

WFD IMPLEMENTATION ON TRANSBOUNDARY RIVER BASINS. THE IBERIAN PENINSULA CASE

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ABSTRACT

In accordance with the importance of European shared river basin districts, the Water Framework Directive (WFD) strongly promotes the cooperation between the Member States so that 'good status' for Europe's surface and groundwater is achieved within a 15-year period on all rivers, including transboundary ones. At the Iberian Peninsula level, Portugal and Spain reinforced and reframed the bilateral cooperation on shared rivers water resources in the last decade, based on the so called Albufeira Convention, approved in 1998, and under the WFD umbrella. The two countries have chosen (at least for the first cycle of WFD implementation) a basin-based water management and a decision-making process framed on coordinated River (sub-) Basin Management Plans, one per country.

Nevertheless, although the WFD has been an important trigger of reform of the water policy and institutions in both Iberian countries, Portugal and Spain are currently (mid 2011) among the EU Member States with major delays in the adoption of the River Basin Management Plans.

The internal and common effort of both countries to WFD implementation will be described and compared. It will be shown how a more dynamic and common effort is needed to achieve the declared goal of a near future integrated management of the shared river basins.

1 INTRODUCTION

The implementation of the Water Framework Directive (WFD) has been in the centre of the European policy in what concerns water resources management in the last decade. The high expectation goals defined in the WFD (OJ, 2000) and the tightened implementation schedule have led the countries to develop strong efforts in order to cope with the expected milestones.

After a brief presentation on the WFD application status, attention will be more specifically drawn to the transboundary river basins, focusing on the Iberian Peninsula case. Both Portugal and Spain stage of the WFD implementation will be discussed. Moreover, the analysis will be extended to the cooperation that has been existing between the two countries in what concerns water resources management.

2 THE WATER FRAMEWORK DIRECTIVE

The Water Framework Directive (WFD), adopted in October 2000, sets the scene for

a new approach to water resources management, based on river basin units. Besides the innovative approach, the directive also strongly promotes cooperation between countries sharing water resources. Considering that near to 60% of the EU's territory lies in shared river basins, it is easy to understand that an important effort on joint river basin's water management is required.

The WFD considers a first stage of a cycle process, where important milestones are to be achieved on a 15 years schedule since the directive approval in 2000. The first step, due in 2003, was the transposition of the WFD into the national Law and the identification of the River Basin Districts Authorities (RBDAs). The year 2009 was scheduled for finalising the first River Basin Management Plans (RBMPs) and setting up the corresponding programmes of measures aiming to meet environmental goals in 2015, by means of making operational the stated measures and introducing pricing policies meanwhile. After that stage period of intensive work for the Member States, 6-year management cycles are foreseen from 2015 on in order to allow reviewing the RBMPs and comply with the environmental objectives defined.

In the last period and, in some cases still currently, the Member States were (or still are) devoted to the definition and adoption of the RBMPs. Concerning an international river basin district (RBD) falling entirely within the Community, according to the WFD (article 13), Member States should "ensure coordination with the aim of producing a single international river basin management plan. Where such an international river basin management plan is not produced, Member States shall produce RBMPs covering at least the parts of the international river basin district falling within their territory to achieve the objectives of this Directive", emphasizing the challenge set for Member States cooperation on the 40 international river basins with territory within EU.

2.1 General overview of WFD implementation process

The Commission has up to now published only two reports to inform the European Parliament, the Council and also the public about the corresponding development stage. The first report on implementation (COM, 2007), published on 22 March 2007, was devoted to the transposition into national law, the set-up of administrative structures (Article 3) and the environmental and economic analysis of river basin districts (Article 5). In April 2009, the second report on implementation (COM, 2009) addressed the establishment of monitoring programmes for surface and groundwater (Article 8 and Annex V).

According to WISE (Water Information System for Europe, <http://water.europa.eu>), the Commission is currently carrying out an assessment of the status of the RBMPs developed by the different Member States, as the deadline for publishing and reporting those to the Commission has expired in December 2010 and March 2011, respectively. That shall translate into a third report on implementation of the WFD expected to come out in 2012 where the stage of the first set of RBMPs is to be assessed.

