BAR – Results

Airports are becoming increasingly complex, both technical, spatial, organizational and in terms of governance and participation. Especially sustainability (in particular the management of essential flows) and liveability requirements demand for a new paradigm: the airport as a blessing for its region. This requires a different approach that deploys the reciprocity between the airport and its region. Better Airport Regions (BAR) explored this potential to become better.
The BAR research was executed on different aspects but also in coherence with each other and leading to integrated insights and results. Central case study was the Schiphol airport region.

An international case comparison was conducted by TU Munich, in order to identify best practices in the management of other airport regions, in terms of technology, spatial planning, organization and governance. TU Delft (Faculty of Architecture) focused on the analysis of essential flows and how these can be made circular within the region. Furthermore, complexity theory was elaborated for airport regions by translating findings in so-called design patterns. These helped ETH Zurich, which had two student studios working on urban design theory and elaborated plans for the Schiphol region, leading to interesting new propositions. TU Delft (faculty of Technology, Policy and Management) worked on participative models of governance, translating these into a serious game workshop to be played with local stakeholders.
Partners of the BAR project (Schiphol Airport, SADC, Municipality of Haarlemmermeer, Zurich Airport, municipalities of Kloten and Zurich, Kanton of Zurich) and local stakeholders were regularly involved in meetings and workshops and are currently collaborating with researchers in order to translate scientific results to practical application to the market.

BAR dimensions of circularity
Data (points/spots – OD), Collecting and analysing relevant data

- Flows and cycles (linear – 1D), Determining normative rules for circularity including the economy
- Spatial planning and design (areas and volumes – 2D/3D), Allocating circular systems, creating patterns
- Developments, scenarios and planning (time – 4D), Planning the desired spatial configurations
- Action by stakeholders and society (internalisation – 5D), Driving development, making it happen

In practice these dimensions are intertwined and possibly integrated. Precondionality was observed from 5d to OD.

The BAR showed that it can work in theory:

- Data (big data) were collected and analysed (OD). There is stil a lot to do regarding uniformity and exchangeability of data.
- The potential of flows and cycles were clarified (1D).
- Also informed by that spatial designs were made (2-3D). Patterns provide insight following big data (OD) and flow analyses (2D). Stakeholders consider these as having a great perspective.
- Governance research provides guidelines for the perspective of action (5D). All parties like to be helped in order to translate supplied insights to their own action plan.
- The studies and designs demonstrate that there still is (a lot of) space in the region in regards to flows and spatial design!
- Research taught that generic policy and approaches do not work and that thes issues need to be specifically considered from a local perspective. A relationship is laid with the local

action at a higher scale level: what does every intervention contribute to a higher goal and what does this mean for another site and the initiatives to be taken there?
- General image is that studies indicate perspective for the airport region. Schiphol states: from compensating to positivating and participating.

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