases. The substantial delegation of air transport rights to the industry has shifted the risk of opportunism to the execution phase. As an example, a Member State may resist operations in its own territory by carriers from other Member States on the grounds of infrastructural shortages, or by forming an airport system, while the resisting Member State’s own airlines freely fly to and from other Member States that have invested in airport facilities (Havel, 1997: 101). This strategy has been tried by some

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45 The Subsidiarity doctrine is not easy to apply. Endless arguments can arise about which level of decision-making will obtain the best results.
Member States (ibid.: 101, 394). Although the Community rules take precedence, monitoring their implementation requires separate action and legal action against opportunistic behaviour depends on such matters as complaints being made and pursued in court. Yet, the risk of opportunism remains limited as is explained below.

To begin with, there are more opportunities to achieve a fair outcome. The reciprocity requirement has been eliminated and the Community's framework structure enables some accommodation of domestic concerns. A Directive, for instance, leaves more room for domestic adaptation than a Regulation, which is the main instrument used to create the air transport governance structure. Even if Regulations are used, the Community's framework structure allows a state to go beyond what the EC Treaty provides and it is often possible to implement legislation in a way that promotes domestic goals without violating Community rules.

The relatively large volume of Regulations limits the ability to realise opportunistic gains since Regulations require a far stricter implementation than Directives. More generally, the gains from opportunism are limited by close interstate relationships, which have contributed to character trust and increased the costs of deviating and by the potential harm to the competitive position of the industry players. For instance, a state that uses its powers to extend Community legislation at the domestic level will affect domestic firms disproportionately and in some instances this serves as a restraint.

The Community structure has strengthened the state's control over the foreign (Member) state. There is an integrated and largely transparent compliance mechanism, while the greater knowledge about other Member States has improved behaviour monitoring at the state level.

Finally, interest harmonisation has been promoted by setting common objectives. Even if the current differences between Community and domestic goals make clear that harmonisation is not complete, on balance, the greater interdependencies have reduced the incentive to behave opportunistically.

Liberalisation has increased the chance that the Dutch airlines will perceive negotiation outcomes as fair. There has been a contrasting development, however, in the form of increased domestic regulation. The Community structure has reduced the airline's dependence on the state for market entry. The elimination of the nationality requirement at the domestic

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46 France has used the strategy of creating an airport system to distribute traffic, funnelling the bulk of intra-Community services to Charles de Gaulle airport and away from Orly airport and restricting competition on certain lucrative ex-Orly domestic routes monopolised by Air Inter. Italy has used the same strategy, reallocating most of the international traffic to the new Milan airport, Malpensa. The Commission, following complaints from several carriers, strongly protested against the Italian practice and, as a result, the allocation was amended and temporarily postponed (Air Bulletin, 1998, vol.2, no. 48). Infra, Section 4.5.7.

47 The state may also make bilateral arrangements with other Member States. Chapter IV, however, noted that this option is not used much because such arrangements will often have a discriminatory effect.

48 Recall from Section 4.5.7 that the majority of Community carriers wanted to retain protection against increased competition following liberalisation. These carriers were not in favour of liberalisation.
level and the freedom of establishment laid down in the EC Treaty have further reduced the airlines' dependence on the domestic home base. These factors taken together have increased the incentive to behave opportunistically by increasing the associated gains and reducing the costs. Opportunism might occur in the form of airline threats to extract state concessions. As an example, in 1999 KLM announced that it would facilitate traffic growth at Malpensa airport (one of the hubs of its alliance partner, Alitalia) in response to capacity problems at Schiphol airport. This may have been one reason why the state was willing to revise the strict KEPD requirements. In addition, although the elimination of the designation requirement might seem to have reduced the risk of adversely selecting airlines, the looser relationship has also made it more difficult to see whether airlines are contributing to the state's goal. As is true for the contact phase, the constraining effect of the risk that state-airline relations will be harmed is too weak to rule out opportunistic behaviour, especially given the reduced monitoring abilities of the state.

