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Discretionary Judgement in Local Planning Authority Decision Making: Screening Development Proposals for Environmental Impact Assessment

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ABSTRACT *Screening is a critical decision-stage in the Environmental Impact Assessment (EIA) process and involves the determination of whether or not a development proposal will require EIA. This decision requires a discretionary judgement on whether the development has the potential to cause 'significant environmental effects', and consequently there is potential for diversity to exist in formal requests for EIA. Drawing upon a comprehensive survey of Local Planning Authorities (LPAs) in England and Wales, this paper explores the characteristics of LPA screening decision making since the introduction of revised EIA regulations in March 1999. The paper starts with a theoretical overview of rationality, decision making and planning theory, followed by a brief review of the regulatory context of EIA screening. The research approach is then outlined and the survey findings are presented, including a detailed consideration of organizational and individual level analyses set within the context of planning theory judgement debates. Comparisons with other European countries are briefly made, before drawing conclusions and recommendations.*

Introduction

Despite the increase of central government influence in shaping spatial policy during the 1990s, the UK planning process remains principally a *discretionary* process (Tewdwr-Jones, 1999); local planning authorities' policy and decision-making capacity has been informed (rather than imposed or dictated) by a combination of legislation, government guidance, and case law interpretations that serve to set the boundaries for the exercise of discretionary judgement.

Environmental Impact Assessment (EIA) is one example of a planning function governed by a regulatory framework within which discretionary judgement is entrenched. EIA is not merely a tool designed to gather environmental information to inform project authorization decision making, but is more fully described as a

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'decision process', e.g. involving decisions surrounding project screening (to determine the need for EIA), scoping (to determine the focus of the assessment), through to the consideration of alternatives, impact prediction, and mitigation (Glasson *et al*., 1999). Within this process, decision-making activity is increasingly recognized as not simply involving the use of objective 'scientific' information in an instrumentally rational manner, but rather as being characterized by value judgements and subjectivity (Lawrence, 1993; Beattie, 1995; Kontic, 2000). As Wilkins (2003) states, "from screening development projects to final decision making, discretion has a prominent role in determining the methodological and practical results of the process" (p. 401).

Reflecting the route chosen by the UK government to implement the European Union EIA Directive,[1] EIA has now been an established procedure in the town and country planning process for over 15 years, with around 70% of all EIAs falling under the planning regulations (Wood & Bellanger, 1999; Glasson *et al*., 1999). Local Planning Authorities (LPAs) are critical stakeholders in the EIA decision-making process, not only via their role as the competent authority, but through screening decision making to trigger EIA where significant environmental effects are likely, and also through influencing the nature and extent of the information and analyses conducted during the assessment process (Wood *et al*., 2005).

Despite the central importance of decision processes within EIA, limited attention has been given to decision theory when researching EIA practice (Krønøv & Thissen, 2000; Weston, 2000a; Cashmore, 2004). This paper seeks to enhance understanding of the nature and characteristics of discretionary judgement in relation to one component of LPA decision making, namely the statutory requirement to 'screen' major development proposals to determine the need for EIA. Drawing upon a comprehensive survey of local authorities in England and Wales, the emphasis is upon an analysis of screening activity and decision outcomes, but also more specifically upon contextualizing the screening decision process within planning theory judgement debates. The paper therefore starts with an overview of the theoretical treatment of rationality and decision making in planning theory, followed by a brief review of the regulatory context of EIA screening. The research approach is then outlined and the survey findings are presented, including a detailed consideration of organizational and individual level analyses set within the context of planning theory. Comparisons with other European countries are briefly made, before drawing conclusions and recommendations for future practice.

Theoretical Context: Rationality, Decision Making and Planning Judgements

In considering the exercise of discretionary judgement in planning, the justification and legitimacy of decisions are critical factors that lead inexorably towards questions surrounding the notion of rationality. Rationalism, with its emphasis on logical reasoning (as opposed to intuitive or emotive reasoning) continues to be a potent ideal in planning (Allmendinger, 2000a). As Rydin (2003) notes, "central to the legitimacy of environmental planning is the idea that it is a rational process, pursued in the public interest using intelligence and knowledge, and grounded in broad-based acceptance" (p. 3).

During the 1960s and 1970s the theoretical basis of planning was dominated by systems thinking and rationalist behavioural theory. The foundations of the rational or 'synoptic' planning model typified in the work of McLoughlin (1969) and Faludi (1973) draw heavily on the sociological theory of Max Weber (1864–1920), who sought a form of bureaucracy and rational decision making that clearly separated facts from values. Thus, Weber emphasized a distinction between fact-based *formal* rationality (the most effective and efficient means of achieving a given end) and *substantive* rationality (i.e. ends and their evaluation) involving political decision making, values, ideals and morals (Darke, 1985). In rational planning, therefore, ends are given and planners should act impartially to meet these ends in an efficient and value free manner (i.e. via formal procedures involving the consideration of alternatives, systematic analysis and objective evaluation), with the technical knowledge of the planner serving to secure legitimacy.

The requirement to separate means and ends (and even to identify clear ends) coupled with the exclusion of political, social and personal influences upon decision making, have meant that the synoptic planning model has been strongly criticized for providing an unrealistic picture of planning practice. In particular, a powerful challenge to conceptions of planning as a technical, instrumentally rational activity has been presented by the communicative school of theory. Whilst forms of communicative planning vary and have different emphases (Healey, 1997), a basic shared tenet is that planning follows a rationality, but one which "reflects the interplay and negotiation of interest, statuses, and meanings" (Baum, 1996, p. 369).

Drawing heavily upon the work of Habermas (1984), communicative theorists emphasize other ways of knowing or thinking that can be articulated through free and undistorted discourse. Thus, in communicative rationality, dialogue is not dominated by any individual party and the aim is for agreement and mutual understanding, enabling the development of a more rounded and effective socially constructed rationality that incorporates values and norms that would not be considered by purely instrumentalist analyses. In this way, discretionary decisions developed within the bounds of communicative rationality are legitimized via broad-based participation and agreement, in contrast to the synoptic planning model that provides a procedural basis for legitimizing decisions and which emphasizes the dominance of instrumental 'scientific' knowledge above other modes of reasoning.

