

1st Dec 2019

Mr Peter Achterstraat AM
NSW Productivity Commissioner
Office of the Productivity Commissioner

Response to the Productivity Discussion Paper dated October 2019

Dear Peter,

Thank you for the opportunity to meet with you in a Western Sydney regional setting to consider the subject Discussion Paper.

Amongst the many challenges and opportunities of a fast-growing region our member Councils (collectively) have identified the following priorities;

- The creation of local jobs - the Federal and State Governments own figures suggest that a 200,000 local jobs target will need to be achieved in GWS by 2036, unfortunately this is 100,000 jobs short of the growth in resident workers over the same period.
- Local government financial capacity and appropriate funding mechanisms to deliver adequate social infrastructure.
- A coherent smart region agenda beyond the simple deployment of apps, gizmos and sensors that integrates the planning and operating functions of a modern metropolis.
- Transport and intra-region accessibility.

In terms of the focus areas of the Discussion Paper these appear adequate to guide discussion and investigations with one exception, the issue of Governance. I believe that place-based governance whether it be in the provision and operation of infrastructure or in the delivery of services should attract its own priority of attention.

I believe that digital technologies will provide the mechanisms to operate a region/city in ways that could hardly have been imagined just a decade ago, the productivity enhancements, especially from Local Government would rival anything achieved to date from other recent reform agendas, including Council amalgamations.

I would like to propose a single project that substantially impacts every one of the Treasurer's Productivity Priorities as detailed in the Discussion Paper.

The details of this project are contained at the Attachment "A Digital Common Operating Environment for Local Government" dated 8th March 2019 that was prepared in response to the Call for Prospectus process of the Western Sydney City Deal.

I commend the Attachment for your consideration, and I am available at your discretion to provide further information as necessary.

Yours sincerely,



Attachment.

1. "A Digital Common Operating Environment for Local Government" dated 8th March 2019.

8 March 2019

Prospectus

“A Digital Common Operating Environment for Local Government”.

“It is impossible to create a smart region without a smart local government sector that consists of Councils having developed digital planning, operating, financial, administrative and logistic sub-systems all integrated with a hi- resolution spatial model”

References:

- A. Call for Prospectus – Developing the Digital Western Parkland City.
- B. Opportunities for the Western Parkland City.

Introduction.

This prospectus has been developed by WSROC on behalf of its member Councils and seeks the following outcomes;

- the development of a specification for the next generation best practice operating environment for Local Government based on digital technologies,
- the conduct of a pilot program with 2 -3 Councils to implement the specification, and
- the development of a program that incentivises Councils’ for early take up of the specification.

This document will refer to the **Digital Common Operating Environment (DCOE)** as the thing to be developed and implemented.

It is anticipated that industry will respond to the Call for Prospectus with many interesting ideas across the 8 themes, what is not certain is whether anyone will address the issue of what constitutes the “core” of the digital systems, technologies and applications. Where does the interoperability occur, say between planning and operational functions? where and how is the data stored, maintained, analysed and “integrated”? How does massive amounts of near real-time data collection through various single or multi-function sensors find its way to influencing operating and planning decisions, locally, regionally and city wide?

Western Sydney Airport is being developed as a “totally digital” airport, a practical objective with the potential to enhance the airports integration and engagement with local communities, especially

through local government. But having a digital airport in the middle of an analogue universe makes little economic, social or environmental sense.

Local Government's data collection through various deployments of environmental sensors and collection of other data that includes the operation of the local public domain, building and construction activities, social events, recreational activities, etc will increase substantially as digital capabilities are utilised.

How to store it, where it is stored, how it is integrated and processed into value-adding information (insights) are all legitimate questions that require consideration and that directs attention to some "core" platform, regardless if it is virtual or physical, centralised or distributed.

The premise is that local Government is not only best placed to provide this "core" platform but it will be the fundamental component of a Council's intrinsic capabilities in the digital environment.

By its very nature the DCOE will have a substantial positive impact on productivity, social inclusion and environmentally sustainable outcomes as detailed at Reference A.

