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Review

Coastal management and public policy in Spain

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1. Introduction: theoretical framework and objectives

This study has two fundamental objectives, the first of which is to analyse the recent evolution of marine coastal management in Spain from the perspective of the State Public Administration (SPA). As the body primarily responsible for managing the maritime-terrestrial public domain (MTPD), the Ministry of the Environment's Directorate General of Coasts (DGC) is the institution of reference at this administrative level. The second objective is to confirm that the so-called Decalogue for Coastal Management used in previous studies [1–5] serves as a guide for assessing these types of public policies.

One of the most important tasks within the first objective is demonstrating any changes that may have been made to the management model and assessing their scope. To do so, the key elements that define a specific coastal management policy will be studied, in this case, those pertaining to the latest legislature (2004–2008). This study's interest lies in the fundamental role that an assessment - qualitative in this case - of any public policy plays in improving the Administration. Furthermore, institutions across all countries must make concerted efforts to advance in their management of marine coastal zones and resources, in view of the global crisis they are facing [6].

However, the scope of our conclusions should be noted. Spain's political and administrative model distributes responsibilities for coastal management across three territorial tiers: national (State), regional (the Autonomous Communities, ACs) and local (municipalities or local entities, LEs). The intermediate tier has accumulated the most competences (land use planning, protected areas, water management...), although the SPA still retains major responsibilities (use, activities and public works in the MTPD).

The theoretical framework that underpins a large part of our reasoning rests on several premises:

1. Coastal management is a public function, since it affects issues in the public realm that are of basic interest to our society. These interests take the shape of (natural or cultural) spaces, assets, resources and human activities that may be conflictive, etc.
2. The general framework within which the public administration makes certain decisions on governing and managing the coast

is political [7]. Hence, the interest in an analysis of public coastal policy.

3. The neo-Institutionalism theory highlights the need for public management objectives to be more concerned with results rather than with relationships among stakeholders [8,9]. Furthermore, societal direction or leadership cannot be achieved solely through regulations, administrative procedures and sanctioning mechanisms, among other reasons, because this model has been shown not to be very effective [10].
4. Stakeholder participation, transparent decision-making, formation of strategic alliances, search for voluntary agreements, accessible information and new training models for coastal administrators must be accepted as indispensable if a change in coastal management model is to take place.
5. Lastly, the events and measures analysed in the following pages should be interpreted, as Subirats does [11], as "government" or "management" tasks, so as to enable a better grasp of the coastal institution's successes and failures. The first concept -government- is linked to the formulation of public policy and therefore part of a more strategic orbit. In the case of the Spanish coast, public policy is formulated by the Ministry, the corresponding Secretariat General and the DGC. This last, together with the General Sub-directorates, lays out coastal policy and implements it through instructions and directives. The second concept -management- is used to put the above-defined policy into practice. It functions within the institution's operational scope and is developed by DGC (*Dirección General de Costas*) department heads, but also *in situ* and directly by the coastal administration's peripheral services (23 demarcation or regional services). Among other factors, the scheme's progress will undoubtedly depend on the proper adjustment and interaction between different scopes: government and management, strategic and operational, formulation and implementation (Table 1). The explanation is simple: a fluid relationship establishes a two-way dialogue: top down and vice versa.

2. Formal aspects: precedents, justification, hypothesis and method

The background to this study can be found in the earlier studies mentioned at the beginning of this paper and reflects our concern about the relationship established between the coastal

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Table 1

The scope of the Spanish state coastal administration's government and management.

	Operational	Strategic
Management	Coastal Demarcation or Regional Service staff (who apply policy)	DGC department heads and heads of the Coastal Demarcation or Regional Service staff (who develop the policy)
Government	Director General of Coasts and Subdirectors General (who lay out and implement policy)	Minister and Secretary General (who formulate general policy)

Source: In-house according to Subirats' schema (2006).

management model and the profile of the responsible Spanish institutions. We are especially interested in policies, investment and performance criteria, capacity for social learning, assessment mechanisms and evolutionary trajectory. The conclusions drawn in the publications serve as a departure point for this study. Other previous works of interest are those by Gómez Pina [12], Fernández [13], Montoya [14], Mulero [15], Trigueros [16], Sanz-Larruga [17], Chica [18] and Arenas [19].

The following points justify the advisability of the chosen time period and the analysis of one single institution:

- 1) Our previous publications [2,3] study the general model of coastal management in Spain between 1988 and 2003, including the role developed by the Autonomous Communities and municipalities. This study should be considered as a continuation, although exploring in greater depth the most important institution with the longest history in coastal management in Spain. One must remember that the DGC is the body that manages the maritime-terrestrial public domain (MTPD).
- 2) Institutions specifically dedicated to coastal management do not usually exist in the Autonomous Communities, and when they do exist they are recent cases. This is of fundamental importance in order to carry out a comparative analysis between public policies developed in different terms of office.
- 3) A serious attempt to change the previous coastal management model took place in the studied term of office (something which did not occur before 2004 nor after the elections of 2008). Between 2008 and 2009, what is nowadays known as the Directorate General for Coastal and Marine Sustainability (the old DGC) has had no significant change to its personnel, duties or structure. More generally speaking, it is only worth mentioning the merging of two old ministries: the Ministry of Environment and the Ministry of Agriculture and Fisheries. This is now known as the Ministry of the Environment and Rural and Marine Affairs.
- 4) One must not forget that the two objectives mentioned at the beginning (to analyse the recent evolution of marine coastal management in Spain from the perspective of the DGC, and to confirm the usefulness of the Decalogue) allow the institutional policies to be evaluated. For this, it is essential to have detailed information (it is more difficult to obtain such information from prior legislative periods as these are characterised by less transparency and limited projects to change the institution's management model).
- 5) Coastal management is a process that is derived from a public policy. These are valued for their relationship with human activities and, above all, for their results on coastal areas and resources. Such results are clearly observed in the long-term. Also, the need to know the details of a certain coastal management model is evident. Consequently, the answers to

