Ī

DISASTERS AND LAND USE LAW: THE SPANISH CASE IN THE EUROPEAN UNION LEGAL FRAMEWORK

Dr. Julio Ponce*

I.	INT	RODUCTION	650
	A.	Disasters and Land Use Regulations: A Possible Cause	
		but also a Possible Mechanism for Disaster Prevention	650
	В.	Structure of this Paper	
П.	EUI	ROPEAN UNION AND MEMBER STATES: DISTRIBUTION OF	
	Pov	WERS AND ROLES	652
	A.	The European Union	652
	B.	Spain	
		1. The Framework of Spanish Land Use Law	
		2. The Historical Perspective	
		a. The Situation Before 1956	
		b. 1956 National Act: The Importance of Planning in	
		Spain	658
		c. The Reformation of 1975	659
		d. The Constitution of 1978	660
		3. The Distribution of Power among the Public Levels:	
		Regional Legislation	.661
		4. Fragmentation of Land Use Law and the Survival of	
		a Hard National Core	.662
III.	Ev	ALUATION AND MANAGEMENT OF RISKS BY LAND USE LAW:	
	THI	E SPECIFIC PROBLEM OF SCIENTIFIC UNCERTAINTY	.664
	A.	Scientific Uncertainty and Precautionary Principle	664
	B.	Evaluation	
		1. Natural Risks: The E.U. Directives and their Impact	
		on a National Level: The Spanish Case	.667
		2. Natural Risks: The Legal Requirements of	
		Evaluation by Planning	668
		a. The Environmental Impact Assessment and the	.000
		National Spanish Land Legislation	668
		b. Flood Risks Prevention and Urban Planning	

^{*} School of Law, University of Barcelona. I would like to thank Mr. Oscar Capdeferro, PhD student at the Law School for his help in finding and organizing legal data. This study was discussed during the Workshop on "Disasters and Sociolegal Studies," chaired by Susan Sterett (University of Denver) and Thomas Birkland (North Carolina State University) which was held at the Oñati International Institute for the Sociology of Law (http://www.iisj.net/?sesion=1347) on Thursday, July 21, 2011.

		3. Man-Made Risks: The Example of the Evaluation of		
		Crime and Terrorism Risks	.669	
	C.	Management	. 669	
		1. Legal Prohibitions Binding Land Use Planning		
		2. Legal Obligations Binding Land Use Planning and		
		Private Owners: Social Function of Property and		
		Prevention of Disasters	.670	
		a. Regional Planning and Local Zoning		
		b. Limits to Property Rights and Disasters		
IV.	PLANNING AND CLAIMING DAMAGES IN THE CASE OF			
	DIS	ASTERS	.671	
	A.	Lack of Prevention: Public and Private Liability		
	B.	Spanish Examples of Compensation Claims in the Case of		
		Disasters	. 673	
		1. The Biescas Campsite		
		2. The Car Bomb Attack Against a Guardia Civil Barrack		
V.	LAND USE PLANNING AND PREVENTION OF DISASTERS675			
	Α.			
		Urban Planning: Administrative Procedures and		
		Fundamental Rights	. 675	
	В.			

I. Introduction

A. Disasters and Land Use Regulations: A Possible Cause but also a Possible Mechanism for Disaster Prevention

Natural and man-made disasters are a major European worry, due to their increasing frequency and severity, as well as their impact on human life, destruction of economic and social infrastructures, and damage to the environment. For example, according to an official European Union (E.U.) document, the economic impact of disasters in Europe has been estimated at €15 billion annually.¹

Land use law (*Derecho urbanístico*, in Spain, or *Droit de l'urbanisme*, in France) deals with the regulation of land use. There is a clear relationship between the use of land and disasters. On one hand, the regulation of land can allow urban expansion by means of several

^{1.} Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, a Community Approach on the Prevention of Natural and Man-made Disasters, at 4, n.11, COM (2009) 82 final (Feb. 23, 2009), available at http://ec.europa.eu/echo/civil_protection/civil/pdfdocs/com_2009_82en.pdf (last visited Oct. 21, 2011) [hereinafter Prevention of Natural and Man-made Disasters].

instruments (i.e. planning and zoning), and urban expansion can bring intensive use of land, industrial development and construction of infrastructures, which can be a factor in future disasters. A good example of this is urban pressure on rivers and flood risks.²

But on the other hand, the proper regulation of land can be a preventative tool for disasters, by preventing disasters from occurring and by minimizing their impact when disasters are unavoidable. That is the perspective this article studies.

B. Structure of this Paper

This study will be organized in the following way: In the first section, it considers the role of E.U. and E.U. Member States in relation to disasters and land use planning. Next, it contemplates the role how land use planning can evaluate and manage risks to avoid disasters, paying special attention to the European use of precautionary principles, which are sometimes explained with the sentence "better safe than sorry." This analysis will specifically use, though not exclusively, the example of the Spanish legal system, taking into account its inclusion in the more general E.U. legal system.

Then, this article will reflect on the public responsibility in preventing disasters and possible consequences of poor administration when making planning decisions, using two Spanish cases: the disaster at the *Biescas* Campsite and a terrorist attack against the Spanish police.³ In both cases, affected people brought a lawsuit against public authorities, demanding compensation for damages caused by inappropriate planning.⁴

Finally, this article will explore the possibilities of planning as a tool to prevent disasters in relation to two specific areas: location of nuclear plants (with some comments on the importance of administrative procedures to protect fundamental rights as the German Constitutional Court decision *Mülheim-Karlich* has outlined) and new developments

^{2.} See, e.g., MINISTERIO DE MEDIO AMBIENTE Y MEDIO RURAL Y MARINO [MINISTRY OF THE ENVIRONMENT AND RURAL AND MARINE ENVIRONMENT], RESTAURACIÓN DE RÍOS: BASES DE LA ESTRATEGIA NACIONAL DE RESTAURACIÓN DE RÍOS [RESTORATION OF RIVERS: RULES OF THE NATIONAL STRATEGY FOR RIVER RESTORATION] 47 (Apr. 2010), available at http://www.marm.es/es/agua/publicaciones/Rios_B_Restauracion_tcm7-27570.pdf (last visited Sept. 21, 2011) (Spain).

^{3.} See generally A.N., Dec. 21, 2005 (R.O.P., No. 1976), available at http://www.poderjudicial.es/search/doAction?action=contentpdf&databasematch=AN&reference=1022 464&links=&optimize=20060118 (last visited Oct. 21, 2011) (Spain).

^{4.} Id.

regarding the prevention of crime and terrorist attacks by means of urban planning (the so-called Crime Prevention Through Environmental Design).⁵

II. EUROPEAN UNION AND MEMBER STATES: DISTRIBUTION OF POWERS AND ROLES

On one hand, the European Union has no powers in the field of land use planning, though it can have an influence on national policy in several ways. Although E.U. Member States are responsible for land use planning, they are bound by the E.U. legal framework and by the national constitutional distribution of legal powers. This article will use the Spanish case to demonstrate this point.

A. The European Union

The territory of the current European Union occupies 4,324,782 sq km² (less than half the size of the U.S.).⁶ The European Union has a population of 492,387,344 (July 2010 est.)⁷ and a density of 112 inhabitants/Km² (compared to a density of thirty-one in the US).⁸ Seventy-five percent of Europeans now live in urban areas and the figure is expected to grow to 80% by 2020.⁹ Urbanization is spreading, faster than urban population growth. It is estimated that the overall size of developed areas has grown by a fifth in the last twenty years, whereas the European Union population increased by only 6%.¹⁰

The European model is a concept invoked during discussions concerning European integration. But what does it mean? Obviously, it is a concept in development with clear political roots in an ongoing debate. Some opinions conceive of the European Union as a free-trade area,

^{5.} See Bundesverfassungsgericht [BVerfG] [Tribunal Federal Constitucional], Dec. 20, 1979, ENTSCHEIDUNGEN DES BUNDESVERWALTUNGSGERICHTS [BVERFGE] 53, 30, (1BvR 385/77), available at http://www.servat.unibe.ch/dfr/bv053030.html (last visited Oct. 31, 2011) (Ger.).

^{6.} See CIA, World Fact Book, https://www.cia.gov/library/publications/the-world-factbook/index.html (last visited Sept. 21, 2011) [hereinafter World Fact Book].

^{7.} Id.

^{8.} Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2006 Revision and World Urbanization Prospects (revised in 2005), http://esa.un.org/wpp/unpp/panel_population.htm (last visited Sept. 21, 2011) (select "population," then select "Europe," then select "population density," then add "United States," and click on "display").

^{9.} Memorandum from the Bureau of European Policy Advisors, Roger Liddle & Frederic Lerais, Europe's Social Reality, MEMO/08/83 (Feb. 26, 2007), available at http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/07/83 (last visited Oct. 26, 2011).

