

# 6 Germany

## Integrated transport, land-use and environmental policy-making

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### 6.1 Introduction

To give a short overview of the integration of transport, land-use and environmental policy at national, regional and local levels in Germany is not an easy task: the German political system is rather complex and fragmented. Moreover, there is not much systematic research on policy integration. Within the existing research there are two main strands of discussion: one concerns the integration of environmental policy into other policies, and the other concerns the problems of coordination between policies and their relationship with different policy styles (for an overview of the incorporation of the environmental dimension into freight transport policies, see for example Hey, 1998).

A key discussion in Germany in this area is the integration of environmental concerns into other policies and a whole generation of committed professionals has devoted many years to battles along this line. The issue of policy integration raised by sustainable development debates is much more complicated and meets considerable resistance also among environmentalists. The problem is that this requires a discussion about the role of different policies. Transport, environmental and land-use policies are traditionally weak policies which all have strong inter-relationships with economic and employment policies. At least in Germany, land-use policies do not include comprehensive development strategies for a given territory. EU Structural funds, which in theory would require the most integrated approach to all the policies addressed here, are mainly being managed by economic ministries.

#### Political structure

The Federal Republic of Germany has a clearly federal political system consisting of three main levels: the federal level, the regional level (the *Länder*) and the local level. Five of the 16 *Bundesländer* (federal states), and half of Berlin joined the western *Bundesrepublik* only in 1990 – without major changes in the constitution. Every federal state has its own state power and constitution. Cultural Policy, large parts of the education system, the police, and the communal law are exclusive competencies of the *Länder*. They are responsible for the entire internal administration and for the enforcement of federal laws and regulations. The *Länder* in turn are subdivided in 32 administrative districts without own legislative power (*Regierungsbezirke*), which consist of 440 counties (*Landkreise* or *kreisfreie Städte*) and altogether 14,197 municipalities.

Federal legislation is decided by the parliament which consists of two chambers: the *Bundestag* (House of Representatives, 669 members) and the

Bundesrat (Representation of the Länder, 69 members). The President of the Republic has merely representative functions. The federal constitutional court decides in case of doubt whether a law is allowed by the constitution.

The Bundestag – in charge of a complex legislation and of a multitude of control tasks – has developed a strict division of labour. The 23 permanent commissions correspond to the ministries of the government, their recommendations are normally accepted as final decisions by the plenary. The Bundesrat, which represents the Länder governments, has the right to take the initiative for laws. Many statutory orders and administrative regulations have to be accepted by this chamber. Since the foundation of the Federal Republic one could observe a process of 'unitarisation': on one hand the parliaments of the Länder have lost more and more competencies, whilst on the other hand the governments of the Länder have been increasingly involved in the legislation process at the federal level. At the same time the building of party-related blocks in the Bundesrat has considerably gained importance. In this way political accountability has been weakened and tendencies towards a 'consociational democracy' have been considerably strengthened (see for example Lehmbruch, 1996). The allocation of legislative competencies between the federal and the Länder level is basically structured as follows:

- exclusive competence of the federal level (Bund): mainly foreign policy, financial policy and defence;
- competing legislation between the Länder and the Bund (the Länder laws are valid unless there are federal regulations), such as waste, air quality and nuclear safety;
- competence of the Länder (the federal level setting only the general frame), such as land use, nature protection, education and cultural policies.

The implementation of federal laws and administrative provisions is within the responsibility of the Länder and the local authorities. This allows for some leeway. On the other hand there are many issues where a formal autonomy of the Länder and the local level exists, but is very strongly guided by federal funding (e.g. for transport infrastructure).

The style of policy-making is rather confrontation oriented, especially at the federal level but, in the implementation of policies, a cooperative style is more prevalent. These 'soft' approaches often find conflict with the traditional political culture of hierarchical ruling ('Obrigkeitsstaat'). Against this background, negotiation systems, especially at the federal level, usually show a lack of openness for new political actors (closed shops) and transparency.

The functioning of the federal government is governed by three rather contradictory rules: the 'guideline competency' of the chancellor, the collective decision making of the cabinet and the autonomy of each minister in running a ministry. The sectoral organisation of policy and programme development, and the difficulties of cooperation between the ministries were criticised as



early as the 1970s (see for example Mayntz, 1980), although efforts to improve coordination have not been very successful (Thurner and Stoiber, 2001).

The third administrative level are the local communities. Legally they are subordinate to the Länder, but they have a certain autonomy guaranteed by the federal constitution. The original differences between the structural models of local government in the different Länder have largely disappeared.

It could be said that the German political system is characterised by a strong horizontal and vertical 'Politikverflechtung' (political entanglement). In terms of the formulation of policies, decision making and administrative implementation it is strongly fragmented. Negotiation systems and processes (often including only the most powerful interest groups) are central elements in the political process. The consequence is that political decisions often lack transparency and are taken at the cost of groups that are excluded from the process.

## 6.2 Actors and institutions

### Environmental policy

Environmental policy has a rather long history in Germany. It has become an official part of public policy since the end of the 1960s, when the social democratic party entered the federal government. A formal environmental programme was established in 1971 which can be considered as an innovative step in the direction of strategic environmental planning. It introduced the integration principle (Krebs and Günther, 2000), and a cabinet committee for environment and health. The basic approach was to formulate long-term environmental targets and concrete steps to be implemented (Jänicke et al. 2001). In 1976 the programme was prolonged but the innovative long-term and integration-oriented approach encountered increasing resistance. Since the 1980s it was increasingly substituted by a conventional medium-term command and control policy based on permits and standards. As this approach was in tune with the traditions of German administrations and was well managed, it was successful in tackling the most obvious environmental problems. As this approach basically has been maintained until today, Germany's role has shifted from being a successfully regulating front-runner in environmental policies to being a latecomer when others established new instruments for strategic planning or market-oriented implementation and promoted a more integrative view. The concept of sustainable development, calling for the process-oriented integration of different dimensions, is often being considered as a step back compared to existing high environmental standards. However, the national climate change policy can be considered as rather successful.

