Author name: J. Roorda

Date of submission: Monday, May 25, 2015

Submission: On behalf of JRA I support the principles in the consultation paper and make the following comments and recommendations.

1. Urgent guidance on backlog calculation is needed. Infrastructure Backlog or Bring to Satisfactory (BTS) and Maintain at Satisfactory (MAS) Needs Clear Definition for Consistent Practice. The calculation methods for BTS and MAS continue to be inconsistently applied and this is likely to continue to provide high variability and low confidence policy decisions unless there is clear guidance from IPART. Code update 23 does not provide this guidance unless read together with the IPR Manual. An auditable determination of BTS must connect to the IP&R resourcing strategy for an informed trade-off for risk, affordability and service levels. Appendix 1 suggests a methodology that has been peer reviewed, successfully tested with a significant sample of NSW Councils and compatible with interim simplified approaches for Councils that do not have reliable asset and risk management plans.

2. Using written down value (WDV) in special schedule 7 condition profiles in Code Update 23 can provide unreliable sustainability measure. Modern equivalent renewal cost or depreciable amount is a more reliable measure. See appendix 2 for an example of the impact of using either WDV or Depreciable Amount.

3. Lower own source revenue to an achievable target for rural Councils. A 60% own source revenue target is not likely to be achievable for rural councils and ignores vertical fiscal imbalance. Rural councils have high infrastructure to population ratios and implementing strategies to achieve 60% own source revenues through rate increases could result in adverse impacts for primary industry competitiveness for NSW. The DLG reported average for NSW was 37.4 % in 2011/12 and 42.5% in 12/13. The target should be lowered or clarified as to what is included in own source revenue to enable an achievable level for rural councils.



Independent Pricing and Regulatory Tribunal Methodology for Assessment of Council Fit for the Future Proposals PO Box K35 Haymarket Post Shop NSW 1240 http://www.ipart.nsw.gov.au/Home/For Consumers/Having your say/Lodge a submission

20th May 2015

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Jeff Roorda | General Manager JRA

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¹ Comparative Information on NSW Local Government Measuring Local Government Performance 2011/12 NSW Premier and Cabinet Division of Local Government. October 2013

APPENDIX 1 – BRINGING INFRASTRUCTURE TO SATISFACTORY.

EXISTING POLICY FRAMEWORK

The existing policy framework to determine satisfactory service levels and risks based on IP&R is robust and effective and provide the basis for a transparent, accountable and evidence based methodology. JRA observation is that this policy framework has not been applied consistently to "Bring to Satisfactory" BTS or "backlog" across NSW local government primarily due to it being seen as a lower priority. The realisation of importance has changed, the guidance needed to implement this awareness is needed urgently and the following guide provides a summary of policy and practice.

- 1. The Annual Report is one of the key accountability mechanisms between a Council and its community. As such, it should be written and presented in a way that is appropriate for each council's community.²
- 2. Councils are required to report on the condition of the public works (including public buildings, public roads, as well as water, sewerage and drainage works) under the control of the Council as at the end of that year, together with:
 - An estimate (at current values) of the amount of money required to bring the works up to a satisfactory standard;
 - An estimate (at current values) of the annual expense of maintaining the works at that standard;
 - The council's program of maintenance for that year in respect of the works; and
 - The report on the condition of public works is also included in the financial reports and is known as Special Schedule 7. Councils must complete this Schedule each year.³
- 3. The Asset Management Strategy must identify assets that are critical to the council's operations and outline the risk management strategies for these assets.⁴
- 4. The Asset Management Plan/s must identify asset service standards and should incorporate an assessment of the risks associated with the assets involved and the identification of strategies for the management of those risks. The strategies should be consistent with the overall risk policy of Council. The International and Australian Standard AS/NZS/ISO/31000:2009 Risk management Principles and guideline provides a useful guide. ⁵
- 5. For water supply and sewerage a 30-year total asset management plan (TAMP, which is a key element of the Strategic Business Plan (SBP) and Integrated Water Cycle Management (IWCM) Strategy) and a 30 year financial plan are required. A council's peak planning document is the later of its IWCM Strategy and SBP, which are required every 8 years on a rotation of every 4 years (www.water.nsw.gov.au). The key outputs of the IWCM Strategy or SBP are a 30-year TAMP, a 30-year financial plan and an affordable Typical Residential Bill (TRB) on the basis of the agreed levels of service and the projected demographic growth. The annual Action Plan to Council, which is the key water and sewerage working document provided to the council each year, enables the council to effectively and efficiently manage its risks and highlights any corrective actions needed to address emerging issues, areas of underperformance, or to implement Best Practice Management (BPM) requirements.