As with the synoptic or rational model, communicative planning theory is strongly normative, describing an idealized decision-making process as it should be rather than necessarily how it takes place in practice. In particular, following the work of Foucault, communicative planning has been attacked for its weaknesses in capturing the influence of power (Flyvbjerg, 1998) and for placing an over-emphasis upon communicative events (e.g. public meetings) at the expense of capturing the importance of non-communicative processes and actions: "communication is part of politics, but much of politics takes place outside communication" (Flyvbjerg & Richardson, 2002, p. 59)

In the face of what has been labelled a theory-practice gap (Alexander, 1997; Allmendinger & Tewdwr-Jones, 1997; Harris, 1997), in the past decade there has been renewed interest in pragmatic planning theory. The neo-pragmatist movement has links with the communicative school in that it also emphasizes the need for discourse and socially shared understanding, but importantly the pragmatists refute the

requirement for universal consensus as a basis for planning, whilst simultaneously rejecting the existence or necessity of retaining a rigid dualism between facts and values. Indeed, Harrison (2002) questions whether communicative planning theorists have made correct use of Habermas, "who clearly understands the necessity of instrumental reasoning within spheres of human activity requiring purposive-rational action, even while he fears the intrusion of this form of reasoning into all areas of life" (p. 164).

Pragmatists argue that the transitions between different types of rationality and reasoning are essentially fluid, contingent on circumstances, and draw upon practical and experiential judgement. The need to distinguish between purposive rational actions (including instrumental and strategic action) and communicative action in planning is rejected by the pragmatists (Harrison, 2002). In addition, the complex and dynamic interactions between means and ends is more fully acknowledged, in contrast to the notion of ends that are set in advance (as in the synoptic model) or ends that emerge through deliberation (as in the communicative model). Recognizing the importance of experience, attitude, bias, and socio-cultural influences on decision making, the pragmatists argue for an 'ends in view' approach involving hypotheses that are open to reformulation, and that serve to direct action under the conditions of uncertainty that typically characterize planning processes (Harrison, 2002).

As was the case with the communicative school, the pragmatist perspective has been criticized for limitations regarding the embedded nature of power, including the capacity of the planner to filter and / or shape perceptions of issues by 'hiding behind the mask' of technical expertise and professional protocol (Hoch, 1996). This 'power blindness' is tackled in part by Forester (1993) via the promotion of critical pragmatism which encourages planners "to be open about their 'gate keeping' power roles, reflect upon bias and prejudices and be inventive about new processes" (Allmendinger, 2002b, p. 15).

The critical pragmatist perspective points to a more individualistic dimension of discretionary decision making that can be conceptualized further by drawing upon frame-critical policy analysis (Rein & Schön, 1993). 'Framing' is a phrase that has been used to describe "... the integration of facts, values, theories and interests in decision settings. It acknowledges that decisions are formulated on the basis of judgement and values, in addition to technical criteria, and that such decisions vary between individuals and situations" (Tewdwr-Jones, 1995, p. 173). A planner's decisions are influenced by 'pre-packaged' personal views developed outside practice (reflecting, for example, a person's upbringing, culture, education), and learning from social and professional 'relational webs' reflecting professional experience, organizational and structural influences, and politics. Therefore, framing provides a body of work in planning theory that can help understand the differences in thought processes and the formulation of strategies, and which can cast light upon the tactics that may be relevant to the organizational setting of decision making.

Regulatory Context: The Screening Process in EIA

The premise that EIA should be carried out where a development proposal has the potential to cause 'significant environmental effects' is a fundamental concept that underpins EIA regulatory systems across the globe. As has been noted, 'screening' is the term used to describe the process employed to establish whether or not a

development proposal will require EIA, and as such it represents a critical decision stage. Effective screening serves to ensure that where significant environmental effects are likely, EIA is triggered and project authorization decision making is subsequently informed by an understanding of the likely environmental consequences of development action, in addition to presenting the opportunity to facilitate improved management of environmental effects through mitigation.

In England and Wales, government guidance in the form of Circular 02/99 highlights the central role of the concept of significance in screening decision making, and states that "... whilst only a small proportion of developments will require EIA, it is stressed that it is not discretionary. If significant effects are likely EIA is required" (DETR, 1999, p. 9). Despite this emphasis, paradoxically, discretion clearly does play a role in screening in terms of the judgements involved in the determination of what is 'significant'. The implicit exercise of discretionary judgement in relation to the identification of significant effects during screening decision making has clear potential to lead to diversity in the requirement for EIA, and raises serious challenges for ensuring consistency of application of the regulations, and by inference land-use planning, environmental protection and equity.

Since coming into force, the European Commission has received a considerable number of complaints relating to the operation of the amended EIA Directive, and provisions under Article 4(2) with regards to screening have been identified as the most frequent source of *actual* infringements within the European Union (IAU, 2002). Research on the actual operation of screening decision making is therefore clearly of practical relevance as well as academic interest, although surprisingly little research has yet been conducted into how screening systems are operating within member states. Rather, the great majority of research into EIA decision making has focused upon the project authorization stage, to the detriment of our understanding of earlier decision stages in the overall EIA process (Weston, 2000a). During the initial period of formal EIA regulation in the UK, some evidence was found to suggest inconsistencies in screening approaches employed by LPAs (Wood & Jones, 1992) and more recently Weston (2000a) has explored the basic characteristics of screening under the original 1988 EIA regulations. However, since this time the introduction of amendments to the EIA Directive, the subsequent implementation of revised UK Regulations, plus the evolution of case law, have all served to change the context for screening decision making and it remains the case that little attention has been given to exploring the similarities or diversity that may now exist in LPA screening practice.

This paper seeks to redress this through providing a detailed, empirically informed, examination of screening decision making in England and Wales under the Town and Country Planning (Environmental Impact Assessment) Regulations 1999-SI 1999 No 293. These Regulations serve to implement the amended EIA Directive for development which occurs under the Town and Country Planning Act 1990. As with the previous regime, in screening a development proposal an LPA must first determine whether the project falls within Schedule 1 or Schedule 2 of the Regulations, which essentially mirror the project lists provided by Annex I and II of the Directive.[2] Within England and Wales, EIA is mandatory for all Schedule 1 projects, whilst for Schedule 2 projects EIA is only required where development is likely to have 'significant environmental effects'. The LPA must provide a screening opinion for all Schedule 2 development proposals either in response to a request

from a developer, or in a situation where the LPA receives a planning application for a Schedule 2 project that is not accompanied by an environmental statement. The LPA must then produce the screening opinion within three weeks, although this period may be extended subject to agreement with the developer.