In fact, all Member States should have already finalised the RBMPs and the corresponding programmes of measures (Article 13 and 11). Presently (mid 2011), Member States should be devoting efforts to make operational the programmes of measures required by the WFD. However, according to the available data, the Member States are at very different stages in what concerns WFD implementation.

2.2 River Basin Management Plans

The elaboration and adoption of the River Basin Management Plans is a key issue in WFD implementation, as an obvious important milestone for the European Union global water frame policy. According to Figure 1 and the corresponding source of information, one could conclude that some Members States (Belgium, Portugal, Spain and Greece) are still in or have not even started the consultation process on RBMPs. However, if the national corresponding information is consulted, one can observe that, in fact, both Greece and Portugal have not yet started the consultation process. However, in Spain and Belgium, different stages in the RBMPs process can be observed: (i) in Spain, a RBMP has only already been adopted and published in the Internal Basins of Catalunya whereas in the Júcar, Segura, Cantábrico, Tejo, Guadiana, Ebro, Internal Basins of Basque Country, Ceuta and Melilla river basins, the consultation phase has not even taken place; (ii) in Belgium, only the Flanders region has adopted the RBMP for the Flemish part. On the other side, in Italy, referred on the map (Figure 1) in green as already having adopted the RBMPs, in fact the consultation phase on the draft RBMPs is announced to be ongoing for all RBDs, but has still to be conditioned to and follow a first consultation process on regional water protection plans (“Piani di Tutela delle Acque”), due to all the regions of the eight RBDs.

It should be pointed out that the reporting period of the Member States has only ended last March and, in this context, some information is expected not to be available yet on the specific websites of the Member States, leading to some discrepancies.

Norway is a specific situation as it is implementing the Water Framework Directive as part of the European Economic Area Agreement. In that case, a specific timetable has been agreed. However, despite the delay of 9 years in the deadlines defined for the other Member States, Norway has already adopted the RBMPs in June 2010.



Figure 1. River Basin Management Plans – adoption status: (i) Green: River Basin Management Plans adopted; (ii) Yellow: consultations finalised, but awaiting adoption; (iii) Red: consultation; Updated 11/04/2011 (http://ec.europa.eu/environment/water/participation/map_mc/map.htm)

According to the data referred on the European Commission (Environment) website (source of information of Figure 1 and referred above), the following Member States have complied with the WFD deadline for the River Basin Management Plans finalisation: Austria, Estonia, Lithuania, Finland, France, Germany, Hungary, Luxembourg, Malta, The Netherlands, Poland, Romania, Slovak Republic, Sweden and UK.

As defined in the WFD, the environmental objectives and the programmes of measures for the transboundary river basins should be defined for the whole river basin area and not only by country. In fact, RBMPs for the Danube, Rhine, Elbe, Ems, Meuse, Scheldt and Odra river basins have already been published, some involving namely some non-EU Member States.

The Danube river basin is a good example of that and of the coordination effort needed to achieve that goal. The Danube is the second largest river basin in Europe and the world's most international one (19 countries: Albania, Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Germany, Hungary, Italy, Macedonia, Moldova, Montenegro, Poland, Romania, Serbia, Slovak Republic, Slovenia, Switzerland and Ukraine) and has adopted its RBMP in December 2010, after the countries have worked on their national management plan and cooperated at the international level. The ICPDR (International Commission for the Protection of the Danube River), created in the beginning of the 1990's, has played an important role in the discussion and cooperation needed to achieve the RBMP, requesting the countries in the Danube River Basin District to work on their national management plans and to cooperate at the international level (most of them non EU Members).

In the Iberian Peninsula, the different river basin administrations of both Portugal and Spain are still working on the elaboration of the RBMPs at the national level although with some degree of collaboration for the five transboundary river basins: Minho, Lima, Douro, Tejo and Guadiana.

3 PORTUGAL AND SPAIN: CONTEXT AND STAGE OF IMPLEMENTATION OF THE WFD

3.1 Iberian Peninsula Shared River Basins

In the Iberian Peninsula, located in the southwest part of Europe, the five shared river basins between Portugal and Spain represent more than 45% of the Iberian territory (Figure 2), with the ones of Douro, Tejo and Guadiana covering more than 95% of the shared area. About 21% of the area covered by those five river basins (around 268 500 km²) belongs to Portugal, corresponding to 65% of the Portuguese territory, whereas the similar area of Spain (79% of total) represents around 42% of its territory.

