
SUMMARY OF THE STH WORKSHOP

Key points from the Solidarity Transport Hub Workshop (Warsaw, March 5, 2020)

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Background of the workshop

The Solidarity Transport Hub (STH) is megaproject, not only in Poland but also in the international context. The project will re-shape the transport map of Poland for many years to come. If done right, it will become Poland's showcase in the region and internationally on how to build megaprojects. The big ambition in terms of scale and timelines will be the focus of attention of media and public opinion at home and abroad. If successful STH will be a project that others will come to Poland for to study.

The purpose of the workshop was to learn from international experiences – good and bad. We shared the latest thinking from academia and practice. To help the partners delivering STH to set a new benchmark for megaprojects.

The Oxford research on megaprojects shows that early decisions are important to ensure success. For this workshop we focussed on two elements: How to collaborate and partner for success; and how to set up projects for success.

Workshop Part 1: Partnering

The first part of the workshop discussed the challenges and opportunities of partnering. Many organisations find that “silos” stand in the way of effective and successful delivery of major projects. Those silos can be internal within the project (e.g. between different teams) and external to projects (e.g. between delivery partners, impacted communities, stakeholders).

Megaprojects require partnerships between a large number of public and private entities. No single entity has the capacity and capability to deliver megaprojects. Private sector companies play an integral part in delivering megaprojects and many megaprojects are delivered through special purpose vehicles (SPVs), i.e. companies set up to deliver the strategic objectives.

In many major projects – this workshop looked at HS2 in the UK and SCL in Hong Kong – relationships between different parties on projects tend to be adversarial.

These challenges for partnering and the readiness to partner were captured in three questions:

- (1) Do we have the *motivation* to partner – most major projects and their clients understand that partnering is beneficial, so motivation is often not the problem;
- (2) Do we have the *means* to partner – most major projects lack the tools to partner effectively, e.g. sharing of information, Digital Twins/BIM models; and

- (3) Do we have the *opportunity* to partner - are commercial relationships setup in a way that make partnering or hinder partnering, e.g. through risk sharing.

The workshop then looked at some enablers to create the opportunity to partner successfully:

- Risk sharing through commercial strategies that distinguish between risk and liabilities;
- Incentive alignment, e.g. skin-in-the-game, of all parties where incentives align to the strategic objectives of the project; and
- Trust-based relationships that establish a true federation between the builder, buyer and user.

An important ingredient to create partnerships is finding the right partners. The international best practice shows that partners are typically selected in a structured process based on their demonstrated experience, their capacity and capability of critical resources and skills, global know-how and understanding of megaprojects, their access to financing and their financial capability to delivery megaprojects, etc. Our research shows, that equally important is whether the strategic goals of partners are aligned and whether the different organizational behaviours and cultures can be brought together.

The workshop looked in more detail at the challenges of aligning strategic objectives through identifying which objectives are givens, tradeables, optimizers and complementarities and structured ways of achieving consensus between stakeholders and sponsor about the project's objectives.

The final two discussion points in the workshop focussed on behavioural and cultural issues. Our research shows that trust with stakeholders is best establish when a project can (1) understands and addresses the needs of stakeholders and their pain points, which is also called intimacy; and (2) align strategic objectives.

The final discussion focussed on cultural issues of partnering. Partnership often fail because of competing cultures between the parties and stakeholders involved in a project. Understanding the archetypes of organisational cultures (group, development, rational and hierarchical culture) helps us to develop partnership principles that work for all parties. Thus, to partner projects need to use more than one lever:

- Group culture: Create a cohesive team and build morale;
- Development culture: Reward and demand individual initiative to contribute to partnering;
- Rational culture: Use contractual measures (bonuses, penalties) and informal social contracts; and
- Hierarchical culture: Create rules & policies and formal & structured means of collaboration (e.g. mandating the use of shared tools, setting up joint working groups, task forces).

Workshop Part 2: Making Projects Successful

In the second part of the workshop we identified the two-fold challenge of major projects and megaprojects.

First, project performance falls below expectations - projects finish over budget, over time and under benefits over and over again. The international data on construction projects show that only 1 in 3 projects finished on budget (or better), 1 in 30 projects finished on budget and on time (or better) and 1 in 500 projects finished on budget, on time and on benefits (or better).

Second, productivity in the construction sector, which includes all relevant activities from planning, financing, and construction itself has been low. OECD data for the last 20 years shows that construction productivity has flatlined, while leading sectors productivity has doubled.

To address both challenges – performance and productivity – we need novel approaches to deliver at scale. Building on innovative and disruptive ideas taken from offshore wind energy projects and Tesla’s Gigafactory the workshop identified the key principles to smart scaling.

Smart scaling is based on three core ideas

- (1) Modularity and flexibility – asking the question what is your LEGO?
- (2) Speed – asking the question how can you get replicate scope to help learning?
- (3) Flywheel – how can you create virtuous circularity combine learning and scaling through replication and create positive learning curves?

Finally, we shared our research-based recommendations on how to implement Smart Scaling at STH:

1. Rigorously, identify LEGOs from past projects that can be replicated at STH, and stick with their scope;
2. Rigorously, identify possibilities for increasing speed of delivery;
3. Rigorously, identify the flywheel for STH and spin it, to improve cycle by cycle; and
4. Prepare for high costs, delays, and losses where you do not succeed with the above.

Conclusion from the Workshop

The workshop provided a good first step to bring the relevant public and private parties together that need to collaborate to successfully deliver STH. The workshop discussions proved that this group should continue meeting on a regular basis (e.g., once a quarter/every six months) to look at the next stages of work and continue to learn from international examples. This is supported by research evidence, where we found that successful projects, right from the start, established an experienced advisory body, e.g. an expert panel, and forged a strong federation of builders, buyers and users.