The airport feels disadvantaged by the outcome of the liberalisation process. Section 4.5.8 noted that its output and behaviour are increasingly subject to control. Some examples are the requirement of an annual operations plan, various reporting requirements, the instrument of slot co-ordination and systematic compliance checks. The airport's interests, like those of the airline, have diverged from the state's goals. Access to greater marketing opportunities, the growth in traffic and constraints on capacity make it more and more difficult to meet the requirements. The imposition of new requirements carry the risk of further reducing the airport's ability to use its assets efficiently. The revision of the compliance and monitoring systems suggested by the Optimisation strategy is an attempt to counter this trend. However, Section 4.5.8 showed that new forms of opportunistic behaviour have resulted such as discriminatory tariff setting, diversification and co-operation with other airports.

The overall effect of these developments is that the state is forced to incur higher costs to specify behaviour, monitor performance and enforce compliance in case of a dispute.

In conclusion, the framework nature of the Community structure and absence of reciprocity increase the chance of agreements that are considered fair at the interstate level. Although it seems more difficult to pursue domestic goals, in many instances the framework Community structure enables a state to implement legislation in a way that is consistent with domestic goals. In addition, the Member States share many views. The procedures surrounding the conclusion of a transaction seem to make the transaction prone to opportunistic behaviour, but the greater use of legal language restricts the ability to acquire any opportunistic gains. Moreover, the complicated nature of negotiations implies that the process must be well co-ordinated if any gains are to be captured. The close relationships between states have also increased the costs of opportunistic behaviour and made it more likely that agreements are self-
enforcing. Control mechanisms at the interstate level have improved. States are well-informed about each other and in frequent contact so that behaviour can be monitored. Integration has made Member States highly dependent on other Member States in the pursuit of domestic goals. The scope, intensity and duration of interstate co-operation have also aligned interests. Each of these factors limits the risk of opportunism and hence the cost of protecting interstate agreements. Finally, the supranational compliance system has lowered the cost of dispute resolution.

Whereas liberalisation has facilitated agreements that seem fair to the industry, stricter domestic regulation has had the opposite effect. The continued pursuit of certain domestic goals that conflict with greater industry freedom has led to a divergence of interests and has increased the net gains from opportunistic behaviour. The state’s control over the airlines has weakened, and the airlines are less likely to be sanctioned for deviant behaviour. Airports are strictly regulated and have not benefited from liberalisation. The overall outcome has therefore been a greater risk of opportunism at the industry level, motivating both the state and industry to incur costs to protect their agreements.

5.10 - Optimal governance structure

Chapter 10 described the various subgoals which the Dutch state pursue to attain its goal of a selective network. Those subgoals are the psychological goal of prestige, the goal of generating financial benefits, the political goal of maintaining good interstate relations and social goals aimed primarily at the protection of the environment. The analysis performed in this chapter has shown that both the Bilateral and Community structures enable the state to formulate and impose requirements that need to be met by foreign states and the industry and thus to pursue the selective network goal. Although some instruments are no longer allowed or may not be fully exploited in the Community structure, other instruments remain available, while the Community’s framework structure frequently accommodates the demands of domestic policymakers. The features of the two structures differ sharply. In Bilateralism, for instance, the state has control over the transaction process through its sovereign status, the two party nature of agreements and its possession of the property rights to the airspace. In theory, therefore, the state should be able to attain all of its goals. The informality of the transaction process in Bilateralism, with its emphasis on the relationship, and the features of secrecy and barter exchange make it possible to differentiate between transaction partners. There is a complicated compliance mechanism enabling states to use various measures to obtain concessions. Furthermore, in the state-industry relationship, the state’s control over the property rights and the close relations between the state and industry created by the many

49 Although the air transport regulations are relatively recent, they are part of a long-term alliance in the form of the EC (including the treaty, secondary legislation, acquis and consequent interdependencies).