Although the contribution of Spain to the shared (surface and groundwater) river basins water resources (2/3 of total) is lower than the referred areal share, more than 70% of the total water use on the five shared river basins corresponds to that country, where also more than 2/3 of the corresponding existing storage capacity is located.



Figure 2. Iberian shared river basins (www.cadc-albufeira.org)

3.2 Water Resources Management Framework

In order to comply with WFD implementation goals and schedule, both Portugal and Spain have made a great internal effort to reform or adapt their legislative, administrative and institutional water framework, both declaring to take into due account the shared water resources necessary coordination provisions. Having as reference the description of those efforts, reforms and/or adaptations made by Maia (2008), the corresponding current stage will be now summarized.

In Portugal, the transposition of the WFD into National Law occurred in 2005. The Water Law defined eight River Basin Districts (“Regiões Hidrográficas”, RHs) for mainland Portugal (and two for Madeira and Azores islands) that embrace the fifteen river basins formerly considered for management purposes, making the water administrative regions to coincide with the river basins’ boundaries. This arrangement took into due account the need to match the Portuguese river basin districts with the corresponding ones shared with Spain, as by then defined. The 2005 Water Law also established five (plus two for the islands) River Basin Districts Administrations (“Administração de Região Hidrográfica”, ARHs) as institutions responsible for water resources management and planning, and so in charge of elaboration and execution of the RBMPs. Nevertheless, only in 2007 those institutions were legally recognized (DR, 2007).

Spain is a pioneer on water management at the river basin level, the first River Basin Institutions (“Confederaciones Hidrográficas”) dating back to 1926. Only in 2007, Spain made a first rearrangement of the former River Basin Districts definition, by that, and concerning the river basins shared with Portugal, making adequate the Minho and Lima Spanish river basin parts integration (up to then joined with others under the so called “Confederación Hidrográfica del Norte”, CHNorte) to the Portuguese 2005 Water Law definition (by which both were joined in RH1, having in attention Spanish reality) and to the WFD requirements. For that purpose, Spain divided the basins under the CHNorte in two RBDs, formally defining the so called “Demarcación Hidrográfica del Miño-Limia” (BOE, 2007). Later, in 2008 (BOE, 2008), the CHNorte was formally

divided in two, in accordance with the referred RBD division, the one with the institutional authority over the Minho and Lima Spanish river basin parts named “Confederación Hidrográfica del Miño-Sil”, the river Sil being an important tributary of the Minho river.

Figure 3a shows the map of the River Basin Districts (Portuguese “Regiões Hidrográficas”, RHs, and Spanish “Demarcaciones Hidrográficas”) of the Iberian Peninsula, as in December 2010, and Figure 3b details the RBDAs in Portugal. The map incorporates all the modifications occurred up to that date (since 2007) in Spain on RBDs definition, mostly due to internal Autonomic Communities statute changes or requirements. Changes on the “Demarcación Hidrográfica del Cantábrico” (division in two, one incorporating the called “Cuencas Internas del País Vasco”), occurred meanwhile (in 2011), are not still represented. A change in the “Demarcación Hidrográfica del Júcar” is also foreseen, following a complaint from the Autonomic Community of Valencia.

It shall be noted that Spain, expected to have an easy task on fulfilling WFD provisions in what concerns RBDs definition due to its long tradition of water management on a river basin level, was in fact unable to effectively comply with the WFD schedule, mostly due to the complexity of the Autonomic regions reality and to water southern regions water scarcity (Maia, 2008).