The DCOE will specifically enhance outcomes associated with:

- Smart monitoring
- Data Sharing
- Smart Public Spaces
- Smart Transport
- Community Engagement
- Smart Planning and Management

Imagine if,

the State Government made a small investment and provided the leadership to facilitate the development of a digital common operating environment for local Government in NSW commencing with a pilot in Western Sydney and that,

the fundamentals that are making ***Service NSW*** so successful are applied to Local Government so we could end up with a network of Councils that while retaining their unique identities and relationships with their constituencies, conduct their business within a digital common operating environment supported by a suite of "core" technological capabilities that would guarantee optimum outcomes from resources expended,

then imagine the ease ...

Productivity

- for staff to be recruited and trained, and the transfer of skills and knowledge across Councils, saving time and costs of recruitment, training and service delivery,
- of developers and builders interacting with local Government across multiple jurisdictions, saving time and money for Councils, developers and purchasers of dwellings,
- for sharing information between the three levels of Government, reducing costs, increasing transparency, removing red tape, increasing access to and the accuracy of local Government reporting,

- for sharing information between Councils especially those within regions and sub-regions leading to increasing levels of collaboration,
- with which Councils can be comparatively performance assessed between one another and facilitating benchmarking within "like" Councils,
- to establish shared services, decreasing costs and increasing service levels,
- to achieve enhanced levels of governance across local government in NSW through improvements in business processes with reduced effort and costs,
- to use common data sets and tools, and develop an enhanced suite of decision support tools on which to support a Smart City approach,
- to reduce the effort and costs for the maintenance of local government IT systems, and an increase in the performance of technological support.

Social inclusion

- enhanced community engagement through visualisations and simulations of effects of planning and development proposals,
- digital portals that allows real-time engagement of citizens with services provided by local government and non-government organisations,
- easier identification of communities at risk/vulnerable through self-reporting or from analysis of disparate data.
- more effective engagement with communities by providing the means to report on service delivery or infrastructure performance.

Environmentally sustainability

- more efficient use of water and energy in the local public domain through adaptive responses to demand and real time monitoring/control,
- more effective mitigation of urban heat effects through collection of local data and application of mitigation measures through building and construction approvals processes.

The idea of a “next generation” digital common operating environment was discussed amongst member Councils in 2017 and there was significant support, especially by 3 Councils, to participate in an initiative, conditional on securing State Government support.

The development and delivery of a DCOE, in the first instance will need a collaboration between;

- Local Government – a minimum of 3 Western Sydney Councils but could include all the Councils of GWS for specific elements of project design and delivery.
- State Government – OLG, DPE, EPA
- WSROC

We are seeking;

Phase 1. State Government leadership through OLG with appropriate levels of funding to develop the specification for the DCOE for Local Government.

Phase 2. To develop a program for specification implementation on a Council by Council basis that incentivises early take up. The incentive would be a contribution from the State Government to implement the DCOE as a priority.

Background.

Local Government, no different to any other service provider, is a member of the 'services industry'. It is arguably the largest and most important member of this industry. It is in the business of planning, providing, and managing vital services, infrastructure, and facilities to communities. It has enormous societal, economic and environmental responsibility.

The means by which Local Government provides services is through the combined or integrated management of its resources, i.e. people, money, and land, infrastructure and built assets. It must therefore be expert in their management, not just in their planning but also in their operation.

It must also be expert in managing the nexus created between itself and Federal and State Governments, public agencies and the private sector when shared interests, common responsibilities and statutory obligations come into play.

Local Government is doing a lot of things well; and there is not necessarily a shortage of the planning, financial or technical skills required to 'strategically' manage assets and resources in a manner and to a level that is appropriate for each individual Council. Much of this is done intuitively by Councils, but albeit inefficiently on an ad hoc basis without formal processes.

Local Government also has a major role to play in delivering the benefits of a truly Smart City¹ beyond simple stand-alone initiatives of little strategic significance. To do so will require a substantial improvement in core capabilities not only within individual Councils but also across the whole Local Government Sector.

The environment that Local Government must respond to is characterised by;

- Governments that bear the high transactional costs caused by incomplete, different and numerous data sets, and the need to convert them into useable formats.
- Governments that cannot attribute or differentiate costs to users because the cost of service delivery cannot be consistently and accurately determined.
- Innovation, investment and greater economic efficiency across the sector is limited.