² IP&R Manual March 2013. Section 6.1.

³ Ibid Section 6.4

⁴ Ibid Section 3.4.1

⁵ Ibid Section 3.4.2

- 6. The report on the condition of public works (Special Schedule 7) should flow directly from the Delivery Program (Note 1) which should define performance indicators for both existing and proposed levels of service. These performance measures can be used to quantify the upgrade costs (or degree of over-servicing) between existing and target service levels (Note 2).
- 7. The determination of satisfactory target service levels (Note 3) involves an informed trade-off using the Long Term Financial Plan and Asset Management Plan 10 year scenarios for revenues, risks and service levels. This approach is consistently identified in the IP&R Manual and expanded in complementary resources such the IPWEA Level of Service and Community Engagement Practice Note 8.
- 8. The Final Report of the NSW Independent Local Government Review Panel October 2013 noted that "Collaborative approaches are also needed to ensure that all councils have access to high quality technical assistance in fields such as setting realistic condition standards for infrastructure, including undertaking community engagement to determine what levels of service are acceptable. It needs to be more widely understood that at any given time a significant percentage of a council's infrastructure assets will be at a less than desirable standard: it is simply financially impossible (and irresponsible) to aim for every road, bridge, drain, building etc to be 'satisfactory' or better."⁶ The report notes that some councils have already done excellent work in this regard and that the Institute of Public Works Engineering and the Australian Centre of Excellence for Local Government have prepared a 'practice note' on levels of service which should provide a sound basis for training programs.
- 9. Cost to bring to assets to satisfactory (BTS) should be determined by asset and risk management plans. This guide recommends that the cost to bring to satisfactory should be the total unfunded cost to renew all high residual risk assets in the current risk register. Residual risk includes all types of risk shown in table 1 on the following page.
- 10. Special Schedule 7 is auditable by checking for alignment between SS7 and asset and risk management plans. The risk register establishes a consistent and evidence based cost to bring to satisfactory and connects to good governance practice of transparent reporting of risk through appropriate governance processes such as an audit committee.
- Asset Risks include operational, technical, financial, legal, social and environmental risks using the ISO 31000 framework. Supporting resources are available and this methodology is consistently applied internationally. (Note 4)

Note 1 – For water supply and sewerage, this is the first 4 years of a water and sewerage council's 30-year total asset management plan (TAMP) in accordance with the Strategic Business Planning Check List (http://www.water.nsw.gov.au/ArticleDocuments/36/town_planning_strategy_checklist.pdf.aspx). The TAMP involves a cost -effective 30-year capital works program showing each of works for growth, improved standards and a renewals plan, together with an operation plan, which includes non-build solutions, and a maintenance plan. **Note 2** – NSW Office of Local Government, IP&R Manual Section 6.4 P133

Note 3 – Levels of service for water supply and sewerage need to be determined and reported in accordance with Item 4 on page 5 of the Strategic Business Planning Check List.

Note 4 – IPWEA NAMSPLUS – Asset and Risk Management Plan Templates

The input of the NSW Office of Water to the draft of this guide is gratefully acknowledged. Also the peer review by Dr Penny Burns and John Comrie (JAC).

⁶ Revitalising Local Government Final Report of the NSW Independent Local Government Review Panel October 2013, p52

POLICY APPLICATION

The following principles are suggested to implement the existing policy framework. This methodology focuses limited council resources to areas of highest risk.

- 1. "Bring to satisfactory" is the sum of Modern Equivalent Renewal Cost (MERC) of high residual risk assets not financed in the current annual reporting period. This is based on assets due for renewal or partial renewal but not funded. Cost to bring to satisfactory is the most efficient modern equivalent capital treatment to keep the asset to service at a satisfactory level. (Note 5) This aligns with Code update 23 when read together with the IPR manual. Satisfactory level of service is not bringing and asset to "as new" condition but to a level where "only minor maintenance is required".
- 2. "Maintain at satisfactory" (MAS) is the unfunded maintenance treatments recommended by the risk management plan to manage BTS risks but not financed in the current annual reporting period.
- 3. BTS is audited by examining the Asset Management Plan and Risk Register that act as "working papers" for BTS and MAS in the annual report.
- 4. Deferring renewal may result in the modern equivalent renewal cost increasing and will impact future BTS reporting.
- 5. BTS analysis must be carried out for each material asset component. Network averages are not likely to provide reliable or consistent BTS reporting.
- 6. The connection to risk registers reinforces the importance of independent Audit Committees to report service risks associated with "unsatisfactory service levels" to Council. This enables the essential separation of aspirational but unaffordable service levels from target service levels identified in the delivery program.

