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## Sharing Water on the Iberian Peninsula: A Europeanisation Approach to Explaining Transboundary Cooperation

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**ABSTRACT:** This paper applies the Europeanisation perspective to the policy change evident in the 1998 Convention on Cooperation for the Protection and Sustainable Use of the Waters of the Spanish-Portuguese Basins (Albufeira convention). The 'top-down' Europeanisation framework is applied here to a case involving simultaneous, joint adaptation to European Union (EU) policy in terms of two states negotiating a transborder agreement that encompasses institutional changes required by that policy. This study provides an analysis of transnational policy change in an area of vital importance in international relations, namely, shared freshwater resources. It finds that while the Europeanisation framework may be applied effectively to transboundary adaptation (not just cross-country comparison) and goes a long way in explaining cooperation on the Iberian Peninsula, it is incomplete in its consideration of other influences within and beyond 'Europe', from the global to the local levels.

**KEYWORDS:** Albufeira convention, Europeanisation, Iberian peninsula, Water Framework Directive, water policy

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### INTRODUCTION

The Europeanisation approach attempts to explain domestic change in European Union (EU) member states through the effects of European integration. While the approach is not yet considered by many analysts to be a coherent theory, it is an important framework used to study European integration and its causes and effects (Vink and Graziano, 2007). In the area of EU environmental policy, much Europeanisation scholarship focuses on the potential domestic change in policy content, administrative structures, and regulatory style (Knill, 2001; Knill and Lenschow, 2001).

Europeanisation has been applied to water policy generally and the EU's Water Framework Directive (WFD) specifically in several EU member states (e.g. Howe and White, 2002; Asquer, 2009; Thiel, 2009). There have also been limited attempts to apply the approach to cross-border governance (Leibenath, 2007). The current paper utilises the Europeanisation perspective, particularly the concept of "Europeanisation by institutional compliance" (Knill and Lehmkuhl, 2002) to analyse the case of transboundary water relations, and the formation of a cross-border water management regime, on the Iberian peninsula.

Spain and Portugal share five principal rivers, with two-thirds of their borders established by these rivers or their tributaries, the Miño/Minho, Limia/Lima, Duero/Douro, Tajo/Tejo, and Guadiana (see figure 1). The three main watersheds (Duero/Douro, Tajo/Tejo, and Guadiana) are also the largest shared rivers fully within EU borders. In general, Spanish territory is upstream and about 70% of the mean yearly water resources of these rivers is generated in Spain. The river basin areas total 45% of the surface area of the Iberian peninsula, and include nearly 64% of Portuguese territory. Extreme variations in rainfall – from season to season, year to year, and geographic region to region – exacerbate scarcity in water flows, particularly in the drier south. Agricultural irrigation is the main source of consumption for both states. Low water pricing also results in overuse and lack of progress in conservation and efficiency. These water scarcity and allocation problems are aggravated by the

traditional focus of both countries on dam construction and (in Spain) large-scale water transfers from wetter to drier regions (Maia, 2000; Canelas de Castro, 2003).

Figure 1. Iberian peninsula: Shared river basins.



Source: Commission for the Application and Development of the Albufeira Convention ([www.cadc-albufeira.org/es/cuencas.html](http://www.cadc-albufeira.org/es/cuencas.html)).

This case of shared water resources is representative of the general trend found in the Transboundary Freshwater Dispute Database studies in that formal cooperation between the two riparian states, beginning with the Treaty of Boundary Limits in 1864, has been the norm.<sup>1</sup> Indeed, a new era of cooperation – and institution formation – occurred with the signing in 1998 of the Convention on Cooperation for the Protection and Sustainable Use of the Waters of the Portuguese-Spanish River Basins (Albufeira convention), which broadened the scope of cooperation from a narrow economic focus on allocating the benefits of hydroelectric power generation to a much wider framework for achieving the sustainable use and management of shared water resources. This convention represents a significant upgrading of cooperation between the two states in comparison to previous agreements, in both its scope and its new institutional framework, which includes transboundary bodies for managing the agreement.

<sup>1</sup> See [www.transboundarywaters.orst.edu/database/](http://www.transboundarywaters.orst.edu/database/). Studies utilising the database find that riparian states' cooperation over international water resources to date far outweighs instances of conflict (especially violent conflict) and that institutions appear to be a crucial factor influencing transborder water relations. See, for example, Wolf et al., 2003; Giordano and Wolf, 2003; Wolf, 2007.

Despite this formal cooperation, however, the case also clearly indicates the presence of conflict between the two states over their shared water resources throughout the history of their relations, particularly since the mid-late 1990s. Conflicts pit different societal and governmental groups, for example farmers, environmentalists, regions, localities and energy utilities against each other both within and across borders (Llamas, 1997; Garrido et al., 2009). Why, then, did the Iberian states arrive at the comprehensive Albufeira agreement after years of more limited cooperation, and in the context of ongoing conflict? This is an important question for the states and citizens involved, and also because of the insights that this case may contribute to the study of transboundary water cooperation more generally, as well as to the Europeanisation literature.<sup>2</sup>

An application to the Iberian case of the Europeanisation by institutional compliance framework allows us to evaluate systematically the impact of EU policy requirements on the comprehensive policy shift represented by Albufeira and its aftermath. The effects of European water policy (embodied primarily in the WFD) on the intertwined processes of change in the water policy sector in Spain and Portugal individually, and in their transboundary relations through Albufeira, will be analysed through the lens of theoretically grounded causal mechanisms proposed in the stated framework. The empirical findings presented are based on semi-structured interviews carried out with policy makers, technical experts, and members of environmental non-governmental organisations (NGOs) in both countries, as well as on an extensive examination of other primary and secondary sources.

#### **THE ANALYTICAL FRAMEWORK: EUROPEANISATION BY INSTITUTIONAL COMPLIANCE**

This paper adopts a conceptualisation of Europeanisation in the top-down sense, defined as the impact of EU regulatory policies on national policies and institutions (Knill and Lehmkuhl, 2002). The policy change that we seek to explain is the comprehensive cooperation in managing shared water resources set forth in the 1998 Albufeira convention and developed in its aftermath. Cross-national Europeanisation studies are usually concerned with comparing domestic adaptation of states to EU policies. While a consideration of domestic policy change is a necessary part of understanding the Albufeira agreement, we argue that the Europeanisation framework must also be applied to the transnational policy change embodied in the treaty. In response to European requirements, Spain and Portugal have engaged not only in adaptation of their domestic water policy sectors, but also in *joint* adaptation to these requirements through the negotiation of a transborder agreement. Moreover, these processes of domestic and transboundary policy change are intertwined, as compliance with the WFD necessitates simultaneous adaptation at both levels.

Knill and Lehmkuhl (2002) identify three mechanisms of top-down Europeanisation, in which policy making at the EU level may have an impact on domestic – and in this case, transboundary – regulatory styles and structures: 1) through coercive or prescriptive demands on states (through, for example, EU directives) that require them to adopt measures to achieve compliance with specific EU requirements (positive integration); 2) through changing domestic opportunity structures as a result of regulatory competition, as opposed to a prescribed model of behaviour (negative integration) (see also Radaelli, 2003); 3) through 'framing' integration, that is, indirectly affecting member state policy by changing domestic beliefs and expectations (Knill and Lehmkuhl, 1999).

The first mechanism, which Knill and Lehmkuhl (2002) also refer to as Europeanisation by institutional compliance is evident in regulatory policies in areas such as consumer protection, the environment, and workplace health and safety. To assess this mechanism, first we need to compare EU requirements and domestic/transboundary arrangements along the dimensions of administrative style and administrative structure. Administrative style indicates aspects of regulatory intervention that define the rules of the game for public/private interaction, and the institutionalised relationships

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<sup>2</sup> Regarding this latter point, Haverland (2007) argues that the case study method remains important in Europeanisation studies in order to "better elucidate the causal mechanisms through which the EU matters".

shaping the interaction between administrative and societal actors (patterns of interest intermediation). The model identifies two ideal types of administrative style: 1) *intervening*, in which general patterns of regulatory intervention are characterised as deductive, substantive, hierarchical and detailed, and administrative interest intermediation is legalistic, adversarial, formal, closed, and privileged; 2) *mediating*, in which these patterns are inductive, non-hierarchical, procedural, and flexible, and interest intermediation is pragmatic, consensual, informal, and open, and is characterised by equal access. Administrative structure/organisation includes *competence allocation* and *coordination and control*, considering both formal authority across levels of governance (i.e. centralised or decentralised administration) and actual patterns of vertical and horizontal coordination and interaction amongst administrative bodies (Knill, 2001; Knill and Lehmkuhl, 2002).

The framework identifies the following *ex ante* hypotheses regarding domestic change in EU member states. We may apply these hypotheses to the transboundary situation as well.