In coming to a screening opinion LPAs must have regard to the exclusion thresholds contained in the Regulations and to the screening criteria in Schedule 3, which are a restatement of Annex III of the EIA Directive. In addition, the indicative thresholds in Circular 02/99 and the general criteria for assessing significance provided in paragraph 33 of the Circular must be taken into consideration. The LPA is not required to undertake consultation in coming to their screening opinion, but in accordance with the amended Directive it must place a statement on the public record that indicates the reasons for their screening determination. If a developer disagrees that an EIA is required, then they may seek a screening direction from the Secretary of State. Finally, Permitted Development Rights are withdrawn for projects requiring EIA and cannot be regained before screening is carried out (Weston, 2000b).

Research Approach

To determine the nature and characteristics of screening decision making under the Town and Country Planning (Environmental Impact Assessment) Regulations 1999, a questionnaire survey was distributed to every LPA in England and Wales during August and September 2002. The questionnaire comprised a variety of yes/no, multiple-response (including Likert scale-type questions), and free response questions designed to establish:

- *basic facts* (e.g. the amount of screening activity occurring, the proportion of decisions that lead to EIA);
- *general* procedures and perceptions of screening practice (e.g. the main consideration used in screening decision making; constraints to screening); and
- *specific* details of the screening approach used for the most recent project that the LPA was involved in.

The request that LPA officers provide answers relating to their last screening decision was felt to be appropriate in the sense that the responses have a greater likelihood of being a close reflection of the actual practice employed, as opposed to providing what may be perceived to be an 'appropriate' response to a survey question that relates to generic screening decision making. However, the variety of project types covered by the responses means that any analysis or comparison by project category is not meaningful.

The response rate for the survey was 26.2%, incorporating a total of 11 responses from County LPAs, 77 at the District level, with 19 for Unitary Authorities. The response rate across the different types of LPA is comparable, being 27.5% for County LPAs, 25.7% for the Districts, and 27.9% for Unitary Authorities. The overall response rate is typical of postal questionnaires of this nature and the number of actual responses (107 in total) is sufficient to facilitate meaningful empirical analysis. The responses are drawn from LPA officers working in development control practice representing a mix of rural and urban authorities scattered across

England and Wales. A diverse range of EIA experience is evident within the sample, from those with very limited previous exposure to EIA through to those with considerable experience, and overall the responses are considered to provide a representative picture of screening practice.

As a starting point, the data analysis focused upon exploring the pattern of responses across all LPAs and also within the three levels of LPA organizational structure, i.e. County, District and Unitary Authority. The second major strand of the analysis explores the characteristics of screening decision making within and between LPAs by dividing the responses into three categories based around the proportion of Schedule 2 screening decisions within an LPA that historically have lead to a requirement for EIA. Specifically a typology of EIA screening 'frames' is defined by the following boundaries:

- 'Precautionary' where more than 50% of Schedule 2 Screening Decisions have led to EIA (21 LPAs);
- 'Moderate' where between 26–49% of Schedule 2 Screening Decisions have led to EIA (56 LPAs);
- 'Minimalist' where less than 25% of Schedule 2 Screening Decisions have led to EIA (20 LPAs).

Results and Analysis: LPA Screening Decision Making in Practice

Levels of LPA Screening Activity

The survey revealed evidence of the widespread application of screening since the introduction of the amended EIA Regulations (Table 1), although at the time of the survey some 9% of LPAs indicated that they had yet to initiate a formal screening process for a single development proposal. In terms of the actual number of screening decisions (Table 2), around 50% of LPAs have screened less than five development proposals, with the majority of District LPAs falling into this category.

Given the increased number of project categories now contained in Schedule 2, it might have been anticipated that screening would now be an almost ubiquitous activity amongst LPAs. However, on an annual basis, LPAs in England and Wales consider well over 500 000 applications for planning consent, and whilst EIA activity has increased under the 1999 Regulations (Figure 1), EIA cases still make up less than 0.1% of this total (Weston, 2002). It is also the case that developers and/or their consultants may not seek a formal screening opinion from the LPA, choosing instead to conduct their own screening and supply an Environmental Impact Statement

Table 1. LPA involvement in screening under the 1999 EIA Regulations

Undertaken Screening?	No. of LPAs (n = 107)	LPA (%)	County (%) (n = 11)	District (%) (n = 77)	Unitary(%) (n = 19)
Yes	97	90.7	90.9	89.6	94.7
No	10	9.3	9.1	10.4	5.3

Table 2. Level of screening activity under the 1999 EIA Regulations

Number of Screening Decisions	No. of LPAs (n = 97)	LPA (%)	County (%) (n = 10)	District (%) (n = 69)	Unitary (%) (n = 18)
1 to 5	49	50.5	10.0	64.0	22.2
6 to 10	16	16.5	10.0	16.0	22.2
11 to 20	9	9.3	20.0	4.3	22.2
21 to 40	13	13.4	30.0	8.7	22.2
Over 40	8	8.2	30.0	4.3	11.1
Don't know	2	2.1	0.0	2.9	0.0
Total	97	100	100	100	100

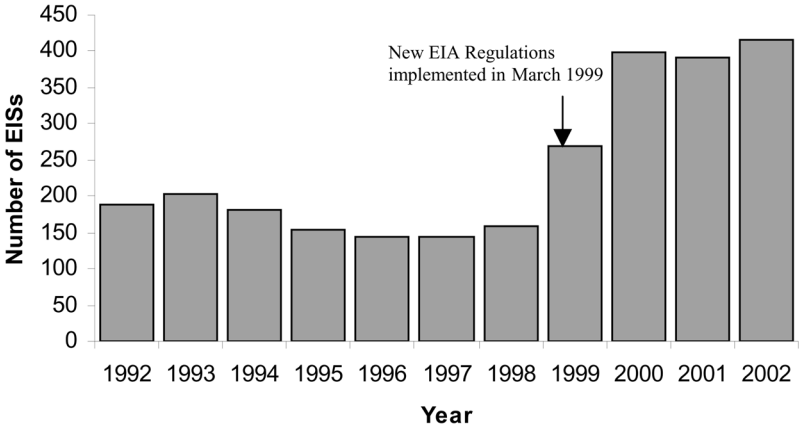

Figure 1. ES submissions under the Town & Country Planning EIA Regulations. *Source:* (ODPM, 2003)

(EIS) to accompany the planning application where appropriate. Indeed, in a survey of environmental consultancies carried out in parallel to this study, of 149 responses over 50% indicated that they had screened a proposal on behalf of a developer, effectively bypassing the LPA (Wood & Becker, 2003).