some of the following questions help assess the advisability of short/mid-term evaluations: what are the basic units of time in public policies?, must one wait ten, fifteen or twenty years to conclude that the procedures of a management model are not appropriate?, how can we know whether a certain public policy is going well? Some answers may lead to the conclusion that, at times, it is relevant to evaluate the public policies of certain terms of office.

The working hypotheses are as follows:

- 1) The development of the DGC's management policy lacks integration, which must be verified through the five sequential stages into which any public policy can be broken down [20]. This author's schema presents the following stages in a single process: a) the identification of issues or problems of interest, b) the formulation of a policy that aims to respond to those problems, c) the adoption of an action plan, d) the implementation of same, and e) assessment.
- 2) In fact, several institutional changes - very positive ones, incidentally - did indeed take place during the period studied, although these innovations have not yet extended beyond government levels to penetrate the management structure. This means that the system of relationship that connects government and management - and vice versa - has failed to function properly.
- 3) The DGC has not yet concluded its process of institutional modernisation, which would explain the lack of a more participative management model that is open to society. This reinforces resistance to more democratic changes in the public institution.

The method we used consisted in studying the political coastal management model, which we analysed on the basis of the elements in the above-mentioned Decalogue: policy, regulations and responsibilities, institutions, coordination and cooperation, strategies, instruments, training, resources, information and participation. We have drawn from diverse sources of intelligence with official bodies predominating.

3. European context for Spanish coastal management

It can be said that there is no single European coastal management model [21]. Each member country continues to govern the majority of the responsibilities relating to its own coasts. Specific laws do not always exist for the integrated management of coastal areas, as occurs in other countries. When such laws do exist, they make particular reference to the MTPD or to a narrowly defined coastal area (Laws of France (1986) and Spain (1988), Decree Law Regulating the Coastal Area of Portugal (1993), etc.). Also, the regulation of land use planning and protected coastal areas are frequently used management mechanisms. The legislation concerning the land and marine environment is abundant, and few countries have a precise definition for coastal area.

The precedents in the search for a European coastal management model offer poor results. The different European institutions' attempts have not been very successful, but they have been numerous over time: the Council of Europe's Resolution (73) 29 on the Protection of Coastal Areas, the study by the European Economic Commission (EEC) in 1978 on "Integrated Coastal Management in the European Community", the European Coastal Charter (1981) of the Conference of Peripheral Maritime Regions of the EEC, the order by the Council of Europe in 1984 for the preparation of a report entitled "European Strategy for Coastal Management", the European Coastal Conservation Conference held

in the Hague in 1991, the two Resolutions of the Council of Europe in 1992 and 1994 (one in relation to the European policy on coastal areas and the other on the need for EU strategy on the integrated management of coastal areas), etc.

It is possible that this is due to other matters being prioritised in the political agenda, such as agriculture, movement of individuals and goods, political situation etc. Furthermore, these matters are more concrete than coastal management, which makes it easier to find common guidelines for member states. It must not be forgotten that many countries still have a strong sense of national autonomy. Indeed, it is sometimes the case that the unity and homogeneity of Europe is more clearly seen from outside the continent than from within.

However, important steps forward have also been made. One of which, in our opinion, is that for some countries without an environmental tradition, Europe has played an important role in promoting progress in conservation and coastal management. Another step forward is due to regulatory instruments, which play a hugely useful role: the Integrated Pollution Prevention and Control Directive (96/61), the Water Framework Directive (2000/60/EC), the Environmental Impact Assessment Directive (85/337), the Strategic Environmental Assessment Directive (2001/42/EC), the Habitats Directive (92/43) or Natura 2000, the Bathing Water Directive (2006), the Marine Strategy Framework Directive (2008/56), etc.

The two most important initiatives of recent years have been: the Demonstration Program on Integrated Coastal Zone Management (1996–1999) [22], and the work relating to the management strategies of the marine environment (2002–2008). The main difference between the results of one initiative and the other is their legal force: whereas the initiative referring to coasts ended in a simple Recommendation by the European Parliament and Council on the application of ICZM (2002/413/EC), the second finished with the passing of a Directive (2008/56/EC) establishing a framework for community action in the field of marine environmental policy.

As regards the Recommendation, it is necessary to remember that it requested that the member states carry out a stocktaking of the actors, laws and institutions that are related to coastal management. Furthermore, it suggested the passing of a national strategy for the implementation of the principles of ICZM. The last important point appears in the Communication from the Commission to the European Parliament and the Council (COM, 2007, 308) on the evaluation of integrated coastal zone management (ICZM) in Europe. Despite recognising certain steps forward, this report is not particularly optimistic concerning the general results obtained over recent years.

