

Collaborative research on procurement in the built environment



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Procurement for Sustainable Innovation in the Built Environment

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Now researcher network



Background

- Pressure for change in construction – societal challenges, technology push and cost control
- The client/procurer shapes incentives for all industry actors
- Large volume construction procurement but little research
- **Research was scattered, small units**
- **Poor contact with procurement functions in society, no receiver of our research results**

Klokare upphandling



Based in another national collaboration Swedish Universities of the Built Environment (Sveriges Bygguniversitet)

Involves units that are engaged in the Civil Engineering programs at the four large technical universities:

- **Chalmers University of Technology**, Göteborg
- **KTH Royal Institute of Technology**, Stockholm
- **Luleå University of Technology**(LTU)
- **Lund University**(LU/LTH)

In ProcSIBE also:

Karlstads University: Political Sciences



Researchers in ProcSIBE

Faculty

- Anna Kadefors (Chalmers and KTH) Project leader
- Johan Larsson (Luleå) supporting PL, now network leader
- Jan Bröchner (Chalmers)
- Pernilla Gluch (Chalmers)
- Per Erik Eriksson (Luleå and KTH)
- Tina Karrbom Gustavsson (KTH)
- Malena Havenvid (KTH)
- Sofia Lingegård (KTH)
- Stefan Olander (Lund)
- Henrik Norinder (Lund)
- Johanna Alkan Olsson (Lund)
- Henrik Szentés (Lund)
- Andreas Öjehag-Pettersson (Karlstad University)
- Mikael Granberg (Karlstads University)
- Leentje Volker (University of Twente, NL)

PhD students

- Daniella Troje (Chalmers, PhD 2020), postdoc KTH
- **Anna-Therése Järvenpää (Luleå, PhD 2022)**
- **Emilia Nilsson Vestola (Luleå)**
- Melissa Candel (KTH)
- Jessica Molén (KTH)
- Susanna Hedborg-Bengtsson (KTH, PhD 2022) **postdoc Luleå**
- **Lilly Rosander (KTH)**
- Andreas Ekeskär (KTH)
- **Klara Granheimer (KTH)**
- **Agnes Lindell (Lund)**

Red = financed by the Swedish Transport Administration

Reference group



Collaboration with the Swedish Transport Administration

Many projects, small and large, often following up initiatives in the STA:

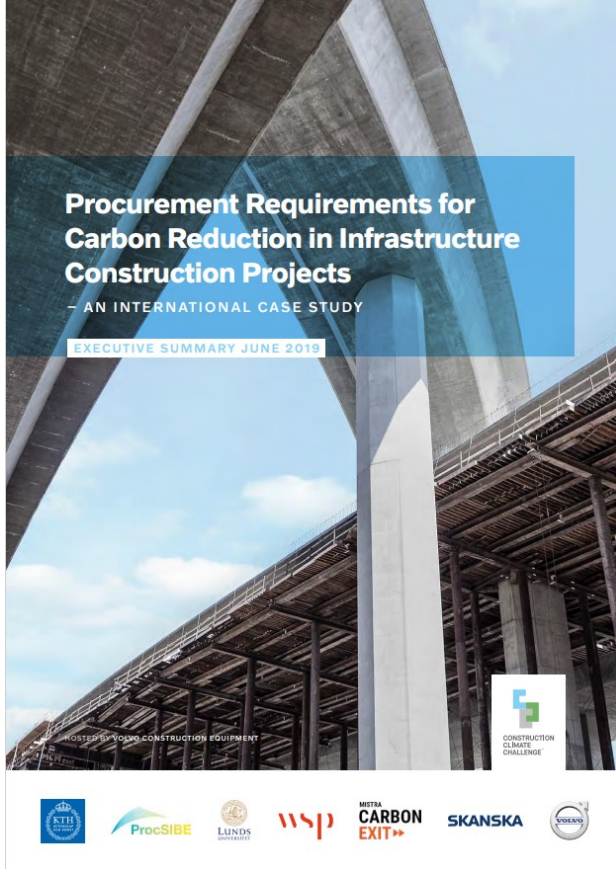
- Design-build contracts
- Consultancy procurement and contracts
- Early Contractor Involvement in large projects and maintenance contracts
- Social value in procurement
- Innovation in maintenance contracts
- Use of past performance evaluation in procurement
- Foreign contractors
- Innovation needs and strategies

Annual presentations of all projects

Presentations for top management, participation in strategy group (Per-Erik Eriksson)

Proactive discussions about future research and strategy





A R C O M
 ASSOCIATION OF RESEARCHERS IN CONSTRUCTION MANAGEMENT

Paul Townsend
Commemorative Award for
Research in Practice

This certificate is awarded to

Daniella Troje

ProcSIBE's other projects/activities

- Procurement requirements for carbon reduction
- Municipal procurement: policy, organisation
- Social procurement: employment requirements
- Client collaboration in sustainable urban development
- Tool for project quality evaluation
- Partnering in hospital projects
- ISO 44001
- Breakfast webinars
- PhD courses
- Anthologies

Sund konkurrens i byggbranschen

En forskningsantologi



Nordic collaboration

Meetings in Stockholm and Trondheim

Paper to Nordic Academy of Management
comparing developments in relational
contracting in four countries over 30 years



Results and main recommendations to STA

- STA aim: to move from detailed contracts to functional requirements (DB, pure client) to innovation/development, using procurement to drive innovation and develop the market
- Design Build contracts are not good for all projects – there has to be a fit-for-project approach
- Design-build contracts are not sufficient to drive innovation
- Better follow-up of design build contracts, but avoid adversarial relationships
- Consultancy procurement based on fixed price: has to be more predictable and easier to price. The client has to be active and involved in defining the task
- ECI needs less autonomy for projects, more issues agreed on industry level, more structured learning and more organization level resources
- Adapting to new carbon reduction requirements is a learning process and speedy implementation requires smart combinations of different kinds of requirements (both detailed and functional)
- Social requirements need to be followed up

Experiences 1 - STA collaboration

- Building relationships, trust and capabilities over time
- National collaboration involving all Swedish universities: easy access for the STA to research on construction procurement
- Research projects allocated to the university best suited, less duplication of research
- New unit in the STA to handle the collaboration with ProcSIBE – better overview and less individual-based & ad hoc
- More influence for research if universities join forces

Experiences 2 – STA and general

- Big clients are complex, project-based organizations
 - Difficulties to learn from pilots - small resources and lack of long-term strategy
 - We are engaged by the central STA unit Purchasing and logistics, but many decisions are made at the project level
 - The central STA unit for strategic development does not deal with procurement strategy
- The building sector is fragmented, but so is the STA
- Changing practices in construction is not only about incentives and requirements – knowledge development takes time and is underestimated
- Future research should focus more on:
 - internal client/municipal organization and relationships projects-organization
 - role of industry level networks/initiatives in developing procurement



Thank you!

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