

Facilitating experimentation in infrastructure delivery through innovative “open” governance and “open” regulatory frameworks

DII – 2017 Keynote Speech by Prof. Amira Osman, University of Johannesburg, amirao@uj.ac.za

Infrastructure provision is considered a crucial driver for economic development, job creation and poverty reduction. The delivery of infrastructure through effective implementation mechanisms that encourage public/private partnerships and facilitate ease of management and maintenance is considered crucial for a country's development. This demands a high level of innovation, efficient mechanisms and impact through an appropriate scale of delivery. However, the built environment professions tend to be conservative and do not easily accept innovation. The stakes are high if “innovations” in process or technology fail, thus the reluctance to adopt new ways of “doing”. This must change if we are to address infrastructure demands in an inclusive and representative process.

The South African National Development Plan (NDP Vision 2030) focuses on the demographic shifts that will boost both productivity and consumption. This situation is similar throughout the continent; by 2030 Africa will have 760 million urban residents, increasing to 1.2 billion by 2050 according to the African Economic Outlook 2016. The infrastructure gaps that are widening are presented as both a challenge and a great opportunity for investment and large-scale developments; unlocking infrastructure backlogs and managing integrated supply chains can transform the economic performance of a country as well as achieve more equitable development by ensuring affordability and accessibility. South Africa and the continent needs resources and skills to deliver the massive infrastructure needs – however, South Africa and the continent also need forms of governance and regulatory frameworks that allow for experimentation and testing out of alternative forms of delivery. These new forms of governance and frameworks will allow for efficient construction of infrastructure, the development of networks of suppliers to those industries and the entities engaged in operating and maintaining this new infrastructure – elements that are called for in the NDP Vision 2030.

In South Africa, the state has committed substantial funding to public infrastructure to address backlogs. In Gauteng alone, during 2013-2016, an investment of R30 billion was made in infrastructure with R42 billion being planned for the next 3 years. This focus has led the Gauteng department of infrastructure development (GDID) to initiate the Lutsinga Infrastructure House, described as a “project nerve centre” which “uses technology to track developments in the planning, design and construction” of all infrastructure projects. This facility demonstrates that while a national infrastructure plan needs to be centrally driven and monitored, this also needs to be aligned with localized project management systems. If this operates efficiently, and if its mandate is extended, it will allow for the creation of conditions for embracing smaller-scale, dispersed projects and project packages that are more accessible to smaller firms and new entrants.

A conventional understanding of infrastructure makes reference to public buildings and amenities, transport structures and roads, service lines for water, sanitation and electricity, etc. – yet the definition can be broadened. The NDP differentiates between hard infrastructure and soft infrastructure. One can also differentiate between the hardware and the software of the environment by bringing “people” into the debate around “infrastructure”. This bringing together of people and infrastructure can best be demonstrated through Open Building thinking and practice. An “open” approach to governance and “open” regulatory frameworks allows smaller projects be aligned with larger visions, facilitates coordination, involves more people and reduces conflict.

Open Building is presented as an approach to the delivery of infrastructure at city, neighbourhood and building level. The need for viewing the built environment at different levels, requiring careful management of the relationships between the agents that operate at those levels, as well as the need to “disentangle” those levels to allow for a degree of permanence without restricting the necessity for constant transformation, is key to understanding Open Building. This “open” approach allows for distributed decision making in the manner in which the built environment is designed, funded and delivered. This “open” approach to the built environment allows for the acknowledgement of the co-existence of formal and informal systems and can address the disparity in different parts of a country and within cities. It offers a re-think on infrastructure finance and procurement strategies. The introduction of the concept of ‘base buildings’ could be considered a part of neighbourhood infrastructure – in the same way that roads and service lines are considered a part of the neighbourhood infrastructure and are accessible and used by all, irrespective of income level or social status.

This “open” approach to governance and delivery will be presented in the light of the South African NDP, innovations such as the Lutsinga example in Gauteng and reflections on applications in the rest of Africa.

Keywords: Infrastructure, innovation, regulatory frameworks, governance, Open Building, base buildings, Gauteng, South Africa