

Stakeholder perceptions of Environmental Management Plans as an environmental protection tool for major developments in the UK



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ARTICLE INFO

Article history:

Received 1 July 2015

Received in revised form 18 September 2015

Accepted 18 September 2015

Available online 21 October 2015

ABSTRACT

Insufficient implementation and the lack of legislative requirements for follow-up measures following the approval of projects are consistently highlighted as major shortcomings of Environmental Impact Assessment (EIA). Although adopted over 15 years ago by the World Bank, Environmental Management Plans (EMPs) were only semi-formalised in the UK in 2008 and arguably provide a continuous link or 'bridge' between the EIA process pre-consent and an Environmental Management System (EMS) post-consent. Drawing on twenty-one semi-structured interviews with stakeholders and thematic analysis of their responses, and a broad-scale practitioner survey, this study aimed to assess the effectiveness of EMPs as an environmental protection tool across the project lifecycle for major developments. The findings revealed a mixed picture of EMP effectiveness in practice, with EMPs only partially fulfilling a bridging role between EIA and EMS. There is no 'gold standard' terminology for EMPs, all having slightly different uses, thus presenting different focuses to different stakeholders and further enhancing variation in practice. For many stakeholders, the effectiveness was simply not known, due to the lack of communication and follow-up that still exists. EMP-EMS linkages were shown to be effective from the developer's perspective when a single organisation has involvement across all project phases, though weaknesses occur when multiple parties are involved. Among other stakeholders, knowledge varied significantly; whilst some were in agreement that the linkages worked, many were unaware of the connections and thought of them as two quite separate tools. Stakeholders advocated for the need to make EMPs a legal requirement; for improved communication between stakeholders during EMP implementation and increased documentation of project outcomes; and for EMPs to be consistently written by environmental professionals. Furthermore, weak links in the current process may be improved by providing detailed guidance for organisations on the potential for EMP-EMS linkages, with the additional aim of encouraging stakeholders to broaden their current specialist knowledge on environmental protection tools.

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1. Introduction

Insufficient implementation of follow-up measures, and the distinct lack of legislative requirements following the approval of projects, have consistently been highlighted as major shortcomings of Environmental Impact Assessment (EIA), with literature subsequently questioning the overall effectiveness of EIA as an environmental protection tool (Wood, 1999; Nitz & Holland, 2000; Gallardo & Sanchez, 2004; Gallardo & Sanchez, 2004; Jay et al., 2007; Morrison-Saunders et al., 2007). EIA follow-up can be defined as 'the monitoring and evaluation of the impacts of a project or plan (that has been subject to EIA) for management of, and communication about, the environmental performance of that project or plan (Arts et al., 2001). Such shortcomings exist despite the World Bank establishing guidance in 1999 on Environmental

Management Plans, documents established in order to provide a continuous link between predicted impacts and the measures specified to mitigate them (Durning, 2012).

However, a new EU Directive on EIA (2014/52/EU) includes the introduction of mandatory monitoring for significant adverse effects (Article 8) with the aim to correct what is arguably the biggest flaw in the existing regime. More so than ever, applying follow-up within EIA is no longer an option by a sound precaution and proactive measure to ensure a sustainable future (Marshall, 2004).

1.1. Integration of EIA and EMS

An EIA is carried out prior to a development taking place with the aim of minimising significant environmental effects (Glasson et al., 2013). Environmental impacts created during and post-development are controlled through environmental management practices based upon legislative requirements or internal policies. An Environmental Management System (EMS) is one means of managing ongoing impacts

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during, and post completion of the development. Although an EMP might not stipulate a certificated EMS, organisations may choose to demonstrate externally verified credibility to their environmental practices through a formal EMS such as one certified to the International Organisation of Standardisation (ISO) ISO14001 (ISO, 2015). A certified EMS will involve the review, assessment and continual improvement of an existing organisation's environmental effects (Glasson et al., 2013). An EMS is said to have both tangible benefits in aspects such as reducing waste (e.g. Briggs, 2006), and intangible environmental performance improvements; for instance improved environmental awareness among employees (e.g. Rondinelli & Vastag, 2000) and has been adopted as global tool for environmental improvement with over 300,000 organisations certified in 171 countries (ISO, 2013). It should be noted that application of both a certified EMS such as ISO14001 and a non-certified EMS is voluntary, unless it is stipulated by a regulator as a legal condition of a permit to operate.

Both EIA and EMS can be seen as environmental protection tools that have complementary purposes, with EIA seeking to anticipate and mitigate/enhance impacts of proposed new projects at the planning and design stage, and EMS helping organisations to effectively manage the subsequent day-to-day impacts (Obradovic, 2011). Thus, within the 'environmental management toolbox' (Finkbeiner et al., 1998), they can be linked to manage environmental impacts across the development project lifecycle (Slinn et al., 2007; Hollands & Palframan, 2014).