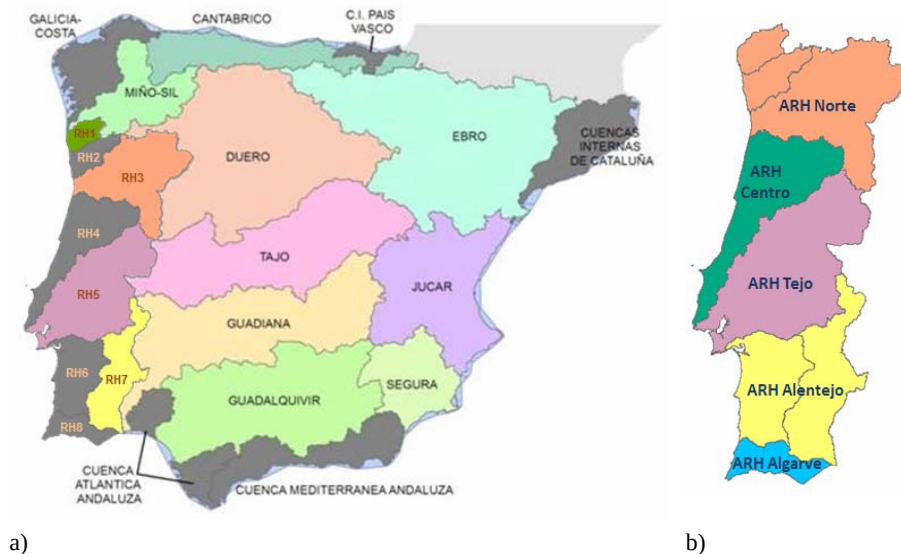


Figure 3. a) Spanish “Demarcaciones Hidrográficas” and the Portuguese RHs (adapted from www.mma.es); b) Portuguese River Basin District Administrations

3.3 Bilateral Cooperation: The Albufeira Convention

Until the end of the last century, the management of the water resources shared by the two Iberian Peninsula’s countries was restricted to the bordering stretches. From then on, the entire river basin was considered to be the basic unit to frame the corresponding bilateral agreements, also in accordance with the common water

resources management policy, meanwhile envisaged to be implemented and fostered by the EU.

The Convention on Co-operation for Portuguese-Spanish River Basins Protection and Sustainable Use (usually referred as the Albufeira Convention) was the response to the referred need of a more pro-active and bilateral management of the issues related with the shared water resources (Dellapenna, 1992). Signed in 1998, the Convention entered into force in 2000, defining a new framework of bilateral cooperation of the five shared river basins.

In order to operationalize the requirements set in the Convention, two institutional boards were created: the Parts Conference and the Commission for Convention Development and Appliance (CADC). The first board has a high deliberative instance, with political co-ordination whilst the second has deliberative, consultative and supervisory functions.

3.4 The CADC

The CADC's role rapidly went beyond its initial expected functions, as this institutional board was pointed out as the Competent Authority for coordination of WFD appliance by both countries, with the creation of a specific Working Group devoted to WFD implementation coordination.

As a matter of fact, the technical work is currently developed by five Working Groups (WGs), each focusing on specific bilateral issues: (i) flow regime, droughts and emergency situations; (ii) information exchange and public participation; (iii) dam safety and floods, and; (iv) WFD and water quality, emphasizing the importance given to shared river basins' management and to coordination of WFD implementation. Additionally, in order to cope with the increasing responsibilities of the CADC in the WFD implementation process, a Permanent Technical Secretariat was approved to be formed at the 2008 Parts Conference (the second held since 2000), in order to support specific tasks as (for the period 2008-2010) to define joint methodologies for the elaboration of the new cycle (due in 2015) of Management Plans for the shared international RBDs, to adequate the flow regime to be stated by the RBMPs with the flow regime defined by the Convention and to consolidate the basis for national public participation processes. The aim was to make operational a joint permanent structure, composed mostly by public officers from both countries, with headquarters' location rotating each two years between the two countries. The idea, in fact, was to intensify the CADC role trying to approach its level of efficiency to the one of other recognized international rivers commissions. Nevertheless, until now, the Permanent Technical Secretariat continues to work based on joint meetings of two national corresponding structures.

The Portuguese and Spanish delegations of the CADC started meeting in July 2000 and have participated in fourteen plenary meetings since then. However, if the CADC trigger role in bilateral coordination has been proven (and seemed to take ground and be fostered from 2006 to 2008), some "slow-down" on its activity seem to be occurring. In fact, the planning of activities for 2012 has not yet been published nor any plenary meeting of the CADC did occur since July 2010.