Table 1 Types of Risk

Criterion	Risk Evaluation Notes
Operational	Risks that have the potential to reduce services for a period of time unacceptable to the community and/or adversely affect the council's public image.
Technical	Risks that cannot be treated by council's existing and/or readily available technical resources.
Financial	Risks that cannot be treated within council's normal maintenance budgets or by reallocation of an annual capital works program.
Legal	Risks that have the potential to generate unacceptable exposure to litigation.
Social	Risks that have the potential to: - cause personal injury or death and/or - cause significant social/political disruption in the community.
Environmental	Risks that have the potential to cause environmental harm.

(NAMSPLUS Risk Management Plan Template, ISO 31000)

Note 5 – This application is consistent with code update 23 where Satisfactory is defined as "satisfying expectations or needs, leaving no room for complaint, causing satisfaction, adequate". High levels of complaint. The estimated cost to bring assets to a satisfactory standard is the amount of money that is required to be spent on an asset to ensure that it is in a satisfactory standard. Where an asset is in condition 3, 4 or 5 AND has low risk AND acceptable levels of community complaint (operational risk) then the cost or renewing these assets would represent an unaffordable cost to the community and should not be included in reported backlog. It may be included in aspirational service levels for consultation in the Community Strategic Plan (CSP).

POLICY APPLICATION EXAMPLES

Code Update 23⁷. "Unless Council has undertaken consultation with their community and has agreed to a level of service from councils assets the BTS should be measured against the second condition rating of Good as stated in the Integrated Planning and Reporting Manual for local government in NSW." "Asset condition should be based on up to date asset condition assessments rather than an engineering estimates."

Current Methodologies Applied in NSW.

The methodologies used to calculate "backlog" are inconsistent across councils and policy decisions based on current unaudited annual special schedule 7 reports are likely to be materially flawed without clear policy direction on methodology. Most councils do not comply with the fundamental code update 23 pre requisite that "*Asset condition should be based on up to date asset condition assessments rather than an engineering estimates.*" It is JRA's experience that less than half of NSW councils have up to date condition assessments for all infrastructure. This is deemed not affordable for these Councils. Condition assessment for buried assets (other than by limited sampling) is very expensive and unreliable where assets are in the first 50% of their lifecycle. This has a major influence on the reliability and variability of the resulting reports and the primary reason for the suggested methodology in this guide that ensures limited resources are applied to areas of highest risk.

Common Method 1 – The sum of Current Replacement Cost (CRC) of assets in condition 3, 4 and 5.

Comment - this method provides very high backlog estimates and is not affordable nor sustainable for most communities.

Common Method 2 – The sum of modern equivalent renewal cost of assets in condition 4 and 5. (Or only condition 5)

Comment - this method provides lower backlog estimates and does not comply with code update 23 unless the community has agreed to this level of service.

Common Method 3 – A proportion applied to each condition group in option 1. (Current Replacement Cost of Condition 5 x nominal %)

Comment - This approach "factors down" backlog to a pre-determined result. If the factor is based on risk then this aligns with the recommended method. This is not a transparent of evidence based approach.

Common Method 4 – Sum of accumulated depreciation for assets with condition 3, 4, and 5.

Comment - This approach does not comply with code update 23 nor the intent of the policy framework. This is not a transparent of evidence based approach and does not enable community consultation on service levels, risks and revenues.

Recommended Method – BTS (backlog) is the Modern Equivalent Renewal Cost (MERC) of high residual risk assets not financed in the current annual reporting period. This is based on assets due for renewal or partial renewal but not funded. Cost to bring to satisfactory is the most efficient modern equivalent capital treatment to keep the asset to service at a satisfactory level. (Note 5). This is shown in the following examples.

⁷ NSW Code of Accounting Practice - Code Update 23 - Special Purpose Financial Statements Final Draft



Figure 1 –Partial renewal to bring asset back to "normal" maintenance state.

Time Years



Figure 2 – Example of Partial Renewal in Figure 1

This pit has a current replacement cost of \$3,000 and is in condition 5.

The pit has 2 components (chamber and lid) but is currently valued as a single asset.

Renewal of the damaged lid at a cost of \$1,000 will manage high risk resulting in the average pit condition of 3 (based on value). Better practice would be to manage as 2 components (long and short life)

BTS under alternative methods = \$3,000 BTS under recommended method = \$1,000

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Figure 3 – Example of Partial Renewal in Figure 1

This kerb and adjoining pavement has failed due to not resealing roads in time, poor sub-grade and drainage. Pavement condition = 5 but only 20% of the pavement needs reconstruction plus resurfacing. Using value of condition 5 asset or accumulated depreciation would materially over state BTS (backlog)

BTS under alternative methods = renew 100% BTS under recommended method = renew high risk proportion (20% of pavement area)

Figure 4 – Example of Partial Renewal in Figure 1



Level 2 inspection completed Bridge Engineering estimate to complete high risk work = \$720,000

BTS under recommended method = renew high risk proportion (\$720,000).

