



UNIVERSITY OF LEEDS

This is a repository copy of *Temporal not temporary: Using megaproject empirics to explore enduring projects*.

White Rose Research Online URL for this paper:  
<http://eprints.whiterose.ac.uk/97194/>

Version: Accepted Version

---

**Proceedings Paper:**

Brookes, N, Sage, D, Dainty, A et al. (1 more author) (2014) Temporal not temporary: Using megaproject empirics to explore enduring projects. In: 30th EGOS Colloquium. Sub-theme 37: Studying Project-based Organizing through a Temporal Lens, 03-05 Jul 2014, Rotterdam, Netherlands. European Group for Organizational Studies .

---

**Reuse**

Unless indicated otherwise, fulltext items are protected by copyright with all rights reserved. The copyright exception in section 29 of the Copyright, Designs and Patents Act 1988 allows the making of a single copy solely for the purpose of non-commercial research or private study within the limits of fair dealing. The publisher or other rights-holder may allow further reproduction and re-use of this version - refer to the White Rose Research Online record for this item. Where records identify the publisher as the copyright holder, users can verify any specific terms of use on the publisher's website.

**Takedown**

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing [eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk) including the URL of the record and the reason for the withdrawal request.



[eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk)  
<https://eprints.whiterose.ac.uk/>

Naomi BROOKES	University of Leeds	n.j.brookes@leeds.ac.uk
Daniel SAGE	Loughborough University	d.j.sage@lboro.ac.uk
Andrew DAINTY	Loughborough University	a.r.j.dainty@lboro.ac.uk
Giorgio LOCATELLI	University of Lincoln	glocateeli@lincol.ac.uk

Paper to be submitted to Sub-theme 37: Studying Project-based Organizing through a Temporal Lens

#### ABSTRACT

This paper explores the organizational phenomena that we have labelled as ‘enduring projects.’ Enduring projects possess many of the features of temporary organizations but have very long lifetimes: typically, enduring projects last for decades. We use empirics gathered in a study of European megaprojects to characterise the ‘enduring project’ phenomenon and we speculate on the usefulness of theory employed in existing ‘temporary organizing’ research to understand enduring projects.

## **Temporal not temporary: using megaproject empirics to explore enduring projects**

### **Introduction and background**

There is a well established tenet that project organizing is synonymous with temporary organizing. This is evident in both the definitions of projects used by professional project management associations to define and differentiate themselves from other management activities ((Caupin, Knöpfel et al. 1999; Project\_Management\_Institute 2008) and in more considered treatises in academe. Packendorff’s seminal work firmly situated the future of research in project organizing in the milieu of temporary organizations (Packendorff 1995). He considered that projects could usefully be viewed as temporary organizations whose defining features were as follows:

- “An organized course of action aimed at evoking a non-routine process and/or product
- Has a predetermined point in time or time related condition state when the organization and/or its mission ceases to exist
- Has some kind of performance evaluation criteria
- Is so complex in terms of roles and number of roles that it requires organizing (it cannot self-organize)”(Packendorff 1995)

Implicit within this definition of ‘temporary’ was an assumption that the time limitation was short and as such made time ‘press-down’ upon the temporary organization. Packendorff quoted Bennis in describing the ‘uncomfortable’ nature of life within a temporary organization. Bennis stated:

‘Coping with rapid change, living in temporary work systems, developing meaningful relations and then breaking them -- all augur social strains and psychological tensions.’(Bennis 1968)

Project organizing continues to be defined through its ‘temporary’ nature:

“In general, projects are intended to be temporary organizations with a finite duration; traditional organizations are intended to endure.”(Reich, Liu et al. 2013)

Temporariness is viewed as a response to an increasing environmental turbulence (e.g. (Bakker 2010)). This form of ‘short-term temporariness’ in projects has a wide range of implications. Some researchers identify the flexibility and responsiveness that such modes of organizing allow:

‘Because of their limited duration, project-based organizations do not constitute irreversible resource commitments of fixed costs.’ (Sydow, Lindkvist et al. 2004)

However, there is growing evidence of the presence and impact of project organizational forms that have all of the characteristics that are ascribed to temporary organizations but that have lifetimes of years, decades or, in a few cases, centuries. We have called these type of organization ‘enduring projects.’ Whilst temporal, they are not temporary. We postulate that enduring projects are particularly employed in the design and delivery of extremely large infrastructure projects known as megaprojects. Given that much of the research in project organizing is currently situated in temporary organizing, enduring projects may represent the limit of applicability of current research streams in temporary organizing in projects.

In this paper, we delineate the phenomenon of enduring projects. We use the empirical experience of an investigation into European megaprojects to characterise them and speculate

on the theoretical approaches that could be used to understand and engage with enduring projects. We discuss how similar and or how different these theoretical approaches may be from those currently evident in the mainstream of 'temporary organizing' literature.

