



UK and Italian EIA systems: A comparative study on management practice and performance in the construction industry

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ABSTRACT

This study evaluates and contrasts the management practice and the performance that characterise Environmental Impact Assessments (EIA) in Italy and in the UK. The methodology relies on the investigation of six carefully selected case studies, critically reviewed by referring to EIA and project design information, as well as collecting the opinion of key project participants. The study focuses on the construction industry and on specific key sectors like infrastructure for transport and renewable energy and commercial and tourism development. A main term of reference for the analyses has been established by critically reviewing international literature so as to outline common good practice, requirements for the enhancement of sustainability principles and typically incurred drawbacks. The proposed approach enhances transfer of knowledge and of experiences between the analyzed contexts and allows the provision of guidelines for practitioners. Distinctive differences between the UK and the Italian EIA systems have been detected for pivotal phases and elements of EIA, like screening, scoping, analysis of alternatives and of potential impacts, definition of mitigation strategies, review, decision making, public participation and follow up.

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1. Introduction

The aim of this study was to design, plan and implement a new methodology for the comparison of Environmental Impact Assessment (shortly EIA) systems focused, according to a new perspective that differs from previous similar studies (e.g., Barker and Wood, 1999; Cashmore et al., 2007; Glasson and Bellanger, 2003), on EIA practice and management in the construction industry. This approach is first applied referring to two Member States of the European Union, Italy and the UK, subject to harmonization principles established by EIA Directives 85/337/EEC and 97/11/EC, but strongly differing in terms of administrative, social, cultural and political features. Such diversities are reflected by the EIA systems, one, the Italian, initially centralized and only recently devolved to regional administrations, the other, the British, centred on the key role of the Local Planning Authorities (shortly LPA).

The specific objectives of the study were:

- The establishment of a general framework for the comparative analysis of international EIA systems, assessing to what extent internationally acknowledged good practices are implemented in the two contexts to enhance qualities like practicality, effectiveness, efficiency, transparent communication, identification and engagement of stakeholders;
- The thorough analysis of key similarities and divergences related to management practice, environmental assessment approaches and performance in order to allow transfer of knowledge and of experiences between the two contexts;
- The definition and the prioritization of specific guidelines that might assist subjects, like administrators, professionals and consultants, involved in EIAs.

The research methodology relies on the structured and systematic investigation of six selected case studies, critically reviewed by examining EIA and project design information, as well as responses of key informants to specifically designed questionnaires. The framework for the case study review is provided by internationally acknowledged good practice as well as by drawbacks incurred in EIA practice reported in literature (Barker and Wood, 1999; Cashmore et al., 2007;

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Doelle and Sinclair, 2006; Hartley and Wood, 2005; Wilkins, 2003), like:

- Decision making and management shortcomings due to poor communication, deficient public participation, inappropriate stakeholder information and involvement (especially during critical early stages like screening and scoping), lengthiness and/or ineffectiveness of scoping, inadequate follow-up and monitoring procedures, late commencement of EIA, unconvincing and unrealistic analyses of alternatives, scarce administration and guidance;
- Structural issues, mainly related to the implementation of EIA as a separate administrative and technical process, scarcely connected to the project lifecycle;
- Technical limitations, like lack of measurable indicators and of quantitative impact predictions, and ineffective mitigation measures, but also excessive emphasis on scientific analyses, voluminous, poorly organized and overly technical Environmental Statements (shortly ES).

A further element appraised in the study is the capability of the analysed EIAs to enhance integration with sustainability principles, which should enable a balanced redressing of environmental, social and economic issues (Cashmore et al., 2007; Lawrence, 1997; Wilkins, 2003) and diverse benefits like reduced planning risk and operational costs, reduced operational costs, maintenance of value for money, enhanced reputation and credibility, extended building life and improved viability, lower churn of tenants, and avoidance of penalties and fines (Taylor and Wilkie, 2008).