The Integrated Planning and Reporting (IP&R) was introduced in response to the call in 2006 from the Local Government and Planning Ministers' Council (LGPMC) for nationally consistent frameworks to improve Local Government's capacity in:

- Long-term financial sustainability
- Asset Management
- Community engagement
- Workforce planning

¹ A Smart City in its most basic form is one that systemically collects data, converts it into knowledge that in a planning sense shapes strategy, policy and plans and in an operational sense forms the basis for decisions all of which produce superior economic, liveability and sustainability outcomes; all underpinned by the exploitation of technology.

NSW has a comprehensive IP&R Framework that comprises the following:

- Strategic Community Plan (10 years)
- Corporate Business Plan (4 years)
- Long-Term Financial Plan (10 years)
- Workforce Plan
- Information, Communications and Technology Plan
- Asset Management Framework

Since its implementation in 2006, there is strong evidence² that the ‘value’ of IP&R, and particularly the benefits of linking and relating both the strategic and operational management of assets to service planning and delivery, service levels and service outcomes, and long-term financial planning is not widely appreciated across Local Government.

The implementation of an IP&R Framework across the Local Government sector in NSW can be best described as “not having being done very well”. The State Government mandated the adoption of IP&R over Local Government without understanding the long-term change, cultural, capacity and capability implications that this would have over individual Councils, let alone the Local Government sector as a whole.

The introduction of IP&R represented radical change and overhaul to the traditional management of Councils, provision of services, and relationships with their communities. In turn, this presented unknown challenges, uncertainty, and threats, which resulted in resistance to new ideas.

A lack of suitable support from the State Government to assist Local Government to implement IP&R, and acquire the necessary new planning, business, financial, communication, and analytical skills, as long-term change management projects meant that Local Government has largely been left to its own devices to ‘get on with it’.

In implementing the IP&R requirements of their respective States, Councils largely treated them as exercises in compliance and ‘box-ticking’. IP&R documentation, strategies and plans were often prepared by consultants without ‘ownership’ and accountability for their content being accepted by Councils.

Measurement of performance and fit-for-the-future is concentrated on financial and asset ratios, rather than the inputs and processes that, together with prudent financial and asset management, produce levels of service outcomes, and report the extent to which Councils fulfil their missions.

Some of the more significant observed outcomes and unintended consequences of the above are:

- Many Councils remain unaware of, or understand the importance, principles, and benefits and value of IP&R.
- Associated with this, many in Local Government still prefer to see themselves as regulators and administrators, rather than as service providers and resource managers, agents of their communities, guardians of the present, and shapers of the future.
- In the seven years since it was implemented in NSW many Councils have made little or no progress in IP&R. Once the boxes had been ticked, few Councils looked to integrate IP&R into their organisations.

² Examples: Boxall, Jones, & Comrie, 2015; Carter, 2013; Daniels, 2014; New South Wales Treasury
[Blacktown](#) [Blue Mountains](#) [Cumberland](#) [Fairfield](#) [Hawkesbury](#) [Liverpool](#) [Parramatta](#) [Penrith](#)

- There is a feeling common to smaller and non-metropolitan Councils that implementing IP&R is beyond their reach, and they therefore argue that it does not apply to them.
- Many still do not understand their strategies and plans, or how to go about implementing them. There are often unreasoned assumptions by Councils that they do not have the time, the human and financial resources, and skills to implement IP&R.

The opportunity to re-visit the implementation of the IP&R as a necessary reform through the opportunity of developing the next generation “best practice” operating environment for Local Government based on existing and emerging digital capabilities could deliver substantial improvements to productivity, social inclusion and environmental benefits on an unprecedented scale.

The Opportunity.

The opportunity takes the form of a special collaboration between State and Local Government to develop a “next generation best practice digital operating environment” that would encompass all of those functions of a contemporary Council, both front of house and back office; in the form of a Digital Common Operating Environment (**DCOE**).

The **DCOE** can be developed under the guidance of the existing Integrated Planning and Reporting Framework (IP&R) with the added benefit that in doing so it will provide reason and momentum to address any deficiencies in the implementation of the Framework within individual Councils and across the sector.