4. Coastal management in Spain from DGC point of view: the analysis of a legislature (2004–2008)

The baseline situation must be described in order to grasp the scope of events between 2004 and 2008. A previous work [4] outlines the coastal management model from the SPA's perspective and Table 2 offers a summary of the diagnosis made then, which is useful now.

4.1. Coastal policy

This section will focus on the different stages in sequencing that all coastal policies entail, but first, our context should be recalled: coastal management is still not a high priority in national public policy, compared with other general issues (employment, immigration, housing and tourism) or environmental issues (waste, climate change, energy and water). The limited space the major political parties devoted to coastal management in the electoral

Table 2
Decalogue of the SPA's coastal management in Spain.

Aspect	General Diagnosis 1988–2003
1. Policy	Coastal management is not a high priority in public policies. There is no well defined, explicit coastal and marine policy; priority is given to development over resource conservation; sectoral policies are not integrated; few political initiatives for integrated management exist; the SPA has no regional policy criteria for coastal CAs.
2. Regulations and responsibilities	Abundant legislative instruments and their dispersion; there is a regulation on the MTPD, but not a specific text for integrated management; the mechanisms are insufficient for developing the IZCM; regulating the marine environment is still a pending objective. Very important competences for the SPA, since the MTPD is the "backbone" of coastal areas.
3. Institutions	There is a specific State Coasts Administration that was assigned for the first time in 1996 to a ministry of the environment and not a ministry linked to the construction of infrastructures and equipment; its structure is based on a central body (DGC) that is implemented in the territory on the basis of peripheral units (23 Coastal Demarcation or Regional Services); the specific coastal body is practically the only State administration that lacks professional bodies to manage it.
4. Coordination and cooperation	Our Constitution's distribution makes coordination and cooperation with regional entities obligatory; major conflicts in coastal area management competences have been confirmed. There are no coastal coordination agencies and very few instruments exist to promote cooperation among the different territorial management levels.
5. Strategies	Management strategies have been made to serve tourism for a long time; the SPA has not formulated a well-defined public IZCM strategy; strategic coastal management instruments were not approved by political heads during the 1996–2004 period.
6. Instruments	Regulatory instruments are many and diverse in nature; there is no national IZCM programme; the most effective instruments are associated with different sectors and engineering works; voluntary instruments have little relevance; the general criteria for applying instruments deriving from the Shores Act 22/88 are not made public.
7. Administrators	Training for administrators in the Ministry of the Environment's coastal body is completely biased towards engineering; there is no complementary institutional training programme for coastal zone managers; adequate importance is not given to the intellectual skills required for integrated management; there are serious flaws in our country's university system in this regard.
8. Resources	Of almost exclusively public origin; the DGC is the main vehicle for investments in the MTPD; the amount is still low, yet is growing; to a large degree, these investments are allocated to urban areas and production, rather than conservationist purposes in natural spheres; the criteria the DGC uses to allocate resources are not made public.
9. Information	A scheme to agglutinate coastal information is lacking; knowledge of the coastal scheme has serious deficiencies in the marine area; information management through the SIG still encounters stumbling blocks in its implementation, above all in peripheral administrations; information on the objectives and results of the DGC's management is as limited as its dissemination.
10. Participation	There are no professional bodies or forums in which to debate possible solutions to the problems that assail our country's coasts; most institutions that manage resources or competences related to the coastal system have adapted to the demands of a participative, democratic society, as far as professional bodies are concerned; the DGC is one of the few institutions with a recognised capacity for action and investment that completely lacks these bodies.

Source: In-house.

platforms of 2004 affirms that it is a fourth or fifth-ranked issue in terms of social and political interest. Thus, a coastal policy that ranks at the same or a higher level than other sectoral policies is clearly needed.

The year 2004 ushered in the close of a stage of government by the conservative People's Party (which had begun in 1996) and the start of another by the Socialist Party. While this was important to Spain's policies in general, it was less so to coastal management. We have demonstrated in previous works [3] that both major political parties have applied essentially similar coastal practices, at least as far as objectives, strategies and investment criteria are concerned. Furthermore, one government team's policy determines the conditions for the following team, because the administrative planning and execution processes involved in public works can extend beyond the four years of a legislative term.

In any case, the legislative term object of this analysis is the one that differed most from previous stages. Although its accomplishments were still insufficient, certain progress in the search for an integrated coastal management model can be seen.

The start of the legislature was promising. In contrast to previous legislatures, the state government's new coastal policy was made public through an explicit document divided into seven sections: 1) the Master Plan for Sustainable Coastal Management, 2) investment programme, 3) MTPD boundary definition, 4) concessions, 5) marinas, 6) urban and territorial planning instruments and 7) ports of general interest. The DGC is only completely responsible for the first four points, which means that the fifth and sixth sections must be negotiated with the CAs and the seventh with the Ministry of Public Works' National Ports Authority.

Thus, the first and second stages in all public policy - the identification of key issues and formulation of the policy itself - were covered, at least in theory. Entitled *Synthesis of the Ministry of the Environment's Coastal Policy* [23], they were presented to the media by the Minister herself in mid-July 2004.