^{10.} Id.

ascribing the poor performance of the economy to the "soft" European model being invoked.¹¹ Those parties would like to see the role of European institutions restricted to policing the single market.¹² The other opinions consider this perspective close to the *laissez-faire* approaches of Anglo-Saxon liberalism, seeing the European model as the foundation of a just and competitive society, and wanting strong European institutions to fulfill functions otherwise reserved to those of the nation states.¹³ The latter conceives the European model as a human order based upon a mixed economy, civilized labor relations, the welfare state and a commitment to social justice.¹⁴

Scholars and practitioners debating European spatial planning and territorial cohesion policy in the E.U. also take this discussion into account. In any case, the E.U. legal framework (as interpreted by an impressive amount of official documents following international developments) considers sustainability as a key concept composed by three complementary parts: economic, social, and environmental.¹⁵ In other words, it cannot be stated that a society is sustainable unless the three elements exist.

The CIA's World Factbook states that "The evolution of the European Union . . . from a regional economic agreement among six neighboring states in 1951 to today's supranational organization of twenty-seven countries across the European continent stands as an unprecedented phenomenon in the annals of history." In any case, we should consider this unification as an ongoing and difficult process. The adventure started in 1957 and continues today with a failed Constitution in 2004 and the Treaty of Lisbon, which has changed the existing legal framework.

It is important to emphasize that, according to this "constitutional" framework, the European Union does not possess powers in the field of

^{11.} See generally Andreas Faludi, Territorial Cohesion and the European Model of Society, at 2 (July 2005) (unpublished article presented at AEOP Vienna 2005), available at http://aesop2005.scix.net/data/papers/att/228.fullTextPrint.pdf (last visited Sept. 21, 2011).

^{12.} Id.

^{13.} Id.

^{14.} *Id.* (stating consideration for the second perspective a model rooted in Social Democrat-Christian Democrat mainstream of continental European politics).

^{15.} See, e.g., The Urban Dimension in European Union Policies for the Period 2007–2013 (Feb. 2010), http://www.ace-cae.org/public/js/tinymce/jscripts/tiny_mce/plugins/imagemanager/files/documents/Guide-Part-1-EN.pdf (last visited Oct. 19, 2011).

^{16.} World Fact Book, supra note 6.

^{17.} See Treaty of Lisbon Amending the Treaty on European Union and the Treaty Establishing European Communities, Dec. 13, 2007, 2007 O.J. (C 306) 1,269-71 [hereinafter Treaty of Lisbon].

land use.¹⁸ However, as Italian Professor Chiti notes, the goals of sustainable development, solidarity, the fight against exclusion and economic, territorial, and social cohesion lead to increasing intervention in relation to European cities.¹⁹ The European Union also has power in the field of the environment and other public policies, with territorial impact (e.g. transportation), keeping in mind the *principle of subsidiarity*, that is, matters ought to be handled by the lowest competent authority.²⁰

Those related powers and political will, taking into account territorial issues by means of the promotion of intellectual and public networking experiences (generating a huge amount of reports, studies and papers), and the use of substantial investments, both help explain the relevant role of the European Union in urban affairs. Moreover, E.U. environmental policy has a significant impact on land use law in European countries.²¹

B. Spain

In 2007, Spain had a population of 45,200,737 with an area of 506,030 km², and a density of eighty-nine inhabitants/km², making it a middle-ranked European country, between the more densely populated central European countries and the less populated nations to the north. ²² Spain has seen rapid population growth, especially from 1960 to 1970 and 1970 to 1980, encouraged by the increase in industrialization of the metropolitan areas of large cities such as Madrid, Barcelona, Valencia, Bilbao, and Saragossa. ²³ From 1960 to 1970, all of these urban areas had annual population growth rates of more than 3%, and in Madrid's case, over 4%. ²⁴ From 1970 to 1980, Spain also saw rapid population growth but at a lower rate, with Madrid seeing only a 2% increase. ²⁵ Population growth declined considerably in the decades that followed, bottoming out towards the end of

^{18.} Id.

^{19.} Erminio Ferrari et al., IL Governo del Territorio [The Govern of the Territory] (A. Giuffrè ed., 2003).

^{20.} Id.

^{21.} Other than the primary sources of EU Law, we should bear in mind the secondary sources—legislative previsions which are made and implemented by reference to an article of the EC Treaty.

^{22.} Urban Policies in Spain http://www.eukn.org/Spain/en/EUKN_Spain/Urban_Policies_in_Spain (last visited Oct. 14, 2011) [hereinafter Urban Policies in Spain].

^{23.} Id.

^{24.} Id.

^{25.} Id.

the 1990 to 2000 decade. Since 2000, continued migration has contributed to a steady increase in the natural rate of growth.²⁶

Rapid population growth from 1960 to 1980, primarily concentrated in the metropolitan areas of large cities, produced a serious shortfall in infrastructure, housing, facilities and deterioration in urban life quality. This was in combination with the industrial decline in the mid-1970s in places such as Bilbao and the central area of Asturias, which is home to the iron, steel, and the shipping industry that was in crisis throughout Western Europe. The housing development growth rate in recent years has been spectacular and remained buoyant until the crisis of 2008. Sharp increases in house prices made it very difficult for a large percentage of the population to buy a home. The drop in the average household size as well as the steady increase in immigration generated a new housing demand.

Spain's urban population is concentrated in four major urban areas: Madrid, Barcelona, Valencia, and Seville, each with more than 1,000,000 inhabitants all of which are located, with the exception of Madrid, on the peninsula's periphery. This periphery is home to nine urban areas with a population between 500,000 and 1,000,000 inhabitants (Bilbao, Malaga, the central area of Asturias, Saragossa, Alicante/Elche, the Bay of Cadiz, Vigo/Pontevedra, Murcia and Las Palmas in Grand Canary); thirty-five urban areas of between 100,000 and 500,000 people; and thirty urban areas of between 50,000 and 100,000 inhabitants.²⁹ Thus, there are seventy-eight urban areas throughout Spain with more than 50,000 inhabitants.³⁰

Physical characteristics, communications, the location of industrial enclaves, and coastal tourist settlements all mean that the population is unevenly distributed and concentrated particularly in the peninsula's periphery, as well as the Madrid metropolitan area, which is situated in the sparsely populated centre of the country.³¹ Apart from the Madrid metropolitan area, which is witnessing high growth rates, the populations of smaller urban areas such as Malaga, Alicante/Elche, and in particular, Murcia and Vigo/Pontevedra, are also expanding rapidly.³² The growth trend in the outlying regions of the peninsula, in the tourist areas along the

^{26.} Id.

^{27.} Urban Policies in Spain, supra note 22.

^{28.} Id.

^{29.} Id.

^{30.} Id.

^{31.} *Id*.

^{32.} Urban Policies in Spain, supra note 22.

Mediterranean coast, and the central area around Madrid, thus, remains constant.³³

Spain experienced a very slow natural growth rate from 1990 to 2000, as well as one of the world's lowest fertility rates, which was well below the E.U. average.³⁴ In 1996, Spain's average number of children per woman was 1.16 as opposed to 1.44 in the rest of the European Union.³⁵ The continued increase in immigration since 2000 has caused this statistic to climb, but it still remains below the European average. An aging population raises many problems as well, such as the provision of retirement pensions, health care, and a greater demand for facilities for senior citizen facilities.³⁶

An increase in migration produces diverse effects. For example, the rejuvenation of the population and more young workers in the job market, consequently, make more contributions to the social security system. But it increases demand for facilities, housing and also raises social integration issues.³⁷

1. The Framework of Spanish Land Use Law

This section focuses on the general trends, comparing the Spanish situation with American and other European land use laws and references historical and current land use law. Case law is clearly very important, but until now, the leading role has been played by the legislative branch, which has created the modern land use law in Spain through the introduction of several technical acts.

Urban planning has a major role in this scenario. Urban planning is compulsory, both on a regional basis (decisions made by the *Comunidades Autónomas*) and more importantly, on a local basis. Urban planning in Spain implies a range of different legal elements: several kinds of maps, documents, and the rules for dividing the land into zones. A plan must exist to regulate land use, as it is a legal requirement in all the *Comunidades Autónomas* of which there are currently seventeen regions in Spain.³⁸

^{33.} Id.

^{34.} Id.

^{35.} Id.

^{36.} Id.

^{37.} Urban Policies of Spain, supra note 22.

³⁸ Juli Ponce, Land Use Law, Liberalization, and Social Cohesion through Affordable Housing in Europe: The Spanish Case, 36 URB. L. 317, 322-31 (2004).

2. The Historical Perspective

a. The Situation Before 1956

Regulation of land use has existed in Spain since the times of the Ancièn Régim.³⁹ The modern context dates back to the liberal state of the 19th century, under the jurisdiction of the police (policia) at the local level.⁴⁰ The regulation focused on the growth of cities (urban developments of ensanche) and on problems of health and security.⁴¹ Public intervention was made possible by a wide range of laws, which were first regulated in the Compulsory Purchase Act of 1836 (e.g. ordinances, alignments and compulsory purchases).⁴²

Land use law developed in a more technical way during the 20th century. From the 1920's, more modern, legal techniques were included in legal codes, such as the Municipal Charter of 1924, which introduced "zoning." In the 1930's, the idea of Regional Planning came to Spain. Catalonia was a pioneer with the "Zoning Distribution Plan" in 1932, but the Spanish Civil War destroyed the possibility for concrete developments. 44

Regarding affordable housing, in addition to a bill in 1878 and the creation of several research committees, the Cheap Houses Act of 1911 was the first law that addressed the issue of housing for the working classes.⁴⁵

^{39.} See ALLAN-RANDOLPH BREWER-CARIAS, LA CIUDAD ORDENADA [THE ORDAINED CITY] (Criteris Editorial 2006) (under the colonial Spanish rule a similar regulation of land uses was enacted in South America).