The **DCOE** would deliver all the functions necessary of a contemporary Council and structured to achieve the following outcomes;

- Reliable and systemic data collection and storage
- Universal and commonly understood definition of data
- Open access to the data
- Standardised reporting across all Councils on key performance metrics
- Customised reporting for specific critical stakeholders
- Customised digital portals for key stakeholders
- Processing data into knowledge to guide decisions and actions
- Interoperability with other key systems

Elements of a DCOE

The DCOE is primarily a place-based planning and operations tool, for this reason it is argued that its development, even though it has a multitude of stakeholders, should in the main be developed by Local Government with State Government leadership and financial support.

A DCOE must accommodate the following, indicative only, not meant to be an exhaustive list;

- customised stakeholder engagement portals, i.e. communities, utilities, service providers, developers and builders, Government, special user groups.
- visualisations and modelling of planning proposals, development applications and proposed new infrastructure.
- an LGA based high resolution digital twin would be integrated with a low/medium resolution regional digital twin.

- all of the functions of a contemporary Council would be interoperable with the spatial information contained within the digital twin i.e. planning, operations, finance, administrative, logistics.
- integration and analysis of data from CCTV and other sensors in the public domain.

At this point it may be pertinent to address the issue of integration and interoperability of the various functional sub-systems and specific purpose technologies. This is best considered in the light of a specific example, as follows.

Imagine a smart pole that not only has public lighting, signage and perhaps one or more energy/telecommunications utilities using it. Add a hi-resolution CCTV camera with advanced video analytics, a hi resolution video display and a drone to the same smart pole and you now have an item of public infrastructure that provides for:

- Public safety
- Traffic and pedestrian management
- Automatic parking infringement enforcement
- Car parking availability (near real time)
- Place based public transport route and service information (bus stops, commuter car parks)
- Special event management
- Emergency and incident management
- Law enforcement support

The question that arises is then “how are these things integrated within the operations function?” and the following question then is “how do these operations-based functions make their way to influencing the planning function?”.

The elements that would indicatively comprise a DCOE for local government is shown diagrammatically at Figure 1 on the following page.