Various theoretical approaches to linking EIA and EMS have been proposed (e.g. Ecclestone & Smythe, 2002; Sanchez & Hacking, 2002; Ridgway, 2005; Slinn et al., 2007; Perdicolis et al., 2012). Such studies highlight a range of barriers that can hinder integration (Palframan, 2010), including challenges around the legal and policy framework (e.g. Ecclestone & Smythe, 2002); technical issues (e.g. Slinn et al., 2007); practitioner issues (e.g. Sanchez & Hacking, 2002); and proponent and stakeholder attitudes (e.g. Marshall 2004). It is widely acknowledged that there is most potential for linking EIA with EMS where organisations plan their own development for which they also oversee construction and/or occupy in the long term (Marshall, 2004; Slinn et al., 2007; Palframan, 2010).

1.2. Environmental Management Plans

Environmental Management Plans (EMPs) are one way of mitigating and managing the environmental effects of development projects (IEMA, 2008), defined as documents that 'outline the mitigation, monitoring and institutional measures to be taken during project implementation and operation to avoid or control adverse environmental

impacts, and the actions needed to implement these measures' (Tinker et al., 2005).

The overall objective of an EMP is to provide a continuous link or 'bridge' between the EIA process pre-consent and the EMS operated by various stakeholders (e.g. project construction contractors, project operation managers) post-consent (IEMA, 2008; Glasson et al., 2013) (Fig. 1). Furthermore, where an organisation has an EMS, the EMP may refer to relevant policies and procedures within it, and a proponent's EMS may include processes for the preparation of EMPs. As such, recent experiences have described EMPs as a less formal, less bureaucratic, 'EMS-lite' approach (Marshall, 2002, 2004, 2005).

Around the world there has been some take-up of EMPs as part of the EIA process by, for example, the World Bank (see above) and in specific locations such as Western Australia (Dik and Morrison-Saunders, 2002) and Hong Kong (Durning 2012) or in specific sectors such as Environmental Action Plans in flood risk management works overseen by the UK Environment Agency (Fuller et al. 2012). There is no general statutory requirement for project proponents to deliver all mitigation proposed pre-consent or to prepare EMPs in the UK, and as such, their use varies significantly within sector, organisation and scheme (IEMA, 2008). The UK Institute of Environmental Management and Assessment (IEMA) has been a strong advocate of the EMP approach, and set out its position in its Practitioner Guide (IEMA, 2008). Prior to this, there has been little existing guidance available in relation to the production and implementation of EMPs.

The focus on EMPs within the academic literature is limited in scope. Early studies have identified issues associated with the use of EMPs in practice as a result of the need for voluntary uptake (Boyden, 2002; Mohamad-Said, 2002). The origins and the links EMPs can make between EIA and EMS have recently been explored by Durning (2012) through the review of current literature, noting their variation in practice, and their focus on construction rather than operational impacts (e.g. Broderick & Durning, 2006). Most notable is perhaps a string of studies by Marshall (2002, 2004, 2005) documenting a single case study and advocating that, in the absence of statutory requirements, the development of an EMP will be motivated by a proponent/developer's individualistic desire to satisfy specific project requirements or for them to fit within existing management frameworks such as their EMS.

It is worth clarifying that the integration of EIA and EMS has received little attention in the literature; and it is complicated by a range of terminology and differing approaches to the level of independence of those involved in oversight of any monitoring. The World Bank and the International Finance Corporation set overarching performance standards related to sustainability, and typically have a requirement for environmental supervisors to oversee construction activities. The

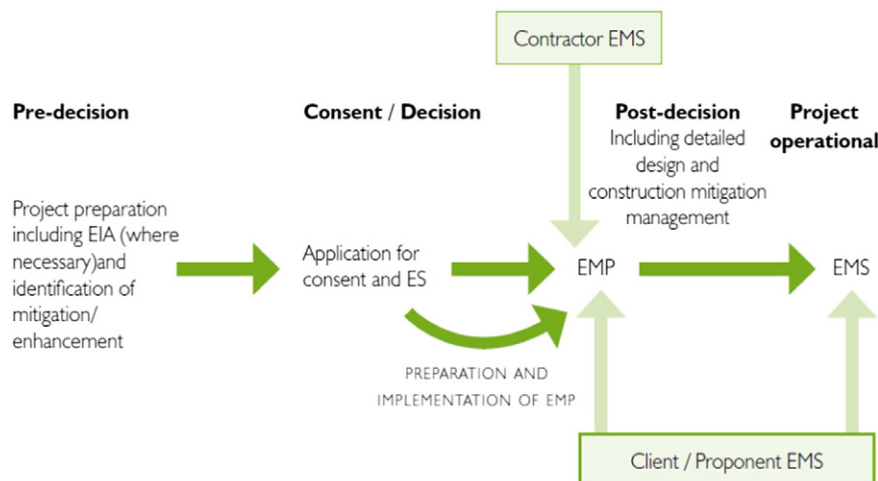


Fig. 1. Linkages between EIA, EMPs and EMS (IEMA, 2008).

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