1. If no changes are required by the European model in domestic or cross-border institutional arrangements, then persistence of such arrangements will occur. More specifically, if we have 'confirmation of the core' domestic or transboundary structures, we will expect 'compliance without change'.
2. If moderate changes are required by the European model in domestic/ transboundary arrangements, then adjustment is possible.
3. If fundamental changes are required by the European model in the domestic/ transboundary arrangements, then the persistence of such arrangements will occur. That is, a 'contradiction of the core' will result in 'administrative resistance', resulting in "at most limited and symbolic adaptations".
4. Even in the case of core contradictions between European requirements and domestic/transboundary arrangements, however, these contradictions may be reduced (and domestic/transboundary adaptation to European requirements may thus be possible) in the context of national/transborder core administrative reforms independent of European requirements.<sup>3</sup>

If domestic change is possible from the institutional perspective, it is then necessary to look at the other two Europeanisation mechanisms that may be at work, that is, changing opportunity structures through which one or another group of actors' interests may prevail, and changing beliefs and expectations (framing integration). This is the political agency part of the analysis, which enables a better explanation of why change actually occurs or not, and, if it does, the direction of the change.

Working with the ideal types presented in the model necessitates subjective interpretation and simplification of the governance structures and patterns within and between Spain and Portugal. These limitations are well documented and acknowledged in the Europeanisation literature (e.g. Vink and Graziano, 2007). The model does, however, provide a useful analytical structure with which to consider the complex policy adaptation occurring on the Iberian peninsula.

## **EU WATER POLICY: REGULATORY REQUIREMENTS**

The European Community began formulating water policy in the mid-1970s, and three specific 'waves' of legislation have been identified (Blöch, 2004; Kaika, 2003). The first dealt primarily with water-quality standards and the protection of surface waters allocated for drinking. The second wave of legislation, passed in 1991 and 1996, focused for the first time not only on setting water-quality standards, but also on controlling emission levels as a means of achieving the desired standards. The WFD, in effect since 2000, resulted from a series of negotiations beginning in 1996 and constitutes the third wave. It unites

<sup>3</sup> These hypotheses are summarised from Knill and Lehmkuhl, 2002 and Knill and Lenschow, 2001. The author then applies these assumptions to the transboundary level.

the approaches of the two prior periods and provides a common framework for EU water policy, making the policy truly Europe-wide. It introduces a new approach to water management based on natural river basins,<sup>4</sup> including inland, transitional, coastal, groundwater, and associated ecosystems (an *integrated* approach), and stipulates that water quality cannot be considered separate from emission controls and groundwater protection (a *combined* approach).

In terms of the regulatory requirements of the European-level policy, the WFD tends more toward the intervening ideal type specified by Knill (2001). Having a general text regarding the objectives to be applied to all member states, the WFD represents a deductive approach to changing water policy within the EU. The interventionist nature of the WFD is evident in the hierarchical and uniform definition of substantive standards on, for example, emissions and water-quality objectives. Member states are required to transpose the Directive into national legislation, create mechanisms for implementation, achieve the objectives outlined in the Directive, and report their progress to the Commission (Aubin and Varone, 2004). It demands outcomes by specific dates and requires the creation of institutions, programmes, and plans. These requirements significantly decrease member state administrative discretion and flexibility.

The WFD seeks to improve and manage both the quality and quantity of European waters through the identification and control of pollutants and general activities detrimental to water quality, the management of surface water and groundwater, and the protection of aquatic ecosystems and wetlands. It sets the ambitious goal of achieving 'good status', from both a chemical and ecological perspective, of all waters in EU member and applicant states by 2027 (Directive 2000/60/EC). To achieve these goals, the Directive sets forth a water planning process in which states must establish or define a legal and institutional framework based on river basin districts and then develop studies to enable them to categorise their water resources, evaluate and monitor the status of these resources, and develop and implement programmes of measures to meet the WFD objectives (Menéndez Prieto, 2010).

The integrated and combined approaches of the Directive would imply concentration or at least horizontal coordination of administrative control responsibilities. The Directive also designates an institutional structure (the 'competent authorities' for the river basin districts) as the primary implementation bodies of this integrated approach. By 2003, states were required to identify river basin districts<sup>5</sup> within their territories as the main unit for river basin management, and to specify the competent river basin authority for the application of WFD rules. National governments must meet a series of deadlines for implementing the WFD requirements.

For river basins spanning borders, the states involved must identify an international river basin district and authority. In both instances, the competent authority can be an existing national or international body. In cases in which no such authority exists, one must be established.<sup>6</sup> These river basin authorities are then responsible for the development and implementation of the required basin management plans. The WFD indicates a clear preference for a single, jointly-produced international management plan in transboundary cases (Commission of the European Communities, 2010a). Reflecting member state sovereignty concerns, however, the minimum legal requirement is for coordination of plans produced separately at the national level. In the case of transboundary river basins, then, we must consider both the national and bilateral efforts at compliance.

Regarding regulatory intervention, the policy generally favours formal and legalistic patterns of interaction among the EU, national administrations and subnational actors. The administrative

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<sup>4</sup> The Directive defines a river basin as the area of land from which all surface run-off flows through a sequence of streams, rivers and possibly lakes into the sea at a single river mouth, estuary or delta (Directive 2000/60/EC, Art. 2.13).

<sup>5</sup> Defined as the area of land and sea, made up of one or more neighbouring river basins together with their associated groundwaters and coastal waters (Directive 2000/60/EC, Art. 2.15).

<sup>6</sup> River basin management is a legally binding instrument. The details of organisation and sharing of responsibilities among national, regional and local authorities, however, are at the discretion of the member state (Blöch, 2002).

arrangements would appear overall to limit informal participation, with the exception of Article 14 which requires public participation and consultation. Authorities in member states are required to keep the public informed of their programmes and plans and to provide access to all relevant documents, and the public may present written observations of the plans. This requirement applies specifically to the development of the river basin management plans and more generally to the Directive in its entirety (Barreira, 2010).

## **WATER POLICY ON THE IBERIAN PENINSULA PRIOR TO THE WFD AND ALBUFEIRA CONVENTION**

### **Sectoral policy dimension in Spain and Portugal**

Historically, the overriding policy focus of the water sector in both Spain and Portugal has been upon augmentation of supply for economic development purposes, principally in the agriculture sector (irrigation) and the generation of electricity. Particularly during the period of dictatorship in both countries, and also continuing into the democratic period of the post-1970s, administrative style (patterns of regulation and administrative interest intermediation) tend strongly toward the 'intervening' ideal type. Policy has been characterised by large-scale hydraulic infrastructural projects as a comprehensive government strategy in both states implemented in a very centralised, hierarchical manner. Hydraulic engineers provided the scientific expertise upon which water policy was based and the central governments limited input to societal actors benefiting directly from these projects, particularly irrigators and hydropower generators. This traditional 'hydraulic paradigm' has been challenged after the democratic transition in both states. The Spanish transition to democracy has been characterised by both the reallocation of competences in the water-policy sector brought about by the decentralisation of the state, and by the emergence of societal actors with divergent interests. There has been no corresponding territorial decentralisation in Portugal, but we can see increasing civil society participation, particularly of several vocal environmental NGOs. Despite these pressures, however, the patterns of administrative style in the water sector in both states through the beginning of the current century could *not* be considered 'mediating' (e.g. Giupponi et al., 2002; del Moral, 2010).<sup>7</sup>

In the category of administrative interest intermediation, the relations between public and private actors in both states tend toward legalism, i.e. the uniform application of rules. That is, the weak tradition of civil society participation is to a certain extent codified legally in limited access to decision-making processes, with the result that public actors have an effective gatekeeper function in choosing the private interests (cited above) they will prioritise (Bermeo, 1990; Aguilar Fernández, 2004). Regarding mode of interaction, we can point more recently to an adversarial mode amongst administrative and societal actors, but more in Spain than in Portugal. This is chiefly apparent in the 'water wars' among territorial actors (regions) in Spain over proposed water transfers and more generally the division of competences between the national and regional (Autonomous Community) levels (López-Gunn, 2009). Moreover, there is significant disagreement on general approaches and specific policies among political parties in both countries and among societal groups; particularly the environmental and New Water Culture movement (FNCA) versus irrigation and hydropower interests (Arrojo Agudo, 2001).<sup>8</sup> Despite these challenges to traditional arrangements, policy making remains to a certain extent consensual, given that access to policy processes tends to be closed and to privilege the agriculture sector and the hydroelectric, public works construction and water services companies at the expense of environmental groups, especially and the public more generally. Moreover, while informal

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<sup>7</sup> For more detailed analyses of the development of water policy and institutions in Spain see del Moral and Sauri, 1999; Costejà et al., 2004; Bukowski, 2007. For a comparable analysis of Portugal see Maia, 2003; Mineiro Aires, 2003; Thiel, 2009.

<sup>8</sup> The New Water Culture Foundation (FNCA) was created in 1998 by a group of academics and specialists in Spain and Portugal as a cross-border effort to promote sustainable development principles in water planning and use within and beyond Europe. The group sponsors conferences and publications, and engages in political activism. See [www.unizar.es/fnca/](http://www.unizar.es/fnca/).

lobbying and communication occur, formal interaction amongst legally specified actors in the policy process continues to dominate.