With the national environmental programme in 1971, the competence for environmental policies at the national level was distributed to different min-

istries. The main responsibility was attributed to the ministry of the interior. With this approach, environmental policy was acknowledged as a cross-cutting issue, and nearly every ministry established a department for environmental affairs. However, fully coordinated environmental policy was not developed and the approach of negative coordination prevailed. As a result, environmental policies have been rather fragmented (Krebs and Günther 2000). A change in the approach occurred after Chernobyl in 1986 when a special environmental ministry was created. It became the main actor in environmental policies at the federal level. However, many important environmental competencies remained with other ministries. The promised concentration of responsibilities has been carried out in a half-hearted way, the BMU has remained a rather weak ministry – not only in the era of Helmut Kohl, also during the red-green coalition from 1998 onwards. However, the environmental ministry has played an important role in urging the other ministries to integrate environmental concerns into their policies (Jänicke et al. 2001).

Three national agencies belong to the Federal Environment Ministry: the Federal Environment Agency (Umweltbundesamt founded in 1974), the Federal Office for Radiation Protection (Bundesamt für Strahlenschutz founded in 1994) and the Federal Agency for Nature Conservation (Bundesamt für Naturschutz founded in 1994). The cabinet committee for environmental affairs established in 1970 is supported by a standing committee of the directors of the environmental departments in the different ministries. Both have a rather weak position and do not contribute considerably to policy integration.

In order to establish the cross-cutting 'Climate Programme 2000', the federal government established an inter-ministerial working group for CO<sub>2</sub> reduction. The OECD considered this as a 'positive example for an integrated, cross-sectoral approach' (OECD, 2001: 7). For the elaboration of the national Sustainable Development Strategy a more permanent 'Green Cabinet' composed by a number of secretaries of state has been established. How these structures will develop is not yet clear. Up to now they do not have any decision-making competencies and the *National Sustainable Development Strategy* is a very cautiously formulated document. Moreover, the government and the parliament have established the following advisory structures:

- the Council on Sustainable Development (Rat für Nachhaltige Entwicklung) has members origination from business, trade-unions, churches, NGO's, research and the different;
- the German Council of Environmental Advisors (Rat von Sachverständigen für Umweltfragen, SRU) advises the federal government on the state of the environment and on environmental policy and publishes a very comprehensive report every two years which regularly emphasise the importance of policy integration;
- the Federal Government's Scientific Advisory Council 'Global Changes to the Environment' (WBGU) is another expert council which develops policy



recommendations;

- the parliamentary inquiry commission 'Protection of Mankind and the Environment' (1995-1998) was the most important animator for the German discussion on Sustainable Development; it has made concrete recommendations for policy integration at government and parliament level.

All these actors have explicitly emphasised that efforts for policy integration are necessary in Germany. The Länder also play a relatively important role: they are involved in federal environmental issues through the Bundesrat, they are the enforcing authorities for environmental laws (e.g. industrial waste, habitat protection, water quality) and can to a limited extent issue their own environmental legislation. Legislation competencies exist in the areas of soil protection, landscape protection and maintenance, water resource management. The most important institution in the Länder are the Environment Ministries (Landesumweltministerium). The following panels ensure a coordination between the Länder and between them and the federal government:

- the conference of the environmental ministers of the Bund and the Länder (Umweltministerkonferenz des Bundes und der Länder);
- the standing committee of department directors (Ständiger Abteilungsliterausschuss Bund-Länder für Umweltfragen);
- working Groups between the Länder (Länderarbeitsgemeinschaften) concerning water, pollution control, nature conservation, waste, nuclear energy and chemical safety.

The competencies of local governments guaranteed by the constitution are to be found in the areas of supply and disposal (waste, water, energy), land consolidation planning, construction plans, landscape planning, transport. They are guided by laws at the federal and the Länder level but there is some leeway.

Local communities can therefore set their own priorities in the areas of local climate protection, local taxes, land use, local transport planning, environmental reporting and awareness raising, economic promotion, participatory processes. The most important local actors are the municipal environmental departments. However, important competencies are located in other departments of the local governments. In recent years there have been efforts to develop integration mechanisms, integrated approaches, guidelines and visions. Compared to other countries, Local Agenda 21 processes are not very widespread. This may partly also be due to the late emergence of programmes from the Länder. However, the very differentiated and thoroughly organised administration at the local level and a strongly developed spirit of defending own competencies does not facilitate integrated approaches.

### Land use policy

Whereas the environmental and transport policy are shaped by strong competencies at the federal level, the main competencies concerning land use are located at the Länder level. The main instruments of land use planning in Germany are indicated in Table 6.1.

Various instruments of landscape planning (e.g. *Landschaftsprogramm*, *Landschaftsrahmenplan*, *Landschaftsplan*, *Grünordnungsplan*) aim at integrating environmental aspects into land use policy (Fischer, 2002). In terms of land use policy, the federal level only gives general guidelines which must be developed by the Länder in a rather autonomous way. The legal framework is given by the Federal Regional Planning Act which was reviewed in 1998. The 'Leitbild' for land use is given at the federal level by the 'Raumordnungspolitische Orientierungsrahmen'.