^{40.} Ponce, supra note 38, at 322.

^{41.} Id. at 323.

^{42.} MARTÍN BASSOLS COMA, GÉNESIS Y EVOLUCIÓN DEL DERECHO URBANÍSTICO ESPAÑOL [GENESIS AND EVOLUTION OF SPANISH LAND USE LAW] (1812-1956) (Montecorvo, 1973).

^{43.} See Estatuto Municipal [Municipal Charter] (B.O.E. 1924, 69), available at http://www.boe.es./datos/pdfs/BOE/1924/069/A01218-01302.pdf (last visited Oct. 31, 2011) (Spain).

^{44.} See Carlos Nardiz Ortiz, Los Ingenieros de Caminos y el Urbanismo del Siglo XX [The Civil Engineering and Urban Planning of the Twentieth Century], 59 FIGURE 3 (1999), available at http://www.ciccp.es/revistait/Anteriores/pdf/Op49/OP49%20Articulos/06.Carlos%20Nardiz%20Ortiz.p df (last visited Oct. 31, 2011) (Spain).

^{45.} Juli Ponce Solé et al., El Derecho de la Vivienda en el Siglo XXI: Sus Relaciones con la Ordenación del Territorio y el Urbanismo, con Análisis Específico de la Ley Catalana 18/2007, de 28 de diciembre, en su Contexto Español, Europeo e Internacional [The Right to Housing in the Twenty-first Century: Its Relations to the Land and Urban Planning, with a Specific Analysis of the Catalan Law 18/2007, December 28, in the Spanish, European, and International Context] (Marcial Pons 2008) ("Brief history about the housing regulation in Spain and Catalonia, which existed before the Act 18/2007, December 28, on the right to housing.") (Spain).

The Act relied on private investments and established some public grants for entrepreneurs.⁴⁶ Unfortunately, this regulation was unsuccessful, mainly due to the lack of public resources to develop its provisions, and it was amended before the beginning of the Civil War in 1936.⁴⁷

After the Civil War, public efforts were addressed at rebuilding the devastated country. Thus, the *Instituto Nacional de Vivienda*, a public specialized body, was created in 1939 to achieve this goal.⁴⁸ Some years later, in 1957, a Department was dedicated, the *Ministerio de la Vivienda*, that assumed responsibility for housing policy in Spain until it was merged with the Department of Public Works at the end of the 1970's.⁴⁹ In 2004, the Ministry of Housing was reestablished to deal with the serious problem of housing affordability.⁵⁰ At the end of 2010, after a new political restructuring, this Ministry disappeared again.⁵¹

b. 1956 National Act: The Importance of Planning in Spain

The modern land use law was introduced in 1956, during Franco's forty-year dictatorship.⁵² The 1956 National Act came into force when Spain was a centralized, non-democratic country.⁵³ But in spite of this context, scholars agree that the Act was of high technical quality and the foundation of modern Spanish land use law.⁵⁴

The priority of the regulation was agricultural land.⁵⁵ Subsequent construction was granted by public powers through urban planning.⁵⁶ As a general rule, the plans regulated the property rights without expropriation.⁵⁷ The plan, at least formally, awarded decision-making powers to municipalities with an element of discretionary interpretation.⁵⁸ However,

^{46.} Id.

^{47.} Id.

^{48.} Ponce, supra note 38, at 323.

^{49.} Id.

^{50.} Id.

^{51.} *Id*.

^{52.} TOMÁS-RAMÓN FERNÁNDEZ, MANUAL DE DERECHO URBANÍSTICO [URBAN LAW MANUAL] 23 (Las Rozas, Madrid El Consultor de los Ayuntamientos y de los Juzgados, 2008).

^{53.} Ponce, supra note 38, at 323.

^{54.} Id. at 340, n.27.

^{55.} Id. at 324.

^{56.} Id.

^{57.} FERNÁNDEZ, supra note 52, at 23.

^{58.} Id. (Although urban policies were in the hands of local bodies, the real situation was that the national level interfered continuously, changing local decisions. We have to take into account that

this discretion was not used by democratic municipalities, and there were regular abuses of power in favor of supporters of the fascist mayors. Consequently, urban planning was the central *pièce de résistance* of the whole legal system. But twenty years after the 1956 Act, just 7.5% the Spanish territory had an urban plan implemented.⁵⁹ So, the failure of the plan was, in reality, the failure of law.

Regarding the management of development, Spain does not implement the American-type exactions, or impact fees, nor does it implement the French-style use of tax law as a way of financing the new parts of the cities. The National Act of 1956 established a legal system to develop public infrastructures and public facilities effectively based, grosso modo, on the owner's legal duties to freely give a fixed percentage of land to the municipality. This is still effective today in general terms, with a national legal maximum of 10% and a possible minimum variable in each Comunidad Autónoma, for which the land is dedicated to streets, green areas, and local public facilities. It also makes all the necessary efforts to develop the area where the plot of land is included.⁶⁰

However, this rigid system is made flexible by means of development agreements between the city councils and developer, a source, of corruption in some cases. Development agreements between municipalities and owners or developers are regulated by land use laws. The Spanish legal system accepts them but imposes certain procedural conditions in order to promote accountability.

c. The Reformation of 1975

During the sixties and part of the seventies, Spain became an industrialized country, suffering great social and economic transformations. In the urban sphere, the important phenomenon was the migration of a large part of the population from agricultural areas to cities, with the inherent problems of adequate housing. The growth of the cities was quite chaotic. Theoretically, the plans were in place to deal with this migration, but a large number of municipalities did not pass plans, and in other cases, as explained before, arbitrary decisions encouraged speculation and made it impossible to achieve an orderly urban sprawl.

before the Constitution of 1978 the idea of local self-government did not exist, and national level had the "custody" of local authorities.).

^{59.} Ponce, supra note 38, at 324.

^{60.} FERNANDO LÓPEZ-RAMÓN, INTRODUCCIÓN AL DERECHO URBANÍSTICO [INTRODUCTION TO URBAN LAW] 118 (Marcial Pons 2005).

Due to these factors, Spain decided to introduce another act in 1975 in order to complete the 1956 National Act and avoid recurring problems. ⁶¹ But the general structure of the legal system was left untouched. In 1976, the regulations of 1956 and 1975 were merged into an Act (the *Texto Refundido*). ⁶²

d. The Constitution of 1978

The Constitution of 1978 highlighted the profound changes in Spain with the introduction of democracy and the autonomy of the various regions. Effectively, Spain morphed from a centralized model to an almost federal model. Both elements had a legal impact in the autonomous⁶³ and local level.⁶⁴ The Act in 1985 specifically mentions land use regulation among the local authorities.⁶⁵

According to the Constitution, Spain was declared a "Social State," and several social rights were introduced including rights associated with the environment. Article 45 states: 67

- 1) Everyone has the right to enjoy an environment suitable for personal development, as well as the duty to preserve it.
- The authorities shall safeguard a rational use of all natural resources with a view of protecting and improving quality of life and preserving and restoring the environment, by relying on essential public cooperation.

^{61.} Reform de la Ley Sobre Regimen del Suelo y Ordenacion Urbana [Reform of the Law on Land Use] (B.O.E. 1975, 107), available at http://www.boe.es/boe/dias/1975/05/05/pdfs/A09427-09448.pdf (last visited Oct. 31, 2011) (Spain).

^{62.} LÓPEZ-RAMÓN, supra note 60, at 118.

^{63.} CONSTITUCION ESPAÑOLA [SPANISH CONSTITUTION], B.O.E. n.148.1.3, Dec. 29, 1978, available at http://www.congreso.es/portal/page/portal/Congreso/Congreso/Hist_Normas/Norm/const_espa_texto_ingles_0.pdf (last visited Sept. 23, 2011) (Spain) [hereinafter SPANISH CONSTITUTION].

^{64.} Id. at n.140.

The Constitution guarantees the autonomy of municipalities. These shall enjoy full legal entity. Their government and administration shall be vested in their Town Councils, consisting of Mayors and councilors. Councilors shall be elected by residents of the municipality by universal, equal, free, direct and secret suffrage, in the manner provided for by the law. The Mayors shall be elected by the councilors or by the residents. The law shall lay down the terms under which an open council of all residents may proceed. (Spain).

^{65.} See Ley Reguladora de las Bases del Régimen Local [Foundation of Local Regime Act] tit. 8 (B.O.E. 1985, 7) (Spain).

^{66.} SPANISH CONSTITUTION, supra note 63, art. 45.

^{67.} Id.

3) Criminal or, where applicable, administrative sanctions, as well as the obligation to remedy damage, shall be imposed, under the terms provided by law, against those who break the provisions contained in the foregoing paragraph.