Regarding administrative structure and organisation in the water sector, in terms of the vertical allocation of competences we see much more territorial and governmental decentralisation in Spain than in Portugal. The Spanish Autonomous Communities, as regional governmental bodies, have significant decision-making competences in the sector, while the Portuguese administration remains largely centralised both territorially and administratively.<sup>9</sup> There is therefore less vertical control of the policy in Spain than in Portugal. Spain has a long history of basin-level water management, with the first River Basin Authority (RBA)<sup>10</sup> established in 1926 in the Ebro basin (Maia, 2008; del Moral, 2009; Varela and Hernández-Mora, 2010). During the Franco dictatorship, the existing RBAs were strengthened and more were founded. Control over them, however, was centralised under a single government ministry, the Directorate General for Water Works (DGOH), with the result that management of the basins was characterised as "strongly corporatist and hierarchical" (López-Gunn, 2009), dominated particularly by the interests of hydraulic engineers. The river basin authorities have become more participatory, as well as more decentralised, after Spain's transition to democracy. In Portugal, water resources planning was historically conducted at the basin level as well, with the first Hydraulic Services administrative bodies created in 1884 (Pato, 2008) but the water administrative regions did not coincide with the river basins until the government reforms in 2005 (Maia, 2008), as will be discussed below. Municipalities have long been involved in provision of water services, but the entire sector has been characterised historically by centralised management (Giupponi et al., 2002; Thiel, 2009).

Concerning patterns of horizontal coordination, we see the responsibility for water policy lying primarily in the environment ministries in both states. This is a relatively recent development, dating to the creation of the first environment ministry in Portugal in 1990 and in Spain in 1996. The latter can be "unequivocally linked" to EU criticism of horizontal fragmentation contributing to problems with implementation of EU directives (Aguilar Fernández, 2004). Despite the creation of the environment ministry in Spain (which has gone through several iterations since 1996), there has been no "marked effect on the departmentalisation of the state or the recurrence of jurisdictional conflicts amongst the ministries" in environmental issues (ibid). Similarly, horizontal fragmentation has been evident in Portugal, as other ministries such as public works and agriculture are responsible for important aspects of the policy (Mineiro Aires, 2003). One of the complaints of water policy officials on both sides of the border is that while industrial and agricultural policies have significant impacts especially on the environmental aspects of water policy, the environment ministries in some situations have little control over the actions of these other areas, and that these other ministries continue to be better funded and more powerful in the ministerial hierarchy than the environmental ministries (Interviews 3 and 6).

### **Transboundary water policy**

Spain and Portugal signed a series of agreements regulating the use of transborder water resources starting in the 19th century. These agreements focus narrowly on economic use, particularly for hydroelectric power generation, do not cover either river basins as a whole or groundwater, do not aim to protect aquatic ecosystems, and are characteristic of the regulatory patterns of administration found in the water-policy sector within each state. The first of these agreements was the 1864 Treaty of Boundary Limits, which was updated in the Exchange of Notes in 1912. These instruments establish the right of common usage of water resources in specified border stretches (Garrido et al., 2010).

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<sup>9</sup> There are no continental autonomous regions comparable to those in Spain. While the 1976 Portuguese constitution calls for regionalisation of the mainland, this initiative was halted in 1998 when a referendum on the issue was defeated (see Gallagher, 1999; Baum and Freire, 2001).

<sup>10</sup> This and subsequent RBAs were called *Confederaciones Hidrográficas* (CH). This name was retained in the post-Franco period for inter-regional basins. Intra-regional basin authorities have varying institutional structures and names. Thus the more general acronym RBA will be used for all basin authorities in Spain.

By the 1920s both states had implemented economic development projects that necessitated greater production of electricity. In 1927, they signed the Convention to Regulate the Hydropower Exploitation of the International Stretch of the Duero/Douro river, which specified the equal sharing of hydropower potential. A 1964 agreement then expanded the geographical scope to include the river's tributaries, again specifying an equal division of the water resources for hydroelectric exploitation (Barreira, 2003). A 1968 convention extended the 1964 agreement to the remaining shared rivers. Its primary focus was still on hydropower generation, but it also considered other economic uses such as irrigation. It references the maintenance of minimum flows during drought periods, and specifies an obligation for prior notification, i.e. the duty of both parties to provide information on planned construction projects in order to avoid damaging the interests of the other state (Santafé Martínez, 2003).

Transboundary cooperation over the shared basins, then, reflected the same patterns of administrative style, structure, and organisation as those present in each state's domestic policy arena. The policy was developed in a formal, hierarchical, centralised manner through the negotiation of bilateral treaties, along a narrow set of interests privileging the input of a limited number of actors (central government administrations and hydropower generators).

### EUROPEANISATION BY INSTITUTIONAL COMPLIANCE: EXPECTATIONS FOR CHANGE

In considering the adaptation pressure created by European requirements, we see that in many respects, the regulatory requirements of European water policy are compatible with sectoral policy arrangements present in both countries, and in their transboundary arrangements. Administrative style, both of the WFD and in the domestic water policy sectors, tends toward the 'intervening' ideal type regarding patterns of regulatory intervention and administrative interest intermediation. The exception is in the WFD requirement for public participation, which counters the closed, privileged patterns of interest intermediation within and between the states.

Expectations are mixed regarding administrative structure and organisation. The institutional requirements of the WFD are incompatible, in different ways, with both the Spanish and Portuguese domestic arrangements. Requiring management at the river basin level implies the creation of new administrative structures in the Portuguese case. Spain's evolving system of decentralised and shared competences makes the kind of coordination envisioned in the Directive difficult. Moreover, cross-national compliance may be more problematic if domestic institutional structures are incompatible.

The integrated and combined approaches inherent in the WFD make necessary the horizontal coordination amongst various policy sectors that affect the sustainable use of water. This requirement is at odds with the compartmentalisation of these policy sectors in both states, as well as the focus of the traditional hydraulic paradigm on the exigencies of economic development (both industrial and agricultural) at the expense of environmental concerns, in both national and transnational policy.

Crucially, the Directive also necessitates significant changes to the states' traditional transboundary arrangements. Member states are required to designate (and create if necessary) an international river basin district and authority and, at a minimum, *coordinate* their individual river basin plans for purposes of achieving sustainable use goals across the entire range of basin waters and ecosystems. These legal requirements go far beyond the limited bilateral cooperation specified in agreements prior to Albufeira. There is little in the history of the two states' cooperation regarding their water resources that would indicate the probability of establishing the coordinated governance of their shared river basins required by the WFD.

According to the hypotheses of the model, then, it would appear that little or no change is required in terms of the deductive, hierarchical nature of domestic regulatory intervention, for example in the definition of substantive standards on emissions and water-quality objectives. Here 'persistence' of these institutional arrangements should result in compliance with WFD requirements at the domestic level. Importantly, however, the WFD requirements, particularly concerning the integrated and

combined approaches and environmental impacts, are significantly more stringent than those in place domestically or transnationally. In the latter, environmental provisions were nonexistent prior to the Albufeira convention.

The public participation requirement implies fundamental changes in core domestic and transboundary arrangements. Here, we would expect 'administrative resistance' resulting in limited or no change, i.e. compliance is not likely.

### **CHANGE IN THE DOMESTIC WATER POLICY SECTOR: SPAIN**

After the centralisation of the Franco period, the primary purpose of the first post-transition water law, the 1985 Water Act, was to modernise the legal framework for water policy, requiring that it cover both groundwater and surface water resources within river basins and consolidating the RBAs as the main unit for water management. The law declared groundwater to be part of the public domain, linked water quality and environmental protection to water policy, incorporated European Community (EC) water quality directives, and required the Spanish parliament to carry out national hydrological planning (Bukowski, 2007). Importantly, it also recognised the authority ceded to the Autonomous Communities in the 1978 Constitution and subsequent decentralisation process, which resulted in shared water competences.

The 2001 Water Act consolidated the 1985 Act and a 1999 reform, and transposed several aspects of the WFD, specifying the water planning process and determining the organisational structure of the River Basin Districts (RBDs) and the RBAs. A 2003 law (Act 62-2003/Consolidated WFD Water Act) was the official transposition of the WFD into Spanish law. A 2007 European Commission report (Commission of the European Communities, 2007), as well as complaints by environmental organisations and expert evaluations (La Calle Marcos, 2007), indicate several areas of incomplete or incorrect transposition of the Directive, including designation of competent authorities and cost-recovery water pricing. In response, subsequent decree-laws were approved in 2007 which determined the territorial delimitation of the RBDs and the authority for their governance (Maia, 2008).