### **Enduring projects: encountering the phenomenon**

We first became aware of the phenomenon of enduring project organizations during our research into a portfolio of European megaproject cases that we had gathered as part of a wider research programme into the design and delivery large infrastructural megaprojects (the MEGAPROJECT Project) funded under the auspices of the EU's COST initiative (University\_of\_Leeds 2011). (We are using megaproject in the spirit of Priemus and Flyvbjerg's and Merrow's interpretation as a useful label to describe the very large societally impactful infrastructure projects that are increasingly being employed (Priemus and Flyvbjerg 2008; Merrow 2011)) As part of our investigation, we were trying to discern common characteristics that were evident across the portfolio of megaprojects. In order to achieve this we conducted an inductive 'pattern-spotting' analysis across the cases within the portfolio using Eisenhardt's approach to building theory from cases (Eisenhardt 1989). A more detailed exposition of this process can be found in Brookes et al (Brookes N J 2014).

This approach enabled us to identify the widespread use of a form of project organization that was founded on employing equity based special purpose entities (SPEs) whose specific purpose was to design, deliver and sometimes to operate large scale infrastructure megaprojects in the EU. SPEs are legal joint ventures (usually a limited company of some type or, sometimes, a limited partnership) created to fulfil specific objectives.) We labelled these phenomena as enduring project organizations. Whilst the use of SPEs has received attention in project literature ((Grimsey and Lewis 2002; Daube, Vollrath et al. 2008)) the implications of these have not been considered beyond their ability to mitigate and share risks (bar limited exceptions e.g. (Smyth and Edkins 2007)). In identifying enduring projects as a form of project organization, we are moving consideration of SPEs used in this context from purely financial instruments and considering them holistically as organizational structures, governance mechanisms and contexts in which complex behaviours are enacted.

Summary characteristics of enduring projects encountered in the MEGAPROJECT portfolio of cases are captured in the table below. Accreting these into a group allowed us to establish

tentative and defining organizational features which can be juxtaposed with those more traditionally associated with temporary project organizations.

<b>Project Title and Description</b>	<b>Project Value<sup>1</sup></b>	<b>Design &amp; Construction Leadtime</b>	<b>Number and nature of owners of 'enduring project' SPE</b>
<b>MOSE</b> A flood protection scheme for Venice	€2.3 bn	~45 years	7 A combination of regional government bodies, conservation organizations and private construction contractors
<b>Andasol</b> A solar powerplant in Spain	€600 M	10 years	2 Private energy companies
<b>Anholt</b> A Danish Offshore windfarm	€1.3 bn	5 years	3 Private energy companies and Danish government organizations
<b>Greater Gabbard</b> A UK offshore windfarm	€1.8 bn	11 years	2 Energy companies one entirely private the other partially government owned
<b>Hinkley Point</b> A nuclear newbuild powerplant	£16 bn	~13 years	2 Energy companies and non-local government financiers
<b>Rovigo</b> An LNG offshore platform and onshore pipe network	€970 M	10 years	3 Private energy companies
<b>A2 Motorway</b> Polish motorway system	€1.3 bn	18 years	4 Private contractor and finance organizations
<b>Athens ring road</b> A ring road system in Athens, Greece	€1.3 bn	9 years	6 Private contractor and finance organizations

**Table 1: Characteristics of Enduring Projects in the MEGAPROJECT Portfolio**

In much of the literature to date, a project organization has been conceptualised as a temporary group of people accreted from across an organization or organizations to undertake a project (Turner and Müller 2003; Sapsed and Salter 2004). In contrast, enduring projects have a formally constructed organizational structure, the governance of which has a defined (and legally based) separation from the organizations that own them. Enduring projects have considerable resources and command the efforts of a large number of individuals (albeit these efforts may be subsumed in a 'supply chain' of separate sub-projects.) Enduring projects continue for a long period of time. Their design and construction alone can take at least a decade and they are associated with infrastructure provision that will have an operational lifespan of several decades. Table One shows enduring project organizations delivering

<sup>1</sup> Project Value and Project Leadtime relate only to the design and delivery component of the project lifecycle: leadtimes for the operational phase will be much longer

roads, flood protection systems and powerplant which will all have a substantive lifecycles. These are likely to extend beyond the corporate existence of the other organizations interacting with the enduring project organization and could surpass the length of an individual's entire working life. A more detailed examination of one of the MEGAPROJECT portfolio cases, the Greater Gabbard Offshore Windfarm provides an interesting illustration of the longevity of the enduring project when compared with the more transient nature of the traditionally 'permanent' organizations.

