

Analysis of wildland fire risk management from the territorial policies perspective: strenghts and weaknesses in the European regulatory framework

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Abstract

The wildfire problem, especially the growing importance of large fires, responds to complex structural causes. Risk management cannot be only dealt from a sectoral perspective of forest policies. On the contrary, requires a global approach made from the different policies with effect in territory, which may contribute in a conclusive way in wildfire risk prevention. *Territorial Policies*, understood as public interventions which, at different scales (national, regional, local), aim to promote a more rational resource use, permit dealing with social, legal and economics factors with incidence in wildfire risk, issues which are out of reach of forest policies. The aim of this study is to analyse the present European regulatory framework on territorial policies with effect on wildfire management at the European scale, in order to identify and establish the possible influence and/or impacts that these policies may have in wildfire risk prevention.

1. Introduction

It has been widely recognized that wildfires represent a serious threat for European forest, in relation to the ecologic, economic and social point of view (Coletti, 2005). This situation has been worsen in the second half of the 20th to become one of the major hazards for forests in Europe together with pollution, plagues and erosion. Land use change dynamics have aggravated fire hazards and disaster potential, especially in Southern Europe, due to the abandonment of rural areas, the prolonged protection of forestlands and the growth of extensive wildland-urban interface areas (Xanthopoulos and others, 2006). Moreover, these consequences have broader implications beyond the forest itself and its national boundaries, including tragic impacts on human health and lives.

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The concern that wildland fires have aroused in Europe over the last decades, have entailed the need to analyse the way this hazard is being managed, a competence that in the European Union (EU) context remains national and is developed, fundamentally, within Member States forest policy. In practice, we find that national governments usually develop their wildland fire policies as an ad-hoc reaction to specific a situation which already have been created, and not as a preventive approach before the emergency is generated (FAO, 1999). Thus, structural factors basic in wildland fire initiation and propagation, which may not necessarily be within the forest sector, are left behind.

Taking into account a cross-sectoral approach of policies with incidence in the territory as a whole, would provide the opportunity to address the long term social, legal and economic factors with incidence in the way land is managed, which are out of the scope of forest policies. This type of policies are *territorial policies*, understood as development policies undertaken by public authorities - the central state as well as regional and local governments - with the aim of promoting a more efficient use of resources within specific geographical areas (OECD, 2003). Moreover, this approach is crucial in the European context since no EU Treaty provides for a comprehensive common forest policy to all EU countries but recognizes the need to support the Member States in forest related issues through other EU policies.

The aim of the study is to identify and analyse policy measures external to the forest sector with potential influence in wildland fire prevention and propagation in the European framework. In order to do that, an assessment of the main regulatory instruments is developed, out of a selection of European policies with greater incidence in wildland fire management: *spatial planning, agricultural and rural development policies, energy policy and environmental policy*. For all of them, the analysis will be focused in the consideration of wildland fires within the policy as well as in an assessment on the main strengths and weaknesses they have for Integrated Wildland Fire Management (wildland fires, prescribed burning and suppression fire)⁴.

2. Spatial planning policies in wildland fire risk management

2.1. *Spatial planning policy and forest policy issues: an unalignment situation*

Spatial planning, as a public policy focused in influencing the distribution of people and activities in spaces, includes all level of land use planning (urban planning, regional planning, national spatial plans and the European Union international level). Although Europe does not have a common spatial planning policy on its own, in recent years European orientations for spatial planning have been developed. This has provided a framework to be assumed by states and regions

⁴ This research is being developed in the context of the FIRE PARADOX Project “An innovative Approach of the Integrated Wildland Fire Management Regulating the Wildland fire Problem by the Wise Use of fire: solving the Fire Paradox” (2006-2010)⁴, an IP funded by the European Commission within the Sixth Framework Programme, whose overall objective is the establishment of scientific and technological bases for new legislation and policies in Europe and in Mediterranean North Africa region.

in the formulation for their territorial models. These orientations have been specified through the European Spatial Development Perspective (ESDP) of 1999, which is, at the present moment, in its operative development stage.