Research on screening decision making performed under the original 1988 EIA Regulations showed that 5% of the LPAs surveyed were actively seeking to avoid the need for EIA if at all possible (Weston, 2000a). The findings from the current survey show that this approach no longer prevails under the 1999 EIA Regulations. This change in attitude has almost certainly occurred partly as a consequence of recent case law, which has served to reinforce how seriously the courts take the issue of formal compliance with the procedural requirements of the Regulations. A case in point is the so called 'Chicken Run case' (Tromans, 2002), whereby planning permission for a large egg production unit was quashed on the basis of a failure to screen the development. In ruling on the case Mr Justice Sullivan (*R vs. South Cambridgeshire District Council*) stated that:

> It is not appropriate for a person charged with making a screening opinion to start from the premise that although there may be significant impacts, these can be reduced to insignificance as a result of the implementation of conditions of various kinds. The appropriate course in such a case is to require an environmental statement setting out the significant impacts and the measures which it is said will reduce their significance. (Tromans, 2002, p. 29)

LPA Approaches to Screening Decision Making

The survey revealed some evidence that changes to procedures invoked by the 1999 Regulations are leading to a more considered and transparent approach to screening decision making. For instance, under the 1988 EIA Regulations, previous research found that 25% of LPA respondents automatically required EIA for *all* Schedule II projects (Weston, 2000a). In contrast, this figure has now fallen to just 5% of respondents. This substantial reduction is perhaps indicative of the 'changing culture' of EIA in the UK (Weston, 2002), linked to the requirement under the 1999 EIA Regulations that there must be a clear written statement of the screening opinion placed on the planning register, in addition to the potential threat of legal challenge to a decision.

Project-based screening thresholds are widely used by LPAs, with over 81% of respondents indicating they had been considered in formulating their most recent screening opinion. When requested to identify the single most effective approach to screening, 36% of LPAs identified thresholds as the favoured method. Thresholds appear to be particularly popular in LPAs with more limited screening experience; nearly 60% of LPAs that have screened less than five development proposals mark thresholds as their main consideration, whilst this falls to 33% for LPAs with greater experience.

Given that LPAs have just three weeks to come to a screening decision, the ease and speed of application of thresholds is one factor noted by planning officers in accounting for their popularity. The consistency and certainty provided by thresholds was also frequently cited. As one respondent put it: "Indicative thresholds are the most effective approach predominately because they give certainty and justification to a decision. They enable a clear demonstration to the applicant of the rationale behind the request for an EIA". The popularity of thresholds is further demonstrated in that 44% of LPAs specified that it was their *main* consideration in decision making and that EIA should only be done if the project lies above the indicative thresholds provided in Circular 02/99.

Whilst the thresholds are clearly an important factor in influencing the screening decision, some evidence was found to suggest that LPAs do not apply them in a rigid fashion, instead favouring a more considered approach. For instance, LPAs note that "thresholds provide a starting point for professional judgement" and that "the thresholds are not prescriptive, thus professional judgement is considered integral in deciding whether an EIA is required". This approach to screening is in line with government guidance that indicates that consideration of the potential for significant environmental effects should be made on a case-by-case basis that relates to the relationship between the specific project and the receiving environment. Thus, the fact that a project lies above or below a threshold is not in itself sufficient

justification for determining a screening opinion (Weston, 2000b); as Circular 02/99 states: "The fundamental test to be applied in each case is whether *that* particular type of development and its specific impacts are likely, in *that* particular location, to result in significant effects on the environment" (DETR, 1999, paragraph 44).

The importance of professional judgement in screening is clear from the survey results, with 93% of LPAs indicating that they used professional judgement in coming to a screening decision for the last project considered, with little variety in this level across type of LPA organization. Professional judgement also appears to be more highly favoured as the most effective approach amongst the more experienced LPA screeners (i.e. those who have screened more than 5 EIAs), where 33% noted it to be the most effective approach, in contrast to 19% for those who have screened fewer than five development proposals.

The survey findings also revealed that despite the fact that consultation is not a statutory requirement under the 1999 EIA Regulations, consultation is often an important part of LPAs screening decision making that feeds into professional judgement on the case under consideration. As one respondent explained: "It is a combination of the professional experience culled from a number of sources both from within the council and from the statutory consultees which helps to identify the likely impacts and whether these are significant enough to require an EIA set against the regulations and the circular".

Informal discussion within an LPA is likely to be the quickest and easiest approach to consultation and is an effective means of capturing local knowledge of the site and surrounding environment. In total, 68% of LPAs indicated that they had consulted internally on the last screening decision, although the figure for County LPAs is considerably lower at 50% (Table 3). Very little evidence of public consultation was found, and this will partly reflect the restricted amount of time available for screening decision making.

The survey found that some 27% of LPAs used a checklist for screening the last development proposal, with remarkably little diversity according to organizational type. However, only 2% of LPAs regarded checklists as the single most effective approach to screening. Checklists can be helpful for making sure that a full range of factors are considered in screening, but are limited in the sense that by design they are essentially generic and can never be fully commensurate with the contextual nature of individual development proposals. Thus, it may be the case that some LPAs are using checklists to ensure consistency of their decisions and as a quality assurance aid to make certain that all potential dimensions of the possibility for

Table 3. LPA consultation during screening decision making

	LPA (%) ($n = 97$)	**County (%)** ($n = 10$)	**District (%)** ($n = 69$)	**Unitary (%)** ($n = 18$)
Consultation within own organization	68.0	50.0	69.6	72.2
Consultation with other organizations	44.3	50.0	39.1	61.1
Community consultation	4.1	0	4.3	5.6

'significant environmental effects' are taken into consideration prior to formulating the screening opinion.

Identifying Significant Effects: Project Characteristics and Impacts

So far the analysis and discussion have served to outline the general character of the main approaches to screening under the 1999 EIA Regulations and have highlighted the importance of professional judgement, thresholds and consultation. To gain further insights into the judgements made regarding the determination of whether there are likely to be significant effects on the environment associated with a development, LPA officers were asked to indicate the relative importance of a variety of project characteristics and impact types that were given consideration during the formulation of their decision. Table 4 provides details of the importance of issues identified by LPA officers with regard to their last screening decision.

