Driving sustainable innovation through procurement of complex products and systems in construction
Haugbølle, Kim; Forman, Marianne; Gottlieb, Stefan; Bougrain, Frédéric

Published in:
Joint CIB International Symposium of W055, W065, W089, W118, TG76, TG78, TG81 and TG84

Publication date:
2012

Document Version
Publisher's PDF, also known as Version of record

Link to publication from Aalborg University

Citation for published version (APA):
Introduction..................................................................................IV - V
Committees ....................................................................................VI - VII
General Information .......................................................................VIII
Map and Adress .............................................................................IX
Centre Mont-Royal .................................................................X
Social agenda..............................................................................XI
Program Overview........................................................................XII
Schedule......................................................................................XIII - XV
Acknowledgements.......................................................................XVI - XVII

W055 ............................................................................................1 - 20
W065 ............................................................................................21 - 80
W089 ............................................................................................81 - 94
W118 ............................................................................................95 - 105
Index by authors..........................................................................105 - 106
Index by keywords.......................................................................107 - 111
DRIVING SUSTAINABLE INNOVATION THROUGH PROCUREMENT OF COMPLEX PRODUCTS AND SYSTEMS IN CONSTRUCTION

Kim Haugboelle  
Marianne Forman  
Stefan Christoffer Gottlieb  
Frédéric Bougrain

Keywords: Innovation, Procurement, Construction business system, Complex products and systems (CoPS), Sustainability

ABSTRACT:

This paper will explore how procurement of complex products and systems by clients and users may drive sustainable innovation in the construction business system.

In recent years, (public) procurement of complex products and systems has increasingly been advocated as a complementary yet powerful strategy to drive innovation for sustainable construction. Such a demand-oriented innovation strategy has been pushed not only by national agencies, but also by international bodies like the United Nations and notably by the European Commission through its Lead Market Initiative.

While more ordinary projects may maintain and sustain existing practices and principles, procurement of complex products and systems potentially opens up the black box of construction and provide an avenue for studying the fundamentals guiding the practices and principles of construction actors and activities. Thus, this paper is based on a case study of procuring a complex construction project by an international construction client and a literature review on construction business systems and innovation systems.

The paper will demonstrate how procurement of complex products and systems by construction clients may reshape the linkages between the various constituents of the construction business system and in turn stimulate innovation in the supplier network, among the involved project-based firms and within the client organization itself.

In conclusion, the paper will suggest that procurement of clients and users will most likely only be able to drive sustainable innovation in case 1) the client is procuring something extraordinary (complex), 2) align the purpose of procurement with the purpose of innovation, and 3) carefully design shared points of accountability between the project processes and the business processes.