The most important actor on the federal stage is the Federal Ministry of Transport, Building and Housing (BMVBW) which was created by the red-green coalition in 1998 by merging the Ministry of Transport and the Ministry of Building and Housing. This merger was a positive step towards policy integration between land use and transport policies. However, in practice this integration still encounters considerable difficulties. The Federal Office for Building and Regional Planning (BBR) is the responsible agency in this field, which in turn is the result of a merger of two agencies with quite different histories and cultures.

At the Länder level, the federal guidelines are translated into more specific state building laws, state planning law as well as state development plans and programmes. The responsibility for this is attributed to different ministries, depending on the structure of the Land government (e.g. the Economic Ministry in Hessen and Baden-Württemberg or the Environment Ministry in Bavaria). The coordination between the Länder and also between the Länder and the federal level is ensured by the Conference of Ministers for Regional Planning (MKRO). Similar functions has the Conference of Ministers for Urban Development and Housing (ARGEBAU). In the larger states special institutions, called regional planning associations, are responsible for regional planning at a level between the Land and the local authorities. Usually local authorities have a strong influence at this level.

Finally, the local communities, represented by their local planning authorities, have the task to take concrete decisions while respecting all guidelines and plans elaborated at larger scales. Their main instruments are the zoning plan and the town planning map.

### Transport policy

Transport policy has many aspects. In this chapter we will concentrate on those issues which have a specific spatial impact. As in most other European countries, transport policy in Germany is characterised by a strong 'pillarisa-



**Table 6.1 The main instruments of land use planning in Germany**

Level	Instrument
Bund	Raumordnungspolitische Orientierungsrahmen (land use policy orientation framework)
Land	Landesentwicklungsprogramm/-plan (state development plan)
Region (not found in all Länder)	Regionales Raumordnungskonzept/Regionalplanung (regional land use concept/regional plan)
City/municipality	Flächennutzungsplan (zoning plan)
Neighbourhood	Bebauungsplan (town planning map)

tion': a functioning vertical coordination across the different administrative levels for every transport mode (roads, rail, water, air), but coordination between the modes is very weak.

The planning and maintenance of road infrastructure is organised on four levels: the Bund, the Länder, the counties and the municipalities have their own road system for which they are responsible. The rail system is nearly exclusively owned by the Bahn AG which is owned by the Federal level. However, since the rail reform, the Länder have got a much stronger influence on the regional rail transport. Waterways are run by federal agencies.

The main instrument of transport planning on the federal level is the *Federal Transport Network Plan (Bundesverkehrswegeplan BVWP)*. The planning procedure is straightforward: the federal authorities collect propositions for new infrastructure from state governments, local governments and their own administrations (Federal Railways, highway authorities, waterway authorities and so on). With the help of a standardised cost-benefit analysis the proposals are rated and sorted in a priority list. The basic objective is the extension of the transport network. There is no strategic planning concerning ecological or social objectives (Fischer, 2002).

The central actor at the federal level is the Ministry for Transport, Building and Housing (BMVBW). It is responsible for the formulation of transport policy and for infrastructure planning. The Ministry has an internal 'working group for integrated transport policy'. A number of specialised agencies are responsible for the different transport modes and the corresponding infrastructure.

As in the other policy fields, the main actors at the regional level are the Transport Ministries of the Länder. Also for transport there is a conference of the ministers of the Länder and the federal level. The Länder ministries elaborate specific state transport infrastructure plans or more integrated transport concepts. The administration of the Länder is also responsible for carrying out the investment projects of the national road network. With the railway reform the Länder have got the responsibility for the regional railway transport. The contract the federal or minor private railways for maintaining public transport services at the Land level. For this purpose special agencies or state owned companies have been created.

The counties do not only have the responsibility for the network of county roads (Kreisstraßen), they also have to supervise or organise the inter-muni-

pal public transport (e.g. buses in rural areas). The cities play an important role in transport policy. Not only are they responsible for the local road infrastructure where the largest share of overall traffic flows. They also have to manage city traffic with regulations, parking schemes, bicycle infrastructure and so on. Last but not least they are responsible for the organisation of local public transport. Different offices, agencies and companies depending from the local governments are involved in transport issues: usually there is an infrastructure department (Tiefbauamt), a city planning department (Stadtplanungsamt), the police (Ordnungsamt), the public transport company, an environmental department (Umweltamt), all involved in transport issues. Coordination at this level usually works better than at higher levels. However, here too is a very differentiated approach and an administration very aware of competence delimitations which often hinder effective cooperation.

In summary, one can say that corresponding to the general policy style in Germany, the interactions between these policy fields are rather limited at the federal level but are somewhat greater at the regional and local levels. Within organisations, different policies are rather segmented, especially environmental and transport policy.

### 6.3 Policy content

Integration between the different policy fields is not yet very advanced in Germany. Policies are often formulated separately, especially at the federal level. This section focuses more on the federal level while the following section concerning practice puts more emphasis on the regional and local situation.

#### **Environment policy**

After the general elections in 1998, the new Minister for the Environment (from the Green Party) was confronted with very high expectations and an administration that had its own priorities. The long-term task of policy integration was not among the first priorities. However, some positive results have been achieved including the climate change protection policy and the revision of the federal nature protection act.

In its 2002 *Environmental Report*, the Federal Environment Ministry takes stock of the environmental policy of the federal government. It calls an improved integration of environmental issues in other departments. Mobility is treated in a separate chapter which demands better coordination of transport policy especially with regional planning, economic and environmental policies. Apart from this, there is little relation to the issue of land use and regional planning (BMU, 2002).

The *National Climate Protection Programme* (2000) was elaborated by the already mentioned inter-ministerial working group on CO<sub>2</sub> reduction. It shows



a very integrative approach. The envisaged measures cover a variety of policy fields. Transport policy is treated explicitly. In relation to transport issues also the spatial dimension (land use) is considered (Interministerielle Arbeitsgruppe CO<sub>2</sub>-Reduktion, 2000).