### **Greater Gabbard Offshore Windfarm Limited: an island of constancy in a sea of perturbation**

In 2002 in the UK, the Crown Estates, as part of the UK Government's commitment to achieving carbon emission reductions, auctioned a series of licences to establish large off-shore windfarms to generate electricity. One of these licences was provided to establish an off-shore windfarm off the coast of South East England at a site called Greater Gabbard. This licence was purchased by an organization called (eponymously) Greater Gabbard Off-Shore Wind Ltd (GGOWL). GGOWL provides exemplar features of an enduring project organization established to support a specific project. The lifespan of GGOWL, which has already been in existence for over eleven years, is likely to continue for at least another fifty.

GGOWL was a joint venture established between Airtricity (an entrepreneurial young organization based in the Republic of Ireland) and Fluor (a well established contractor with a long record of large infrastructure project delivery.) In the period 2003 – 2007, GGOWL successfully applied for all of the permits associated with the provision of an extremely large off-shore wind farm. (The wind farm comprising ~150 turbines has a capacity of 500MW, enough to power 530,000 homes in the UK.)

The first perturbation in the 'permanent organizations' with which GGOWL was associated was the purchase of Airtricity by Scottish and Southern Electricity (SSE) in 2007. At this point the original owner of Airtricity left this organization completely to form another completely separate renewable energy company. SSE then were faced with developing an ongoing relationship with the other owner of GGOWL, Fluor. For a variety of reasons, SSE resolved this issue by purchasing Fluor's share of the GGOWL from Fluor for £40M. GGOWL, at the instigation of SSE, then contracted with Fluor to act as the EPC ( engineer-

procure-construct) contractor for the offshore wind farm (excluding turbine provision which was delivered by Siemens) . The contract comprised a fixed sum agreement of \$1.8bn.

GGOWL underwent another perturbation in ownership later in 2008 when SSE decided to sell 50% of its shares in GGOWL to the German power utility company RWE for £308M. At this stage, therefore, GGOWL had experienced four owners in five years. Meanwhile, GGOWL had continued in its activity of delivering the offshore windfarm and in late 2008 entered its construction phase. Once it entered its construction phase GGOWL began to experience substantive difficulties in its construction activity leading to a number of delays. Tier 1 subcontractors went bankrupt leaving large proportions of undersea cable to be laid. The monopiles on which the turbines were located were provided by inexperienced subcontractors. Significant numbers of these were not to specification and had to be rewelded. These factors led to a delay in construction of the project of over eighteen months. As a result of these delays, in the last quarter of 2010, Fluor made provision in its accounts for losses of £340 million. The relationship between GGOWL and Fluor deteriorated even further and in 2011, Fluor sued GGOWL for \$300M; a lawsuit which in 2013 they were ultimately to lose.

Despite these difficulties the Greater Gabbard wind farm was opened in July 2013 by the UK's Energy Minister. Under the aegis of GGOWL, the wind farm has entered its operation phase. This phase is due to last for the next 50 years during which GGOWL will continue to operate the wind farm and, ultimately, to be responsible for its safe decommissioning. This means that GGOWL, an organization specifically created to design, deliver and operate the Greater Gabbard wind farm project will have longevity of over sixty years. It has already outlived the independent existence of one of its first owners (Airtricity) and is likely to outlive several more 'permanent' organizations with which it is associated. GGOWL remained in existence despite significant differences in the patterns of actors involved in the overall project (e.g. Fluor, a former owner of the enduring project organization becoming a contractor for the same organization)

### **What theory is needed to understand enduring projects**

Having described a distinct organizational phenomenon of the enduring project (as exemplified by GGOWL), then what theory could be employed in understanding this phenomenon? A useful starting point in answering this question is to understand the work that has been undertaken to date in the milieu of temporary organizations. Bakker provides a

highly comprehensive review of this topic (Bakker 2010). Furthermore, if we use Bakker's interpretation then any organization seen as possessing a finite lifespan should be viewed as a temporary organization (see below)

*"There seems to be a debate in the literature on whether systems of relatively longer duration (although still limited by a deadline in a distant future) should be called 'temporary'. The dominant view suggests they should."*(Bakker 2010)

By extrapolation, this means that the theoretical approaches delineated by Bakker in the context of temporary organizations should be equally applicable to enduring projects as, despite their longevity, they can be regarded as temporary organizations.

However, in identifying the phenomenon of enduring projects, we may have located the boundary that limits the applicability of current research in temporary organizations. Whilst some constructs identified by Bakker such as the linearity of time may hold true for enduring projects, others, such as the impact of the imminent end of the project on group dynamics, may not. In the case of GGOWL, the end of the enduring project organization will be after 2060. We postulate that there is a cogent need to examine the existing body of research on temporary organizing to see what does and does not assist in understanding enduring project organizations.