Forest's plans are nominally integrated in the spatial planning system (Montiel y Galiana, 2005, p. 36). However, the need to connect forest policy, especially intervention on wildland fires, to spatial planning is one of the most common topics among any bibliographic contribution which tries to go into depth in the structural factors affecting wildland fires. This approximation is done usually from the forestry perspective (Gómez, 2004), and particularly in relation with large fires, in which origin converges complex structural causes (mainly related to the crisis and abandonment of the agrarian sector and to the latter natural succession of vegetable masses) (Badia and others, 2002, p. 33) which are not feasible to be approached under an exclusive sectoral optic. These structural causes are basically two of them (Plana, 2004): (i) A settlement model with a sharp trend to dispersion, which dangerously increases ignition risk and (ii) the evolution of forest vegetation towards a growing continuity of masses which favours wildland fire propagation

Unalignment in both policies is a reality and the lack of dialogue and convergence of its objectives and principles, notorious (Montiel and Galiana, 2005). Spatial planning (in particular from land use planning) provides the possibility to take part in the urban's settlement organization, in the one hand, putting under restrictions occupation in risk areas and in the other hand favouring a territorial matrix which difficult propagation. This should be developed in coordination with forest planning; however the absence of a coherent frame between these two policies is one of the matters usually pointed out. From the forest policy approach, the vision for spatial planning and its perspectives for forest planning are contradictory. On the one hand, it is criticised that little attention is given to rural areas in general, and particularly to forest areas, at the expense of urban areas; on the other hand, its capacity of intervention through the main instrument: land use organization, it is very positively considered.

The truth is that spatial planning does not just translate principles coming from forest administrations, but introduces principles for this type of areas, particular and differentiated. In spatial planning instruments, forest areas are highly valued, with growing recognition for the territorial model (Galiana, 2004), which entails a generic conservation approach for various reasons: a) *Exclusively territorial*: forest areas considered as areas which provide an equilibrium to the development model, on the contrary to urban development processes, b) *Functional*: Due to the adequate functioning of the whole system, as productive areas of basic natural resources (water, air, ...), recreation possibilities, etc. and c) *Environmental*: which favour valuable ecologic areas.

This entails a *conservational approach* for forest masses through the establishment of protected areas, which, as well as incorporating criteria considered by other types of planning (i.e. environmental, forestry), widens conservation motivations for protection by incorporating criteria more closely related with the functioning of territorial systems. This approach may cause harmful effects, since the prohibition for forest area reduction does not considers fuel measures, which are absolutely necessary from a wildland fire management perspective within a context of rural abandonment and uncontrolled vegetation succession (Badia and others, 2002, p. 30).

Thus, a clearly *regulatory approach* is posed over forest areas, in the sense of the establishment of legislative precautions on its maintenance and patrimonial consideration through *zoning*, which basically entails the restriction for uses and activities depending on the carrying capacity's limit, in relation to resource use and natural hazards. An approach established through land use planning instruments (also recognised by forest planning) which has been put into question by other recent approaches which insist on the need for a more strategic spatial planning approach (Davoudi, 2004). The adoption of a more strategic perspective, aimed at detecting and regulating processes with the most relevant and innovative territorial incidence, regards the *Territorial Plan* as a rationalizing reference for the territorial processes which focus on actions with a potential for transformation in space and time. Within this frame it would be more appropriate the concept social agreements spatial trends rather than carrying capacity.

2.2. Strength and weaknesses: the difficult intervention on wildland fire risk management through Spatial Planning

Performance over wildland fire risk management under spatial planning is framed in the wider approach undertaken by this public policy on natural hazards, thus favouring a more sensible use for the territory within a sustainable territorial model, which incorporates the biophysics matrix and the dynamics knowledge unto the territorial analysis and diagnosis, from a systemic territorial approach (Folch, 2003). Thus, indeed, an inadequate urban or regional planning may aggravate the negative effects of natural hazards (floods, wildland fires), and on the contrary a correct land use organization may minimize the harms (J.R.C./I.E.S., 2005).

There is a generic treatment for land use occupation in relation with natural hazardousness, which usually tends to limit uses and activities in areas affected by this kind of events to minimize harms caused by them. The need to establish limits precisely in this type of areas acquires a growing relevance in spatial planning legislation, a statement more and more common to spatial planning documents. The regulatory capacity for spatial planning instruments allows its incorporation to the protected areas category (either as differentiated lands or as a restraint imposed to other planning categories).