This legal system shows a high degree of complexity, which has to be managed by means of different, cooperative legal mechanisms.⁶⁸

3. The Distribution of Power among the Public Levels: Regional Legislation

Pursuant to the Constitutional Clause 148.1.3, the seventeen Comunidades Autónomas have enacted laws creating their own land use and housing laws, including Catalonia and its capital, Barcelona, which has a long history, its own language, and a strong identity of nation status.⁶⁹ Although the central government delegated many of its powers, it continued making laws concerning land use, using several constitutional clauses, especially article 149.1.13. This article allows the central government to enact supplementary legislation to complete the regional legal system.⁷⁰ Using this argument, two national Acts came into force in 1990 and 1992, creating a common legal framework in spite of an increasingly decentralized government.71 Meanwhile, the price of land increased dramatically, especially in major cities, and the right to shelter became a myth for many people who had to leave the inner cities (the more affluent areas) for the suburbs (more impoverished areas) in search of affordable housing.

^{68.} See Modificicacion de la Ley de Régimen Jurídico de las Administraciones Publicas y del Procedimiento Administrativo Común [Modification of Common Administrative Procedure Act 1992] (B.O.E. 1992, 285), available at http://www.boe.es/boe/dias/1992/11/27/pdfs/A40300-40319.pdf. (last visited Oct. 31, 2011) (Spain).

^{69.} SPANISH CONSTITUTION, supra note 63, art. 148, § 1, cl. 3.

^{70.} *Id.* art. 149, § 1, cl. 13 (stating, the Spanish Parliament can enact legislation establishing "basic rules and coordination of general economic planning," which are binding for the regional and local level).

^{71.} See Reforma del Régimen Urbanístico y Valoraciones del Suelo [Urban System Reform and Land Values] (B.O.E. 1990, 17), available at http://www.boe.es./boe/dias/1990/07/27/pdfs/A22060-22073.pdf (last visited Oct. 31, 2011) (Spain). See also Real Decreto Legislativo por el que se aprueba el Texto Refundido de la Ley sobre el Régimen del Suelo y Ordenacion Urbana [Royal Decree Approving the Text of the Law on the Regime of Land and Urban Planning] (B.O.E. 1992, 156), available at http://www.boe.es./boe/dias/1992/06/30/pdfs/A22238-22274.pdf (last visited Oct. 31, 2001) (Spain).

4. Fragmentation of Land Use Law and the Survival of a Hard National Core

A highly controversial decision of the Spanish Constitutional Court in 1997 almost destroyed this common legal structure. It ruled that the 1990 and 1992 National Acts were partially (about 80%) unconstitutional, and consequently void. It established that land use law was a regional concern and at the national level, it could only regulate land use in certain exceptions that are connected directly with property rights. It

Consequently, the National Act of 1998 attempted to fill the gap and promulgated some general rules about classes of land and limits to local plans, as well as some rules about compulsory acquisitions. This Act was modified by the current Land Use Act of 2007 with similar content. It was influenced by the E.U. approach, as we will be discussed later.⁷⁵

Beyond this general explanation, it is necessary to analyze the current E.U. legal framework in the specific field of prevention of natural and manmade disasters. In this sense, the European Union has developed both *soft law* and *hard law* in this area. ⁷⁶

Regarding soft law, the most relevant document is The European Commission Communication on the Prevention of Natural and Man-made Disasters of 2009.⁷⁷ In this document, the European Commission confirms the lack of a common strategic approach for disaster prevention, and develops some ideas towards its creation. Among these ideas, the European Commission emphasizes three ideas. In particular, the development of knowledge-based disaster prevention policies at all levels of government, linking the relevant actors and policies throughout the disaster management cycle, and improving the effectiveness of existing policy instruments with regard to disaster prevention.⁷⁸ The European Commission develops different measures for future implementation, which relate to each one of these three ideas. Regarding the development of knowledge, the European Commission expresses its intention to develop a comprehensive inventory

^{72.} S.T.C., Mar. 20, 1997 (B.O.E., No. 61/1997), available at http://www.boe.es/boe/dias/1997/04/25/pdfs/T00003-00126.pdf (last visited Nov. 7, 2011) (Spain).

^{73.} Id.

^{74.} SPANISH CONSTITUTION, supra note 58, art. 149, § 1, cl. 18.

^{75.} See generally Ley del Suelo [Land Act] (R.D.L. 2007, 8) (Spain) [hereinafter Land Act].

^{76.} See Consolidated Version of the Treaty on the Functioning of the European Union art. 288, Sept. 5, 2008 (C 83) 171, available at http://eur-lex.europa.eu/JOHtml.do?uri=OJ%3AC%3A2010%3A083%3ASOM%3AEN%3AHTML (last visited Sept. 23, 2011) [hereinafter TFEU].

^{77.} Prevention of Natural and Man-made Disasters, supra note 1.

^{78.} Id. at 4, § 2.

of existing sources of information related to disasters, and to launch a stakeholder group to review the existing information in order to take the measures necessary for filling any indentified knowledge gaps. However, the European Commission states its intention to implement better practices, developing guidelines on hazard/risk mapping, and encouraging research activities. 80

Regarding links between relevant actors and policies, the European Commission will extend an already established program of "lessons learned" from interventions conducted within the framework of the Community Mechanism for civil protection, and will also develop specific courses on prevention. Moreover, the European Commission will increase the public's awareness in relation to disasters. And it will create a network covering the departments in charge of land planning, risk and hazard mapping, protection of the environment, and emergency preparedness and response, while reinforcing the link between early warning systems.

In connection with improving the effectiveness of existing policy instruments, the European Commission, in close cooperation with Member States, will develop several public policies to strengthen the integration of disaster prevention in national operational programming of E.U. funding. Finally, existing Community legislation will take account of disaster prevention during the planned reviews of a number of items of E.U. legislation. The European Commission will encourage Member States to fully integrate the common European design codes for buildings and civil works into their national planning regulation in order to mitigate the impacts of earthquakes. 85

Regarding binding regulations, the European Union has already developed a set of instruments that address different aspects of disaster prevention, the main interest, and disaster preparedness, response and recovery. As will be discussed below, when dealing with specific questions, these legal tools are essentially directives⁸⁶ and some are

^{79.} Id. at 4, § 3.1.1.

^{80.} Id. at 5, § 3.1.1.

^{81.} Id. at 6, § 3.2.1.

^{82.} Prevention of Natural and Man-made Disasters, supra note 1, at 6, § 3.2.1.

^{83.} Id. at 6, § 3.2.3.

^{84.} Id. at 7, § 3.3.1.

^{85.} Id. at 8, § 3.3.2.

^{86.} See, e.g., Council Directive 2009/71, 2009 O.J. (L 172) 18 (EURATOM), available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:172:0018:0022:ES:PDF (last visited Oct. 31, 2011); Council Directive 2007/60, 2007 O.J. (L 288) 27 (EC), available at http://eur-

regulations.⁸⁷ From a legislative point of view, the most relevant tools are probably the E.U. Directives, which "shall be binding, as to the result to be achieved, upon each Member State to which" they are "addressed, but shall leave to the national authorities the choice of form and methods."

III. EVALUATION AND MANAGEMENT OF RISKS BY LAND USE LAW: THE SPECIFIC PROBLEM OF SCIENTIFIC UNCERTAINTY

A. Scientific Uncertainty and Preçautionary Principle

According to E.U. legislation and various Member States' legal framework (e.g. Spain), urban planning must evaluate risks to prevent natural and man-made disasters. But sometimes when identifying a phenomenon, product, or process, scientific evaluation does not allow the risk to be determined with sufficient certainty. Scientific uncertainty can arise from a controversy on the existence of a lack of some relevant data. In these situations, E.U. legal framework calls for the use of the Precautionary Principle. The Communication from the Commission on the Precautionary Principle is the most relevant E.U. soft law document in that field. The following lines will provide an overview of the communication.

According to the Communication, the Precautionary Principle should be considered within a structured approach to the risk analysis that

lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:288:0027:0034:ES:PDF (last visited Oct. 31, 2011); Council Directive 96/82, 1996 O.J. (L 010) 13 (EC), available at http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31996L0082:ES:HTML (last visited Oct. 31, 2011).

^{87.} See, e.g., Commission Regulation 1891/2006, 2006 O.J. (L 394) 1 (EC), available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:394:0001:0004:EN:PDF (last visited Oct. 27, 2011) (on multi-annual funding for the action of the European Maritime Safety Agency in the Field of response to pollution caused by ships); Commission Regulation 1726/2003, 2003 O.J. (L 249) 1 (EC), available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003: 249:0001:0004:EN:PDF (last visited Oct. 27, 2011) (banning single-hull tankers from European ports).

^{88.} TFEU, supra note 76, art. 288.

^{89.} Communication from the Commission on the Precautionary Principle, at 4, COM (2000) 1 (Feb. 2, 2000), available at http://ec.europa.eu/dgs/health_consumer/library/pub/pub07_en.pdf (last visited Sept. 23, 2011) (this document only tries to help in the interpretation of a legal binding principle enshrined in article 191 of the Treaty and already applied by European Court of Justice Case law (e.g., cases C-157/96 and C-180/96), where the Court review the validity of the Commission's decision banning the exportation of beef from the United Kingdom to reduce the risk of BSE transmission, during the situation known as "mad cows") [hereinafter Precautionary Principle].