The new Federal Nature Protection Act of 2002 can also be considered as an important step to-wards better policy integration between nature protection, land-use and transport policy. The links between nature protection, regional planning, land use and landscape planning are dealt with in detail. Landscape planning has been strengthened as an instrument for the integration of environmental aspects into regional planning. The long disputed right to sue for environmental NGOs may also have a relevant integration effect (Bundesregierung, 2002a).

The most influential document concerning sustainable development in Germany has also grown out of environmental policy debates but did not come from the government. It came from the 1998 report of a German Parliament Commission inquiry entitled *Protection of Mankind and the Environment*. It was accompanied by a large number of studies including a special case study hconcerning building and housing, which reports intensive efforts to integrate the economic, environmental and social dimensions. It makes specific recommendations for improving policy integration at the level of the parliament and the federal government (Enquete-Kommission 'Schutz des Menschen und der Umwelt' des Deutschen Bundestages, 1998). Some of these recommendations were taken up by the red-green coalition.

In view of the Johannesburg Summit, the recent *National Sustainable Development Strategy of the Federal Government* (2002) has been elaborated within a very short time: tree months for the writing of the draft and two months of public discussion (Bundesregierung 2002b). The institution in charge was the 'Green Cabinet' that had been created one year earlier. The National Council for Sustainable Development had only an advisory role. As the result was not the visionary future-oriented strategy expected by many from a red-green coalition, public reaction was quite negative. In fact, the document presents few new ideas. For some issues it presents ambitious objectives (e.g. reducing the consumption of land) but remains vague for others (e.g. climate protection).

### **Land use planning policy**

The last Christian democrat government achieved a comprehensive reform of the planning laws in 1997 which did not satisfy all expectations but nevertheless showed some progress towards better policy integration. The Federal Regional Planning Act lays down the principles and the procedures for spatial planning at the various levels. Its purpose is the reconciliation of different demands regarding space and a reduction of conflicts arising during the planning process. It is thus characterised by an intrinsically integrative approach and strongly relates to environmental aspects (conservation of open space,

conservation of the functioning of the natural balance, surface-saving settlement structures, protection of natural resources) and to transport aspects (accessibility for persons and goods, attractiveness of public transport and so on). In the new version of the law of 1998, sustainable development is mentioned for the first time as a general principle for Spatial Planning (Bundesregierung, 1998).

The Federal Building Law regulates the local planning procedures in detail. It was revised in 1997 and is now officially committed to the objective of a sustainable development for settlement structures. Important progress includes special provision concerning soil protection and the economic use of land. The *Spatial Planning Reference Framework* (*Raumordnungspolitischer Orientierungsrahmen* or ROPOR) is a basic document elaborated by the Conference of the Ministers for Spatial Planning (MKRO). It sets out general guidelines for planning at the regional and the local level. The Orientation Framework postulates five *Leitbilder* (visions) which all have direct relations to environmental and transport issues: *Leitbild Environment and Land-Use*, *Leitbild Transport*, *Leitbild Europe*, *Leitbild Structure and Development* (Bundesministerium für Raumordnung, 1993; Lauschmann, 1994). This framework, passed in 1993, has not been revised since the reform of the above-mentioned law. Any new edition will have to take into account the ESDP (European Spatial Development Perspective) passed in 1999 by the European Conference of the Ministers for Spatial Planning. Other interesting documents in this context are the *National Action Plan for the UN Conference Habitat II* in 1996 and the corresponding progress report for the Istanbul Conference five years later. These documents call for a proactive comprehensive planning approach which embraces all spatially relevant policy fields (BBR, 2001).

The *Federal Transport Network Plan* (*Bundesverkehrswegeplan BVWP*) is the centrepiece of national transport planning in Germany. It is the overall plan for the development of the transport infrastructures of national importance covering all modes. Based on this document the plan of actual requirements is developed in negotiations between the federal and the Länder level. This is followed by decisions concerning timing, financing and the construction of the single projects. The Länder administrations are in charge of concretely implementing the general guidelines of the BVWP in a twofold planning procedure consisting of the regional planning procedure which defines the general tracking and the concrete planning procedure which defines the plans in detail. Concerned parties have the right to make objections in both procedures.

The current BVWP dates from 1992 – only shortly after the integration of Eastern Germany – and was scheduled to last ten years. At the level of the general objectives, policy integration is an important issue: the plan has objectives related to spatial development (improvement of accessibility, employment and equity between territories), environmental concerns (reduction of



noise, air pollution and the effects of transport infrastructure). The assessment of single projects occurs through a cost-benefit analysis where environmental effects are taken into account in a monetised form. Additionally, every large project is subject to an environmental risk analysis and a monetised assessment with regard to urban development. In terms of the actual investment plan, the 1992 BVWP marked a trend-break compared to previous plans: investments in railway infrastructure were as high as those in roads for the first time.

The revision of the most recent *Federal Transport Network Plan* went on for several years. After the last federal elections, the new Transport Minister published a status report on the implementation of the plan and changes in the frame conditions (BMV, 1999). For the new edition, some methodological changes are being envisaged: In the cost-benefit-analysis environmental aspects will be considered with a more important weight, a special analysis concerning the spatial impacts will be introduced and the environmental risk assessment will be required not only for large projects but for all those selected by the Federal Office for Nature Conservation. Still, integration of environmental and spatial development aspects is being considered very late in the process and is in competition with economic aspects. The whole planning process of the BVWP is basically oriented towards an extension of the existing transport networks. Single projects are evaluated separately and put in a priority list. A weighing up of more general objectives in the sense of a really integrative transport concept is not taking place. Innovative approaches in this direction put forward by a study for the Federal Environment Agency have not been accepted.