It should be noted that the proposed measures did not appear in the Socialist Party's 2004 electoral platform. This, together with the informal manner in which the text was edited and the way in which it was drafted, leads one to believe that it was born with a certain haste or improvisation after the election was won. The consequences of making specific coastal policy through this procedure are obvious: there was no prior debate or approval by the election's victorious party, its formulation was not participative nor was it enriched by the contribution of the 23 coastal demarcation or regional services (the administrations closest to citizens and real problems), etc. Furthermore, the document was not published nor widely disseminated as is customary in other countries with coastal and marine policies [24–26].

Although the main ideas were included in the Ministry of the Environment's annual report (2005), its content and programming were not thoroughly explained in detail, above all inside the institution. Initiatives to prepare management levels for the task of tackling a change in coastal policy were also unknown. We believe that the new coastal policy's action plan (the third stage) was not truly adopted by the DGC; government spheres may have adopted it, but management levels did not. A real change in public policy is much more complex and difficult.

Just one year later, the DGC presented another document entitled *Reorientation of Coastal Policy. Actions developed between July 2004 and July 2005* [27]. Its content organised coastal policy into ten sections: 1) framework agreements with the CAs for integrated coastal management, 2) the launch of a Master Plan for Sustainable Coasts, 3) the acceleration of the MTPD's boundary definition plan, 4) investment programme, 5) the conservation and recovery of marine biodiversity, 6) collaboration with coastal urban planning, 7) the acquisition of land to protect the MTPD, 8) coastal

maintenance and conservation, 9) collaboration strategy with the CAs in recreational marinas and 10) MTPD management monitoring.

In theory, the document merely aimed to be a public balance of the first year of legislature, which was new and positive, since it meant rendering accounts to citizens. Yet, its comparison with the preceding document leads one to ponder a change in the political agenda, on the one hand, because it covered ten high-priority points and not seven, and on the other, because topics that acquire greater protagonism appear. The former can be interpreted as follows: the draft of the first document on coastal policy did not take the political framework sufficiently into account. In this sense, the technical conception may have prevailed over policy when the agenda was formulated at the start of the legislature.

A good example of this can be found in the concern for marine environment management. Its later incorporation into the DGC's political agenda was closely related to work by the European Commission, Council and Parliament. In effect, there are references to policy, strategy and directives for the marine environment that date from almost ten years earlier. Yet, the high point of this process in Europe was almost parallel to the legislature we are analysing, proof of which was the approval in June 2008 after several years of hard work of new Directive 56/EC, which establishes "a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)".

In general terms, the coastal policy of 2004–2008 allows for several observations with respect to its predecessors [28–30]. First and foremost, it proposes that measures be oriented more closely to environmental conservation. This aspect is very relevant, because one of this institution's main strengths is its major investment levels in public works (oriented to beach regeneration and constructing seaside promenades in urban and tourist areas).

Thus, the new coastal policy aimed to break with the institution's tradition: it announced the gradual reduction of investments in "urban seaside promenade infrastructures" and offered a simple alternative: in addition to the DGC's funding, the CAs, LEs and even private initiative must also commit themselves. This aspect brooks no doubt; its intention is to tackle a substantial change in the philosophy underpinning Spain's coastal policy.

Furthermore, it is a faithful reflection of the recognition of the role played by CAs in coastal management: they are responsible for territorial planning on the coast, which makes it necessary to consider the relationship between the SPA and other territorial levels in more voluntary than regulatory terms. Hence, its reiteration of the search for consensus and agreement, the need for coordination and cooperation and the advisability of signing collaboration agreements, etc.

Moreover, the political proposal was positive in the special attention paid in its agenda to strategic planning instruments for the DGC and the integration of certain sectoral policies, which were joined by issues that have traditionally concerned the institution: erosion and boundary definition, etc. The latter is fundamental since the fact that the complete Spanish MTPD is still not known with legal and administrative certainty almost two decades after the approval of the Shores Act 22/88 cannot be explained.

Several elementary subjects are not mentioned or made as specific as they deserve to be. For example, relevant aspects in the IZCM such as the origin of resources, profile and training of technicians and civil servants, dissemination of information, possible public participation and public assessment of the management accomplished were barely mentioned. These topics are of enormous interest in the changes that need to be addressed inside the DGC, yet are also very controversial. We consider that the political agenda was quite incomplete for a time because of these gaps. No sectoral policies such as those related to biodiversity, the marine

environment, fisheries, marine transport or offshore wind energy were incorporated in the beginning either.

One further observation about coastal policy: novel proposals related to institutional organisation - reinforcing coordination inside the DGC itself and between the DGC and the Coastal Demarcation Service, granting a greater role to these peripheral services, improving administrator training, establishing criteria or directives for the DGC's actions and investments, etc., which are indeed key objectives in an IZCM model - were not put forward until the legislature's third year [30]. It is a pity that this did not take place at the start of the period of government, among other reasons because no new political initiatives were launched in 2007 or, above all, in 2008; they yielded to the development of previously presented initiatives.