3.5 River Basin Management Plans

As referred before, Portugal and Spain are still behind schedule in what concerns the

implementation of the WFD, namely in the context of the RBMPs adoption. When compared with other shared river basins' examples (referred in section 2.2), it would be expected that the two Iberian Peninsula countries would have already complied with that defined goal. However, concerning the shared rivers, and despite the bilateral cooperation already existing and that will be detailed below, one reason could be that, in fact, Portugal and Spain only began to consider the entire river basins in the scope of that cooperation for the last decade.

In Portugal, the consultation phase of the RBMPs has not yet started, with the one for Guadiana (and also for Sado and Mira, under the same RBDA, "ARH do Alentejo") the first foreseen to occur (announced for the first semester 2011), all the others with a consultation period expected to begin in the second semester of 2011. The delay can be, in part, explained by the fact that the RBDAs have only been legally defined in 2007. This delay in legal framework definition has consequently postponed the process of implementation of the WFD, namely in what concerns the elaboration and adoption of the RBMPs. The efforts and effective work being carried out by RBDAs will hopefully allow overcoming some of the existing delay.

In Spain, the situation is very different, as very uneven stages are verified in the RBMPs elaboration. The RBMP of the Internal Basins of Catalunya is the only one already finalised and approved, and in the Mediterranean and Atlantic Basins of Andalucía the RBMP consultation phase has taken place in the second semester of 2010, whereas in the Douro and Minho-Sil (as well as in Guadalquivir and Galicia-Coast) the consultation phase is still ongoing, and has not even started in Júcar, Segura, Cantábrico, Tejo, Guadiana, Ebro and Internal Basins of Basque Country.

4 BILATERAL ISSUES

This section intends to emphasize the importance and relevance of the current stage and of the foreseen efforts for WFD implementation as well of the Albufeira Convention and the CADC, above referred, on some specific bilateral water issues of the Iberian Peninsula.

4.1 Flow regime

The revision of the flow regime defined by the Albufeira Convention (CADC, 2008) establishes (for all shared rivers except Lima) a minimum trimester flow regime at the referenced monitoring stations, as well as a minimum weekly flow regime for the Douro and Tejo river basins, the former (and originally the only guaranteed) minimum annual flow regime still being valid. The annual and trimester values are guaranteed for all the referred river basins, but exceptional situations are defined for Minho, Douro and Tejo rivers when precipitation (in monitoring precipitation stations) is lower than 60% to 70% of a corresponding reference period. The weekly flow guarantee (in Douro and Tejo) is only valid if the trimester flow regime conditions are applicable. For the Guadiana river basin, both annual and trimester flow regime definition are dependant not only on referenced precipitation values but also on the water storage volume in Spanish (referenced) reservoirs. For this basin, a minimum average daily flow guarantee at the upstream bordering section is also established (to be also guaranteed at the upstream section of the common downstream bordering estuarine stretch). The flow

regime values to be guaranteed and the reference values and periods for the different shared river basins can be found in Maia (2008).

However, one should keep in mind that the adopted minimum flow regime discharges defined by the Albufeira Convention shall be adequate (i.e., bigger, to attend to possible uses downstream) to the ecological flow regime values established by the RBMPs approved by both Portuguese and Spanish authorities. Tables I and II do present the corresponding referred values for rivers Minho (Table I) and Douro (Table II), the ecological flow values as defined for normal years by the RBMPs of the Spanish river basins part, both currently in phase of public discussion, as referred before. One can see that in Minho (Table I), although that does not occur for the minimum annual flow value, all guaranteed trimester flow values are lower than the corresponding ecological ones. A similar comparison for the Douro (Table II) does show that this situation is only not true (and only by a small amount) in the second trimester, the larger discrepancies occurring in the third and fourth trimester, periods when the consequences of that may be more relevant.

The Spanish RBMP of Douro establishes also a flow regime for dry years, which values are exactly 50% of the ones established for normal years. The Spanish RBMP of Minho, although not presenting values, also establishes a similar condition. Having that into due account, one can see that the values guaranteed by the Albufeira Convention (only in non-expected years) for the driest (4th) trimester of the hydrological year correspond to (for Minho) or just exceeds 10% (for Douro) the corresponding ecological flows defined for that trimester.