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dependencies stimulate the industry to act in the state's interest. The situation is very different in the Community. The public nature of negotiations and agreements, the many legal restraints, and the feature of regulation prevent the state from differentiating its air transport relations. The air transport rights have largely been delegated to the industry and Community institutions and the states have lost their traditional sovereignty. The delegation of rights to the industry has reduced the ability of the state to prescribe industry behaviour and monitor compliance and has made the state increasingly dependent on alternative ways of motivating the industry to pursue the selective network goal.

Some features of the Bilateral and Community structures have implications for specific parts of the selective network goal. In Bilateralism, the ability to differentiate implies that the state can pursue its financial goal by selecting those trading partners who make a sizeable contribution to the transport network. In practice, however, the reciprocity requirement makes this impossible for states that have a small potential of third and fourth freedom traffic. The fact that the Netherlands have been able to build a strong position in air transport and that this sector has contributed considerably to the state's financial goal can be attributed more to the Open Skies agreement with the US than to the Bilateral structure. The Community does not impose any reciprocity requirements and for this reason performs better than the Community structure in terms of the financial goal.

The Bilateral structure is more effective in achieving the social goal of protecting the environment. The state's property rights and sovereignty enable it to differentiate its air transport relations. Similarly, the features of secrecy and barter exchange enable the state to select transaction partners that operate with modern equipment and to stipulate the use of such equipment and the time of operation in the Bilateral agreement. It can use domestic regulation to prescribe the behaviour of the industry, in particular the way in which it should provide airport and air transport services. Dutch negotiators are also well-organised and creative in Bilateral transactions, making strategic use of non-aviation quid pro quos. As a result, Bilateralism has made a solid contribution to environmental protection, despite the country's small size. Realising the same goal in the Community is problematic. Although the Community structure contains some elements aimed at protecting the environment and although the goal may be pursued at a domestic level, the Dutch wish to improve environmental protection beyond what is required at the corresponding Community level carries the risk that the state will breach its treaty obligations and will antagonise the industry. The goal of prestige has become less important and thus attracts less attention than other goals. Note, however, that the two-party agreements and the use of non-legal enforcement mechanisms in Bilateral state-

50 Section 5.8 noted that other Member States aimed for restrictive Bilaterals with the Netherlands because of KLM's strong competitive position. The wish to protect their own carriers may influence discussions on the
airline relations have forged a close bond between the state and industry, thus contributing to
the nation's prestige. In the Community structure, the delegation of property rights and a
growing divergence of interests have loosened state-industry relations. In addition, respect for,
knowledge of and close relationships among Member States have become a substitute for the
goal of prestige. The political goal of maintaining good interstate relations is pursued in very
different ways under the Bilateral and Community structures. The Bilateral structure
emphasises the relationship. Control over the property rights, the two-party nature of
agreements, the secrecy surrounding the transaction process and the ability to differentiate in
Bilateralism enable the Dutch state to tailor its air transport agreements according to the value
of its relationship with a specific state. In the Community, the content of agreements is largely
determined at the Community level and discrimination between Member States is prohibited.
However, the resulting inability to tailor agreements to individual states is more than
compensated by the fact that relations between Member States are much closer than Bilateral
interstate relations.

The above discussion implies that it is not possible to give an unambiguous answer to the
first question in Chapter I, namely which of the Bilateral and Community structures is more
effective. Nevertheless, the thesis has shed some light on the nature of the problems faced in
each structure. The Community harmonises the interests of the states but not completely. The
advantages associated with a greater knowledge about other Member States do not
compensate the disadvantages arising from the loss of control over the transaction process.
The Bilateral structure outperforms the Community in one area that is important, namely the
ability to differentiate between transaction partners. This feature enables the state to create a
selective transport network. Even if the ability to select and differentiate may be restricted
somewhat because of the reciprocity requirement and the Dutch lack of economic and political
power, this limitation applies mainly to the financial goal. The Community structure does not
impose any reciprocity requirements, which makes it better suited to the financial goal. The
Bilateral structure falls short of the Community's performance in the area of good interstate
relations and performs better in terms of the relatively unimportant goal of prestige. Whether
these findings imply that the Community structure can be considered more effective than
Bilateralism depends on the weights assigned to each of the goals. This is primarily a political
issue.