The restricted timeframe available for decision making coupled with the limited existence of any detailed analysis on potential impacts and baseline conditions at the screening stage of EIA means that LPA officers are obliged to exercise judgement in what is typically an uncertain and 'information poor' environment. Indeed, the two key constraints on screening identified by LPAs were a lack of resources (45%) and timeframe constraints (44%), the former being of particular concern to District and Unitary LPAs. In such challenging decision circumstances it is likely that individuals will make use of heuristics or 'short-cuts' to enable them to identify the need for EIA. Thus, in Table 4 the most important factors identified by LPAs are the *size and scale* of a project, with nearly 87% of LPAs classifying these as important or very important, with *the nature of the project* and *proximity to sensitive environmental receptors* also rated highly. It is likely that these factors are being used by LPA officers as proxies for the potential occurrence of significant environmental effects. Indeed a clear link can be made between the size/scale and nature of a proposal and the indicative thresholds contained in the Regulations and associated government guidance.

Nevertheless, it seems that more specific consideration *is* given to the potential for impacts upon the receiving environment, with between 60–65% of LPA decisions rating potential impacts upon ecology, traffic, emissions (noise, air, odour etc) and landscape impacts as important or very important factors in their most recent screening opinion. In contrast, socio-economic impacts appear to exert much less influence on a screening decision, e.g. 42% rate economic impacts as being of little or no importance. This is perhaps unsurprising given the emphasis in the Regulations and associated guidance upon specifically environmental impacts. Similarly the responses appear to suggest that LPAs are not unnecessarily influenced by potential public controversy or political concerns, a position clearly in line with Circular 02/99 which indicates that such factors are not relevant to the determination ''unless the substance of the opponents' arguments reveals that there are likely to be significant effects on the environment'' (DETR, 1999, p. 13).

As a consequence of amendments to the EIA Directive, the 1999 EIA Regulations incorporate a requirement that the assessment of a project's likely significant environmental effects consider both cumulative effects and the risk of accidents. It seems that cumulative effects are now broadly taken into account with over 45% of

Table 4. Importance of project characteristics and impact types in screening

Issue ($n = 97$)	Very important (%)	Important (%)	Moderately important (%)	Of little importance (%)	Not important (%)	No response (%)
Nature of project	42.3	32.0	15.5	5.2	0.0	5.2
Proximity to receptor	44.3	33.0	12.4	5.2	3.1	2.1
Size/scale of project	46.4	40.2	10.3	3.1	0.0	0.0
Ecological impacts	32.0	30.9	24.7	10.3	1.0	1.0
Traffic / access impacts	33.0	32.0	20.6	12.4	1.0	1.0
Emissions	30.9	30.9	22.7	6.2	5.2	4.1
Controversy/concern	9.3	15.5	27.8	30.9	11.3	5.2
Social impacts	5.2	21.6	37.1	26.8	4.1	5.2
Economic impacts	6.2	23.7	22.7	27.8	14.4	5.2
Landscape impacts	25.8	35.1	20.6	12.4	4.1	2.1
Cumulative impacts	19.6	25.8	21.6	17.5	11.3	4.1
Risk of accidents	5.2	10.3	26.8	33.0	17.5	7.2
Other	3.1	1.0	2.1	4.1	9.3	80.4

screening decisions highlighting this impact dimension as important or very important, perhaps as LPAs relate the potential impacts with their knowledge and experience of the baseline conditions in the area. With regard to risk of accidents, from Table 4 it seems that this has not been considered as a major issue, with 50% indicating that it was of little or no importance in their screening decision. This finding is largely explained by the character of the particular projects for which LPA answers are recorded, which on the whole do not pose any specific risk. For a limited number of projects (e.g. waste transfer stations and developments upon contaminated land) risk was identified as a major consideration with implications for the screening outcome, but this detail is lost in the aggregate analysis presented in Table 4.

Splitting the data into two groups, based upon whether or not EIA was subsequently required for the development proposal in question, facilitates insights on the relative importance of issues and project characteristics in shaping the final outcome of a screening decision (Figure 2).

In Figure 2 there is very little difference between the relative importance of traffic, economic impacts, and controversy between cases that subsequently required/did not require EIA, suggesting that as a general rule these issues may not be the critical factors in the screening outcome. There is some marginal increase in the perceived importance of the proximity of sensitive receptors, ecological impacts, and risk for cases requiring EIA. However, the difference is most striking when looking at the nature of the project, emissions, landscape impacts and cumulative impacts, implying that these factors are potentially amongst the most important in shaping the screening outcome. It can be seen that the proportion of LPAs marking size/scale of the proposal as important or very important is remarkably similar in both situations. This finding serves to reinforce the notion that project size/scale is

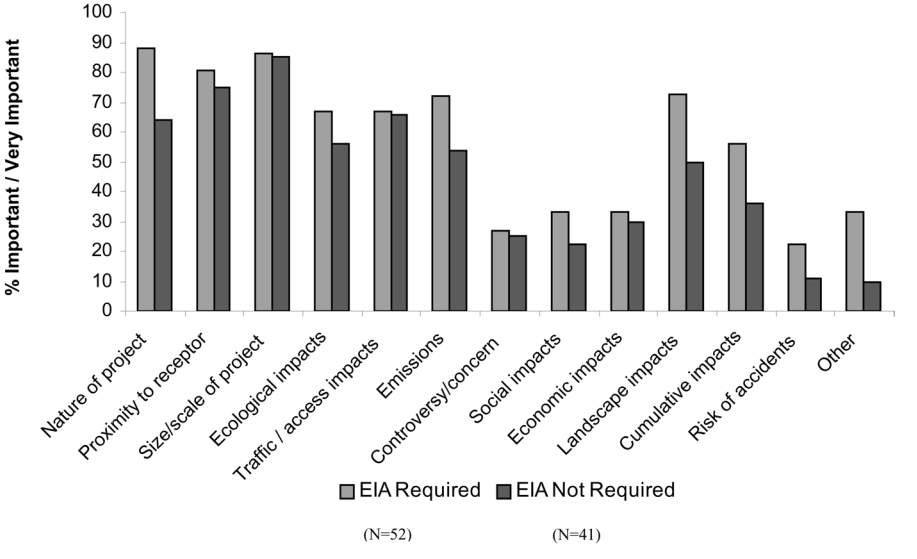

Figure 2. Comparison of importance of issues in cases requiring / not requiring EIA

strongly linked to related indicative thresholds, and that it can serve to act as a criterion that operates in both an inclusive or exclusive fashion in the decision process.