The research commenced with a review of UK and Italian EIA literatures, as well as of legislative and administrative provisions, in order to understand differences concerning key elements, such as the appointment of the competent and responsible authorities, screening and scoping, environmental components to be considered during impact analyses and mitigation design, temporal and spatial frameworks for EIA processes, procedures for review and decision making, public notification and follow-up (Table 1). The findings of this review

provided also information on specific shortcomings of the two EIA systems. For the UK context these include: the variable, sometimes low, quality of ES; the ineffective management of cumulative or less tangible/secondary environmental effects (Lee and Colley, 1992); limited community consultation and involvement (Hartley and Wood, 2005); the non-mandatory character of scoping, allowing various conceptions and enhancing difficulties (Snell and Cowell, 2006; Wood et al., 2006); the little regard by LPA officers to EIA findings, contrasted by much more space devoted to consultation; performance deficiencies and delays; reduced influence of EIA on planning decision (Wood and Jones, 1997) producing a rise in the number of judicial review challenges to LPA and planning appeal decisions (Weston, 2002); the multiplicity of the legislative framework (Glasson et al., 2005). As to the Italian context, peculiar limitations include: organisational and expertise deficiencies of responsible authorities especially at local and regional level; an inherent complexity, implying long timeframes and lacking in simple and effective guidance, hindered in its development by structural political instabilities (Costantino and Scialò, 2008; Landi, 2009) and fragmented by the introduction of diverse and disjointed regional and provincial procedures (Daini, 2002); the excessive emphasis on technical aspects; the poor consolidation of practice, primarily with respect to key stages like scoping, follow-up and screening; scarce public participation and lack of trust (Del Furia and Wallace-Jones, 2000); poor analysis of cumulative effects (COWI A/S, 2009).

Section 2 describes the research methodology. Section 3 presents an overview of the selected case studies. The outcomes of the study are illustrated in Section 4. Finally, Section 5 discusses the results and provides general conclusions and recommendations for the development of further research, as well as guidelines to assist practitioners operating in the two national contexts.

2. Methodology

The research methodology consisted of three main stages: selection of similar and representative case studies; review through a specifically

Table 1
Basic legislative provisions and general features of the Italian and the UK EIA systems.

Stage	UK EIA system	Italian EIA system
Responsible authority	Local Planning Authority (LPA).	Region (or Autonomous Province) or Ministry of the Environment (MoE).
Screening	Screening opinion provided by LPA when required by the developer. Developer provides information.	Voluntary administrative procedure. Joined verification of preliminary design and EIA.
Scoping	Voluntary phase undertaken by the developer. Developer, Statutory Consultees and LPA discuss and agree the Terms of Reference. Notification of the scoping report.	Voluntary phase carried out collaboratively by the developer and the responsible authority. Not subjected to any form of public notification or participation.
Impact analysis	Broad categories: effects on human beings, buildings and man-made features, land, water, air and climate indirect and secondary effects.	Broad categories of receptors: species and habitats, water, soil and subsoil, biodiversity, flora and fauna, climate, health, landscape, ecosystems, historical and cultural heritage.
Mitigation design	Broad categories: site setting, technical measures, aesthetic and ecological measures.	Precautionary character of EIA. General hierarchy: avoidance and prevention, minimisation of effects, compensation.
Preparation of the ES	Content of the ES specified in the Town and Country Planning regulations. The ES is accompanied by the planning application.	ES clearly structured in its format. Specification of planning, design and environmental frameworks. The ES is accompanied by the definitive design.
Review	The LPA carries out public consultation and consults the Statutory Consultees, before making a decision (internal review).	Inquiry (internal review) carried out by a technical commission of the responsible authority, integrated by representatives of concerned Regions, Provinces and local councils.
Decision making	Planning permission might be refused or given.	Judgement of environmental compatibility, to be publicly notified and motivated.
Follow up	LPA will need to consider carefully how mitigation measures are secured.	The EMP must be outlined in the ES. Impact and compliance monitoring have to be undertaken and notified by the responsible authority.
Public involvement	Public notice: completion of the ES. Copies are made available for public inspection. The public can then make written representations within 21 days.	Public notice: completion of the ES. Copies are made available for public inspection. Within 60 days from the date of notification of the EIA process, any individual or subject is in principle allowed to submit opinions and remarks concerning the environmentally assessed project.

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