^{90.} Id. at 14.

^{91.} TFEU, supra note 76, art. 191.

^{92.} See Precautionary Principle, supra note 89, at 4.

comprises three elements: risk assessment, risk management, and risk communication.⁹³ Decision makers need to be aware of the degree of uncertainty correlated with the results of non-action, evaluating available scientific information.⁹⁴ Judging what is an "acceptable" level of risk for society is a political responsibility.⁹⁵ In some cases, the right answer may be non-action or at least to not introduce a binding legal measure.⁹⁶ In the case of action, a wide range of initiatives are available—from a legally binding measure to a research project or recommendation.⁹⁷

In order to choose among these possible actions, measures based on the Precautionary Principle are guided by several principles:⁹⁸

- a) Proportionality: action chosen must achieve the appropriate level of protection.⁹⁹ Principle of proportionality is a key legal principle in European law.¹⁰⁰ Judicial review based on it relays on three "filters" or steps of control:
 - i) Means adopted must be suitable to the protection: they cannot be excessive, in the sense of restricting rights unnecessarily, nor insufficient, in the sense that they do not protect the public interest. ¹⁰¹ In some cases a total ban may not be a proportional response to a potential risk. ¹⁰² In other cases, it may be the only effective possible answer to a potential risk. ¹⁰³
 - ii) The restriction of rights must be necessary. 104 This means that public authorities must be satisfied with the mildest means, if effective. Every excessive measure restricting freedom must be avoided, and if

^{93.} Id. at 3.

^{94.} See id. at 17.

^{95.} Id. at 16.

^{96.} See id. at 15.

^{97.} See Precautionary Principle, supra note 89, at 16.

^{98.} Id. at 4.

^{99.} Id. at 18.

^{100.} See, e.g., TFEU, supra note 76, art. 296.

^{101.} See Precautionary Principle, supra note 89, at 18. See also SPANISH CONSTITUTION, supra note 63, art. 16, § 1.

^{102.} Precautionary Principle, supra note 89, at 18.

^{103.} Id.

^{104.} See generally Charter of Fundamental Rights of the European Union, art. 52, Dec. 18, 2000, O.J. (C 364) 1, available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2000:364:0001:0022:EN:PDF (last visited Oct. 27, 2011) [hereinafter EU Bill of Rights].

- used, they can be found illegal through judicial review. 105
- iii) The third filter is proportionality in the strict sense. It means that benefits (of all types) associated to public intervention must be greater than inherent costs (of all types).
- b) Non-discrimination: another classic means of controlling public action in Europe. Comparable situations should not be treated differently, and different situations should not be treated in the same way, unless there are objective grounds for doing so (which must be explained according to the legal duty for giving reasons). On the other hand, non-discrimination does not prohibit positive actions (the European term for affirmative actions or reverse discrimination) according to the circumstances. 108
- c) Consistency: measures should be consistent with the measures already adopted in similar circumstances or using similar approaches.
- d) Cost-benefit analysis: evaluation of the pros and cons cannot be reduced to an economic cost-benefit analysis.¹¹⁰ That evaluation must be wider in scope and include noneconomic considerations.¹¹¹ But assessment should include an economic cost-benefit analysis where this is appropriate and possible.¹¹²
- e) Examination of scientific developments: measures should be maintained as long as the scientific data are inadequate, imprecise or inconclusive, and as long as the risk is considered too high to be imposed on society. 113 Measures based on the Precautionary Principle shall be reexamined

^{105.} See generally id. See also Precautionary Principle, supra note 89, at 16.

^{106.} See EU Bill of Rights, supra note 104, art. 21. See also SPANISH CONSTITUTION, supra note 63, arts. 9.2–14.

^{107.} Precautionary Principle, supra note 89, at 19.

^{108.} See, e.g., PROF. O. DE SHUTTER THE PROHIBITION OF DISCRIMINATION UNDER EUROPEAN HUMAN RIGHTS LAW (Eur. Comm'n Emp't & Soc. Aff., Feb. 2005), available at ec.europa.eu/social/BlobServlet?docId=1692&langId=en (last visited Oct. 27, 2011).

^{109.} Precautionary Principle, supra note 89, at 19.

^{110.} Id.

^{111.} Id.

^{112.} Id.

^{113.} Id. at 20.

- and, if necessary, modified depending on the results of the scientific research and the evaluation of their impact. 114
- f) Burden of proof: measures based on the Precautionary Principle may assign responsibility for producing the scientific evidence necessary for a complete risk evaluation. It is possible to ask for prior public approval of the activity, and to shift the burden of proof towards the private individual who should only object if there is an unacceptable risk of causing disasters. 116

B. Evaluation

Taking into account, if necessary, the Precautionary Principle, E.U. Member States have established regulations in relation to the public duty of risk evaluation when planning land use. In this section, this article will contemplate the Spanish example. As a general framework, Art. 10 of the Spanish Land Use Act states that prevention of natural risks and serious accidents is one of the binding legal principles that must guide public regulation of land in all cases.

1. Natural Risks: The E.U. Directives and their Impact on a National Level: The Spanish Case

As previously explained, the European Union has approved several binding Directives as to the result to be achieved by each Member State to which they are addressed, but they shall leave the choice of form and methods to the national authorities. This classic E.U. legal technique explains why Spain, like other Member States, has been obliged to implement several Directives, and pass new legislation in relation to the prevention and management of disasters. 120

^{114.} Precautionary Principle, supra note 89, at 21.

^{115.} Id. at 22.

^{116.} See id. at 21.

^{117.} See, e.g., Precautionary Principle, supra note 89, annex I.

^{118.} Land Act, supra note 75, art. 10(c).

^{119.} See discussion infra Part II.B.2.f.

^{120.} Id.

2. Natural Risks: The Legal Requirements of Evaluation by Planning

a. The Environmental Impact Assessment and the National Spanish Land Legislation

Directives on Environmental Impact Assessment are good examples of the E.U. influence on Member States. Among these, the Strategic Environmental Assessment Directive is prominent. The Directive was implemented in Spain, Act 9/2006, on environmental assessment of plans and programs. This Act demands an administrative procedure for the evaluation of environmental impact caused by urban planning. In connection with this, the Land Use Act of 2007 mandates compulsory risk maps to be included in the environmental sustainability report that the developer must prepare. This report must be included in a document called Environmental Memory, which explains environmental impact.

b. Flood Risks Prevention and Urban Planning

With regard to prevention of flood risks and urban planning, the Spanish regulation *Real Decreto* 903/2010 implements the E.U. Directive 2007/60/EC on the assessment and management of flood risks. ¹²⁷ According to this Directive, the Spanish regulation creates different tools to

^{121.} See generally European Commission on Environment: Environmental Impact Assessment, http://ec.europa.eu/environment/eia/home.htm (last visited Oct. 27, 2011).

^{122.} See Council Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the Assessment of the Effects of Certain Plans and Programmes on the Environment, 2001 O.J. (L 197) 30 (EC), available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2001:197:0030:0037:EN:PDF (last visit Nov. 12, 2011).

^{123.} Evaluacion de los Efectos de Determinados Planes y Programas en el Medio Ambiente [Evaluation of the Effects of Certain Plans and Programs on the Environment] (B.O.E. 2006, 9), available at http://www.seo.org/media/docs/ley_planes_programas_ma.pdf (last visited Oct. 31, 2011) (Spain) [hereinafter Act 9/2006].

^{124.} Land Act, supra note 75, art. 15, § 1. See also Act 9/2006, supra note 123, art. 7, § 1.

^{125.} See Land Act, supra note 75, art. 15, § 2.

^{126.} Id. art. 15, § 3(c).

^{127.} See Evaluación y Gestión de Riesgos de Inundacion [Assessment and Flood Risk Management] (B.O.E. 2010, 903), available at http://www.boe.es/boe/dias/2010/07/15/pdfs/BOE-A-2010-11184.pdf (last visited Oct. 24, 2011) (Spain). See also Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions, COM (2004) 472 final (Dec. 7, 2004), available at http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2004:0472:FIN:EN:PDF (last visited Oct. 28, 2011) (it is interesting that a previous Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions, Flood risk management. Flood prevention, protection and mitigation).

assess flood risks, for example, flood hazard maps, flood risk maps, and flood management maps. The regulation makes it clear that urban planning is bound by all three maps: "regional and local plans when regulating land uses cannot include decisions against flood management" and establishes that construction will be prohibited in lands with identified flood risks. 129

3. Man-Made Risks: The Example of the Evaluation of Crime and Terrorism Risks

The need for evaluation during the urban planning process is extended to man-made risks. For example, there is a compulsory evaluation of crime and terrorism risk during urban planning, which was established by Catalan, as well as other European legislation.¹³⁰ This kind of risk prevention will be considered in the last section of the article.

C. Management

In some cases, legislation evaluates and determines how to manage the identified risks. Measures can range from establishing guidelines for future local plans to introducing legal obligations for land owners for avoiding factors that can lead to future disaster.