In 2000 the Ministry for Transport Building and Housing published a balance on transport policy after two years of existence of the new integrated Ministry. The whole report calls for 'an integrated policy for regional planning, urban development and transport'. It states that it is important to pay more attention to 'the causes and the effects of a sustained traffic growth' including the spatial and environmental dimensions. While these statements constitute a rather advanced position, the list of initiated or envisaged actions did not present anything new (BMVBW, 2000a).

However, because of a shortage of available funds compared to the original BVWP, an investment programme for 1999 to 2002 set the priorities for the last two years of validity of the old plan. It follows the old evaluation logic for single projects but sets clear priorities for rail and waterways (BMVBW, 1999). The financing instrument for these plans is partially the European Regional Development Fund with a special Operational Programme for Transport Infrastructure. The ex-ante evaluation concerning Sustainable Development contained in the corresponding programme document mentions a series of instruments used by the federal government for ensuring an environmentally-compatible and resource-efficient mobility. In practice, the actual procedures

**Table 6.3 Main transport policy documents at the federal level**

Policy Document	Statement	Type of integration	Strategies, techniques, tools
Federal Transport Network Plan (1992)	Objectives <ul style="list-style-type: none"> <li>• spatial planning: improvement of accessibility, employment, equal opportunities</li> <li>• environment: reduction of noise, air pollution and dividing effects of traffic</li> </ul>	inter-sectoral	<ul style="list-style-type: none"> <li>• Spatial planning: 'analysis of benefits for urban development' (städtebauliche Nutzenanalyse)</li> <li>• Environment: environmental risk assessment (Umweltrisikoeinschätzung)</li> </ul>
Transport Report (2000)	Objectives <ul style="list-style-type: none"> <li>• integration of spatial and transport planning</li> <li>• improvement of environmental protection</li> </ul>	inter-sectoral	Techniques, tools <ul style="list-style-type: none"> <li>• strengthening of market mechanisms</li> <li>• setting a general political framework (new federal transport network plan etc. )</li> </ul>
Investment Programme 1999-2002	<ul style="list-style-type: none"> <li>• general statement about the importance of integrating environmental concerns</li> <li>• concrete integration of environmental concerns by a shift in investments from road to rail and waterways</li> </ul>	inter-sectoral	
ERDP: Federal Programme Transport Infrastructure 2000-2006	Objectives <ul style="list-style-type: none"> <li>• contribution to a modal shift from road to rail and waterways</li> <li>• contribution to a positive or neutral 'sustainability' of the single projects</li> </ul>	inter-sectoral	Strategies <ul style="list-style-type: none"> <li>• consideration of environmental concerns in the construction of infrastructure</li> <li>• regulatory and fiscal support for combined transport</li> </ul> Techniques and tools <ul style="list-style-type: none"> <li>• environmental assessment in the general planning procedure</li> <li>• quantification of environmental effects in the cost-benefit analysis of the Federal Transport Network Plan</li> </ul>

ronment Ministers (UMK) and the Presidents of the associations of local governments made a common declaration concerning the Local Agenda 21. They declared their support of the integration of the ecological, economic and social aspects and called for a cooperation of the different administrative levels. The issues of transport and land-use were directly addressed as sectoral policies to be integrated in a common process (ICLEI and DIFU, 2001). To date, regional strategies for sustainable development (Regional Agenda 21) have been developed in Bavaria and Lower Saxony, whilst Baden-Württemberg and Rheinland-Pfalz are the only ones to have an environmental plan. Schleswig-Holstein has formulated a system of environmental objectives. One important observation is that these various documents and processes are of very different quality.

In terms of the integration of environmental policies, Bavaria is an inter-



**Table 6.4 Main environmental policy documents at the federal level**

<b>Policy Document</b>	<b>Statement</b>	<b>Type of integration</b>	<b>Methods and tools for policy integration</b>
Report of the Inquiry Commission 'Protection of Mankind and the Environment' (1998)	<ul style="list-style-type: none"> <li>• general call for policy integration</li> <li>• concrete propositions</li> </ul>	inter-sectoral inter-departmental intra-organisational	<ul style="list-style-type: none"> <li>• consideration of the concept and dimensions of SD in the ministries and parliamentary commissions</li> <li>• SD as an essential element of the policy of every ministry</li> <li>• extension of the instrument of the inter-ministerial commissions (IMA)</li> <li>• Green Cabinet</li> <li>• coordinating role of single policies by the state minister in the office of the Chancellor</li> <li>• appoint members of parliamentary commissions to be responsible for considering sustainable development</li> </ul>
National Climate Protection Programme (2001)	<ul style="list-style-type: none"> <li>• climate protection measures have to be taken in a wide variety of policies</li> <li>• explicit treatment of the traffic and transport</li> <li>• spatial planning is considered in connection with transport issues</li> </ul>	inter-sectoral inter-departmental	<ul style="list-style-type: none"> <li>• elaboration of the programme by an inter-ministerial working group</li> <li>• wide range of concrete measures in different policies</li> </ul>
Environmental Report (2002)	<ul style="list-style-type: none"> <li>• general call for the integration of environmental considerations in all policies</li> <li>• mobility as a self-standing issue in the report</li> <li>• call for an improved coordination of transport policy with all involved policy fields, especially regional planning, economic policy and environmental policy</li> </ul>	inter-sectoral	
Federal Nature Protection Act (2002)	<ul style="list-style-type: none"> <li>• direct relation to spatial planning at different levels</li> </ul>	inter-sectoral	<ul style="list-style-type: none"> <li>• strengthening of the role of landscape planning as instrument for the integration of environmental issues in spatial planning</li> <li>• right to sue for NGOs</li> </ul>
National Strategy for Sustainable Development (2002)		inter-sectoral	

esting case. Despite the sometimes sharp rhetoric of the conservative government, environmental politics has a strong role: nature protection is an im-

portant element of Bavarian identity and present in local development policies. The Environment Pact Bavaria, concluded in 1995, was the first comprehensive voluntary agreement in Germany between politics and business. In 2000, it was renewed for another five years. The pact formulates a vision and objectives for different policy fields including mobility. The general approach, however, does not stress the integration between different policy fields very strongly (Bayerische Staatsregierung, 2000).