Asset management plan recommends upgrade to meet increasing traffic loads.





Figure 6 – Example of Full Renewal in Figure 5

This roof sheeting cannot be partially renewed and would require full renewal before the roof starts to leak. High risk of damage if roof leaks.

BTS under recommended method = renew high risk proportion (renew rusted roof sheeting) and not the supporting timber structure.



Time Years



Figure 8 – Example of No Renewal Required

A large proportion drains in this network had condition 4 and 5 based on age. This is common practice for buried assets. Sampling by CCTV showed that none of these had risk of failure. Some like the one shown had 5-10mm displacement that did not warrant reconstruction. Low risk.

BTS under recommended method = No renewal required. Alternative methods would all overstate BTS (backlog)



Figure 9 – Example of No Renewal Required

This road serves 3 properties. The sealed section is condition 5 and will shortly be reverted to a formed road with thin gravel layer of < 100mm under the asset management plan to improve network efficiency. (lifecycle cost per vehicle). Low risk.

The gravel section is condition 4 because there almost no gravel left and is managed by maintenance grading to minimise lifecycle cost per vehicle. Low risk.

BTS under recommended method = No renewal required Alternative methods would all overstate BTS (backlog)

Note that the NSW Office of Water has advised that BTS is zero for a council which has developed and is implementing a cost-effective 30-year total asset management plan (TAMP) for water supply and sewerage in accordance with Item 7 on page 10 the Strategic Business Planning Check List (www.water.nsw.gov.au). Councils need to annually 'roll forward' their 30-year TAMP and to review and update the TAMP for projects completed, modified or deferred. The council then needs to update its 30-year financial plan using the updated TAMP and the council's latest annual financial statements. Any unfunded renewals must be added to the required renewals expenditure for the following year. However, BTS would arise if the council fails to implement its identified 30-year water and sewerage renewals plan in a timely manner. The amount of any BTS is the difference between the following years' required renewals and the budgeted amounts. Asset valuation for water supply, sewerage and stormwater assets needs to be in accordance with the NSW Reference Rates Manual for Valuation of Water Supply, Sewerage and Stormwater Assets, 2014 (www.water.nsw.gov.au).

APPENDIX 2 – IMPACT OF USING WRITTEN DOWN VALUE IN ASSET CONDITION PROFILES.

Using a test asset register shown below sensitivity analysis was completed on the use of depreciable amount compared with written down value (WDV)

Depreciable			% Life					
Asset	t Amount		Condition	Remaining	WDV		Risk	
					\$			
1	\$	2,000	1	100	2,000		Low	
					\$			
2	\$	2,000	2	75	1,500		Low	
					\$			
3	\$	2,000	3	50	1,000		Low	
4	\$	2,000	4	25	\$	500	Low	
5	\$	300	4	25	\$	75	Low	
6	\$	300	4	25	\$	75	Low	
7	\$	2,000	5	5	\$	100	Low	
8	\$	2,000	5	5	\$	100	Moderate	
9	\$	2,000	5	5	\$	100	High	
10	\$	2,000	5	5	\$	100	High	
					\$			
	\$	16,600			5,550			

Asset Register

	Depreciable		This is the modern equivalent cost
Asset Register	Amount	\$16,600	to renew
	WDV	\$ 5 <i>,</i> 550	

Result - Depreciable amount

	Condition					
	1	2	3	4	5	TOTAL
Condition Profile Using Depreciable						
Amount (modern equivalent cost to						
renew).	12%	12%	12%	16%	48%	100%
				\$	\$	
Value DA	\$ 2,000	\$ 2,000	\$ 2,000	2,600	8,000	\$16,600

Result - Depreciable amount

Result – Written Down Value							
	Condition						
	1	2	3	4		5	
Condition Profile Using WDV for the							
Same Asset Register.	36%	27%	18%	12%		7%	100%
				\$			\$
Value WDV	\$ 2,000	\$ 1,500	\$ 1,000	650	\$	400	5,550
%Value Rem	100%	75%	50%	25%		0%	

Condition Profile Using Depreciable Amount (modern equivalent cost to renew). 48% of assets or \$8M are in poor condition (at end of life). The reader of the annual report would conclude Council has an infrastructure problem - and it does.