Nonetheless, this regulatory approach does not seem to be effective for wildland fires. Everything seems to point out towards a need for a change in the approach, towards a more *strategic* one, based upon the regulation of more relevant transformation processes under a global perspective (territorial model) and according to the socially acceptable capacity for transformation (i.e. loss of biodiversity, landscape modification, increase in vulnerability). This approach, from the perspective of wildland fires, has as a starting point, the need for the effective incorporation of conservation as an objective for territorial intervention towards a problem of considerable dimensions: the growing increase of large wildland fires. In the different settings for wildland fire risk management, proactive prevention tackles the risk for propagation through fuel management and landscape modification towards less vulnerable and more resilient structures.

Therefore, an analytic and diagnostic frame different from conventional spatial planning ones (zoning and regulatory) is needed, with new approaches in order to overcome the problems in land management (loss of biodiversity, wildland fire risk,

etc...) posed from Landscape Ecology principles: patch, pathway, pattern (territory as a system) (Marull and Mallarach, 2002). Identification of territorial functionality and its incorporation to the model, permits the definition of tools to measure the impact of wildland fires, areas sensible to ecologic damage, potential for urban development with less impact... Thus, an essentially dynamic frame for spatial planning would be set opposite to the static one to land use planning. Therefore, the availability of new instruments on modelling and fire prediction behaviour would allow the identification of strategic sites, not only from the extinction perspective (Plana, 2004), but also from the spatial planning.

On the other hand, another path which should be followed is the necessary bond of planning with territorial management through the setting of territorialized objectives as a basis for the subsequent assignment of resources relative to other policies (rural development, in particular)

3. Agricultural and rural development policies in wildland fire risk management

3.1. *EU Common Agricultural Policy (CAP) and other wildland fire-related issues: An introduction*

From the beginning, agriculture has been one of the major priorities for the UE. The Common Agricultural Policy (CAP) is regarded as one of its main policies areas, if we consider its extent, its share of the EU budget and the controversies it has aroused.

Although having achieved successfully the objectives for what it had been initially created and more than forty years after its conception, the CAP has undergone through various reforms aimed at suppressing the collateral effects of previous versions, adapting to global changes occurred in the international scene and towards incorporating new elements of growing importance in the political agenda such as the environment, sustainability and rural development. In particular, the growing importance of rural development measures within the CAP corresponds to a reality where according to the European Commission (1997) approximately 80% of the territory of the European Union can be called 'rural', where due to major transformations in last decades agriculture is no longer the obvious pillar of the countryside (Elands and others, 2001). Thus, the future of the agrarian sector is closely related with the sustainable development of rural areas.

Measures with potential effects in forestry, and thus in wildland fires, are mainly included amongst actions in the "second pillar" of the CAP, which comprise all those measures aimed at supporting broader rural development and environmental objectives to constitute the EU rural development policy. From the policy point of view, forestry is increasingly recognised as one of the activities to be considered in such development (Slee, B and Wiersum, K., 2001).

The growing importance of the role that forests play in the rural development has been reflected in the evolution of the rural development policy: forestry measures undertaken by CAP have evolved from mainly afforestation measures⁵, to the

⁵ Council Regulation (EEC) n° 2082/92 Reformulation of a system of aids for afforestation

constitution of a specific group of measures on forestry covered by the Rural Development Regulations⁶. Thus, objectives have widened to sustainable forest management and development of forestry, maintenance and improvement of forest resources and extension of woodland areas. This fact has enabled to introduce new measures in addition to afforestation considering the multifunctional role of forestry and support for forest protection values. The present Rural Development Regulation for the programming period 2007-2013 includes a set of measures targeting the sustainable use of forestry land through: first afforestation of agricultural and non-agricultural lands, first establishment of agroforestry systems, restoring forest potential and introduction of prevention actions, Natura 2000 and forest-environment payments, and support for non productive investments.

Regarding forest protection, the Rural Development Regulation makes explicit mention to forest fires regarding the funding of prevention measures as well as restoration activities in forests damaged by natural disasters and for the maintenance of fire breaks through agricultural measures. Moreover, all measures proposed upon forestry in medium or high forest fire risk areas within the framework of the Community action on protection against fire, must conform to the forest protection plans established by the member states for these areas⁷.

3.2. Strengths and weaknesses: promoting a living in rural areas to prevent forest from wildland fires

As forests acquire an increasing role in the development of local communities in forest areas, Agricultural and Rural Development Policies have greater potential to influence structural causes affecting wildland fire initiation and propagation.