The most important planning documents at the regional (Länder) level are the state development plans. According to the guidelines of the Federal Regional Planning Act they are being elaborated in a very long process based on the 'counterflow principal': bottom-up and top-down. The precise process differs between Länder and the planning process itself is mainly the work of specialists. Regional planning has become a defensive discipline: it is to a large extent decoupled from economic development policies which are often being promoted by other institutions and agencies operating on the same territory. Regional planners often see themselves as defendants of a sound spatial structure of the use of land. In fact, in many cases they have succeeded in limiting urban sprawl by fiercely defending 'green zones' where building is not possible. Transport infrastructure plays an important role in these plans, but only in the sense of ensuring general accessibility and viability – not in the sense of an active structural policy. Planning authorities are exposed to pressures of all kinds of particular and economic interests and see themselves in a defensive position. Attempts to promote a more integrated 'Regional Management' show some success (e.g. in the metropolitan Regions of Hannover or Stuttgart, and to some extent in Frankfurt) but are always confronted with the tradition of sectoral administration.

In most Länder, transport policy is dealt with in a technical and rather informal way. In most states there are very few political documents concerning transport infrastructure planning and transport policy although a well-known exception is the general transportation plan for Baden-Württemberg which was produced in 1995 and was the first of such documents (see the example of Baden-Württemberg below). Rheinland-Pfalz has also published a state transport programme (Ministerium für Wirtschaft, Verkehr, Landwirtschaft und Weinbau Rheinland-Pfalz, 2000) but it does not contain many integrative elements. Environmental issues are mentioned at the level of general objectives and concerning the effects of transport. Specific measures concern noise prevention and the 'compensation measures' prescribed by general planning rules. There is no specific relation to spatial planning issues. There are other examples of innovative policy such as Brandenburg (see for example Fischer, 2000).

### **The case of Baden-Württemberg**

In Baden-Württemberg the ministries for the environment and for transport



were merged in 1996. Originally, the main motivation was to decrease the number of ministers. However, behind the choice of merging these two, there was the expectation that a more integrated policy would result. To date, there is no publicly available evaluation of the consequences and the results are unlikely to be very impressive despite the fact that, according to the minister, transport policy is effectively environmental policy. There are no permanent coordination groups between the two parts of the ministry, just temporary ones. One of these is a working group for monitoring the implementation of the recently passed environmental plan. The fact that Baden-Württemberg submitted 25% of all infrastructure proposals for the preparation of the new Federal Transport Network Plan (while making up for 13% of the population and 10% of the surface) does not seem an indicator for a particularly environmental transport policy.

Nevertheless, Baden-Württemberg is one of the few Länder which have tried to elaborate a comprehensive integrated approach. The Environmental Plan of Baden-Württemberg (Ministerium für Umwelt und Verkehr Baden-Württemberg, 2001) was developed as a 'political plan' – its contents are not legally binding but aim to give direction for various actors in society. It was quickly elaborated by a small number of officers without the large participative process and awareness-raising impact. However, it began public debate and some coordination activity within the government. Institutionally, the strategy is being monitored by the recently installed 'Advisory Council for Sustainable Development' which must submit regular reports to the state government. Moreover, in every Ministry there must be a high-ranking officer responsible for sustainability issues. Specific approaches for the integration of environmental issues into other policies (especially transport) are not to be found in this document. In terms of transport, the plan mentions 'technical developments and innovation concerning vehicles for lowering energy consumption and emissions as well as the limitation of the technically inevitable emissions' (*ibid.*).

The new *State Development Programme* (the central spatial planning document) is currently in the final procedure for approval and, according to the legal procedures, selected institutions representing the public interest can give their comments. The programme envisages an 'integrated inter-disciplinary development strategy' which should take into account the mutual inter-dependencies between the development of settlements, the environment, the economic development and traffic and should respect the principles of ecological, economic and social compatibility. The document states explicitly that transport problems cannot be solved simply by expanding transport infrastructure. It therefore recommends integrated regional planning (including transport), as is already being practised in the Stuttgart region (Land Berlin and Land Brandenburg, 2002; LAG BW, 2001). In fact, the Stuttgart region plays a special role. Here the competencies of economic development, parts

of cultural policy, spatial planning and transport policy have been placed in one institution – the Region Stuttgart, which grew out of a conventional planning association. This model has proved to be very successful but attempts to transfer it to other regions in Baden-Württemberg have been politically blocked.

In terms of integrated transport planning, Baden-Württemberg was once a front-runner. In 1995, a regional transport plan was passed (the first in Germany) and at that time was a remarkable document. Its innovative elements were mainly at the conceptual level: the systematic embedding of transport policy in the larger context of societal, economic, environmental and spatial development policy. At the practical level, it introduced integrated concepts (freight transport concept, traffic management concepts) instead of single infrastructure projects. The plan was scheduled to last until 2010. However the forecasts concerning road traffic growth until this time horizon were already out-dated in 2000. The most important efforts were considered to be technical measures. Reducing transport demand was considered less important. This view followed that of the local automotive industry which meanwhile started a large telematics-based traffic management research and demonstration project for the Stuttgart area. The general integrative approach in the Baden-Württemberg transport plan has received acclaim from the Nordrhein-Westfalen regional parliament commission's inquiry into mobility and has been proposed as a model for the elaboration of an integrated transport planning in this most important state.