Furthermore we posit that additional theoretical perspectives may help in understanding enduring project phenomenon. The temporary-permanent paradigm that underpins much of the existing research work in this area is 'flipped' in the case of an enduring project. The enduring project organization becomes 'permanent' and other organizations are 'temporary.' For example, in the case discussed in this paper, GGOWL has already outlived the existence of Airtricity and, as looks extremely likely, it will also outlive SSE. In more 'mainstream' conceptualizations of temporary organizations, both SSE and Airtricity would have been viewed as permanent.

A full consideration of the theoretical implications of this 'switching' requires more consideration than is available within this paper. However we suggest that Social Identity Theory may have a substantive contribution to make in understanding enduring project phenomenon. Social Identity Theory (SIT) examines how people understand and position



themselves in terms of social group categories (Ashforth and Mael 1989; Alvesson and Empson 2008). Individuals who identify with an organization behave in ways that are aligned with its goals. The depth of individual identification increases with time (Hall, Schneider et al. 1970; Buchanan 1974). Simplistically this would suggest that individuals should be more committed to enduring projects and more likely to align their behaviour to the benefit of enduring projects. However, the GGOWL case illustrates that individuals associated with an enduring project had to forge their organizational identity against a shifting background of other organizational relationships. (Fluor which at one point owned GGOWL then became a supplier to GGOWL.) These conflicting organizational loyalties may have contributed to the severe difficulties encountered by GGOWL in delivering the windfarm. In an extension of Brown's work (Brown and Phua 2011), enduring projects could provide a very interesting context in which to consider how people develop organizational identifications.

Alvesson, M. and L. Empson (2008). "The construction of organizational identity: Comparative case studies of consulting firms." Scandinavian journal of management **24**(1): 1-16.

Ashforth, B. E. and F. Mael (1989). "Social identity theory and the organization." Academy of management review **14**(1): 20-39.

Bakker, R. M. (2010). "Taking stock of temporary organizational forms: a systematic review and research agenda." International Journal of Management Reviews **12**(4): 466-486.

Bennis, W. G. (1968). Beyond Bureaucracy. The Temporary Society. B. W. G. S. P.E. New York, Harper and Row: 53-76.

Brookes N J , H. R., Littau P., Locatelli G., Oliomogbe G. (2014). Using Multi--Case Approaches In Project Management Research: The Mega Project Experience Designs, Methods and Practices for Research of Project Management. Pasian B., Gower.

Brown, A. D. and F. T. Phua (2011). "Subjectively construed identities and discourse: towards a research agenda for construction management." Construction Management and Economics **29**(1): 83-95.

Buchanan, B. (1974). "Building organizational commitment: The socialization of managers in work organizations." Administrative Science Quarterly: 533-546.

Caupin, G., H. Knöpfel, et al. (1999). ICB-IPMA competence baseline, International Project Management Association.

Daube, D., S. Vollrath, et al. (2008). "A comparison of Project Finance and the Forfeiting Model as financing forms for PPP projects in Germany." International Journal of Project Management **26**(4): 376-387.

Eisenhardt, K. M. (1989). "Building theories from case study research." Academy of Management review: 532-550.

Grimsey, D. and M. K. Lewis (2002). "Evaluating the risks of public private partnerships for infrastructure projects." International Journal of Project Management **20**(2): 107-118.

Hall, D. T., B. Schneider, et al. (1970). "Personal factors in organizational identification." Administrative Science Quarterly: 176-190.

Merrow, E. W. (2011). Industrial megaprojects: Concepts, strategies, and practices for success, Wiley.com.

Packendorff, J. (1995). "Inquiring into the temporary organization: new directions for project management research." Scandinavian journal of management **11**(4): 319-333.

Priemus, H. and B. Flyvbjerg (2008). Decision-making on mega-projects: cost-benefit analysis, planning and innovation, Edward Elgar Publishing.

Project\_Management\_Institute (2008). A Guide to the Project Management Body of Knowledge: PMBOK® Guide, Project Management Institute.

Reich, B. H., L. Liu, et al. (2013). "Developing better theory about project organizations." International Journal of Project Management **31**(7): 938-942.

Sapsed, J. and A. Salter (2004). "Postcards from the edge: local communities, global programs and boundary objects." Organization studies **25**(9): 1515-1534.

Smyth, H. and A. Edkins (2007). "Relationship management in the management of PFI/PPP projects in the UK." International Journal of Project Management **25**(3): 232-240.

Sydow, J., L. Lindkvist, et al. (2004). "Project-based organizations, embeddedness and repositories of knowledge: editorial." ORGANIZATION STUDIES-BERLIN-EUROPEAN GROUP FOR ORGANIZATIONAL STUDIES- **25**(9): 1475.

Turner, J. R. and R. Müller (2003). "On the nature of the project as a temporary organization." International Journal of Project Management **21**(1): 1-8.

University\_of\_Leeds (2011). Retrieved January 6th, 2014, from [www.mega-project.eu](http://www.mega-project.eu).