Some of these measures are in close relation with forest protection and wildland fire prevention. Thus, the Rural Development Regulation constitute, together with Forest Focus, the two main instruments for the support of prevention and restoration activities to be carried out by the Member States, co-financed by the recently created European Agricultural Fund for Rural development (EARFD) for the present programming period 2007-2013.

However the potential of rural development policies in solving the wildland fire problem is most important in those measures aimed at guaranteeing the maintenance of viable local communities in both the social and economic sense. Rural Development Regulation pursues this aim not only by improving the competitiveness of the traditional rural sectors (agriculture and forestry) but also by promoting the diversification of the rural economies (i.e. tourism and micro-enterprises) and improving the quality of life in these areas. In this context, the promotion of the multifunctional role of forest contributes to the development of rural communities depending on forest areas and in the long term constitutes a guarantee for forest conservation, especially in the European context where forest ecosystems are subject of growing anthropogenic pressure.

⁶ Council Regulation (EEC) n° 1257/99 of 17 May 1999 on support for rural development from the European Agriculture Guidance and Guarantee Fund (EAGGF) and amending and repealing certain regulations. Council Regulation (EEC) n° 1698/2005 of 20 September 2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD)

⁷ Council Regulation (EEC) n° 1783/2003 amending regulation (EC) No 1257/1999 on support for rural development from the European agricultural Guidance and Guarantee Fund (EAGGF)

From this perspective forests are valued for their potential to contribute to the local economy through (non-)wood production and manufacturing and provision of attractive recreation and tourism facilities, to create an attractive environment for living and working, to maintain biodiversity and protect natural resources, and to preserve and enhance characteristic rural landscapes and related cultural heritage (Elands et al, 2004). This is especially relevant in areas with conflict in clandestine burnings, such as in the Mediterranean areas where fire remains an important tool in rural activities as a mean for making wildlands profitable and constitute the main cause for the initiation of wildland fires. Thus, if the only uses out of wildlands are to be pastures and open spaces where to grow crops, the result is that rural burnings are a practice impossible to end with, being used regardless of the consequences that they can entail (Vélez in Vega y Vélez, 2000).

Moreover, the maintenance of rural activities in forested areas such as use of forest fuel, establishment of agro-forestry systems or the harvesting of non-wood forest products such as mushrooms or hunting activities, favours discontinuities in forest vegetation, which in the long term sets up the best defence against increasingly frequent large fires events.

However, although Rural Development Regulations establish the need to assure compliance of all co-funded forestry measures developed in high or medium forest fire risk areas with forest protection plans established by Member states, in practice we find measures which on the contrary may worsen the wildland fire problem. The excessive use of afforestation⁸ may have a harmful effect for wildland fires occurrence since it increases the continuity of vegetation fuels and thus, the potential for more devastating fires. The use of fast growing species, such as pine or eucalyptus, contributes as well to increase fire hazard. Moreover, the need to assure compliance with forest fire dynamics should be considered for other measures undertaken by CAP which may indirectly affect forest areas such as the effect of decoupling payments from production, which although beneficial for the extensification of less land use may also induce disappearance of livestock and thus the threat of land abandonment and a decrease in the area of extensive pasture (Zdanowic et al, 2005).

4. Energy policies in wildland fire risk management

4.1. *Energy policy and wildland fire-related issues: An introduction*

Energy policy, unlike environmental policy, is not an EU legally-binding policy on the whole. Energy-related decisions have been considered as affecting member states' crucial interests and are therefore still subject to unanimous rule in the European Council. Unanimity facilitates the exercise of veto power by individual states and slows down the progress towards a European energy policy. As a consequence, and in contrast with a growing number of policy decisions that have gradually come to be taken in accordance with the majority rule, energy policy has been Europeanized only to a very limited extent.

In spite of that, the EU clearly acknowledges the relevance of energy issues, as it is exemplified both in its international leading role regarding the promotion of the

Kyoto Protocol and in its support of renewable energies (RE) at the European level. As far as Kyoto is concerned, the EU has set quantifiable targets in terms of emission reduction for its different member states and an explicit reference to the protection and enhancement of sinks and reservoirs of greenland for the promotion of sustainable forest management practices, afforestation and reforestation has been made. Regarding renewables a proof of its importance is the EU's recent commitment to increase its presence in the European energy market up to 20% by the year 2010⁹. Further, the two areas are strongly intertwined: for example, the reduction of CO₂ –as one of the six gases affecting climate change covered by the Protocol- is clearly linked with the fostering of sustainable energies.