In summary, there are good intentions but the implementation is often incoherent. Much depends on the specific constellation of persons in key functions. As at the federal level, long-term spatial development arguments have a hard time to resist strong and well-organised interests. A lack of transparency, complex decision-making structures and a lack of public debate favour the influence of powerful lobby groups. Where objectives and arguments are clear and communicable, policy integration is more likely to occur.

### **The local level**

Policies and policy documents at the local level are difficult to summarise. Usually at this level the inter-relationships between environmental, land use and transport policies are most evident and publicly discussed. In terms of environmental policy, important documents are usually the municipal environmental reports. There are now more than 600 cities publishing environmental reports (Locher, 2002), which generally tend to emphasise the inter-relationships with other policies. Increasingly, they are influenced by the Local Agenda 21 initiatives which promote an integrative approach and usually treat transport and land-use issues extensively (UBA, 2002). Sometime they succeed in giving new initiatives for coordination within the administrations. Perhaps more important than the LA21 processes, has been the elaboration



of municipal climate protection concepts. Between 1000 and 2000 cities have developed such a document (Interministerielle Arbeitsgruppe CO<sub>2</sub>-Reduktion, 2000).

A good example for a coherently integrated approach to city transport policy is the new *City Development Plan Transport* for Berlin. It develops a vision for the development of transport and a complex system of objectives. Based on this, partial strategies and packages of measures are formulated to cover a wide range of policy fields. The proposed measures are inter-related across sectoral administrations involving different actors groups (Abgeordnetenhaus von Berlin, 2001). The Traffic Forum Heidelberg is a well-known example for the elaboration of a vision (Leitbild) of the transport system and policy measures in a comprehensive participation process with citizens. The interest groups involved in the elaboration of the vision covered a wide range and did not just include traffic-related action groups (Sellnow, 2002).

### **The case of Freiburg im Breisgau**

Up until the end of the 1960s, urban development policy in Freiburg followed standard practice: preference for individual motorised transport, settlement development without guidance and neglect of environmental issues. In the 1970s, the inter-relations between transport and settlement development began to be considered in public discussion. The city centre was closed to motorised traffic and the 1978 zoning plan preferred an increase of density to further urban sprawl. In the 1980s, urban transport policies were clearly oriented towards environmental goals. Following Swiss examples, Freiburg introduced a comprehensive monthly ticket for public transport in 1991, which had considerable success. This model was later adopted by many other cities in Germany.

After a period in which no further building zones were allowed, the pressure on the building market led to the planning of two new areas: Rieselfeld and Vauban. Transport had high importance in the planning process and clear priority was given to public transport (new tram lines) as well as cycling and walking. Support for public transport, included the setting up of a regional public transport authority (to provide coherent planning of infrastructure and timetables and fares), improvements in service, information and equipment, and a considerable extension of the tramway network, which led to widely acknowledged successes in shifting the modal split. Contrary to the general trend in Germany, the degree of motorization in Freiburg decreased slightly since 1990 and the number of users of the public transport system increased from 30 million in 1984 to 68 million in 2001.

The so-called 'market concept', which was formulated at the end of the 1980s, aimed at maintaining the main shopping functions in the city, avoiding the building of large shopping centres on greenfield sites and the reduction of car traffic. The concept tried to ensure the availability of main services

and goods at short distances from where people live and concentrating major commercial functions in the city or at least in places with good public transport access. The rather weak instruments of urban planning however could not completely prevent the construction of rather large specialised centres in the periphery (although still in the reach of the bus and tram system). In addition, some smaller municipalities in the surroundings of Freiburg did not adhere to the agreements and preferred instead to maximise development (and local tax revenues). Nevertheless, the overall situation is visibly better than in many other places (Bratzel, 1998).

In Rieselfeld, the rather strong environmentally lobby in the city council was originally against the building of a new quarter on the site of a former sewage works which had considerable ecological value. A compromise was reached that the new settlement should be guided by a comprehensive, environmentally-oriented planning process. After a competition for the master plan in 1992, the implementation of the largest new settlement in Baden-Württemberg (78 hectares) began in 1995. Much of this is now completed or under construction. In order to avoid the creation of dormitory towns, the following objectives were part of the plan:

- high density development
- mixed land uses: living and working in the same area
- balanced structures and forms of living
- family-friendly and disabled-compatible housing
- small plots in order to avoid large uniform blocks
- good private and public infrastructure (local services and facilities)
- environmentally sound planning and construction
- areas for trade and crafts.

Particular attention was given to transport issues. In order to avoid the establishment of car-oriented lifestyles, the new tramway line arrived at the same time as the first inhabitants. No house is more than 400 metres from one of the three tram stops. The original idea of building large areas without permanent car access was not realised, however, because of a lack of demand for such houses.

When the French military left Freiburg in the early 1990s, they did not only free a large amount of housing land across the city, but also a large barracks in an attractive position. Since the mid-1990s, a new part of the city (Vauban) is in the process of development over an area of 38 hectares which will accommodate 5,000 inhabitants. The urban development competition in 1994 set out the objectives of the development, which include:

- mixing of living and working
- preference for pedestrians, cycles and public transport
- district heating and constructions with particular low energy consumption.



The issue of transport is stronger in Vauban than in Rieselfeld in as much as it goes a step further in the direction of car-free living or houses without parking opportunities. However, there are also problems: parking in the surrounding areas has increased and financial restrictions did not allow early construction of the tram route.