Contextualizing Screening Practice within Planning Theory: From the Organization to the Individual

The survey has revealed clear evidence of the exercise of discretionary judgement operating within the structural influences or boundaries established by the EIA regulations, guidance and norms developed through case law. However, the potential adversarial nature of the decision-setting means that LPAs are eager to establish a clear legitimacy and logic behind their determinations, highlighting once more the central importance of rationality considerations.

Whilst not a requirement of the EIA regulations, consultation with other professionals during screening is valued by the LPAs and may partially be undertaken as a means to enhance legitimation, although the limited extent of this consultation is far from the theoretical ideal of communicative rationality. By restricting the consultation base, LPA officers are exercising a 'gate keeping' power role, although in the face of severe time constraints imposed by the regulatory framework this seems pragmatic rather than symptomatic of any Machiavellian intent or induced through an innate fear of public challenge to the planners' authority.

Nevertheless, the primacy attached to expert knowledge, the ability of LPAs to recognize and consider individual technical impacts (landscape, ecology, traffic etc), along with the use of thresholds and other 'objective' approaches (e.g. checklists), all serve to suggest that screening may in part be conceived of as an instrumentally rational decision process. However, the exercise of judgement and interpretation in the face of contextual considerations indicate that the separation of facts and values in screening is not sufficiently clear cut to be characterized adequately by the synoptic planning model. Indeed, in recognition of the complexities of planning decision making in practice, Faludi (1973) advances the use of routinization and the use of heuristics or short cuts, sequential decision making, and 'mixed scanning' (Etzioni, 1967) in which the decision maker quickly scans options and identifies a preferred strategy to explore in more detail. Whilst facilitating a closer approximation of screening practice, such approaches retain instrumental considerations at the core and represent "modest extensions to the rational planning model" (Faludi, 1996, p. 71) which still fundamentally assumes that decision makers will have objectives or desired *ends* in mind. In screening decision making it is questionable whether planners have such clearly defined ends in mind either when deciding whether or not to act but also prior to interacting with others in a consultative or negotiative capacity (Tewdwr-Jones, 2002). As Forester (1996) notes "... planning problems typically need to be reformulated or selectively defined while they are being addressed, so in many practice settings, the time of rationally calculating the best means to well defined ends will simply never come" (p. 247).

In this respect the pragmatic model of planning practice in which decision makers hold 'ends in view' appears more applicable to screening, with planners being aware of the procedural implications of a decision and the opportunities and constraints

that this presents. In responding to context, planners are drawing upon a combination of professional judgement and experience, with the screening decision process exhibiting elements of techno-rational determinations, consultative processes, and substantive rationality all embedded within each other and operating simultaneously.

The preceding analysis has served to provide a detailed picture of screening decision making based around the LPA as an organizational unit, contextualized within theoretical models relevant to planning judgement considerations. However, the analysis has not fully addressed the diversity of practice that may exist within and between organizations, particularly differences that may be important in further characterizing and understanding individual approaches to screening decision making. This more individualistic dimension of discretionary decision making has received limited attention in recent planning theorizing (Tewdwr-Jones, 2002), but is one in which an existing body of theory in the form of frame critical policy analysis (Rein & Schön, 1993) may have considerable potential merit as an approach for further exploring the characteristics of screening decision making, particularly given the role of professional judgement, technical criteria (e.g. thresholds), plus the highly contextual nature of significance determinations.

Institutional, individual and political contexts all serve to influence the development of frames which can subsequently affect the procedures employed by planners, the parties they choose to involve, and the actual issues that form the focus of decision making (Kaufman & Smith, 1999). However, the complex mix of factors which underpin the evolution and development of specific frames (e.g. experience, education, politics, personal motivation etc) makes their identification inherently problematic (Rein & Schön, 1993; Tewdwr-Jones, 1995). The 'extensive' nature of the research design employed in this paper clearly precludes the use of an 'intensive' ethnographic approach to identifying relevant frames. Therefore, as explained in the methodology, an empirical basis has been used to identify three 'frame-types' (based upon the proportion of Schedule 2 screening decisions within an LPA that historically have lead to a requirement for EIA), namely 'precautionary', 'moderate', and 'minimalist' LPAs.

The terms 'precautionary', 'moderate' and 'minimalist' are used for ease of discussion, and should not be interpreted to imply that they necessarily represent incorrect screening decisions. However, it is argued that the way in which these categories are employed in the subsequent analysis is in the spirit of frame-critical policy analysis, in the sense that the intention is to establish a fuller understanding of 'the relationships between hidden premises and normative conclusions' (Rein & Schön, 1993) in the approaches taken by LPA officers in screening decision making. The results and analysis that follow serve to draw out the most interesting differences that exist between the three frame-types across the range of issues covered in the survey (Table 5).

When the questionnaire responses were analysed on the basis of the three frame-types, no strong trends between the categories were found in terms of the reported use of thresholds and professional judgement. However, with respect to the main approach taken in screening decisions a marked pattern emerges; 15% of minimalists noted the use of thresholds to be the main consideration in screening decision making in contrast to 52% of moderates, rising to 67% of precautionary LPAs.

Table 5. Characteristics of screening for decision makers with precautionary, moderate and minimalist frames

In screening decision making:	Minimalist (%) (n = 21)	Moderate (%) (n = 56)	Precautionary (%) (n = 20)
Professional judgement is the *main* screening approach	60	35	10
EIA should only be done if the project lies above the thresholds	15	52	67
Consultation within own organization occurred	55	70	76
Consultation with other organizations occurred	25	52	43
Uncertainty (baseline conditions, etc) is a major concern	5	38	43
Cumulative impacts are considered important or very important	29	44	67
Compliance with local plan / policy is important or very important	14	35	62
Public controversy or political concern is important or very important	24	18	43
Lack of understanding of the screening process is a major constraint	40	32	29
Lack of time to develop a screening opinion is a major constraint	50	46	33
Lack of other resources is a major constraint	35	48	48

Where professional judgement is considered, the pattern is reversed, with 60% of minimalists, 35% of moderates and 10% of precautionary LPAs indicating that it was the main approach used.