Transposition of the directive remains an ongoing process, however, and "the task of modifying the very large body of Spanish legislation regarding water has only just begun" (Menéndez Prieto, 2010). Moreover, problems with implementation of WFD provisions continue. In April 2010, the European Commission, in response to a complaint lodged against Spain in 2007 by the Worldwide Fund for Nature (WWF), gave Madrid a final written warning for non-compliance with several WFD requirements, including that it has not correctly transposed the water-quality requirements (WWF, 2010). Indeed, La Roca et al. (2010) conclude that Spain is one of the EU member states with the worst records of compliance with the WFD, both regarding the content of provisions and delay in meeting the specified deadlines.

The public participation component of the WFD also remains problematic in Spain. The 1985 Water Act introduced a participatory model for water planning and management, centred on the RBAs. Participation was limited, however, extending only to water users, defined as those holding a water use right or having the right to occupy the water public domain. This structure privileged economic stakeholders (particularly irrigators, water supply companies and industry) at the expense of environmental interests and the general public. Subsequent legislation, particularly the 2007 Regulation on Hydrological Planning, brings the Spanish model closer to the letter of the WFD's Article 14, though missing the 2006 deadline. The 2007 legislation transposed the WFD public participation requirements and specifies that the RBAs must engage in a public consultation process during the elaboration of the river basin management plans, as well as promote 'active participation' more generally. Several impediments remain in fostering effective public participation, however, including the continued privileged input of economic interests and a lack of financial resources to facilitate participation by non-economic groups (Barreira, 2010).

The institutional structure for water policy in Spain is complex and multilevel. The national authority for water policy is the Directorate General for Water (under the leadership of the Secretary of State for Rural Affairs and Water), in the Ministry of the Environment and Rural and Marine Affairs (MMARM).<sup>11</sup> The National Water Council (specified in the 1985 Water Law as an advisory body) is designed to coordinate various sectors and interests. It is composed of national and regional government representatives, the RBAs, representatives of professional and economic organisations (e.g. agriculture, energy, water supply, local governments, and environmental interests), and members of the scientific community. Despite the presence of these diverse interests, Varela Ortega and Hernández Mora (2010) point out that since representatives of national and regional governments hold a majority of seats, "the Council's reports are usually supportive of official plans and only have minority dissenting opinions issued by its more independent members" such as environmental advocates and scientists.

The national government also shares competences in the water-policy sector, and other sectors affecting water, with the regional and municipal authorities. The 2001 Water Act established the current organisational structure and functions of the RBAs. When a river basin crosses regional boundaries, the RBA (*Confederación Hidrográfica*) resides at the national level through MMARM. For each inter-regional basin a Competent Authorities Committee also must be formed, composed of representatives of the central, regional, and local governments. While these committees are presumably designed to comply with the WFD requirement of integrated basin management, a recent analysis finds that the Competent Authorities Committees do not establish coordination functions, as would be consistent with the integration concept, but rather simply cooperation (La Roca and Ferrer, 2007). When a river basin lies within the territorial boundary of a single Autonomous Community, that regional government, through a specified hydraulic authority (these institutions vary by region) is the responsible RBA. Other Autonomous Community competences affecting the water sector include natural resources, agricultural policies and land use planning. Municipalities are responsible for urban water supply, waste water treatment and management, and local land use planning.

At the domestic level, then, we see the most important regulatory requirements of the WFD being transposed (albeit past many of the specified deadlines) into national legislation in a way that is consistent with the 'intervening' administrative style. Transposition does not equal implementation, however, and there is ample evidence that Spanish legislation has fallen short in meeting especially the EU targets pertaining to environmental and ecological protection and sustainability. The lack of compatibility between specific WFD goals and actual policy in the water sector prior to the WFD has impeded implementation, despite the compatibility of the WFD with Spanish administrative style. Moreover, while the Government of Spain has overcome some of the horizontal fragmentation in (and beyond) the water sector that would presumably make implementation of the Directive easier according to the Knill model (for example the 2008 restructuring of the environment ministry), this consolidation may well have shifted the balance of power in favour of economic over environmental interests, thereby making compliance with WFD objectives more difficult.

The most complicated aspect of administrative structure and organisation is the fact that Spain is a *de facto*, and still evolving, federal system. Not only is the implementation of the WFD made more difficult by the current diffusion and sharing of authority in the water sector amongst governmental levels, but the status of competences over water also is still in flux, with regional governments challenging Madrid over the politically lucrative issue of water management (López-Gunn, 2009; Espinosa, 2010). When Spain failed to meet the December 2009 deadline for publishing the River Basin Management Plans, for example, the Spanish environment minister blamed the Autonomous

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<sup>11</sup> Environmental policy in Spain was subsumed under the Ministry of Public Works until 1996, when the Ministry of the Environment was created. In 2008, the Zapatero government merged the environment and agricultural ministries into a single entity, the MMARM. While this may be seen as an attempt to reduce fragmentation in the policy sector, it has also been criticised as weakening environmental policy at the expense of agricultural interests (Lopez-Gunn 2009; Garrido and Llamas, 2010).

Communities, noting that their autonomy statutes put the responsibility for elaborating these plans firmly at the regional level in the case of intra-regional basins (iAgua.es, 2010).<sup>12</sup>

It should be noted that even in the case of inter-regional basins, for which MMARM is responsible, river basin plans have not been published. In a catch-22 situation, a regulation promulgated by the Zapatero government in 2007 specified that new Water Councils would be formed for each basin, which would then be charged with approving the 'Framework of Important Themes', thus opening the WFD-mandated public consultation period after which the River Basin Management Plans would be drafted and then finalised. These new Water Councils were not formed, however, meaning that the process could not move forward. As a stop-gap measure the government approved a new regulation in September 2010 modifying the 2007 decree to allow the existing water councils for each basin, in consultation with the Committee of Competent Authorities, to approve the relevant reports (Hernández-Mora et al., 2010).

As would be predicted by the Knill model, the public consultation and participation provisions of the WFD have been met with 'administrative resistance' because of contradictions this requirement presents to the Spanish institutional core. That is, the water-policy sector is deeply embedded in the national administrative tradition of limited civil society participation in governance and therefore quite resistant to meaningful change. Similarly, but not predicted by the model, implementation of the Directive provisions, particularly on environmental protection, remains difficult because of the persistence of the traditional hydraulic paradigm, despite the compatibility of the directive with Spanish administrative style. The multilevel competence allocation in the Spanish administrative structure and the resulting difficulties with vertical control and coordination also remain an impediment to the implementation of the Directive.

#### **CHANGE IN THE DOMESTIC WATER POLICY SECTOR: PORTUGAL**

As in Spain, Portuguese legislation after the transition has focused, albeit more slowly, on modernising the legal and institutional framework for water policy. The Ministry of Environment and Natural Resources (MARN) was created in 1990. Within the ministry, the General Directorate of Hydraulic Services became the National Water Institute (INAG) in 1993, and the current institutional structure for water management in Portugal began to take shape subsequently, as a result of a series of legislative acts reforming the water sector (Mineiro Aires, 2003). The management model was based on deconcentrated central administration, with shared responsibilities between the INAG at the national level and five Regional Directorates for Environment and Natural Resources (DRARNS).<sup>13</sup> The legislation also specified a planning process for water resources, including the development of both a national water plan and river basin plans, coordinated by INAG. Pato (2009) argues that despite the new governance model specified in this legislation, an efficient set of regional institutions was not in reality created until after the 2005 Water Law, resulting in significant delays in both the national and river basin plans.

The 2002 National Water Plan (PNA) aimed to coordinate the river basin plans (pursuant to the 1995 legislation), to specify possible inter-basin water transfers, to coordinate transboundary policy with Spain, and to achieve several national goals including addressing deficiencies in water supply and sanitation, developing new irrigation schemes, and improving the efficiency of water use in the

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<sup>12</sup> The water authority in Catalonia subsequently published its plan on 23 November 2010. The remaining intra-regional plans are still pending.

<sup>13</sup> In 1998, MARN acquired authority for land use planning, and the DRARNS became Regional Directorates for the Environment and Territorial Management (DRAOTs). In 2002, the MARN became the Ministry for Environment, Spatial Planning and Regional Development (MAOTDR), and the DRAOTs were put under the control of the former Regional Coordination Commissions (CCRs – created in 1979 as a temporary measure in anticipation of the regionalisation of continental Portugal, which never occurred). The resulting structures are known as the Coordinating Commissions for Regional Development (CCDRs).

agriculture sector. For the most part, however, it deferred to the WFD and the Albufeira convention (Maia, 2003). The purposes of the 2005 Water Law were then not only to transpose the Water Framework Directive, but also to harmonise and update prior water legislation and continue to develop the management model. In 2004, the European Commission launched infringement proceedings against Portugal for missing the transposition deadline. The complaint against Portugal then went to the European Court of Justice, which ruled against the country. Once the 2005 Water Law was implemented, however, the transposition was deemed to be generally satisfactory (Commission of the European Communities, 2007).