The planning process itself relied very strongly on the intensive participation of future inhabitants. An important objective of urban planning in Freiburg is to stop the trend of young families leaving the city. In this respect the projects of Vauban and Rieselfeld seem relatively successful: 75% of the inhabitants come from the city itself and 25% from elsewhere.

For the future development of the current zoning plan, the city of Freiburg has initiated the 'Dialogue Process - Future of Freiburg', conceived and facilitated by a team of external consultants. A series of workshops with interested citizens have been organised. The dialogue process is still underway and the formal approval of the plan is scheduled for 2006. Two observations can be made about the process to date. First, the quantity and quality of the participation of the citizens did not meet the initial expectations. The interventions of the citizens often were led by very particular interests ('nimbyism'). Second, a lack of flexibility and openness of the city administration sometimes hindered the process. The early publication of proposed building zones by the administration and the refusal to take into consideration propositions for increasing the settlement density led to astonished and negative reactions of the citizens.

The example of Freiburg on one hand shows that the lower level favours policy integration and transparent participation. On the other hand, the complex and sectoral structure of national and Länder legislation very often hinders integration at the local level. The situation in Freiburg is particularly favourable because of various factors, including:

- a culture of consensus-oriented policy style;
- little industry, little pollution, importance of services, university and tourism;
- high environmental quality as essential element of the city marketing;
- a medium-size city (200,000) with own resources and autonomy but no over-complexity;
- a high education level and strong support for the green party;
- a strong tradition of the environmental movement originating in the successful opposition against the planned nuclear power station in Wyhl near Freiburg;
- a number of environmental research and consulting institutions.

However, comparative studies between different cities have shown that the self-image of the Freiburg administration to be among the most advanced and progressive is misleading: environmental achievements, policy integration, openness and flexibility are more advanced elsewhere.

### **Research and monitoring**

The practice of non-integration does not seem to be due to a lack of knowledge on what would be necessary. For decades a series of research institutions have been working on these issues. Monitoring of the policy integration as such, however, does not take place systematically. There is a lot of scattered academic and planning literature on this issue but it is extremely difficult to find.

## **6.5 Conclusions**

### **Lessons from the German case**

In Germany, the high population density in a specific geographic and economic situation has led to a relatively high level of importance for transport, environment and land-use policies, and to a strong tradition of cooperation. Success in integration has been achieved where new institutional settings overcame traditional fragmentation and limits of competency. This has often been the case at the local level where more direct public participation intuitively calls for cooperation where it makes sense. The parliamentary inquiry commissions have had a very efficient and positive influence. With strong democratic legitimation and an efficiently managed budget for targeted research, they succeeded in raising questions in relation to cross-cutting issues. The lack of transparency in all fields favours strong organised interests and the persistence of sectoral working. In southern Germany, the land-use planning system with its counter-flow principle has led to comparatively good results. The new planning and building legislation contains some useful, but often overcomplicated procedures. The lack of an overall vision for transport policy has led to a policy which is dominated by some strong interest groups. Such a structure is very resistant to integration. New players in the game (such as the EU or the regions) may lead to new constellations and more openness.

### **Difficulties and challenges**

It seems that the current situation in Germany, where different kinds of integration are becoming essential for successful development, has a cultural problem. The combination of deeply Taylorist thinking, the preference for 'command and control' approaches and the strong consciousness of rights and duties which was successful in the industrial era is now less applicable. The classical scientific approach of analysing complex problems by subdividing them into sub-problems and appointing specialists to solve them, was extremely successful in an era where the main challenge was to build more and more differentiated industrial and technological complexes. However, this approach has difficulties to cope with the dynamic complexity of the 21st century. The industrial system and its technological logic have become so dominant



in society and ecology that complex feedbacks and interactions can no longer be ignored. In this situation the originally successful thinking is a hindrance: specialists are unable to see the whole picture. The once successful virtues of German public servants and industrial managers have become a hindrance for cooperation, social learning and integration.

In terms of the introduction of more integrated approaches of policy making, target-setting of and the implementation of flexible management systems for attaining them, Germany is quite a latecomer in Europe. The capability of learning from others seems to be much more developed in other European countries. In recent years, Germany has been experiencing the economic consequences of its difficulties to modify governance and cooperation patterns. Overcoming these difficulties is a long-term issue. Introducing new forms of governance is likely to encounter problems such as deep cultural distrust, highly differentiated, resistant institutions, the lack of tools and experience, and influential lobbies taking advantage of the absence of transparency.

Thus, one important conclusion is that difficulties in integration are often less a question of structures and rules, than a question of culture. Throughout the process European integration, Germans have had difficulties with EU policy style which is necessarily based on target-setting, negotiations and procedures and less on fixed rules. In learning from German examples it is important to consider this context. The main opportunities for improving policy integration are to be found in three areas:

1. transparency concerning facts, objectives and procedures
2. opening towards experiences elsewhere
3. participation – integration is intuitive.

With this background one can formulate five basic challenges:

1. reformulate the problems in an understandable way
2. develop understandable structures and tools for transparency
3. mobilise participation
4. exchange experiences in Europe
5. develop new models of cooperation.

The principle of subsidiarity where actors at different levels interact in striving for agreed objectives seems to be essential for opening closed structures. The present debate on the future of European institutions and European governance will probably have a strong influence on the opportunities of policy integration. The request to define clear-cut areas of exclusive competence, which has mainly been raised by German politicians, goes in the wrong direction. Responsibilities should be clearly attributed, but integration requires open arenas of discussion and opportunities for all levels to raise questions and to give their contribution.