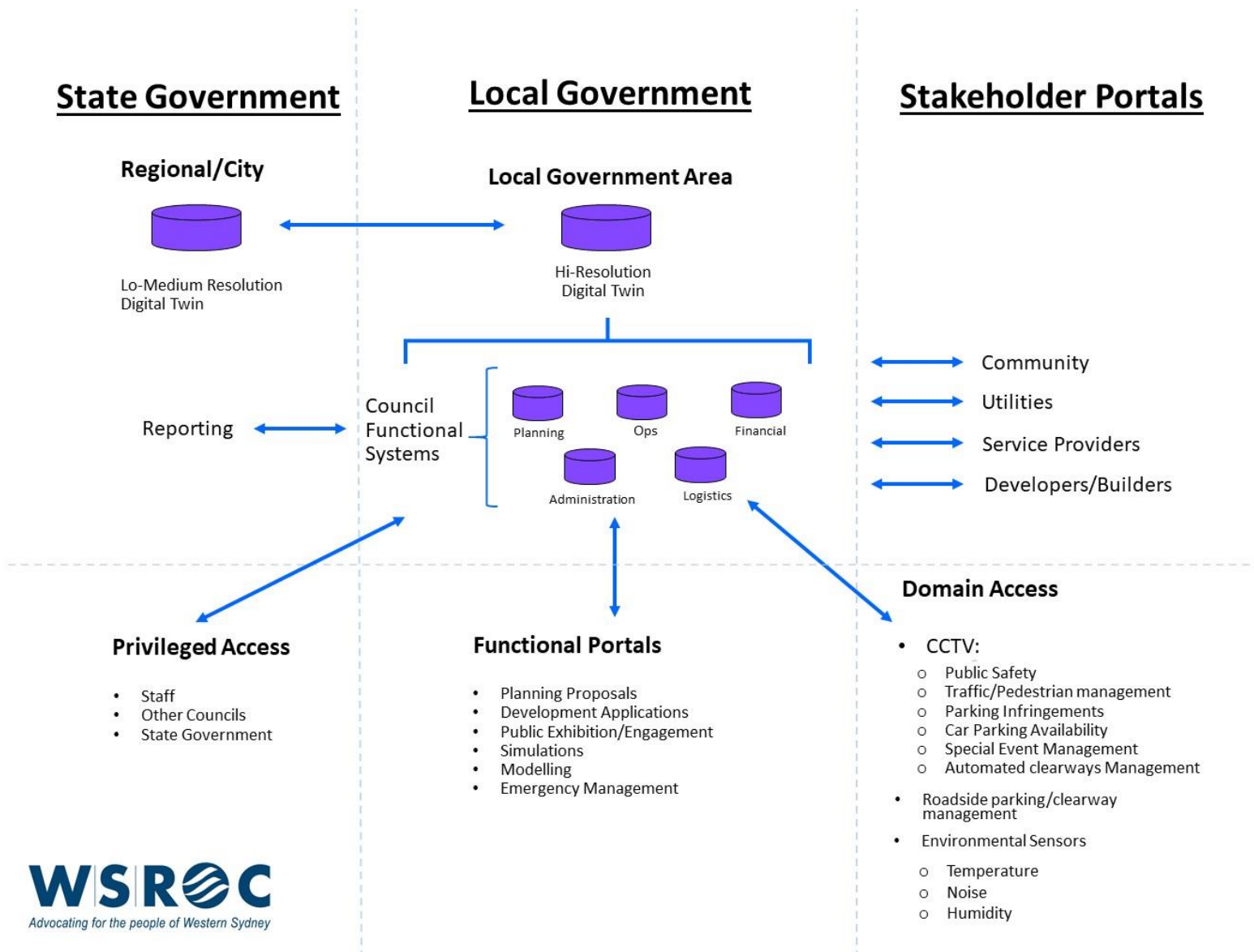


Figure 1.

Implementation of a DCOE.

It could be argued that without a DCOE for local government, one that would facilitate interoperability and create new capabilities, Local Government's ability to make a substantive contribution to the achievement of a smart region is much diminished.

The sooner that a DCOE is developed the lower the risk of divergent capabilities and applications within the local government sector.

The features of the **DCOE** once developed would allow it to be implemented within individual Councils consistent with their technology and business improvement strategies.

It would make sense that the State Government could offer incentives for early take-ups for the **DCOE** because of the significant benefits to the other levels of Government.

It can also be argued that just like Service NSW, that has successfully consolidated a number of State agencies shopfronts into a “common” physical and digital shopfront, Local Government can achieve a “core” front of house and back of office operating environment that could be deployed by individual Councils across the State. This DCOE would deliver all of the functions necessary of a contemporary Council but in the context of the core capabilities listed above.

The Local Government DCOE requires the leadership and support of the Federal/State Governments in the first instance to work with a small group of Western Sydney Councils to develop the specifications necessary as a first step to the conduct of a pilot.

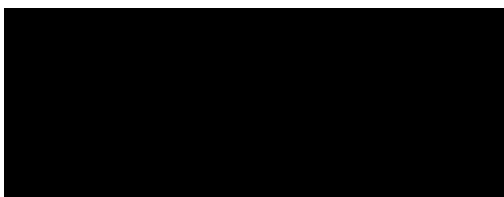
The primary public sector partners to this endeavour would be:

- 2 or 3 Western Sydney Councils
- WSROC Ltd
- Office of Local Government (OLG)

WSROC sees this as an appropriate project for the Western Sydney City Deal to consider as a necessary local government reform that could potentially deliver greater efficiency and cost savings across the sector than any other single initiative before it.

Recommendations.

1. That a project be initiated, a State and Local Government collaboration, that will develop a comprehensive suite of specifications for a DCOE for local government that could be deployed in a metropolitan, a peri urban and a rural Council.
2. That a pilot program be developed to implement the specifications in a number of Western Sydney Councils supported by funding from the State Government.
3. That this proposal be considered for inclusion in the Western Sydney City Deal agenda as an item of significant local government reform of particular priority for Western Sydney but that can be leveraged across all of the NSW Local Government sector.



References.

Boxall, P., Jones, C., & Comrie, J. (2015). Assessment of Council Fit for the Future Proposals Local Government - Final Report.

Carter, M. (2013). Briefing Paper: Australian Local Government Financial Reform - A Federal Perspective.

Daniels, T. (2014, 6-7 March 2014). Long-Term Financial Planning and Integrated Planning and Reporting for Local Government. Paper presented at the Local Government Managers Australia Western Australia Finance Professionals Conference, Pan Pacific Hotel, Perth, WA.

New South Wales Treasury Corporation. (2013). Financial Sustainability of the New South Wales Local Government Sector. Sydney.