In summary, the new coastal policy's attempts to make several sorely needed changes met with very little success. Yet, this political will was neutralised to a large degree by the manner in which it approached its content and development. The policy did not differentiate properly between coastal topics (what must be done) and coastal management topics (how, when and by whom things must be done) when the agenda was set. This is fundamental in an IZCM model, since the two are not the same, although they are closely related. The formulation of the action plan was also marked by these key issues. The adoption of a new coastal policy was inadequately prepared within its institutional setting and the DGC. As shall be seen in the following pages, these circumstances managed to slow down implementation. Initiatives related to the final stage in any public policy -assessment- are not known.

4.2. Regulations and responsibilities

The regulations related to coastal management from the 2004–2008 legislature were not very relevant, save two exceptions that are both related to the marine environment. The first refers to the Natural Heritage and Biodiversity Act 42/2007. The main contribution is related to a better definition of the SPA's competences over the environment and marine resources. The second novelty is Royal Decree 1028/2007, which sets out to establish an administrative procedure for processing applications for electricity generation plants in territorial seas. In theory, it solved a problem related to administrative coordination. The authorisation of offshore wind parks depends on several ministries: the heads of Industry, Marine Transport, Fisheries, National Defence and the Environment. Yet, it is the last of these that grants authorisations and occupation concessions for the MTPD through the DGC.

Furthermore, the distribution of competences related to managing marine coastal resources and space between the SPA and the CAs is still a key issue in Spain and an on-going source of trouble. These disagreements have reached the Constitutional Court on several occasions during the brief history of our young democracy. Yet the previous legislature, compared with other periods, served to reduce the tension.

The most evident conclusion drawn from the events between 2004 and 2008 can be summed up as follows: the SPA has initiated a new stage of transferring major responsibilities over the MTPD to the CAs. At the same time, it hopes to consolidate certain competences related to the marine environment.

The new ground broken by Catalonia in the first area will probably be followed by other CAs:

- 1) It incorporated certain management functions related to the MTPD that the SPA had been developing until that into the negotiations for the new Autonomy Statute (2005).
- 2) The SPA granted its sanction through the Spanish Parliament's approval of this content on the MTPD's management in the new Catalan Autonomy Statute (2006).
- 3) A bilateral commission negotiated the specification and assessment of the transfers in terms of human and financial resources (2007).
- 4) The transfer of agreed upon functions and resources was executed (2008).

The process followed by Andalusia was very similar. Its recently-approved Autonomy Statute also contains new responsibilities in managing the MTPD (2007). Nevertheless, the third and fourth stages have not yet taken place, although they are envisaged for the near future.

The SPA is consolidating its status with respect to the CAs as far as competences in the marine environment are concerned. The Constitutional Court itself had to take part in certain conflicts related to conserving marine biodiversity on the high seas (Constitutional Court Rulings 38/2002, 35 and 36/2005). And not only does this refer to the relationships between two territorial levels of the public administration; it can also be interpreted as a sectoral problem between fisheries and the creation of marine reserves. Furthermore, marine environmental boundaries between CAs do not exist and protected areas are sometimes split up between two or more of them. And our country is still not prepared for the joint management of protected marine areas (PMAs) by two or more Autonomous Communities.

Against this background, the government commissioned the *Consejo de Estado* [31], its main advisory body, to draft a report entitled *Competences of the Different Territorial Administrations and the SPA in the Area of Protecting Marine Species and Habitats and the Declaration and Management of PMAs*. The government's interest was reinforced by European bodies, which have ranked the marine environment as a priority in their political agendas. And making certain internal decision making involves dissipating certain doubts first.

The detailed response by the *Consejo de Estado* [31], which was used to draft several articles in the above-mentioned Natural Heritage and Biodiversity Act, contains the key in the one of its paragraphs: "The main question thus resides in that it must be made clear that in principle the SPA is competent to manage discontinuous systems (especially deep water systems) and ecologically continuous systems whose biodiverse value is exclusively located in waters far from the coast, since the management of marine-terrestrial parks will generally correspond to the Autonomous Communities, because the ecological continuity of ecosystems is clearer."

In synthesis, the status of competences is as follows: while the CAs are reinforcing their protagonism in maritime-terrestrial and terrestrial coastal management, the SPA has chosen to secure the management of the marine environment.

4.3. Institutions

There were no major changes within the SPA institutions that administers the coast and the changes made were rather formal and nominal in nature. For example, Royal Decree 1477/2004, which reorganises the Ministry of the Environment, divides the DGC into two new subdivisions: Coastal Sustainability and Integrated MTPD Management. These are new denominations; in the previous legislature they were called Coastal Measures and MTPD Management, yet their functions are still very similar: public domain works and administration, respectively. The Coastal Demarcation and Regional Services (DGC) also did not undergo

significant alterations in their internal structures or coordination processes with the DGC Central Services in Madrid.

In general terms, continuity in internal organisation prevailed with at least two exceptions, although they are very limited in scope. One is related to the consolidation of the Marine Ecosystems and Environmental Protection Division in the DGC organigram. The other refers to the creation of an integral coastal management work group in the Environmental Advisory Council (the Ministry's advisory body). In any case, no doubt exists on the clear need to modernise the coastal institution, as the ports authority had been some time before (Barragán, 2005).