One of the main provisions of the Water Law was to specify the required river basin authorities, the Hydrographic Region Administrations (ARHs), which were created in 2008 through further legislation (Degree Law 208/2007). The ARHs are deconcentrated entities under the auspices of the MAOTDR, but have administrative and financial autonomy. They were given competences formerly possessed by the CCDRs (which lost most of their water-sector responsibilities) and INAG, and are considered the primary water resources planning authorities. The ARHs are responsible for developing and carrying out river basin management plans, identifying, classifying, and monitoring water resources, developing and monitoring water infrastructures within their respective jurisdictions, participating in environmental impact assessments, and licensing and financing water use (Minuzzi and Bragança, 2011). A restructured INAG is designated as the national water authority, and retains responsibility for planning at the national level, approving the river basin plans, coordinating programmes of measures across river basins, monitoring compliance with environmental objectives, and for international cooperation (Brito et al., 2008).

Water provision and sanitation services are also provided through a deconcentrated administration, characterised by public/private partnerships. Portugal's 308 municipalities share the responsibility for providing these services with the national state-owned public holding company, *Águas de Portugal* (ADP) (created in 1993) and its subsidiaries. Despite this administrative deconcentration, however, the reform of the water services provision regime in Portugal resulted in the central government enhancing its control over the municipalities (Thiel, 2009).

As in Spain, the transposition and implementation of the WFD constitute an ongoing and, at times, problematic process in Portugal. A European Environmental Bureau (EEB)/WWF report finds that hydropower generation and agricultural production still take precedence over environmental considerations and the good status requirements of the WFD (Scheuer and Roulliard, 2009). A 2009 Commission report on WFD programmes for water status monitoring indicated that Portugal does not include specific pollutants in surveillance monitoring in their river basins, as required (Commission of the European Communities, 2009). At a conference sponsored by the EEB in 2010, the Nature Protection League (LPN) presented evidence of Portuguese non-compliance with the WFD, including that centralised decisions regarding a plan for new dams failed to take into account the potential impact on the river basin plans and the environment or to meet the public participation requirement (Naturlink, 2010). And as in the case of Spain and several other EU states, Portugal failed to meet the December 2009 deadline for publishing the River Basin Management Plans (Commission of the European Communities, 2010b).

Portugal has complied with the letter of the WFD in terms of public participation particularly since 1994, but problems remain. One of the main instruments intended to fulfil the participation requirement is the National Water Council, created in 1994 and restructured in 2004. Additionally, Regional Water Councils were created for each basin with the formation of the Hydrographic Region Administrations in 2008 (previously Basin Councils under the CCDRs). Environmental NGOs cite several problems with the functioning of these Councils, including that their membership is stacked in favour of the administration, thus precluding significant input from other stakeholders (Naturlink, 2010; see also Minuzzi and Bragança, 2011), and that the Government is not willing to fund sufficiently the public participation process or consult independent experts from academia (Freitas et al., 2000). The lack of

meaningful public participation is illustrated by a member of the LPN, describing a typical meeting of the National Water Council chaired by the environment minister:

...and in the end he always says okay, so this was approved by the National Water Council. Once one of us from the NGOs said: "Well, wait a minute, we didn't vote on that. We don't necessarily disagree but we didn't vote". And he said, "Vote? But you're not here to vote. I'm here to listen to you and then make a decision".

In terms of administrative style, the case of Portugal is comparable to that of Spain, in that despite delays the regulatory requirements of the WFD have been transposed in ways consistent with the 'intervening' ideal type. And as in Spain, the implementation of WFD provisions, particularly regarding environmental protection and ecological good status of waters, continues to fall short. Contrary to the predictions of the Knill model, despite the compatibility of the WFD with Portuguese administrative style, implementation is impeded by the lack of compatibility of WFD provisions with domestic policy content in the water sector. We also see a comparable situation in Spain in the case of public participation. Administrative resistance continues due, in large part, to the embeddedness of the water-policy sector in a national administrative tradition that lacks a strong culture of civil society participation.

In terms of administrative structure and organisation, the Portuguese central government has enhanced its administrative control over the municipalities. While the ARHs have a significant amount of formal autonomy, they are still deconcentrated entities of the central government. We might then expect, according to the Knill model, that the centralisation and coordination of competences and tight vertical control – compared to the relative decentralisation, fragmentation, and lack of vertical control in the Spanish case – would make policy change more likely in Portugal. But as we have seen, Portugal has problems comparable to Spain in implementation of the Directive. Since Portugal's reforms are so recent, however, we might expect greater capacity for compliance as the new administrative structure matures.

## **JOINT ADAPTATION: TRANSBOUNDARY INSTITUTIONAL STRUCTURE AND POLICY**

### **The Albufeira convention**

The Convention on Cooperation for the Protection and Sustainable Use of the Waters of the Spanish-Portuguese Basins, signed at a summit between the two states in Albufeira, Portugal in 1998 (and in effect since 2000) was a breakthrough in transboundary cooperation in the midst of conflict over shared water resources. Relations had reached a crisis point in 1993 due to several factors. The immediate catalyst for the crisis was Spain's release of the draft National Hydrological Plan (PHN), prior to which there was no consultation with its Iberian neighbour. The plan's provisions included large-scale water transfers inside Spain involving the transboundary rivers, which would have had consequences for Portugal. A severe drought in the peninsula in 1993-95 provided an impetus to negotiate as well as a hardening of the positions of the two states. Intense media coverage of the Spanish PHN in Portugal fuelled the popular image of Spain 'stealing' Portugal's water (Thiel, 2004). Other factors prompting the states to enter negotiations included a steady increase in the consumptive uses of water in both countries, particularly from the 1970s onward, with a resulting deterioration of water quality as well as tensions among economic sectors and geographic territories (Santafé Martínez, 2003).

Neither the climate of mistrust at the outset of the negotiations nor the disjuncture in how the two states viewed the issue can be overstated. In Portugal, the issue of downstream waters affected by Spanish actions was considered a problem of state, high on the political agenda and a part of the electoral campaigns of 1994/95 and 1999. The issue was far less salient in Spain, and Portuguese concern was met with some surprise on the other side of the border, given the general impression that

water scarcity was much less severe in Portugal because of its smaller size and more generous precipitation patterns (Interviews 1, 3, and 6). These diverging positions were evident in the initial drafts of the treaty text submitted by the two states, with Portugal proposing a system of guarantees regarding transboundary impacts and flows and Spain proposing general terms with no specific guarantees.

The two states participated in parallel negotiations from 1996 to 1998 on the Water Framework Directive, with some of the same officials involved at both the European and bilateral levels. WFD provisions, particularly the requirements for good status, afforded Portugal an opportunity to bolster its position in the bilateral talks. According to a Portuguese official involved in the negotiations, if the primary focus were on water availability and consumption needs, then Portugal would not have been in a good position to argue for Spanish guarantees. A much more effective strategy, then, was to bargain on the basis of environmental concerns, i.e. Spanish guarantees of quantity and quality are necessary in order to maintain the good status of Portuguese rivers and estuaries. Portuguese officials made their case to the European Commission, and in turn the Commission informally pressured Spain to negotiate on the basis of Portuguese concerns. Another key impetus was an assessment study completed by the Commission on the countries' shared water resources (European Commission, 1996). This report acknowledged the consequences of the Spanish PHN, encouraged the reaching of a comprehensive agreement, and provided data on which the bilateral negotiations were based (Interview 6).

Another important issue for Portugal early in the negotiations was the proposed Alqueva dam project on the Guadiana. Portugal had requested co-financing of the project (which would create the largest artificial lake in Europe) from the EU in the form of Cohesion and European Regional Development funds. The European Commission required Spain to acquiesce to the project in the shared river as well as to accept the potential environmental impacts in the Guadiana estuary before the funds would be released to Portugal. One of the primary reasons that Portugal refused actual joint management of the shared rivers was to protect its authority to manage Alqueva (Interview 6). Portuguese negotiators argued that the project would be beneficial to Spain, as Spanish irrigators would potentially receive water from Alqueva. Spain accepted Alqueva in 1996, which has been interpreted as "an act of generosity" designed to improve bilateral relations and signal good faith in the negotiations (Garrido et al., 2009). However, a member of the Spanish negotiating team believes that giving up "the only serious card we had to play" early on made it harder to achieve Spanish goals in the talks (Interview 3).<sup>14</sup>

### Regulatory requirements

The main objectives of the treaty are to coordinate three types of actions regarding the shared waters: to promote and protect the good status of surface and ground waters; to promote sustainable use of the waters; to mitigate the effects of floods and droughts/water scarcity (Convenio, 2000). Several articles in the convention contain obligations stemming from WFD requirements. These include Article 4 (cooperation mechanisms to achieve good status of surface and groundwaters), Article 6 (public information), Article 13 (water quality), Article 14 (pollution control and prevention), and Article 17 (incidents of accidental pollution) (Barreira, 2007). Specifically, Article 13 commits Spain and Portugal to adopt all necessary measures to protect water quality, including the preparation of inventories, evaluations, and classifications of waters in the shared river basins, and to comply with the environmental objectives set forth in the WFD as well as the environmental quality regulations established by the rest of the EU directives relevant to water. The convention recognises the necessity of coordinating water management plans and programmes of measures in order to comply with EU law. Article 14 in Albufeira reproduces the language of Article 10 in the WFD regarding the prevention and

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<sup>14</sup> Portugal began construction of Alqueva in 1998 with EU funding. It opened in 2002 and in the 2008 meeting of the Conference of the Parties to Albufeira Spain and Portugal agreed to the first transfers of water to Spanish irrigators.

control of pollution, and requires the two states to coordinate necessary measures to eliminate and mitigate the land-based pollution of estuaries and territorial waters and adjacent marine waters.