1. Legal Prohibitions Binding Land Use Planning

An example of this technique is Art. 12 of the Spanish Land Use Act, which stipulates that urban developments are prohibited in lands with natural or technological risks. This kind of land is declared rural (suelo rural). Therefore, there is no right to build on set lands, and urban planning must establish this condition, for which there is no due compensation. 133

^{128.} Council Directive 2007/60, 2007 O.J. (L 288) 27 (EC), available at http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:288:0027:0034:EN:PDF (last visited Oct. 27, 2011).

^{129.} See id. § 13.

^{130.} See discussion infra Part V.

^{131.} Land Act, supra note 75, art. 12, § 2(a).

^{132.} See id. art. 12, § 2.

^{133.} See id. art. 3, § 1.

2. Legal Obligations Binding Land Use Planning and Private Owners: Social Function of Property and Prevention of Disasters

a. Regional Planning and Local Zoning

Local urban plans can be bound by guidelines that come from regional planning. Spatial planning in Spain, in theory, (ordenación del territorio) is not in State hands. ¹³⁴ In accordance with the Spanish Constitution and the regional autonomous statutes, spatial planning is a regional power and the autonomous communities have specific acts regulating this policy. ¹³⁵ But it is true that the Constitutional Court has confirmed the state's capabilities of influencing "de facto" regional planning by deciding the location of state infrastructures (e.g. the high speed train, tren de alta velocidad, AVE, which currently is instrumental in territorial cohesion through decisions about lines and stations all around Spain). ¹³⁶

At the regional level, it is worth considering the Catalan example. The Catalan Parliament passed an act on spatial planning in 1983, using its jurisdiction in the field, ¹³⁷ and has been developing a new generation of spatial regional plans, which have bound authorities in relation to land use and housing since 2004, including plans for coastal land protection. ¹³⁸ The last step in this recent process is the Right to Housing Act of 2007, which has created the Housing Sector Plan for future approval. ¹³⁹ This type of regional planning can include provisions to prevent disasters. An example is the General Guidelines in Canarias. ¹⁴⁰ These Guidelines can establish

^{134.} See, e.g., PONCE SOLE ET AL., supra note 45.

^{135.} See SPANISH CONSTITUTION, supra note 63, art. 148, § 1, cl. 3.

^{136.} See S.T.C., May 13, 1986 (B.O.E., No. 56/1986), available at http://boe.es/boe/dias/1986/06/13/pdfs/T00001-00005.pdf (last visited Oct. 27, 2011) (Spain).

^{137.} See Política Territorial [Territorial Policy] (Diario Oficial de la Generalitat de Catalunya, 1983, 23), available at http://www.parlament.cat/web/activitat-parlamentaria/lleis?p_pagina=1&p_fw= (last visited Oct. 29, 2011) (follow "Llei 23/1983, del 21 de noviembre, de política territorial" hyperlink) (Spain).

^{138.} See generally Oriol Nel·lo, Catalonia's New Spatial-Planning Policy, GOVERNMENT OF CATALONIA (Sept. 2005), http://www.eurometrex.org/Docs/Moscow/Catalunya-Barcelona_Summary_EN.pdf (last visited Oct. 29, 2011).

^{139.} See Catalan Right to Housing Act art. 11 (B.O.E. 2007, 18), available at http://www20.gencat.cat/docs/habitatge/Home/Secretaria%20dhabitatge/Publicacions/Llei%2018_2007%20del%20dret%20a%20lhabitatge/docs/43_154955.pdf (last visited Oct. 29, 2011) (Spain).

^{140.} See Canary Act (Boletin Oficial de Canarias, 2003, 19), available at http://www.gobiernodecanarias.org/boc/2003/073/boc-2003-073-002.pdf (last visited Oct. 24, 2011) (Spain).

criteria to prevent "catastrophic natural risks," which are compulsory to local urban plans. 141

b. Limits to Property Rights and Disasters

In Spain, landowners are restricted in the use of their property. Although the Spanish Constitution recognizes and protects property rights, it must be developed in accordance with its "social function." This means that legislation, and urban plans within its framework, can limit and guide property rights, establishing positive duties. These limits are not takings and there is no compensation. An example of this is Art. 9 of the Spanish Land Use Act, which establishes that land and building owners in Spain have a duty to conserve their properties. That legal duty includes the obligation of keeping rural land (suelo rural) in good condition to avoid the risk of possible disasters (fires, floods, etc.).

IV. PLANNING AND CLAIMING DAMAGES IN THE CASE OF DISASTERS

A. Lack of Prevention: Public and Private Liability

Possible tort actions for disasters are established in accordance with each national legal system. A clear example is how the American legal regime differs from the European legal regimes. Private and public liability can have different legal regimes according to national administrative law systems in Europe. Even with this public-private distinction in mind, national legal characteristics can be quite different. For example, England and Spain have clear differences, the second with an "objective" public liability, which exists without the necessity of administrative fault or negligence. 148

In the European case, we have a plurality of legal regulations of liability, rooted in each national legal system. But there is a narrow, E.U. common framework created by Directive 2004/35/EC of the European Parliament and of the Council, establishing environmental liability with

^{141.} See id. directive 3(e).

^{142.} See Spanish Constitution, supra note 63, art. 33.

^{143.} Id.

^{144.} Id.

^{145.} Land Act, supra note 75, art 9.

^{146.} Id

^{147.} See, e.g., RICHARD J. PIERCE, JR., ADMINISTRATIVE LAW 167 (Fountain Press 2008) (providing an overview of tort actions against American agencies and American agency officials).

^{148.} Id.

regard to the prevention and remedy of environmental damage.¹⁴⁹ This common framework applies to private liability.¹⁵⁰ Member States were obliged to implement the Directive by April 30, 2007.¹⁵¹ Spain fulfilled its legal obligation with regard to environmental liability by means of the Act 26/2007, on October 23 of the same year.¹⁵²

That Directive establishes a common European framework for environmental liability based on the "polluter pays" principle. 153 The Directive only covers occupational activities listed in Annex III to the Directive. 154 Annex III mainly includes agricultural or industrial activities that require a license. 155 These types of activities are deemed the responsibility of the operator, even if he or she is not directly at fault. 156 Out of Annex III, there are other activities that can damage species or natural habitats protected by E.U. legislation. 157 In this case, the operator will be held liable if, and only if, he or she is at fault or negligent. 158 In both cases, this Directive shall not cover environmental damage caused by "a natural phenomenon of exceptional, inevitable and irresistible character." It does not cover damage caused by nuclear risks. 160 The competent authority, will establish which operator has caused the damage, assess the significance of the damage, and determine the remedial measures that should be taken. 161 The interested party will have access to a court or other independent and impartial public body with the competence to review the public decision.¹⁶²

^{149.} Council Directive 2004/35, 2004 O.J. (L 143) 56 (EC), available at http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2004:143:0056:0075:EN:PDF (last visited Oct. 27, 2011) [hereinafter Directive 2004/35].

^{150.} See Responsabilidad Medioambiental [Environmental Responsibility] pmbl., § 6 (B.O.E. 2007, 26), available at http://boe.es/boe/dias/2007/10/24/pdfs/A43229-43250.pdf (last visited Oct. 27, 2011) (Spain) [hereinafter Environmental Responsibility].

^{151.} Directive 2004/35, supra note 149, art. 19, § 1.

^{152.} See Environmental Responsibility, supra note 150, pmbl., § 1.

^{153.} Directive 2004/35, supra note 149, art. 1.

^{154.} See id. art. 3, § 1 (a).

^{155.} See id. annex II.

^{156.} See id. art. 3, § 1(a).

^{157.} See id. art. 2, § 1(a).

^{158.} See Directive 2004/35, supra note 149, art. 3, § 1(b).

^{159.} Id. art. 4, § 1(b).

^{160.} Id. art. 4, § 4.

^{161.} See id. art. 11, §§ 1-2.

^{162.} Id. art. 13, § 1.

Regarding public responsibility for a lack of proper evaluation of risks. there is no common European legal framework. Therefore, each Member State will apply its own legal regime. In the Spanish case, Arts. 106.2 of the Spanish Constitution, and 139 and following of Act 30/1992 establish a legal framework applicable to all public administrations and all activity sectors in Spain. 163 According to this legal regime, a public administration will be liable if there is actual damage that citizens do not have the legal obligation of bearing, if administrative activity, or the lack thereof when it is compulsory, is involved in the damage, and if there is a casual relationship between the public activity, or the lack thereof, and the damage. 164 In Spain, fault or negligence does not have to exist to recognize administrative liability. 165 As a general rule, payment is made through public budgets. Administrative officials do not have to pay money from their own pockets, the exception being when a public administration pays for damage caused by the serious fault or negligence of a public employee. In such cases, public administration must recover the amount paid from the public employee. 166

A question that can arise in the case of disaster and damage is whether the public activity of prevention was adequate. In other words, should public administration be liable for damages if urban planning does not properly assess natural or man-made risks and there are damages as a consequence of a disaster?