4.4. Institutional cooperation and coordination

Unlike events in the preceding paragraph, cooperation between the DGC and the CA did aspire to play an important role during the legislature and this political will was evident in the text of Decree 1477/2004. The following are explicitly mentioned among the functions assigned to the DGC: "The arrangement and coordination of measures or projects that help improve coastal sustainability with the CAs, LEs and public or private bodies". To this end, an agreement model with the CAs was conceived for integrated coastal management, as we have mentioned in the preceding pages, with the following results: agreements were signed by Asturias, Galicia, the Balearic Islands, the Canary Islands, Cantabria, Murcia and Valencia, whereas the Basque Country, Catalonia and Andalusia did not sign agreements.

A reading of all the agreements leads to several conclusions:

- a) The DGC has assumed a valuable voluntary instrument of coordination at different institutional levels as normal and not extraordinary. This initiative is very positive regardless of the results obtained, because it is the unequivocal path for an IZCM in Spain, among other reasons.
- b) The results may not turn out as expected, because they involve a capacity for insight and political experience in coastal management that neither the DGC nor the CAs possesses at this time.
- c) The balance of the agreement policies is as unequal as its interpretation is significant: firstly, there are CAs, all are which with extraordinary political and/or economic weight, that have not signed agreements; secondly, there are heavily tourism-based Mediterranean CAs with agreements that have been influenced by the conservative party's will and were signed with a limited scope (e.g., in time, measures and length of coast); and thirdly, there are CAs in northern Spain under less pressure from tourism (Cantabria, Asturias and Galicia, which are joined by the Canary Islands) that were already experienced in these types of instruments and signed texts whose contents aspire to a broader scope. In this last case, the agreements corresponded to the model created by the DGC at the start of the legislature.

A reading of the results must undoubtedly be made in light of general policy and not only in terms of coastal management, if events are to be understood. Within this logic, it may be that autonomous inertia had more weight than political colour, since then how can we explain the lack of agreements signed by Andalusia and Catalonia, which are governed by the same party as the SPA?

4.5. Strategies

Three initiatives mark this section: a) the Spanish IZCM Strategy, b) the Master Plan for Sustainable Coastal Management and c) the

Coastal Sustainability Strategy. In theory, these three initiatives more than sufficed for furnishing our country with a strategic coastal management instrument. In practice, the opposite was true: Spain had no strategy at the start of the legislature and still has none.

Clearly, the least progress was made in the strategy area during the legislature and confusion reigns. The validity of the existing Spanish IZCM Strategy presented to European authorities in Brussels in 2006 was called into question, because another Strategy was to be launched in 2007. To crown it all, the Master Plan has neither been written up nor approved, and yet, its proposed measures are nourishing the future Strategy (instead of the other way around).

The DGC's serious efforts to change this situation must be acknowledged, yet they have met with no success and the balance is discouraging. From the strategic point of view, the coastal management policy has shown itself to be erratic and improvised, above all, during the second part of the legislature, which has led to incoherencies and contradictions not only in the operational field, but in the methodological and conceptual fields as well.

Some CAs (Catalonia, Asturias, Valencia) already have their own IZCM strategy and others, such as Andalusia, may have ones before the SPA does. In that case, who will set the standard? Who will lead and coordinate the processes of change? Is it better for the parts to influence the whole or the other way around? How are regional strategies related to national ones?

4.6. Instruments

Substantial progress was achieved in this section, with respect to earlier legislatures, including four noteworthy instruments that involve very positive changes:

- 1) The MTPD's Boundary Definition Plan. Although, this is not a plan in itself, in fact, it is a concrete objective to which priority has been granted with very positive results: thanks to an unprecedented effort throughout the entire legislature, almost 82% of the Spanish coast was defined in early 2008 (compared with 62% in 2004) and nearly 2000 km of MTPD were approved, twice the annual rate previously registered by the DGC.
- 2) Guidelines for the "treatment of the waterfront" (especially in urban facades) and "beach measures" [32,33]. Theoretically, this means a reorientation of the DGC's main functions. A reading of these documents reveals a change in philosophy on action criteria and therefore investments. A considerable turnaround can be seen in environmental conservation, to the detriment of investments previously aimed, above all, at promoting productive activities. The practical use of these documents remains to be seen in the future, since it was approved late in the legislature.
- 3) A plan to acquire property of interest in protecting the MTPD. The implementation of this plan had already been launched during the previous legislature; however, it was used as a relevant instrument in the new coastal policy between 2004 and 2008: more than 13 million square metres were purchased for an investment of almost 50 million euros.
- 4) The DGC collaborated very actively in approving (January 2008) the Mediterranean IZCM protocol project, which can be considered progress within the international framework of the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean. An IZCM pilot project was also set up in the Levante in Almeria as part of the Mediterranean Action Plan, in accordance with the Andalusian Government (unfortunately this project, which is virtually

paralysed, has not had any significant breakthroughs over the last 3 years).

With the exception of the final instrument, the above instruments are positive references to the DGC in the legislature. Several reasons support this opinion: there is reasonable agreement on the objectives proposed by the new coastal policy; environmental performance criteria has begun to be valued (this reasoning is not secondary for a Ministry of the Environment that has identified too closely with objectives related to developing tourism); the new criteria for decision-making related to the institution's projects have been made known; and several instruments send messages of change to administrators and those administrated. Despite the above, the execution of engineering works is still one of the institution's main operative instruments. Furthermore, a structural change to achieve an IZCM model was clearly left pending in this section.