### **Administrative structure and organisation**

The convention creates two transboundary institutions to carry out its provisions. The Conference of the Parties (CofP) is chaired by a minister from each state (in practice the environment ministers) or by delegates they appoint, and composed of representatives appointed by both governments. It meets as determined by the state governments, and is designed as a venue for political cooperation at the highest level (Convenio, 2000). To date, the CofP has met twice, in July 2005 and in February 2008. The first meeting focused on the need for greater cooperation mechanisms, particularly regarding drought situations and implementation of the WFD. The second meeting's primary purpose was to approve a new flow regime as an amendment to the convention. At the latter meeting the two Governments also announced (but subsequently did not implement) several important goals, including the creation of a common Permanent Technical Secretariat,<sup>15</sup> the convocation of a public participation forum, and the realisation by 2015 of truly *integrated*, not simply coordinated, river basin plans.

The institution primarily responsible for implementing the convention is the Commission for the Application and Development of the Convention (CADC). It is also responsible for coordinating the requirements of the WFD regarding environmental objectives, including the programmes of measures to achieve these goals. The CADC is made up of delegations appointed by each government (including politicians and technical experts), has a broad range of responsibilities, and is empowered to form working groups, subcommittees, subsidiary bodies and public forums in order to facilitate its work. Its decisions are adopted by agreement of the two delegations meeting in plenary session, and are considered binding if, after two months from the date of their adoption, neither state formally asks for a revision or referral to the CofP. The implementation of these decisions is then carried out by the two states within the procedures of their individual legal structures (Convenio, 2000).

In Articles 15 and 16 of the convention, the countries specify their right to sustainable use of the water resources in the shared basins, while applying, in each of their territories, measures to mitigate transboundary impacts. While recognising management of water resources must take place at the level of the entire river basin, the convention does not require *shared* hydrological planning. Rather, the parties are to coordinate their activities and exchange all relevant information through the CADC. The recognition of the mutual right of water use, as well as the WFD goal of achieving a good status of waters, is closely linked to the provision in Article 16 for a flow regime. A provisional regime was established in an additional protocol attached to the treaty, to be in place until a more specific and permanent agreement could be reached through the CADC and approved by the CofP, which subsequently occurred in 2008.

The information exchange requirement through the CADC is applicable not only to data, but also to legislation and administrative practices (Santafé Martínez, 2003). The required provision of information also affects interaction amongst institutions at the domestic level, since the hydraulic administrations in each state are required to report to the CADC regarding how they are carrying out provisions in the convention as well as any subsequent agreements of the CADC itself. The work of these hydraulic administrations, of necessity, crosses ministerial boundaries.

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<sup>15</sup> No secretariats existed until 2006, when each state established its own. Spanish and Portuguese CADC members interviewed in 2007 cited the lack of a joint secretariat (and very little technical help for the first six years the treaty was in force) as a main impediment to implementing Convention requirements. One CADC official blamed the countries' foreign ministries, saying they had rejected the formation of a joint secretariat because of an unwillingness to lose "even a small parcel of sovereignty". Despite the 2008 announcement, this reluctance apparently still prevails – the Joint Secretariat has not been created.

The CADC has held 14 plenary sessions, the first in July 2000 and the latest in July 2010. After a slow start it became very active after 2005.<sup>16</sup> The focus of much of this cooperation has been on establishing procedures and institutional norms and resolving problems pursuant to the drought that both countries experienced in 2005 (Barreira, 2007).

### Evolution of joint policy

Regarding the WFD-required River Basin Management Plans, Spain and Portugal opted to produce separate but coordinated documents. This coordination occurs largely through exchanging information on their respective plans (Garrido et al., 2009). Both states identified the CADC to the European Commission as the competent authority for coordination of WFD implementation in their respective parts of the shared river basins, but not until 2005 (Portugal) and 2007 (Spain). A CADC working group on the WFD was created in 2001 and then reorganised in 2006 as the Working Group on WFD and Water Quality. Its goals are to coordinate technical activities and the elaboration of management plans for the shared basins, and to define priority measures for WFD implementation (Maia, 2008). By 2007, the working group managed to overcome many of the discrepancies in the way the two states designated their bordering and shared bodies of water (which allowed the approval of a common map of the basins, as required by the WFD), as well as to establish compatible impact statements, monitoring programmes, and economic analyses (CADC, 2007). Disagreements remain on the measuring equipment used at some locations (resulting in disagreement over flows); there are still no agreed quality parameters for shared waters; and common drought indices have not been developed (Garrido et al., 2010). An opportunity for coordinating some of the monitoring issues was missed during the EU's pilot river basin network project.<sup>17</sup> Portugal designated its part of the shared Guadiana basin for the exercise, while Spain decided on the Jucar basin, which is entirely contained within Spanish territory. In line with their initial negotiating positions and interests, the rationale of Portugal likely was to try to involve the European Commission in order to improve Spanish compliance, while the rationale of Spain was to avoid European interference in internal affairs (Interview 6). We should note here that sovereignty concerns generally do appear to present an impediment to transboundary implementation of European regulatory policy.

The stated commitment of the environment ministers at the 2008 CofP to integrated river basin management plans would go beyond the requirements of both the Albufeira convention and the WFD. No movement toward this integrated management has occurred, however, and at this point it is likely impossible to implement such an ambitious goal by 2015. Even the current 'coordination' and information exchange remain insufficient to implement WFD goals (Sereno, 2011), including meeting the 2009 deadline for publishing the basin plans. In June 2010, the European Commission sent a first warning letter to Portugal and Spain regarding the absence of their plans. The required 6-month public consultations on the basin plans had not yet begun in most river basins in both states, including the shared basins (Commission of the European Communities, 2010b).

In addition to the problems cited, the ongoing conflict over authority among governmental levels in Spain presents difficulties for transboundary coordination and has been an ongoing preoccupation of Portuguese officials. In June 2009, the head of the Portuguese delegation to the CADC delivered a written complaint to the Spanish Administration in response to the 2007 revision of the autonomy statute for the region of Castilla y Leon, which asserts authority over management of the Duero/Douro within Spanish territory. Lisbon expressed "surprise and concern" that a transfer of authority to the region was apparently being contemplated in central-regional government negotiations, and asserted that management of the river basin must be retained at the national level in order for Spain to comply

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<sup>16</sup> The CADC met in plenary once a year from 2000 through 2005, except in 2004, when no meeting occurred. It met twice every year in 2006, 2007, 2008, and 2010 and once in 2009.

<sup>17</sup> This effort is part of the EU's Common Implementation Strategy for the WFD. See <http://ec.europa.eu/environment/water/water-framework/prbs.htm>.

with its treaty requirements as specified in Albufeira. While Madrid has duly noted Lisbon's concern and is delaying negotiations with Castilla y Leon for a transfer of authority over the basin, the region persists in its demands (Andrino, 2009).<sup>18</sup>

The Working Group on WFD and Water Quality is responsible for other WFD obligations relating to environmental protection and sustainable use, including developing measures to protect water quality, coordinating procedures for prevention and control of pollution from diffuse and point source emissions, and elaborating and coordinating methodologies for cost-benefit analysis of water usage. As indicated by the frequency of meetings since 2005 and the numerous tasks undertaken, the members of the Working Group are taking their remit very seriously, as evidenced, for example, in periodic joint reports produced since the end of 2007 documenting the evolution of various environmental and quality parameters. While strides have been made in these areas in addition to issues such as common cartography and compatibility of monitoring programmes, other areas continue to be problematic. There remains a great deal of concern by government officials and NGOs in both countries regarding upstream pollution and water quality in the Guadiana, for example (Interviews 1, 2, 5, and 8).