The recurrence of wildland fires, being aggravated by global warming and subsequently compounding the greenhouse effect itself, should obviously be targeted as an objective of EU energy decisions. In this respect, the Kyoto protocol, as mentioned before, not only envisages tradable emission permits but also promotes forests as sink recipients of CO₂. More indirectly related to the fires issue is the attempt to improve energy efficiency (an increase of 18% by 2010 as compared to 1995 is contemplated) and to secure energy supply. Since the EU is severely dependent upon energy imports¹⁰, the promotion of endogenous sustainable sources, such as biomass (following the Danish and Finnish successful examples), has been envisaged.

Leaving aside Kyoto and RE, most energy-related decisions have been basically taken in connection with other adjacent policies (e.g. foreign affairs, internal market – i.e. fair market opportunities for renewables-, and of course environmental protection –i.e. the last Environmental Action Programme has emphasised climate change as an outstanding challenge).

4.2. *Strengths and weaknesses: the absence of a legally binding programme or the reliance on voluntary mechanisms*

The 1997 Kyoto Protocol on Climate Change entered into force in the EU as late as the 16 February 2005 and the necessary time span to assess its impact is consequently missing. Further, the subsidiarity principle, that has entailed a bigger role for member states (or its constituent units, be they regional or local governments) vs the EU Commission, alongside the sustainable development (SD) European programme, that allows for many different -and sometimes contradictory- ways to attain sustainability, compound the problems surrounding the assessment of the influence of EU energy policy on wildland fires. Both factors, subsidiarity and SD, might aggravate the very unequal performance of the different member states as far as Kyoto is concerned. Following the “principle of differentiated responsibilities”, that have guided the attribution of diverse emission quotas to the different countries, some member states, such as Spain, are lagging well behind their assigned CO₂ reduction duties, whereas others like France and the United Kingdom are clearly

9 This commitment has superseded the COM (97) 599 Energy for the future: renewable energy sources - White Paper laying down a Community strategy and action plan This paper provided a strategy for renewables, its main objective being to double the proportion of RE in the EU's gross domestic energy consumption from 6% in 1997 to 12% in 2010.

10 At present, the EU depends on imports to meet 50% of its energy needs. This percentage is expected to increase up to 70% in 2030 with a growing reliance on oil and gas.

outperforming the rest. The absence of EU enforcement powers to reduce the gap between “law-abiders” and “law-breachers” is in this respect striking. Further, as the case of the Kyoto Protocol clearly exemplifies, energy agreements signed by the EU in the international arena have not been conducive to strict Community monitoring of the member states’ performance in curbing CO₂ emissions, let alone to their punishment when they clearly deviate from the targets they have been assigned. This agreement revolves mainly around cooperative (with the other contracting parties) and voluntary (exchanges of experience or information) mechanisms while it also mentions the need to coordinate national policies to tackle work more effectively. To sum up, despite the UE’s clear commitment to the success of Kyoto regionally (it has set out to reduce global CO₂ by 8% between 2008-2012 as compared to 1990) and internationally (it has exerted pressure upon non-signatory countries), the Community has not yet announced how it will penalize those member states that do not comply with CO₂ targets and is basically supporting voluntary strategies to the detriment of more forceful ones. Lack of sanctions and voluntarism might aggravate poor performance of an international treaty that contains important potential for tackling fire forests.

As regards RE, although certain sectors and specific countries have clearly deviated from a rather uninspiring norm, little progress can be detected between 1997 and 2000. The problem lies again in the overall absence of clear mandates and compulsory goals, as most EU decisions in this field adopt the shape of communications (or strategies and white papers). The case of biomass clearly exemplifies this point: in an area that is considered crucial for energy supply and CO₂ reductions, the Commission has merely confined itself to supporting voluntary measures. A Communication has established that “it is necessary to disseminate knowledge and information more widely within the European Union and to launch promotion campaigns stressing the energy, environmental and economic aspects of this technology”. Further, lack of policy coordination and insufficient funding is impairing the process leading to biomass production while support for forestry biomass is still insufficient in half of the European countries (Directive 2001/77/EC). This situation is discouraging since biomass could provide a solution for the overgrowth of forests masses, thus reducing the risk for wildland fire initiation and propagation. At last but not the least, forests act as natural sinks for air pollutants and contribute enormously to reduce global warming.