The Mediterranean Protocol on ICZM, signed in 2008, is worthy of discussion. Firstly, when it comes into effect it will allow the ICZM to be approached from a simple but solid starting point: definition of "coastal zone" (different from that of the MTPD), creation of bodies for the coordination of institutions (these do not exist at present), etc. This could be a positive step for a country such as Spain, which does not yet have such basic aspects as coastal management developed. It may even encourage the implementation of new institutional initiatives that are appropriately designed.

However, the wording of the text is sufficiently open and flexible (eg. "the Parties will do all that is possible to..."), that this Protocol will most likely work as a voluntary management tool, despite having a special legal status. Consequently, we believe that there is no reason for it to increase the level of conflict between the SPA and the autonomous communities. In other words: the protocol will be a good management tool if there is a political desire to use it in order to bring the coastal institutions closer together. In any case, it represents a new opportunity to make progress in the Spanish coastal management model, which is still not well defined as regards the coordination and cooperation mechanisms between the SPA and autonomous communities.

4.7. Administrators

Public works engineering is by far the prevailing professional profile in the DGC [3]. Training civil employees is undoubtedly crucial in successfully tackling a change in the coastal management model. Institutional training did not change substantially between 2004 and 2008, yet several interesting IZCM initiatives did take place: a ten-week experts course for technical personnel in 2005 (Santander), a seminar organised by the Ministry of the Environment's Biodiversity Foundation (Palma de Mallorca), and a European IZCM Masters has been offered each year with courses taught and studied by technicians from the Coastal Demarcation Service (Cadiz), etc.. However, there is still no on-going IZCM training programme for DGC administrators.

We cannot forget that any change or innovation that the government sphere (Minister, Secretary General, Director General) may wish to implement must count on support and work skills in the management sphere (intermediate DGC heads, Demarcation Service heads, etc.) and thus, communication among these must be fluid. New technical and social skills are also needed, especially if we consider integrated management as the search for opportunities in networking, coordination and cooperation among social and institutional stakeholders, conflict resolution, and the search for consensus and public participation, etc..

4.8. Resources

The progress achieved in this area has a certain interest, above all, when taking into account that the DGC is an investment body. In general terms, the money allocated to coastal environmental protection is still very scarce when compared with allocations to other natural resources or activities linked to development (water or ports, for example). However, these resources are still growing. Furthermore, we appear to be passing through a transitional period in which investment criteria are changing, on the one hand, and are beginning to be made public, on the other (of which the directives mentioned in the Instruments section are proof).

In fact, total expenditure between 2000 and 2003 rose to 500 million euros, when the extraordinary items allocated to palliating the catastrophe caused by the sinking of the *Prestige* are excluded. This amount soared to 630 million between 2004 and 2007, with the most benefitted CAs being Andalusia (21%), Galicia (19%) and Valencia (16%). The destination of these resources during the latest legislature still demonstrates the importance of urban areas and the tourism sector: almost two-thirds of the budget was used to transform urban facades (33%) and control beach erosion (27%). Other investments, such as MTPD accesses and the protection or recovery of coastal ecosystems (with 15% each), were secondary objectives for the DGC. Finally, despite their high-priority within the new coastal policy, the acquisition of lands and execution of boundary definitions scarcely added up to 10% of all investments [34].

Yet, the most positive aspect was undoubtedly the evolution of investments throughout the period under study. While spending on the transformation of urban facades declined, spending on protecting and recovering coastal ecosystems and building MTPD accesses and footpaths increased. However, the criteria for distributing the cost of certain investments among the DGC, CAs, LEs and private stakeholders still remain to be set.

4.9. Information

This aspect was essentially overlooked by the DGC. Certain progress, some of which has been mentioned, can be recognised, yet in general terms, information management still leaves much to be desired. For example, there is no system of indicators to ascertain the real impact of investments on coastal protection and conservation or the evolution of the main attributes that define the quality of the MTPD or major coastal ecosystems. There are not even any management processes linked to a formal system of indicators at the DGC itself or the Spanish Sustainability Observatory.

Table 3 offers a qualitative assessment of the major media, sources and topics related to information provided by the DGC. Although it only attempts to orient our opinion, it may underscore several deficiencies that explain a conclusion: communication between society and the DGC is not a relevant topic in this institution.

Table 3
Information on the DGC's coastal management and resources.

	Information and communication	Assessment
Media and sources	Reports (ministerial)	Positive
	Webpage	Negative
	Bulletins, books, brochure, etc.	Negative
	Others (press, internal circulation, etc.)	Regular
Topics	Strategic instruments	Negative
	Operational instruments (boundary definitions...)	Positive
	Financial aspects (investments...)	Regular
	Works and measures	Positive
	Demarcations	Negative

Source: In-house.

Table 4
Progress and current status of the coastal management Decalogue (DGC) in Spain.

Management aspect	Progress 2004–2008	Current status
Policy	Mostly insignificant	Structural changes urgently needed
Regulations and responsibilities	Mostly insignificant	Need for change
Institutions	Non-existent	Structural changes urgently needed
Coordination and cooperation	Reasonable	Need for change
Strategies	Non-existent	Structural changes urgently needed
Instruments	Reasonable	Structural changes urgently needed
Administrators	Mostly insignificant	Structural changes urgently needed
Resources	Reasonable	Need for change
Information	Mostly insignificant	Need for change
Public participation	Non-existent	Structural changes urgently needed

Source: In-house.