B. Spanish Examples of Compensation Claims in the Case of Disasters

1. The Biescas Campsite

This disaster in 1996 had a big impact on Spanish society. ¹⁶⁷ A sudden flood in the gorge of Arás destroyed the *Biescas* campsite, resulting in eighty-seven deaths. ¹⁶⁸ After lengthy discussions to define this disaster as an "act of God," a lawsuit was brought against the public authorities. ¹⁶⁹ A 2005 Spanish Court decision faced the question of the existence of public

^{163.} See SPANISH CONSTITUTION supra note 63, § 106(2). See also Régimen Jurídico de las Administraciones Públicas del Procedure Administrativo Común [Legal Regime of Public Administrations and Common Administrative Procedures] art. 139 (B.O.E. 1992, 30) (Spain) [hereinafter LEGAL REGIME 1992].

^{164.} See LEGAL REGIME 1992, supra note 163, art. 130.

^{165.} Id.

^{166.} Id. art. 145.2.

^{167.} See A.N., Dec. 21, 2005 (R.O.J., No. 1976), supra note 3.

^{168.} Id.

^{169.} Id.

responsibility due to a lack of proper risk assessment when permitting the construction of the campsite in the ravine. The outcome was positive. State and regional administrations were declared guilty and compensation for damages was recognized. ¹⁷¹

This noteworthy judicial decision stated that public administration did not evaluate the existence of "natural and man-made risks of all kinds" for people and belongings. According to the Spanish Audiencia Nacional, public administrations are always obliged to prevent risks even where there is a lack of specific legal provisions that establish such a duty. Public authorities were to compensate €12 million for damages because the disaster was neither unpredictable nor unavoidable. This disaster triggered several measures to develop policy for the prevention of disasters, specifically, the modification of the Spanish Land Use Act and the creation of a Parliamentary Special Commission on Prevention and Assistance in Catastrophic Situations. 174

2. The Car Bomb Attack Against a Guardia Civil Barracks

A second interesting Spanish judicial decision concerning public responsibility in the prevention of disasters is the Spanish Supreme Court decision of November 2, 2004.¹⁷⁵ In this case, the judges considered the car bomb attack on barracks of the Spanish security forces, the Guardia Civil. The explosion caused one death.¹⁷⁶

The plaintiff argued that personal and material damages were caused by the lack of a proper plan to introduce security measures. A previous attack had been attempted against the same police station a year earlier.¹⁷⁷ The Spanish Supreme Court refused the claim for damages, arguing that although it was possible to plan for more security measures in the urban

^{170.} Id.

^{171.} Id.

^{172.} See A.N., Dec. 21, 2005 (R.O.J., No. 1976), supra note 3.

^{173.} Id.

^{174.} See Informe de la Comisión Especial sobre la Prevención y Asistencia en Situaciones de Catástrofe [Parliamentary Special Commission on Prevention and Assistance in Catastrophic Situations], Dec. 9, 1998 (Boletín Oficial de las Cortes Generales, No. 596), available at http://www.iaem.es/Documentos/InformeSenadoPrevCatastrofes1998.pdf (last visited Sept. 29, 2011) (Spain).

^{175.} Regulations of the Town Planning Law art. 69 (B.O.E. 2005, 305) (Spain) (stating the Social Memory is a specific element of Catalan comprehensive plans which must take into account several elements and include explanations for alternatives decided).

^{176.} Id.

^{177.} Id.

design, the damages were caused by the terrorists and not due to a lack of public action. In the Spanish legal regime, this case is called the breach of causal nexus. There can be poor administration, but the cause of damage was not this poor administration but the activity of a victim or a third party.¹⁷⁸

V. LAND USE PLANNING AND PREVENTION OF DISASTERS

A. Location of Nuclear Plants and Risk Prevention Through Urban Planning: Administrative Procedures and Fundamental Rights

Disaster prevention caused by nuclear energy is a main concern, as demonstrated by the tragedies of Chernobyl (1986) and Fukushima (2011).¹⁷⁹ The International Atomic Energy Agency has developed safety requirements in relation to the location of nuclear plants. In the European sphere, nuclear power stations currently produce around a third of the electricity and 15% of the energy consumed in the European Union, according to European Commission.¹⁸⁰ This explains the Council Directive 2009/71/EURATOM, establishing a community framework for the nuclear safety of nuclear installations, which was of compulsory translation by member states before July 22, 2011.¹⁸¹ But this Directive says nothing about the location of nuclear plants. It reminds us that "National responsibility of Member States for the nuclear safety of nuclear installations is the fundamental principle on which nuclear safety regulation has been developed at the international level," and it is still true at a European level.¹⁸²

So, it is necessary to look at the national legal systems of E.U. member states to know about risk evaluation and urban planning. In the Spanish case, according to the regulation 1836/1999, before gaining a public decision for the licensing of a nuclear plant, it is necessary to get a

^{178.} Id.

^{179.} See generally BELARUS FOREIGN MINISTRY, CHERNOBYL DISASTER: WHY ARE THE CONSEQUENCES STILL OBSERVED? AND WHY IS THE INTERNATIONAL ASSISTANCE STILL CRITICAL?, (Apr. 2009), available at http://chernobyl.undp.org/english/docs/belarus_23_anniversary.pdf (last visited Oct. 28, 2011).

^{180.} Communication from the Commission to the European Parliament and the Council, an Energy Policy for Europe, at 17, art. 3.8, COM (2000) 1 final (Oct. 1, 2007), available at http://eurlex.europa.eu/LexUriServ/site/en/com/2007/com2007_0001en01.pdf (last visited Sept. 29, 2011).

^{181.} Council Directive 2009/71, art. 8, 2009 O.J. (L 172) 18 (EURATOM), available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:172:0018:0022:EN:PDF (last visited Oct. 20, 2011) [hereinafter EURATOM 2009/71].

^{182.} Id.

"previous license or site license," which is recognition by national public authorities for the possibility of locating a nuclear plant in a specific site. 183 Only after getting the previous license can the previous license holder apply to get a building permit to construct the nuclear facility. 184

The interested party must apply for the previous license by submitting several documents, including an evaluation of any possible risks detected. After a due administrative procedure with public consultation, the Ministry of Industry will either deliver the previous license or will refuse the application. Therefore, we are dealing with the exercise of discretionary powers. In this context, the role and importance of due process is to guarantee citizens' rights and good administration, i.e. the exercise of discretionary powers with respect to the obligation of due care, is essential.

The importance of administrative procedures in protecting fundamental rights was emphasized by a famous German Constitutional Court decision concerning the Mülheim-Kärlich nuclear plant. In that decision, the German Constitutional Court emphasized the relevance of administrative procedures. Administrative procedure is not just a defensive tool, but also a tool to protect the right to life and physical integrity. It is also an active tool to promote the respect for fundamental rights by imposing a duty on public officials to protect and promote said rights.

B. Planning and Prevention of Terrorism Risks

Interest in public policies for the prevention of delinquency and terrorism is growing, particularly in relation to urban environmental design. Various European institutions are involved in efforts to prevent delinquency

^{183.} Regalamento Sobre Instalaciones Nucleares y Radiactivas [Regulation of Nuclear and Radioactive Power Plants] (B.O.E. 1999,1836) (Spain) [hereinafter Real Decree 1836/1999].

^{184.} Id.

^{185.} Id.

^{186.} Id.

^{187.} See Christian Starck, State Duties of Protection and Fundamental Rights, 3
POTCHEFSTROOM L.J. 1, 1–51 (2000), available at http://www.puk.ac.za/opencms/export/PUK/
html/fakulteite/regte/per/issues/00v1star.pdf (last visited Sept. 28, 2011). Bundesverfassungsgericht
[BVerfG] [Tribunal Federal Constitucional], Dec. 20, 1979, ENTSCHEIDUNGEN DES
BUNDESVERWALTUNGSGERICHTS [BVERFGE] 53, 30 (1BvR 385/77) (Ger.).

^{188.} Bundesverfassungsgericht [BVerfG] [Tribunal Federal Constitucional], Dec. 20, 1979, ENTSCHEIDUNGEN DES BUNDESVERWALTUNGSGERICHTS [BVERFGE] 53, 30 (1BvR 385/77) (Ger.).

and improve urban living conditions. One report by the Regional Committee on "Delinquency and Security in Cities" states: 189

It is important to take into account, right from the outset of any major new building works or the renovation of dilapidated areas of a city, measures to prevent urban violence. This can be achieved by close collaboration between the authorities responsible for urbanization, building owners and the authorities responsible for the safety of the community.

In a meeting on March 15, 2001, the Council of Justice and the Interior of the European Union gave its political approval to the conclusions of the conference of European experts, which highlighted: 190

CPTED or DCO¹⁹¹ has proved to be an effective and practical strategy in the prevention of delinquency and the sense of insecurity, integrated by multidisciplinary collaboration. The best practices referred to CPTED/DCO should be gathered, evaluated and made accessible to all those concerned. This process should use a common framework and the transferable concepts, processes, and principles should be identified.

Finally, in the European Union, the connection between housing policy and security, and, in particular, urban design for the prevention of delinquency, has recently been discussed in the Regions Committee Report, titled "Regional and Housing Policy": 192

The projects should fit together adequately and in the space which surrounds them. When new housing is built or renovated, the regions and the local authorities should take in to consideration such issues as design, in order to discourage delinquency and create zones of quality, sustainable development and patrimony, in addition to the needs and aspirations of the local communities and the widest possible impact on cohesion.