Not every aspect concerning renewables is of course left to the member states’ free judgement. A number of directives, establishing binding goals and discretionary means for their attainment, have also been approved, as the case of Directive 2003/30/EC on the promotion of the use of biofuels or other renewable fuels for transport shows. This legal instrument sets a minimum percentage of biofuels to replace diesel or petrol for transport purposes in each member state: the minimum share of biofuels sold on their markets should be 2% by 31 December 2005 at the latest, and 5.75% by December 2010. As previous experience has shown, implementation deficit is likely to affect the enforcement of this and other energy-related directives.

5. Environmental policies in wildland fire risk management

5.1. *Environment policy and wildland fire-related issues: An introduction*

Since its inception at the end of the 60s-early 70s, environmental policy in the EU has been gradually moving towards sustainability. As a matter of fact, the last two Environmental Action Programmes (EAP) have incorporated sustainability into their titles and made this concept a very prominent one. During this process, environmental protection achieved formal recognition (in the 1986 Single European Act) and increased its “assertiveness”, as shown by the fact that subsequent EAP ceased to consider the environment as something that should be regulated because of its spill-overs on the internal market but rather because it was an important asset in itself. Connected with growing assertiveness was the enlargement of environmental powers assumed by the Commission.

Yet, the initial environmental legislative impetus of the Commission started to be subject to criticism since the mid 80s as a result of the increasing popularity of the subsidiarity principle, advocated by countries that either wanted to pursue their own stringent environmental policies without having to accommodate environmental laggards (such as Denmark), or were willing to reject the “illegitimate interference” of the European agency in certain fields such as bird protection (as the case of Great Britain under the Thatcher government shows). As a consequence of this, less directives have been passed recently while proposals for new frame directives (eg. the 2000 water framework directive, 60/2000) have been made. This will entail that the directive, as the main legal instrument in environmental policy hitherto, will lose its initial specific focus and become more lax and vague as a policy tool. A new approach on better implementation, rather than simple legislative elaboration, as well as a new consensus on the need to combine command-and-control instruments with market-based, voluntary and self-regulatory and educational measures, are at the base of this new policy paradigm¹¹. Another element of the “new” EU environmental policy is related to “conditionality”: the distribution of funds -LIFE, cohesion fund, structural funds- will increasingly come to depend on the fulfillment of environmental objectives. The Cardiff Process has also entailed that environmental concerns be incorporated into all other policy areas by means of the application of the environmental integration principle; that is, environmental policy will gradually be less of a traditional sectoral policy but rather an objective incorporated into all environmentally-related policies. Finally, the role of the EU as a signatory party to international environmental agreements is on the rise.

Of all the areas that environmental policies might embrace, those that could impinge more directly upon forest fires are: water policies that link the quality of the resource with the preservation of a minimum flow in the basin unit; air policies that combat climate change by means of forestation schemes that might contribute to decrease CO₂ emissions through the promotion of the sink effect; urban waste policies that aim to eliminate illegal dump sites in semi urban/rural populations; and

¹¹ Alongside hard harmonization (legislation), diffusion and emulation (i.e. networking, best practice exchange -the cases of IMPEL or European Network for the Implementation and Enforcement of Environmental Law, The Community Framework for Cooperation to Promote Sustainable Urban Development-), know-how transfer and better governance are being increasingly promoted.

conservation and biodiversity policies that focus on the fight against desertification and the promotion of sustainable development schemes in forest and semi-rural areas. Leaving aside the explicit reference to fires provided by a number of regulations¹², most environmental norms do not address this problem explicitly.

5.2. Strength and weaknesses: a long legally-binding programme suffering from serious implementation deficit and a new trend towards “voluntarism”

Unlike the energy policy, environmental protection is mainly based on directives, this entailing that environmental objectives enjoy a legally-binding force. However, implementation deficit, as well as lack of enforcement powers on the part of the EU, have been traditionally identified as the main explanatory factors of slow progress in this area.