Table I. Comparison of revised minimum flow regime defined under the Albufeira Convention and ecological flow regime (normal years) as defined by RBMP of Minho-Sil RBD

	Monitoring station of Frieira dam ^(a)				
	Flow regime (hm ³)				
	Annual	1 st Trimester	2 nd Trimester	3 rd Trimester	4 th Trimester
Albufeira Convention	3700	440	530	330	180
Ecological flows	2016*	519	661	483	353

(a) upstream bordering section; (*) obtained by summation of trimester flows.

Table II. Comparison of revised minimum flow regime defined under the Albufeira Convention and ecological flow regime (normal years) as defined by RBMP of Douro RBD

	Monitoring station of Miranda dam ^{(a),(b)}				
	Flow regime (hm ³)				
	Annual	1 st Trimester	2 nd Trimester	3 rd Trimester	4 th Trimester
Albufeira Convention	3500	510	630	480	270
Ecological flows	2246*	529*	614*	614*	488*

(a) upstream bordering section; (b) The RBMP values presented correspond, in fact, to the Castro dam's values, localized just upstream; (*) obtained by summation of monthly flows.

The assessment of those situations for all shared rivers will be only possible after all

Portuguese and Spanish corresponding RBMPs are made public. Nevertheless, the two presented cases do show that a potential redefinition of the minimum guaranteed flows shall be soon discussed between the RBDs Competent Authorities and by the CADC.

4.2 Extreme events

One of the goals defined in the WFD is to contribute for the mitigation of extreme events effects that affect both Portugal and Spain due to the hydrological and climatic characteristics of the Iberian Peninsula. In this context, the Albufeira Convention is in accordance with the WFD, establishing cooperation between the two countries in the minimization of droughts and floods effects.

As explained in Maia (2009 and 2011), a great effort is needed by Portugal, in internal terms, and by the two countries, at the Iberian level, on drought monitoring, planning and management issues, with Spain leading the way on that field in Europe.

The RBMPs for the Spanish part of all the shared RBDs shall make a revision of the Special Plans for Drought Situations that were approved (for all the “Demarcaciones Hidrográficas”) in 2007. That is the case of the ones currently in discussion for the Douro and Minho-Sil RBMPs where the supporting system of drought indicators is revised and the corresponding measures for the different level of alert are improved, taking into account each RBMP definition of ecological flows. A monthly assessment of drought indicators for each shared RBD is already accessible online, and a weekly report on drought conditions is provided by the National Drought Observatory (“Observatorio Nacional de Sequias”) to all water administrations.

In the case of Douro, the reported mismatch in the classification of the drought levels achieved by means of the global application to the Spanish river basin part of the referred drought indicators system or by means of the precipitation indicators agreed to be used to monitor the minimum flow regime under the Albufeira Convention, as shown by Maia (2009), is now reduced, following the consideration of an additional reference precipitation station, in accordance with the Annex 13 of the Spanish Douro’s RBMP (CHD, 2010). This situation is to be taken into due account in the near future, hopefully under CADC WG on flow regime, droughts and emergency situations.

The situation in Portugal is quite different. In fact, no Drought Plans were developed, currently all planning efforts of the RBDAs focused on the development of the RBMPs, were droughts are also to be addressed (SEC, 2007). An early Drought Warning and Management System is being developed by the Portuguese Water Authority (INAG), with the collaboration of the author of this paper, calling for a specific set of indicators.

Regardless of the way followed for the definition of indicators for the Iberian Peninsula, those should be compatible and be in accordance with those adopted under the Albufeira Convention and the (hopefully coordinated) shared RBMPs provisions. In fact, up to now, neither the work of the CADC nor the RBMPs development stage has contributed to those achievements (Maia, 2009 and 2011).

In what concerns floods, both countries shall comply with the 2007 WFD’s complementary directive on Floods (2007/70/EC) under which Member States on each RBD (national or shared) shall implement a three stage process: carry out a preliminary assessment (by 2011), identify zones at risk of flooding and, for such zones, draw up flood risk maps (by 2013) and establish flood risk management plans (by 2015). In this context, Maia (2008) refers that, although there is already an operational effective

bilateral cooperation, a need of institutionalization and coordination of procedures for flood events is recognized, extending the by then (and still currently) only bilateral automatic system of data exchange implemented for Tejo under a Protocol Agreement for bilateral data exchange approved in April 2002.