The features of the two structures that influence their effectiveness also influence their
transaction cost efficiency. For instance, the extensive delegation of property rights to industry
players in the Community structure has reduced the state's control over the transaction process

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allocation of traffic rights and hence the Dutch ability to retain their position if and when the Community
becomes responsible for air transport relations with third countries.
and has increased the risk of opportunism at the state-industry level. Similarly, the ongoing integration of the economies of the Member States has reduced the risk of opportunism at the interstate level. The following table summarises the transaction cost effects derived in Sections 5.4.1-5.4.4 and 5.7.1-5.7.4. For each governance structure and core dimension, the table distinguishes between the interstate and state-industry relationships. It also gives an indication of the level of transaction costs associated with a given core dimension and relationship. For instance, the entry ‘high’ in the top left hand cell indicates that under Bilateralism, the transaction frequency variable generates high transaction costs in the interstate relationship.

<table>
<thead>
<tr>
<th>Bilateral structure</th>
<th>Community structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREQUENCY</td>
<td></td>
</tr>
<tr>
<td>Interstate</td>
<td></td>
</tr>
<tr>
<td>Low frequency of contracting and rigid contract structure. Amendments needed in a dynamic environment hard to realise. High ex ante negotiating costs to realise best position. High ex post costs of amending and monitoring.</td>
<td>Low frequency of contracting but flexible structure enables adjustments (e.g. infrastructure). No need to realise best ex ante position. Procedure if amendment needed.</td>
</tr>
<tr>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>State-industry</td>
<td></td>
</tr>
<tr>
<td>Easy to amend relationship with state, difficult to adjust operations in dynamic environment due to rigid structure. High cost of executing the agreement.</td>
<td>Framework structure enables airline to adjust operation. Community imposes increasingly strict regulations on airport. Domestic requirements reduce ability to adjust in a dynamic environment.</td>
</tr>
<tr>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>UNCERTAINTY</td>
<td></td>
</tr>
<tr>
<td>Interstate</td>
<td></td>
</tr>
<tr>
<td>Loose relationships. Complex transaction process and dynamic environment. Ex ante costs high. Ex post costs high due to difficulty of gathering information on compliance. Rigid structure increases need to monitor performance.</td>
<td>Close relations. More information processing needed to realise domestic goals. Simplified structure and good information gathering capacities. Framework structure and delegation of property rights to industry reduce need for ex post monitoring of foreign state.</td>
</tr>
<tr>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>State-industry</td>
<td>Airline faces less uncertainty on applicable Community regime. Industry faces more domestic requirements, increasing the need for information processing. High uncertainty about appropriate behaviour. Framework structure increases need for state to monitor industry’s execution of transaction.</td>
</tr>
<tr>
<td>----------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>

### ASSET SPECIFICITY

<table>
<thead>
<tr>
<th>Interstate</th>
<th>State-industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low specific investment needs, no need to incur transaction costs.</td>
<td>Increased requirements, reduced mutual exposure. Airline is able to relocate operations. State aims to reduce exposure. Strong need to devise external protective measures.</td>
</tr>
<tr>
<td>Minimal</td>
<td>High</td>
</tr>
</tbody>
</table>

### OPPORTUNISM

<table>
<thead>
<tr>
<th>Interstate</th>
<th>State-industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>

| Low            | Low                                                                                                                                                                                                                                                                                                                                 |