The Albufeira convention provided for a provisional flow regime which set values for guaranteed minimum annual flow amounts for all the river basins, in addition to a daily minimum flow for the Guadiana (with exceptions allowed for drought/water scarcity) (Convenio, 2000). These flow guarantees have only rarely been violated by Spain since the Treaty came into force (Barreira, 2007), and Portuguese members of the CADC report a high degree of satisfaction with Spain's compliance (Interviews 6 and 7). The Portuguese administration was generally dissatisfied with the time interval of the flows and with what they perceived as insufficient consideration given to downstream consumption needs and reserves, however. Lisbon thus, in 2001, began proposing the creation of a permanent flow regime that would address its concerns. Largely because of Portuguese persistence through the CADC and the efforts of the Working Group on Flow Regimes (created in 2006), the CADC submitted the new flow regime for approval at the 2008 CofP. In addition to the annual flows guaranteed by Albufeira, minimum weekly flows are established for the Duero/Douro and Tajo/Tejo basins, with minimum quarterly flows specified for the Miño/Minho-Lima/Limia basin (CADC, 2008). The new flow regime entered into force in August 2009 after being approved by both national governments. However, as Sereno (2011) points out, it was violated almost immediately by both sides in the Tajo/Tejo basin.

Regarding access to information and public participation, while media coverage of, and strong public reaction to, the Spanish PHN created a great deal of pressure on Portuguese politicians to prioritise the issue and enter negotiations, very little information was released during the talks, and access was closed and privileged. Both sides feared that given the difficulties of overcoming their opposing positions, press coverage could lead to public pressure that might cause the negotiations to fail (Interview 6). Moreover, the only societal groups consulted directly were those largely in favour of reaching an agreement, particularly the agricultural and hydroelectric interests. With very few exceptions, environmental groups and members of the university community were marginalised (Interview 3).

Article 6 of the Albufeira convention specifies the provision of public *information* subject to some restrictions. While there is no specific requirement for public *participation* in Article 6, the states are subject to the relevant provisions of both the WFD and a subsequent directive on public access to environmental information (Garrido et al., 2009). The CADC created a subcommission to address the Article 6 provisions in 2003, which in 2006 was designated as the Subcommission for Public Participation and in 2008 merged into the Working Group for Information Exchange and Public Participation. The CADC organised two public 'technical sessions' on drought management (2006) and

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<sup>18</sup> The matter is currently under review in the Spanish Constitutional Court because of a complaint brought by the regional government of Extremadura arguing that the reform of Castilla y Leon's autonomy statute granting authority over the Duero is unconstitutional, since a small part of the Duero runs through Extremadura and it is thus an inter-regional basin (Consejo Consultivo de Extremadura, 2008).

water planning and climate change (2008), and a series of eight 'public participation conferences' in 2008/2009 (one on each side of the border in the four shared basins). These dealt with the preliminary 'Framework of Important Themes' in developing the river basin plans. As discussed earlier, the WFD requires approval of these frameworks prior to the public consultation process, which then should lead to revision and final publication of the river basin plans. These meetings thus did not constitute the required consultation. Moreover, members of environmental NGOs on both sides of the border cite the difficulty of attending these conferences, given that there is no government funding available to cover their expenses. Many NGO members are volunteers rather than paid employees, and are thus unable or unwilling to commit to paying expenses out-of-pocket in order to participate in CADC-sponsored sessions (Interview 5). The statute of the CADC also allows it to hold public forums, but despite the commitment announced at the 2008 CofP, none have been convoked.

The lack of attention to public information and participation requirements of the WFD in the earlier operation of the CADC had likely more to do with the challenges its members faced in getting the new institutional apparatus up and running, including apathy on the part of both governments, than any concerted effort to limit public involvement. Indeed, the coordinator of the information exchange and public participation working group for the Spanish delegation stated that there was no purposeful *secretismo* (secrecy) on the part of CADC members. Rather, the intention to make information available to the public (by, for example, developing the CADC website) was a key goal hampered by lack of time and resources (Interview 1). Even so, and despite the very real progress made in providing access to information, the CADC falls short of achieving the WFD public participation goals.

### **THE ROLE OF CHANGING OPPORTUNITY STRUCTURES, BELIEFS AND EXPECTATIONS**

As predicted by the Knill model, the persistence of deductive, hierarchical regulatory and institutional arrangements in Spain and Portugal, and in their transboundary relations, is compatible with WFD compliance in terms of setting uniform and enforceable requirements in domestic legislation and in treaty provisions, albeit with delays. The assumption is that since the regulatory policy content of the WFD requires 'intervening' formal and legal patterns of policy making, largely present both within and between the Iberian states, this confirmation of the core will result in compliance without change. This case, however, indicates an additional complexity. Transposing the Directive (domestically and transnationally) in the context of an intervening pattern of regulatory style and administrative interest intermediation is one thing; actually achieving the policy content of the law through implementation – not only in letter but also in spirit – is quite another. The fact that problems remain in implementing particularly the environmental protection requirements of the WFD despite the compatibility of institutional structures may then be explicable through the political and cognitive aspects of Europeanisation.

As expected, the public information and participation requirement has been problematic on all fronts, given the embeddedness of a long-standing tradition within and between the two states of formal control, closed and privileged access to decision making, and lack of a strong civil society.

There is little dispute that WFD requirements have had a significant impact on water policy on the Iberian peninsula. As an official involved in the Albufeira negotiations stated, "if we [Spain and Portugal] were not both in the EU we wouldn't have the agreement" (Interview 6). A change in opportunity structures and a perceptible shift in how important actors in both states view water policy, influenced by the European arena and manifested particularly in the New Water Culture movement, appear to have contributed to compliance with many of the Directive requirements domestically and transnationally. The lack of progress in the areas identified, however, also may be explained in part by the persisting limits on the influence of those actors promoting environmental concerns, even in the context of shifting structures and beliefs.

European environmental regulatory policy has often moved the agenda toward more northern European concerns about environmental degradation and sustainable development. This process has

been influenced by governmental and nongovernmental actors, and has created more opportunities for these actors to promote their agenda within their domestic systems and across Europe (Lenschow, 2010). Some analysts see the general, albeit slow, development in Europe of a common culture linking water and environmental problems (Nunes Correia, 1998; Barraqué, 2003). On the Iberian peninsula, this greater space for influence, coupled with the emergence of Spanish and Portuguese civil society in the post-transition period has resulted in an increase in activity and at times influence over policy on the part of environmental NGOs, the academic and scientific communities, and green-minded politicians (Jiménez, 2007).

The expert community that converges around the New Water Culture movement was founded with a cross-boundary focus in response to a variety of factors, including the water and environmental situation specific to the Iberian peninsula, European environmental policy, and a growing international consensus on the principles of Integrated Water Resources Management.<sup>19</sup> The main goals of the FNCA and environmental NGOs such as WWF-Adena in Spain and LPN in Portugal are to counter the traditional hydraulic paradigm and promote ecosystem-based approaches based on sustainability, conservation strategies and demand management, and these actors strongly support the WFD requirements that further their goals.<sup>20</sup>

It appears that the efforts of these actors have had some effect on both domestic and transboundary policy. The literature on epistemic communities, such as the New Water Culture Movement, hypothesises that the group's preferences are more likely to be translated into policy if its experts have access to relevant bureaucracies and policy makers, or acquire positions in these bureaucracies (Haas, 1992). Prior to legislative elections in 2004 (Spain) and 2005 (Portugal), the conservative parties in power prioritised neither environmental concerns nor the functioning of the CADC (Barreira, 2007; Interviews 6 and 7). The subsequent Socialist governments in both states placed environmental issues higher on the agenda; thus the opportunity structures for influence were changed not by European policy, but by domestic electoral politics.<sup>21</sup> Portugal's Socialist Prime Minister, José Socrates, served as Environment Minister in previous governments and, importantly for the water policy community, he named Francisco Nunes Correia to head the environment ministry from 2005 to 2009. Correia, a civil engineer trained at the Colorado State University and former professor of hydraulic resources and the environment, is himself a member of the New Water Culture movement, and was involved as a technical advisor to the environment minister in the initial phase of the negotiation process leading to the Albufeira convention.

Greater governmental support of Albufeira after 2004/2005, especially given WFD deadlines, resulted in the increase in CADC activity and policy development documented. Spanish and Portuguese CADC members interviewed also cite, in particular, the naming by the Portuguese Government of Ambassador Gonçalo Santa Clara Gomes in 2006 to head the Portuguese delegation to the CADC as a major impetus to better cooperation because of the Ambassador's clout, capabilities, and commitment to the goals of Albufeira. Initial appointments to the position reflected the low priority given to the agreement by the Portuguese Foreign Affairs Ministry (Interviews 1 and 6).

In Spain, domestic water policy was one of the most relevant issues in the 2004 general elections, pushed onto the political stage by the New Water Culture movement and the high-profile regional conflicts over water transfers. One of the first decisions of the new government was to replace the

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<sup>19</sup> IWRM is most commonly defined as "a process which promotes the coordinated development and management of water, land and related resources, in order to maximise the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems" (GWP, 2000).

<sup>20</sup> The FNCA linked their Iberian efforts to the wider European arena with an initiative that led to the signing in 2005 of the European Declaration for a New Water Culture by members of the scientific/policy community from many European states. As an indication of its support for FNCA at the time, the Spanish Environment Ministry hosted the signing ceremony. See [www.unizar.es/fnca/euwater/index2.php?idioma=en](http://www.unizar.es/fnca/euwater/index2.php?idioma=en).