A potential factor that may account for the pattern observed is that the minimalists have greater experience and thus feel more confident in exercising and relying upon their professional judgement in screening decision making. Indeed, it is the case that all of the minimalist LPAs identified have screened more than five projects for EIA, in sharp contrast to the situation for precautionary LPAs, where 70% have screened less than five projects. This 'experience/confidence' hypothesis is perhaps given further support when the data relating to consultation during screening are examined; 76% of precautionary LPA officers undertook consultation within their organization when coming to a screening decision, in contrast to 55% of minimalists, whilst the figures for consultation with other organizations are 43% of precautionary LPAs and 25% of minimalists. However, further scrutiny of the questionnaire responses reveals significant flaws in the 'experience/confidence' hypothesis. For instance, 40% of minimalist LPAs noted that a lack of understanding of the screening process was a major constraint, and when asked to identify the single most effective approach to screening, professional judgement is placed more highly by the precautionary LPAs (at 33%) than it is for the minimalists (at 21%).

As has been highlighted previously, LPAs will draw upon a combination of professional judgement, thresholds and other approaches when formulating a

screening opinion. However, notable differences appear to exist in terms of the style and depth of consideration given to various screening issues by LPA officers associated with the three frame-types identified. Notably, the data in Table 5 seem to suggest that in general, precautionary LPAs place a greater degree of importance upon establishing a clear legitimacy for their decisions and in maintaining the procedural accuracy of their work. This is illustrated by the comparatively high importance attached to the use of thresholds and consultation, but also in that a far greater proportion of precautionary LPAs consider public / political concern to be important in decision making when contrasted with minimalists. Regulatory and policy compliance is also a characteristic, with over 4 times as many precautionary LPAs indicating that this is an important factor in contrast to minimalist LPAs. Finally, Table 5 indicates there also appears to be evidence that precautionary LPAs are more inclined to adopt a 'deeper', more complex consideration of issues that impinge upon EIA when screening, for instance in terms of the attention given to cumulative impacts and uncertainty.

One key reason that may explain the contrasting characteristics of minimalist and precautionary decision making relates to the limited time available for screening. Half of the minimalists noted that lack of time was a major constraint in decision making in contrast to one third of the precautionary LPAs. The fact that the minimalist respondents have undertaken significantly more screening than the precautionary LPAs also may suggest that there is greater development pressure within the boundaries of their LPA and that is serving to generate a high case load for officers, hence serving to reduce the time they may have for screening. In such a situation, the minimalist LPA adopts an approach commensurate with the notion of 'bounded rationality' (Simon, 1976) reducing the number and complexity of the factors considered in decision making and seeking a pragmatic solution that is considered 'good enough' on the basis of intuitive professional judgement. In contrast, screening is a less frequent activity for the precautionary LPAs, who appear likely to display traits of what might be termed reflective practitioner 'theorizing' (Tewdwr-Jones, 1996) involving a deeper consideration of the issues, including whether or not their professional role will be compromised through taking a particular decision.

Discretionary Judgement in Screening: European Convergence or Divergence?

The inherent capacity for discretionary judgement within the UK planning system reveals an implicit tension between flexibility and uncertainty in decision making (Tewdwr-Jones, 1999), a tension that can be identified in the EIA screening process. On the one hand, discretionary judgement engenders flexibility within planning and the ability to reflect environmental circumstances and social values when considering the significance of potential environmental effects. On the other hand, discretionary judgement can make accountability difficult and it has the potential to exacerbate uncertainty for developers and other stakeholders.

From the survey work which underpins the preceding analysis, it is impossible to determine whether the minimalist LPA officers should be more precautionary in their screening determinations and vice versa. However, there is clear evidence of diversity in the nature of approaches to screening and the exercise of discretionary judgement

in terms of whether or not significant environmental effects are likely and hence EIA is required. It seems that the different frames lead LPA officers "... to see different things, make different interpretations of the way things are, and support different courses of action..." (Rein & Schön, 1993, p. 147). By implication, different approaches and interpretations are leading to different courses of action, which raises concerns with respect to the *consistency* of application of the EIA Regulations across England and Wales, although the UK is far from unique in this respect.

Under the principle of subsidiarity, member states have a degree of discretion in terms of the screening procedures to be used as a basis for the identification of significant environmental effects. Consequently, since its inception there has been diversity in the approaches employed by member states for screening Annex II projects under Directive 85/337/EEC (CEC, 1993, 1997; Dresner & Gilbert, 1999; Ladeur & Prelle, 2001). The amendments to the Directive have served to refine the parameters within which screening is performed, and following the adoption of Directive 97/11/EC the majority of the member states have chosen to adopt a screening mechanism that makes use of a combination of both thresholds and a case-by-case approach (Table 6) involving discretionary judgement.

Nevertheless, it is clear that diversity continues to exist across the EU in terms of the broad screening approaches used. In addition, dramatic variation can exist in the levels at which thresholds are set across the member states, e.g. for afforestation projects the Annex II thresholds that serve to trigger mandatory EIA vary from 20 ha in Italy, 30 ha in Denmark, 50 ha in Spain, Ireland and Germany, through to 200 ha in Finland and 350 ha in Portugal. The potential also exists for a project to be subject to EIA on a mandatory basis in one member state, whilst elsewhere it may only require EIA after passing through a case-by-case screening. By implication, within the European Union there exists the potential for issues of consistency to be of concern, both in terms of the extent to which environmental issues may inform project planning, implementation and impact mitigation, but also in the extent to which the opportunity for public scrutiny of environmental considerations is enabled.

Conclusions and Recommendations

Screening is a critical stage of the EIA process and the implications of an inappropriate decision are considerable. Where an EIA is unnecessarily required there will be additional financial costs and delays for the developer, whilst the LPA itself will be likely to expend extra resources in processing a planning application accompanied by an EIA. In contrast, the failure to request EIA when significant environmental effects are likely precludes the benefits of EIA in terms of providing environmental information to decision makers, facilitating the consideration of mitigation measures, and it also means that there will be no opportunity for public scrutiny of the potential environmental effects, a factor that has been of considerable importance in recent court rulings (Tromans, 2002).

The amendments to the regulatory framework for EIA initiated by Directive 97/11/EC have clearly influenced the nature of screening practice in England and Wales. Of particular note is the fact that LPAs no longer appear to be avoiding the need for EIA and that there appears to be some evidence of a more considered and

transparent approach to screening decision making, involving the use of a combination of professional judgement, thresholds and consultation.

Nevertheless, the survey revealed a number of issues that are a cause of some concern. A lack of resources and timeframe constraints are major limitations on effective screening practice, and it is recommended that in marginal cases LPAs seek agreement with the developer to extend the screening decision deadline beyond the three-week period to allow for consultation and the formation of a well considered opinion.