Unlike what happens for droughts, none of the countries has yet a general plan for flood risk mitigation, although both have already transposed (in 2010) the Floods Directive into their respective national legal systems. In this context, the Spanish Douro and Minho-Sil RBMPs (in discussion) have already carried out the first stage process, and took that into account on the programmes of measures, envisaging actions for those situations. In those RBMPs, both “Confederaciones Hidrográficas” refer that they are currently working on the definition of flood zones, in order to fulfil the requirements of the directive.

4.3 Climate change

Extreme events frequency and intensity are expected to increase with climate change on the Iberian Peninsula (COM, 2009). Again, as explained by Maia (2009 and 2011), the two countries are at a different stages on addressing this issue.

In Portugal, a National Strategy for Adaptation to Climate Change was approved in 2010 (ENAAAC, 2010), identifying water resources as one of the priority sectors requiring the development of corresponding adaptation actions. The final version of the specific guidance document on water resources National Strategy to Adaptation to Climate Change is currently still to be approved.

In Spain, the Spanish National Climate Change Adaptation Plan (OECC, 2006) was adopted in 2006, followed by two work plans, one still in 2006 and the other in 2009, this last focusing on: (i) sectorial evaluation of impacts, vulnerability and adaptation to climate change; (ii) integration of adaptation to climate change in different sector legislation; mobilization of key-actors, and; (iii) establishment of an indicator system.

In fact, following the European Union policy (COM, 2007), although only the next generation of RBMPs (due in 2015) should take fully into account climate change effects (that should also be integrated in the implementation of the Floods Directive), the first generation of RBMPs should already include a first check assessment of those effects on the corresponding programmes of measures. For that purpose, the draft of the RBMPs of the Douro and Minho-Sil Spanish river basins parts, currently on discussion, define specific percentages of water resources availability reduction to adequate the foreseen programmes of measures to climate change effects: 6% and 3%, respectively.

4.4 Other bilateral issues

Institutional adequacy and public participation are also bilateral issues to consider. In fact, following the referred in 3.2, the Portuguese and Spanish water institutions are in accordance and fulfil WFD requirements. Nevertheless, the model envisaged for the RBDAs for the shared RBDs is different, the Portuguese ones involving (except for Tejo) more than one river basin, one (ARH Norte) involving more than two shared RBDs. That different model may be also an issue concerning the integration of the CADC as a coordination board for all the shared RBDs. In fact, although the CADC was foreseen by both countries to be nominated as the Competent Authority for bilateral coordination of WFD appliance (CADC, 2005; Maia, 2008), in fact it does not integrate the list of the Competent Authorities of the Minho-Sil and Douro Spanish RBMPs,

currently in discussion.

Public participation assumes an important role for a successful implementation of the WFD, requiring also cooperation between shared rivers' countries. Three different stages were defined for public participation in the RBMPs elaboration context during the definition/preparation of: (i) the timetable and work programme (2006); (ii) the synthesis of the Significant Water Management Issues (2007), and; (iii) the draft of the RBMPs. Maia (2008) summarizes the bilateral work and effort developed by the two countries on framing that activity and carrying out the first joint activities, mostly in the context of the CADC. In addition to national meetings, a program for public discussion of the Significant Water Management Issues of the shared RBDs were organized by the CADC with the participation of the corresponding Portuguese and Spanish RBDAs (ARHs and Confederaciones), with two sessions (one in Spain and one in Portugal) for each of the four ones, held between April and May 2008.

Concerning the discussion of the drafts RBMPs, and having in attention the discussion period of the for the Minho-Sil and Douro RBDs Spanish parts, a public session for presentation of those as well as of the stage of development of the corresponding Portuguese ones, made by the RBDAs involved (Spanish "Confederaciones" of Miño-Sil and Duero, and Portuguese ARH Norte), with the participation of CADC, recently took place in Porto, Portugal.

5 CONCLUSIONS

EU Member States are at very different stages in what concerns WFD implementation. In fact, according to the WFD implementation schedule, all Member States should have already finalised the RBMPs and should be devoting efforts to make operational the corresponding programmes of measures.