This European interest for the situational prevention of crime explains the development of a European standard for the prevention of delinquency

^{189.} E.U. Regional Committee Report on Delinquency and Security in Cities, Nov. 18 1999.

^{190.} Towards a Strategy Based on Understanding to Prevent Crime (Sundsvall, Sweden, 21-23 February 2001).

^{191. &}quot;CPTD" and "DCO" stand for "Crime Prevention through Environmental Design and Designing Crime Out."

^{192.} EU Regions Committee Report on Regional and Housing Policy, n.1.8, Feb. 13, 2007.

by means of urban planning and architectural design. As we know, the European standards are voluntary, meaning complimentary not obligatory, between countries, institutions, and individuals as to how a product or process should be. The key components of the European market unit¹⁹³ are the technical specifications approved for an organization, recognized for standardization for its repeated or continuous application, which can be international ¹⁹⁴ or European.¹⁹⁵

In the mid 1990s, a decision was made to standardize procedures as opposed to products, in order to help local and regional authorities, urban planners, architects, and engineers in their efforts to reduce delinquency in collaboration with the police, security companies, insurers, and residents' associations. In 1996, the European Committee of Normalization set up a technical committee in Denmark to work on the new standard. The project was divided into three work groups. Working group one is presided by France and concentrated on terms and definitions. Working group two is for urban planning and is presided by the Netherlands. Working group three is presided by the United Kingdom and is concerned with housing design, shops, and offices.

Working group two has developed a European pre-standard (ENV 1438-2), approved by the European Committee of Normalization in 2002, with provisional application for three years and the possibility of becoming an EN.²⁰¹ The ENV 14383-2 is important as it is the first effort to establish common terms and definitions regarding the situational prevention of

^{193.} See generally European Commission on Enterprise and Industry, European Standards, http://ec.europa.eu/enterprise/standards_policy/index_en.htm (last visited Sept. 29, 2011) (about the EU activity in that field).

^{194.} See, e.g., International Standardization Organization (ISO), ISO 9000 Essentials, http://www.iso.org/iso/iso_catalogue/management_and_leadership_standards/quality_management.htm (last visited Nov. 14, 2011) (describing ISO 9000 as an international standard for quality management).

^{195.} See, e.g., Committee of Normalization, European EN 1522/1523 Ballistic Standards, http://www.closefocusresearch.com/european-en-1522-1523-ballistic-standards (last visited Nov. 14, 2011) (discussing standards for bullet-proof doors and windows).

^{196.} See generally EUROPEAN COMMITTEE ON NORMALIZATION, A EUROPEAN STANDARD FOR THE REDUCTION OF CRIME AND FEAR OF CRIME BY URBAN PLANNING AND BUILDING DESIGN: ENV 14388-2 (2001), available at http://www.securefit.org/downloads/files/Soomeren_EuropeanStandard.pdf (last visited Oct. 20, 2011) [hereinafter ENV 14388-2].

^{197.} Id.

^{198.} Id.

^{199.} Id.

^{200.} Id.

^{201.} ENV 14388-2, supra note 196.

crime.²⁰² Finally, in 2006 the EN 14383-1:2006 standard was approved for terms and definitions.²⁰³ Moreover, during the period of 2005 to 2007, two technical specifications have been approved—dwellings and offices, and a technical report.²⁰⁴

Among the member states of the European Union, the United Kingdom and, to a lesser extent, France and Spain, are examples of countries who have applied this idea to the concrete development of public security policy, thus, introducing new standards and/or changes to administrative practices.²⁰⁵

In the case of Britain, various official reports and the legal system itself have incorporated this perspective. Among these reports, Safer Places in 2004 highlights that crime and the fear of crime can compromise social cohesion and, as a consequence, the sustainable development of communities. This report insists that it is more efficient from an economic point of view to consider the variables of crime prevention at the planning stage, since it is less costly to correct or manage badly designed urban development. In the same way, the connection between security and social cohesion is emphasized, which has been a crucial element of the British political agenda since 2001, with the creation of the Community Cohesion Unit within the Home Office. 208

With regard to the legal system, the Crime and Disorder Act of 1998 contains the public competence for the prevention of crime and disorder, which in the urban environment has been defined in the *Planning Policy Statement I: Delivering Sustainable Development*. The Safer Places

^{202.} Id.

^{203.} EUROPEAN COMMITTEE ON NORMALIZATION, ENV 14383-1: 2006 PREVENTION OF CRIME—URBAN PLANNING AND BUILDING DESIGN—PART 1: DEFINITION OF SPECIFIC TERMS (2006).

^{204.} See generally European Committee for Standardization, http://www.cenorm.be/CENORM/BusinessDomains/TechnicalCommitteesWorkshops/CENTechnicalCommittees/CENTechnicalCommittees.asp?param=6306&title=CEN%2FTC+325 (last visited Sept. 29, 2011).

^{205.} Id.

²⁰⁶ See generally Office of the Deputy Prime Minister, Safer Places: The Planning System and Crime Prevention (Home Office, 2004), available at http://www.communities.gov.uk/documents/planningandbuilding/pdf/147627.pdf (last visited Sept. 29, 2011) [hereinafter Safer Places].

^{207.} Id.

^{208.} Id.

^{209.} Crime and Disorder Act, 1998, c. 37, § 17 (U.K.).

^{210.} See Office of the Deputy Prime Minister Planning Policy Statement I:

Delivering Sustainable Development (Controller of Her Majesty's Stationery Office, 2005),

available at http://www.communities.gov.uk/documents/planningandbuilding/pdf/

report connects public security with urban planning and emphasizes the link between security and social cohesion, establishing the need, at the planning stage, for local authorities to take into consideration the best practices established in the official reports mentioned. This includes an analysis of different experiences with regard to access and mobility in the urban space (i.e. well defined access, avoiding isolated stairways, tunnels, appropriate road design, etc.), urban structure (for example, avoiding buildings which can be used for anti-social behavior), vigilance (for example, adequate nocturnal lighting and the installation of CCTV), relevance (referring to urban design which encourages a sense of community, with clearly defined divisions to avoid confusion between private and public spaces), physical protection of private property (a more traditional perspective to identify with), activity (avoiding monofunctionality and urban segregation and encouraging mixed use and different types of housing) and management and maintenance (to avoid urban environments which incite vandalism and increase the risk of crime).²¹¹

These reports and legal documents also include some new practices in the area of administrative security policing, such as the creation of Architectural Liaison Officers, who are specialized officers experienced in the risks of delinquency. These officers advise on urban planning issues and the development of the Secured by Design initiative, which support the principles of "designing out crime" by use of effective crime prevention and security standards for a range of applications. ²¹²

In the case of France, the well-known urban problems this country faces have also led to implementing urbanization as a tool for the prevention of delinquency and urban violence, with similar official reports on the subject in Britain. Moreover, since 1995, the French legal

planningpolicystatement1.pdf (last visited Sept. 29, 2011) (this PPS replaces *Planning Policy Guidance (PPG) Note 1, General Policies and Principles*, published in February 1997) (U.K.).

^{211.} SAFER PLACES, supra note 206.

^{212.} See generally The Official U.K. Police Flagship Initiate Supporting the Principles of 'Designing Out Crime', SECURED BY DESIGN (Assoc. Of Police Chiefs), http://www.securedbydesign.com/index.aspx (last visited Sept. 29, 2011) (the official UK Police flagship initiative supporting the principles of "designing out crime") (U.K.).

^{213.} See Alain Bauer & Xavier Raufer, Violences et insécurité urbaines [Urban Violence and Insecurity] (PUD, Paris, 9th ed., 2005).

^{214.} See generally DIDIER PEYRAT, HABITER COHABITER. LA SECURITE DANS LE LOGEMENT SOCIAL [TO LIVE IN A COOP. SAFETY IN SOCIAL HOUSING], (Ministry of l'équipement, des transports et du logement, 2001), available at http://lesrapports.ladocumentationfrancaise.fr/BRP/024000101/0000.pdf (last visited Sept. 29, 2011) (Fr.).

system incorporates what can be defined as an evaluation on the impact of specific developments.²¹⁵

In Spain, an addition to the Catalan regulation was introduced in 2006, specifying the content of the Social Memory. The new regulation states that "an evaluation of the impact of proposed urbanization," with regard to "gender, should also form part of the Social Memory, as well as, social groups who need specific attention, including immigrants and senior citizens," so that "planning decisions, based on information about social realities, can contribute to the development of equal opportunities between men and women, as well as, favoring other groups in need of protection." This evaluation must contain a diagnosis of the situation and an evaluation of the social and gender impact of the urbanization plan. It must justify, among other aspects, the coherence of the proposed plan with the needs of men, women and of other groups with regard to various parameters, including "security and the use of the urban fabric." 218

^{215.} CODE CIVIL [C.CIV.] art. L111-3-1 (Fr.) (modified by Loi 2007–297 of March 5, 2007, relating to the prevention of delinquency).

^{216.} Regulations of the Town Planning Law art. 69 (B.O.E. 2005, 305) (Spain) (stating the Social Memory is a specific element of Catalan comprehensive plans which must take into account several elements and include explanations for alternatives decided).

^{217.} Id.

^{218.} Id.