It is also notable that around one-third of LPAs indicated that a lack of understanding of the process and a lack of clarity in the Regulations are key constraints to screening. This highlights an apparent need for the production of further guidance and best practice examples to assist LPA officers, in addition to further training to encourage practitioners to act reflectively in formulating their screening determinations within the parameters of existing government guidance.

Serious challenges remain in terms of achieving consistency of environmental protection and securing the ideal of a 'level playing field' that underpins the EU, whilst maintaining the benefits intrinsic to a discretionary decision process. Using an approach informed by frame-critical policy analysis, this paper has served to demonstrate that considerable diversity of actual screening practice occurs within an individual regulatory system, particularly in terms of the depth and complexity of the issues typically given consideration by decision makers.

Frames serve to influence the way people 'organize' previous experience and knowledge such that it can shape the way individuals interpret a new situation and consequently their decision. However, as Kaufman & Smith (1999) note, "when frames are transferred from one set of circumstances to another, an imperfect match may prompt solutions that do not respond to actual needs or conditions" (p. 165). To limit the problems associated with screening errors, further guidance should seek to raise awareness of the existence of frames amongst practitioners and encourage a frame-reflective approach to screening decision making. Thus, rather than promoting a highly prescriptive process for screening, guidance might encourage LPAs to adapt their approaches and the depth of consideration to each case, reflecting the complexity and sensitivity of the issues. Such an approach would mean that the diversity of screening approaches would remain and would preclude the attainment of a strictly consistent screening system. However, given that the significance of environmental effects is highly context-specific and that it is heavily influenced by the values held by individuals and society more broadly, such an approach is both pragmatic, effective, and reflects the political dimension of land-use planning decision making.

The alternative would be to promote the development and application of further screening thresholds as a means to achieve consistency. Despite their appeal as rational, objective tools, thresholds do not avoid political values judgements; as Weston (2000b) observes "... it is, after all, Government policy that a pig farm in excess of 750 sows should be considered as potentially having significant environmental impacts; it is not science" (p. 29). Further use of uniform thresholds, whether within the UK or across the EU, might serve to provide an illusion of system conformity, but in reality they would lead to inconsistencies in terms of actual

Table 6. Member states screening mechanisms under Directive 97/11/EC (IAU, 2002)

Austria	Screening is based on a combination of thresholds and case-by-case examination. Some thresholds trigger mandatory EIA. Indicative thresholds are used with case-by-case examination, and in sensitive areas the threshold values are usually halved. Exclusion thresholds are also used; new projects or modifications of existing projects that are less than 25% of the relevant threshold do not require EIA.
Belgium (Brussels)	Thresholds for mandatory EIA are set for some project types. Case-by-case examination is also used, sometimes in combination with indicative thresholds. Exclusion thresholds are used for smaller installations.
Belgium (Flanders)	In principle, under the intended legislation, a list of project types/activities (including some thresholds) for which EIA will be mandatory is proposed. A second list will identify activities for which case-by-case examination will be necessary.
Belgium (Walloon)	A system of mandatory, fixed thresholds is employed. Below these thresholds no EIA is required.
Denmark	Annex II projects are screened primarily on a case-by-case basis, using criteria based on Annex III. A limited number of mandatory thresholds exist, and below these thresholds a case-by-case approach is taken. There are no exclusion thresholds.
Finland	Screening is principally carried out using case-by-case examination, with some minor use of mandatory thresholds. No indicative or exclusion thresholds are used.
France	Exclusion thresholds and criteria (both technical, monetary and also in relation to the nature of the proposal) are used. In principle, all projects that are not excluded in this way will require EIA. A simplified EIA procedure is used in some cases where a full EIA is not considered necessary.
Germany	A system of mandatory thresholds is used. Below these levels, additional thresholds are set that distinguish between general and site related screening. For general screening criteria based on Annex III must be examined in full. For site-related screening the thresholds are lower and concentrate on the criteria that relate only to the proposed project site.
Greece	For Annex II projects a mandatory list is used which defines the thresholds and criteria above which EIA is always required. For projects that fall below these limits a simplified EIA procedure applies.
Ireland	Mandatory thresholds have been set for each of the project classes in Annex II. A statutory basis exists to enable a requirement for EIA in cases where a project falls below these thresholds and the Competent Authority considers that significant environmental effects are likely (through reference to Annex III criteria). Exclusion thresholds are not used.
Italy	A list is used to identify Annex II projects for which EIA is mandatory. Other Annex II projects are screened using a combination of thresholds and case-by-case examination. Exclusion thresholds have been set for almost every Annex II project.
Luxembourg	No data available

(*continued*)

Netherlands	For Annex II projects, thresholds are set above which a case-by-case examination takes place (using Annex III criteria). Below the thresholds no EIA is required.
Portugal	Mandatory thresholds are used for screening Annex II projects. Different thresholds apply in sensitive areas. There is no case-by-case screening.
Spain	Mandatory thresholds are used to identify projects for which EIA is obligatory. Other Annex II projects are screened using case-by-case examination combined with indicative thresholds. Exclusion thresholds are not used.
Sweden	Certain project types have a general requirement for EIA e.g. railways, roads, cement manufacture. For other projects, a combination of mandatory thresholds and case-by-case examination is used. There are no exclusion thresholds.
UK	Screening is conducted using a combination of indicative thresholds and case-by-case examination. Exclusive thresholds are set below which EIA is not required (except in exceptional circumstances when the Secretary of State can use reserve powers to require it).

degree of environmental protection achieved, given the variety of sensitivity in biophysical and social environments and the context specific nature of significance issues. By encouraging the development of a frame-reflective practitioner that actively seeks to question the basis of their assumptions and the subsequent implications, and by allowing time for greater consultation, screening will be better matched to the case specific context and is likely to achieve greater legitimacy.

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Notes

1 Council Directive 97/11/EC of March 3, 1997 amending Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment.

2 Under the Directive considerable changes have occurred to the composition of these project lists, with Annex I extended to incorporate 14 new project categories (in conjunction with an extension to 4 existing ones) and Annex II incorporating an additional 8 projects (with an extension to 8 existing categories and the deletion of particle and fibre board production). Changes or extensions to Annex I and Annex II projects have also now been incorporated in Annex II. As a consequence of these amendments, other things being equal, it is likely that Directive 97/11/EC will lead to a greater volume of screening activity throughout the EU.

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