This opinion rests on one reasoning. The most highly valued sources of information and communication media have a smaller scope of dissemination and are not strictly coastal (Ministerial Report). Furthermore, the section on coasts at the Ministry's website (www.mma.es) is very scanty (it offers little information and is not updated) and scarcely a publication has been issued that addresses coastal management (bulletins, books or pamphlets). We believe that the DGC is an institution whose functions and budgetary scope deserve a specific annual report on the results of coastal management in Spain, such as the one the State Port Authority has been issuing, for example.

Hence, we can conclude that, without a great effort, the DGC's social repercussions could be far greater than they are at present. Furthermore, transparent decision-making, networking, the visibility of the institution itself and the results of its work recommend a greater dedication to information and communication-based topics. Of course, our society needs to get to know the DGC's work and its civil servants better. In this sense, we recommend that the Spanish coastal institution be modernised.

4.10. Public participation

It is hardly possible to comment on anything this legislature accomplished; there were no State bodies or channels with public participation on coastal management in 2004 and nothing changed in 2008. Any observation on a Council or Coastal Forum would be to speak of the future. Very little was achieved during these four years and all the work lies ahead. This aspect is crucial because the democratisation of public institutions demands possibilities for citizen participation. Furthermore, most Spanish institutions have already modernised their management models and adapted them to the requirements of a participative, democratic society. This is undoubtedly one of greatest structural flaws in the SPA coastal management scheme.

5. Conclusions

The Decalogue, which has proved to be a very useful tool for this study and assessing the advances achieved, was used to analyse the SPA coastal management model of the latest legislature. Our main conclusion is that some significant progress has been made, yet on the whole, it has barely been able to transform structures, at times because the changes did not affect all the elements in the management scheme and at others, because they were implemented too slowly.

Perhaps what is most striking is that, as a SPA coastal management institution, the DGC has not yet been affected by substantial changes in its internal organisation. And this may indicate that

there is still no integrated political perspective for coastal marine issues. In any case, what concerns us most is that the majority of key elements in the SPA coastal management scheme as a whole have not advanced significantly.

The three hypotheses posited at the outset of this study help explain what has happened:

Hypothesis 1. The DGC's management policy was not developed in an integrated manner because it was incomplete, unconnected and lacked a sequential character; it even seemed to be improvised at times (above all, in the beginning and middle of the legislature). Problem identification (stage one) was attended to outside the institution itself to an excessive degree and almost not at all within it. With an agenda thusly established, the formulation of public coastal policy (stage two) logically did not include certain topics. The adoption of an action plan (stage three) was not formalised as it should have been (by granting it an institutional rank and legitimacy, publicity, etc.) inside and outside the DGC.

The implementation of SPA coastal policy (stage four) may have been hindered by faulty communication among the parts of the institution itself: the DGC's central and peripheral services (or the government itself and the coastal management scheme). Yet also, and above all, because of the slow pace and difficulties involved in designing and launching new instruments. It is not worth commenting on the assessment of public policy (the last stage); there is no public management report, at least no accessible report that contrasts the legislature's accomplishments with what it proposed to do at the outset, which would have also allowed for feedback and helped advance a new cycle in State coastal policy.

Hypothesis 2. The SPA institutional model has demonstrated interesting new features during this legislature, yet they might not be circulating fluidly, neither from government levels to management levels, nor vice versa. We cannot rule out the possibility that the benefits from these changes may be observed during the next legislature (2008–2012) and we must underscore the work accomplished on the marine environment, a new sphere that Spanish public management has gradually begun to incorporate. Neither has there been any ostensible improvement in connection to the international scheme, above all, initiatives linked to the European Union or United Nations. In any case, the changes observed are insufficient for tackling our society's present and future needs. These sorely needed changes, such as those indicated at the beginning of the conclusions, must be addressed and more attention paid to the contributions of the Demarcation Services themselves. In this way, management levels, with their direct experience and greater proximity to citizens, would enrich government spheres.

Hypothesis 3. The preceding arguments may explain why the DGC has not completed its process of institutional modernisation, especially in the absence of an overall policy and the extremely slow pace of change. The DGC may also be blocked by its institutional inertia, the determining conditions of its socioeconomic function and the power relationships among the three tiers of public management. Yet, what is most worrisome is that the DGC is not taking charge of its fate, which can be seen, e.g., in its incapacity to assume a corporate strategy of its own or a strategic instrument to guide changes in its organisation.

In general terms, this last legislature was more fruitful than earlier ones. Several positive steps with a certain importance were taken. However, the situation today is still far removed from the integrated models for a more sustainable development proposed by international bodies. The focus of attention of Spain's future coastal management (from the SPA point of view) should fall on the sections in which structural changes are urgent and in which less progress has been made during the last legislature: policy, institutions, strategy, administrators and public participation (Table 4). Consequently, we believe that any real approach to an IZCM model

must be made through more decisive changes, which first involves the replacement of the present conception of a “government” scheme for one of “governance”.

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