#### Table 5.2

The table shows a complicated picture. The Bilateral structure allows a differential treatment of trading partners and thus makes it possible to tailor agreements to specific needs. This makes the negotiation process flexible. Once an agreement is entered into, however, the
rigidity of the structure prevents states from responding to developments. On the whole, the relationship is therefore not flexible and the transaction costs of executing the agreement in a dynamic environment are high. Further, the loose interstate relationships and multiple state goals, combined with the features of barter and secrecy, make the Bilateral transaction complex. Secrecy impairs the states’ information gathering capacities, and barter exchange places high demands on their information processing capacities. These features cause uncertainty and require the states to incur high transaction costs in the pursuit of domestic goals. The rather loose interstate relationships and the sovereignty of the state, which hampers compliance, produce a high risk of opportunism and so generate a need to monitor behaviour. The state’s monitoring abilities are limited, however, creating a need for other safeguards. The core dimensions of frequency, uncertainty and opportunism thus generate high transaction costs in the interstate relationship. Bilateralism generally does not require states to make transaction-specific investments so that the degree of asset specificity and the associated transaction costs are minimal. In the Community structure states do not need to make transaction-specific investments either. Moreover, the framework nature of the structure increases the flexibility of the relationship, which facilitates adjustment to changes in the environment and prevents agreements from growing out of line with reality. The close relationships between the Member States, the publicity surrounding the transaction process, as well as its formality simplify the transaction and improve the information gathering and processing capacities of the Member States. Although some uncertainty remains, the associated transaction costs are lower than under Bilateralism. Furthermore, the close interstate relations in the Community, the public nature of the transaction process, improved monitoring at the state level, as well as the existence of European Courts reduce the risk of opportunism and the transaction costs associated with this core dimension. The interstate relationship therefore generates lower transaction costs in the Community structure than in the Bilateral structure.

These findings contrast with the results at the state-industry level. It is true that the rigid structure of Bilateral agreements prevents the industry from adjusting its operations in a dynamic environment. The industry also faces a high degree of uncertainty because it lacks uniform rules and because there are state-imposed requirements. On the other hand, close relations and strong interdependencies improve the state’s monitoring abilities and induce the industry to take the state’s interests into account. These features lower the risk of opportunism, and thus the need to devise additional safeguards. The same features and the mutual exposure to hold-ups also greatly reduce the need to protect transaction-specific investments. The Community operates in a very different way. Although its framework structure provides airlines with a flexible environment at the Community level, tighter domestic regulation prevents the industry from adjusting its operations. The airport faces strict
regulation. The industry has to meet a growing number of domestic requirements, which has increased the complexity of the transaction. The extensive use of domestic regulation and the changing environment have caused a divergence of interests. The greater delegation of property rights to industry players has increased their ability to pursue their own objectives. In other words, in the Community structure every core dimension generates high transaction costs at the industry level.

Such a mixed picture on the transaction cost effects of the two structures makes it difficult to draw an unambiguous conclusion on their transaction cost efficiency. Whereas the Community structure generates lower transaction costs at the interstate level and is thus more efficient at that level, the Bilateral structure generates lower transaction costs and is more efficient at the state-industry level. Neither structure dominates the other. In each structure some core dimensions lead to high transaction costs, while others generate low transaction costs. What the analysis has shown, however, is that the assignment of property rights plays a crucial role in the distribution of transaction costs within a given structure. The party that holds the property rights is confronted with high levels of uncertainty and opportunism and therefore high transaction costs in these problem areas. Thus, in Bilateralism, where the state has control over the property rights to airspace, the claim on productive resources tends to be relatively high in the interstate relationship. In the Community structure, on the other hand, the state has more or less delegated the air transport rights to the industry and the state-industry relationship shows a relatively high claim on productive resources. This raises the question of which relationship can more easily be adjusted in a way that would reduce the problems of uncertainty and opportunism. Section 2.7.3.3, which discusses two crucial features of the state, namely sovereignty of the state and its power to coerce others within its territory, may shed some light on this issue. On the one hand, the state can exert influence on the behaviour of the industry; on the other hand, it cannot determine the conduct of other states that are themselves sovereign. It may therefore be more fruitful to find ways of reducing transaction costs at the state-industry level rather than at the interstate level.

The next chapter will give some suggestions on how the performance of the Community structure may be improved.

51 Note that the reduction of state sovereignty in the EC has affected every Member State.