<sup>21</sup> The Socialist parties remained in power in the subsequent legislative elections in Spain (2008) and Portugal (2009).

2001 National Hydrological Plan and its Ebro basin water transfer with the so-called AGUA programme. This programme contains measures compatible with the traditional hydraulic paradigm, but does include some instruments favoured by New Water Culture advocates, such as conservation and efficiency. Given the political focus on water, the expert community had considerable access to and influence on the Environment Ministry during 2004-2008, although as mentioned previously, the reorganisation of the Ministry in 2008 may again limit this influence (López-Gunn, 2009; Garrido and Llamas, 2010). Moreover, interviewees on both sides of the border stressed that while water management is no longer the primary responsibility of public works ministries, the 'public works mentality' of prioritising water use issues over environmental concerns persists.

A shift in opportunity structures directly created by the European institutional arena is the legal right of groups or individuals in EU states to issue complaints directly to the European Commission regarding their governments' non-compliance with European legislation. As already discussed, Spanish and Portuguese NGOs, cooperating with their European counterparts, have initiated complaints on non-compliance with WFD requirements which in some cases have contributed to Commission action against their governments. We might also expect the transboundary governmental cooperation of Albufeira to create incentives and opportunities for closer cooperation of Spanish and Portuguese NGOs, but that generally has proven not to be the case. With the exception of one transboundary project that drew in NGOs on both sides of the border,<sup>22</sup> the main environmental groups in Spain and Portugal are fighting similar battles separately. There are several factors preventing these groups from taking advantage of the shift in opportunity structures. In Spain, NGOs are often organised at the regional level, and their efforts are directed toward Madrid. Given limited resources, "there isn't time to look next door to France or to Portugal" (Interview 4). Portuguese NGOs also lack both the time and the resources to devote to promoting cooperation with their Spanish counterparts. NGO members in both states lamented this situation, but indicate that it is unlikely to change.

It appears, then, that the expert community and advocacy groups promoting the New Water Culture on the Iberian peninsula have been able to take advantage of changes in domestic and European opportunity structures and in shifting expectations and beliefs regarding the traditional hydraulic paradigm (framing integration) to have some influence on policy in the water sector domestically and transnationally, as evidenced by progress made in many areas. Certainly the WFD gives greater credibility to the beliefs and strategies promoted by these actors. The New Water Culture movement has not, however, been empowered sufficiently by changes in the domestic rules of the game to displace important elements of the traditional hydraulic paradigm. Historically entrenched interests, particularly agriculture and the hydroelectric power industry, remain strong.

In the institutional analysis, we identified the most problematic aspect of administrative structure and organisation to be Spain's decentralised and fluid system of shared governance. While there is some evidence that transfer of water policy competences to the regional level has resulted in innovative policy approaches congruent with the New Water Culture (Embid Irujo, 2010), on balance it has contributed significantly to problems in implementation of WFD requirements domestically and transnationally, including elaboration of the River Basin Plans. The regional governments have been empowered in the water sector because of the shifting opportunity structures created by the evolution of the post-constitutional governing institutions in Spain, not the European arena. As challenging as this situation is for compliance with European requirements, a recentralisation of authority in the water sector is not likely due to the political profitability of water at the regional level. As López-Gunn (2009) shows, regional leaders have 'captured' the issue of water, and even the traditional hydraulic paradigm, as a means of legitimising their political power and controlling a key strategic resource.

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<sup>22</sup> See <http://iberaqua.com.sapo.pt/projecto.htm>

## CONCLUSIONS

This detailed case study of the evolution of Spanish-Portuguese cooperation in managing their shared river basins provides a valuable test of one of the most complete models of Europeanisation and finds that this model goes an admirable way toward explaining not only patterns of domestic adjustment in these two states but also their transboundary implementation of EU requirements. We have seen that the Water Framework Directive requires adaptation in the states' domestic water policy sectors and, for the transboundary river basins, in their bilateral institutions and policies as well. Moreover, it is impossible to explain (or achieve) one process without the other, for example, institutions and mechanisms sufficient to attain 'good status' must be developed at the domestic level on both sides of the border if there is to be success in coordinating programmes of measures transnationally; and unless sufficient cooperation is institutionalised across borders, the WFD requirements are impossible to fully achieve in the shared river basins.

As detailed above, while the data show that the expectations for change hypothesised by the Europeanisation model are not all confirmed, we do see the influence of the three specified mechanisms. The 'intervening' regulatory style of the WFD is generally compatible with existing domestic and transboundary institutions, resulting in domestic transposition of the Directive and inclusion of the WFD requirements in the Albufeira agreement. Implementation has then been problematic, largely due to the incompatibility of the actual *content* of the legislation (particularly the environmental protection requirements) compared to existing domestic laws and transborder agreements. Changing opportunity structures as well as belief systems and expectations also played a role at both levels, as shown in Section 9.

The study also indicates, however, the difficulties inherent in trying to separate out the effects of EU policy on domestic and transboundary adaptation. It is indisputable that without the EU generally, or the WFD more specifically, Spain and Portugal would not have modified domestic or transboundary water policy to the extent that they have. Indeed, Albufeira was designed as the cross-border implementation mechanism for the WFD. But how do we disentangle the various factors and influences – from the global to the local levels – that also may have prompted Spain and Portugal to modify their domestic structures and upgrade their cooperation?

As we have seen, Spain and Portugal began negotiations in direct response to the reality on the ground, including the cumulative results of their economic development paths to that point, drought and increasing water scarcity, and the unsustainability (both economically and ecologically) of the traditional hydraulic paradigm. Moreover, in the context of the states' EU membership, but also beyond it, interdependence on the Iberian peninsula had steadily increased since the 1980s. Thus, as in the analysis by Garrido et al. (2010), while the WFD provided an opportunity and strong incentives for Spain and Portugal to cooperate, the Albufeira convention is only part of "an increasing integration of the two countries' economies, societies and strategic international objectives". Put more starkly, Spain and Portugal are "condemned to cooperation and conscious of the fact that we have to understand each other" (Interview 1). A useful strategy in helping to tease out the Europeanisation effects would be to compare Albufeira with other transboundary water management agreements.

The analysis is also incomplete without a consideration of influences at the international level, which is not an explicit focus of the Europeanisation model utilised here.<sup>23</sup> Both the Water Framework Directive and Albufeira were influenced by prevailing international agreements pertinent to water resources management, including the 1992 UN Economic Commission for Europe (UNECE) Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Helsinki Agreement) and the 1997 UN Convention on the Law of Non-navigational Uses of International Watercourses (Watercourses Convention), as well as the 1998 UNECE Convention on Access to

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<sup>23</sup> There is an ongoing effort to develop analytical mechanisms to link the phenomena of globalisation and Europeanisation, for example Graziano, 2003; Hennis, 2001; Jakobsen, 2010.

Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention). While Albufeira does not refer explicitly to these agreements, as a participant in the negotiations stated:

Sure, when it came time to negotiate these issues we had these on top of the table, because we're not intelligent enough to discover new things! You use what you have. Certainly we were aware of these documents and principles during all the negotiations (Interview 3).

These conventions have the potential to affect bilateral or multilateral river basin accords in several ways. The most direct, as indicated by the interviewee above, is that negotiators have these documents 'on the table' and incorporate key principles into their agreements. There are also several indirect channels for influence. From a top-down perspective, we could ask how much the WFD itself reflects international river basin management principles and is therefore a conduit for these principles to the Iberian level. Or from a multilevel perspective, we could look at the influence of the epistemic community promoting IWRM principles on agreements from the global to the transnational levels, and on groups such as the New Water Culture Foundation that, in turn, seek to influence Spanish-Portuguese cooperation. For this type of analysis, a model that goes beyond the limits of the Europeanisation framework, under the rubric of regime theory, for example, is necessary.

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## LIST OF INTERVIEWS (ALL INTERVIEWS CONDUCTED BY AUTHOR)

1. Technical advisor in the Water Department, Spanish Ministry of Environment, who is also a member of the Spanish Delegation to the CADC, Madrid, 19 February 2007.
2. Staff responsible for water policy, Greenpeace Spain, Madrid, 19 February 2007.
3. Official at the Spanish Ministry of the Environment, who was a member of the Spanish negotiating team for the Albufeira Convention and for the WFD, Madrid, 20 February 2007.
4. Director, International Relations Department, Portuguese Ministry for Environment, Spatial Planning, and Regional Development, Lisbon, 12 March 2007.
5. Vice president of the League for the Protection of Nature (LPN), Lisbon, 13 March 2007.
6. President of the Institute for the Environment, who was a member of the Portuguese negotiating team for the Albufeira Convention, Lisbon, 13 March 2007.
7. President of *Águas de Portugal*, Lisbon, 14 March 2007.
8. President of Portuguese Delegation to CADC, Ministry of Foreign Affairs, Lisbon, 15 March 2007.

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