Portugal and Spain are in the group of the countries in delay, the first still with none draft RBMP presented for public consultation and the second with different stages for the different RBDs (with only one approved), although with some final changes to the current RBDs definition very recent or still to be formalized.

A big effort was made by the two countries to adequate their water institutions to WFD water policy, namely in bilateral terms. The different model envisaged by the two countries for the RBDAs definition of the shared RBDs, the Portuguese ones involving (except for Tejo) more than one river basin, has still to prove to be an adequate solution to achieve in 2015 the declared aimed goal of an integrated (and common) RBMP. The role of the CADC on that and on WFD implementation has also to be clarified (and hopefully fostered).

Some bilateral issues that may contribute to or shall benefit from WFD implementation on the shared RBDs could also be identified, namely:

- the minimum flow regime discharges defined by the Albufeira Convention shall be made adequate to the ecological flow regime values to be established by the RBMPs;
- a (related) great effort is needed to be made by the two countries, at bilateral level, to integrate and address drought monitoring, planning and management common issues; a minor effort shall be needed on flood issues, with both countries at a more similar stage and having sooner established and built common coordination and operational procedures;

- a coordinated and common assessment and approach to climate change effects, namely envisaging a common strategy for the next cycle of the RBMPs.

The referred issues shall necessarily take into due account and be fostered by an effective bilateral participation and involvement of the public of the two countries.

REFERENCES

- BOE (2007). Boletín Oficial del Estado (Official State Journal) 30, Decree Law 125/2007, pp. 5118-5120.
- BOE (2008). Boletín Oficial del Estado (Official State Journal) 62, Decree Law 266/2008, pp. 14696-14698.
- CADC (2005). Minutes of the V CADC Plenary Session, May (www.cadc-albufeira.org/pt/documentos.html).
- CADC (2008). Conclusions of the II Parts Conference, February (www.cadc-albufeira.org/pt/documentos.html).
- CHD (2010). Draft RBMP (Propuesta de Proyecto de Plan Hidrológico, in Spanish), Annex 13, Confederación Hidrográfica del Duero, <http://www.chduero.es/>.
- COM (2007). COM (2007) 128 - Communication from the Commission to the European Parliament and the Council: Towards sustainable water management in the European Union - First stage in the implementation of the Water Framework Directive 2000/60/EC.
- COM (2009). COM (2009) 156 – Report from the Commission to the European Parliament and the Council in accordance with article 18.3 of the Water Framework Directive 2000/60/EC on programmes for monitoring of water status.
- Dellapenna, J. W. (1992). Surface Water in the Iberian Peninsula: An Opportunity for Cooperation or a Source of Conflict?, University of Tennessee Law Review .
- DR (2007). Diário da República (Portuguese Government Official Journal) 208/2007. Dec -Law 208/2007, pp. 3463-67.
- ENAAAC (2010). Decree Order nº 24/2010 of 18 March. Approves the National Strategy of Adptation to Climate Change.
- OJ (2000). "Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for the Community action in the field of water policy". Official Journal, OJ L 327, 22 December.
- Maia, R. (2008). The EU Water Framework Directive implementation in the Iberian context. 13th IWRA World Water Congress, Montpellier.
- Maia, R. (2009). Drought Management in the Iberian Peninsula Shared River Basins: Developments and Perspectives, 7th International Conference on "Water Resources Conservation and Risk Reduction under Climatic Instability", European Water Resources Association (EWRA), Limassol, Cyprus.
- Maia, R. (2011). Drought planning and management on an European transboundary context: the case of the Iberian Peninsula. Accepted at the 34th IAHR World Congress, Australia.
- OECC (2006). National Adaptation Plan to Climate Change (in Spanish). Oficina Española de Cambio Climático, S.G. para la Prevención de la Contaminación y del Cambio Climático, Ministerio de Medio Ambiente, 59 pp.
- SEC (2007). Commission Staff Working Document: Accompanying document to the Communication from the Commission to the European Parliament and the Council. "Towards Sustainable Water Management in the European Union" – First stage in the implementation of the Water Framework Directive 2000/60/EC.