As the habitat directive 92/43, establishing the European network of protected areas Natura 2000 (as well as the previous birds directive 79/409) shows, when it comes to defining, adjusting and implementing those legal instruments the crucial actors are the member states. That is, responsibility for the designation of areas to be preserved as well as for the choice of areas where birds should be protected, fall under the remit of national or regional authorities. The lists containing these sites that are sent to Brussels reflect not only the particular biases of contingent party politics but also the zeal of the different bureaucracies, not to mention radically different administrative capacities as well as diverse well-entrenched traditions of cooperative/non-cooperative links between interest groups and public actors. An important mechanism to overcome potentially divergent outcomes is the possibility, opened to private citizens and environmental groups by the Commission, to sue the country for breaching or misinterpreting EU conservation law. This mechanism is nonetheless severely curtailed by the legal complexities surrounding the opening of judicial cases against EU member states, this being one of the reasons why the previous Environmental Commissioner, Wällstrom, announced the “name, shame and fame” strategy to draw attention upon those countries systematically breaching environmental law.

If implementation deficit is concomitant of legally-binding instruments, what might not happen to instruments that lack this legal force (for example, the Commission proposal concerning a biodiversity action plan for the conservation of natural resources through the use of specific silvicultural techniques to better mimic natural processes, or the VI EAP that, covering the period 2002-2012, has identified nature and biodiversity as one of its four priority areas).

Another important element in current environmental policy is the growing reliance on what might be termed as “voluntarism”, as exemplified in information-exchange mechanisms, best-practice transfer, private networking and the like. A clear example in this respect is the call to set up a network for the exchange of prevention practices and tools in relation to natural accidents and disasters that the heading Nature and Biodiversity (VI EAP) contains. Important as they might be, these

¹² i.e: EC N° 2278/1999 laying down certain detailed rules for the application of Council Regulation (EEC) N° 3528/86 on the protection of the Community’s forests against atmospheric pollution, and EC N° 1727/1999 laying down certain detailed rules for the application of Council Regulation (EEC) N° 2158/92 on protection of the Community’s forests against fire)

mechanisms reflect the new self-regulatory mood that has swept across the EU, pushing more traditional and forceful instruments to a peripheral position. Besides, the usefulness of these mechanisms is likely to be strongly impaired by the absence of standard reports or by a non-existent tradition of adjustment to universal, clear-cut criteria subscribed to by different member states against which comparative assessments can be made.

To sum up, the dilution of the EU environmental policy into the SD programme might prove negative for fire-management proposals since new possibilities for divergent national plans and outcomes open up now. The gradual loss of impetus of the Europeanization process might equally impair the attainment of harmonized and coherent measures that tackle the fire problem at the EU level. Although the subsidiarity principle contains an important element of truth when advocating that certain environmental problems (such as wild fires) are best dealt with at the local or regional level, lack of involvement of the EU might result both in unequal and unsatisfactory outcomes and the emergence of obstacles in terms of lesson-drawing experiences.

6. Conclusions

Wildland fires have become one of the major threats for European forests, especially in southern Europe, a growing problem whose solution cannot be tackled from sectoral (forest and civil protection) policies dealing with this natural hazard. On the contrary, the complex structural factors concerning wildland fires entail the need for a cross-sectoral approach incorporating those policies with effects on the territory.

The Territorial policies here examined show a great potential when it comes to solving some of the structural causes affecting wildland fire initiation and propagation which cannot be envisaged in conventional approaches. Direct action upon the way land is managed and the analysis of social, ecological and economic conditions which contribute to set the wildfire risk are some of the examples of this potential. Coordination needed to achieve a cross-sectoral approach is however hindered by the different nature of territorial policies. In order to overcome these difficulties, the territory should be placed in the centre of the sustainability debate, this entailing making some headway towards territorial governance and policy coordination.

In general, territorial policies are far from strictly considering fire-related objectives. In those cases where these objectives are contemplated, a vague approach seems to be the norm; wildland fires are frequently included among natural hazards in general. Moreover, the neglect of wildland fire objectives in these policies may set the conditions for more devastating fires.

Further, European policies that impinge most directly upon fire management (i.e. forest-related policies) are not part of the *acquis communautaire* and lack therefore a compulsory nature. That is, forest plans will have to be drawn up by member states (e.g. Reg 2152/03) under the subsidiarity principle, thus allowing for heterogeneous results in terms of quality elaboration, comprehensiveness, targets specification and deadlines. In this respect, the absence of specific EU wildland fire management legislation plus the little Europeanization affecting those policies that most directly impinge upon wildfires, leads us to conclude that a concerned effort on

this front is not likely to be anticipated in the foreseeable future. The most Europeanized policies analyzed in this document (i.e. the CAP and certain environmental policies) have only a marginally effect upon fire-related issues.

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