IPART ISSUES PAPER
REVIEW OF DEUS DEVELOPER CHARGES GUIDELINES FOR WATER SUPPLY, SEWERAGE AND STORMWATER

UDIA NSW SUBMISSION

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This submission is the Urban Development Institute of Australia's (NSW) response to the Independent Pricing and Regulatory Tribunal's Review of DEUS Developer Charges Guidelines for Water Supply, Sewerage and Stormwater – Issues Paper.

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Note:

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INTRODUCTION

UDIA NSW appreciates the opportunity to comment on the IPaRT Water – Issues Paper and commends the NSW Government and IPaRT for pursuing a review of DEUS Developer Charges Guidelines for Water Supply, Sewerage and Stormwater (DEUS Guidelines). Development Servicing Plan (DSP) Charges have a significant impact on the provision of housing in NSW and it is critical that the guidelines for their preparation are equitable and the process undertaken to prepare the plans is transparent and accountable.

This review follows sustained advocacy on behalf of the development industry by UDIA NSW. The recent release of the UDIA *'NSW Regional Development Servicing Plans Principles Study'* sought to identify inconsistencies with respect to methodologies contained in the DEUS Guidelines and the IPaRT Guidelines.

The UDIA NSW study was a major catalyst for the IPaRT Review. The IPaRT Water – Issues Paper reflects many of the issues raised in the Principles Study. A copy of the report can be downloaded from **www.udia-nsw.com.au**

UDIA NSW maintains that a single set of DSP guidelines should apply equally to the entire state. UDIA NSW contends that the IPaRT Guidelines represent the preferred approach to developer charges, particularly with respect to the use of Net Present Value (NPV).

Furthermore, UDIA NSW recommends that to assist in generating increased consistency of application of the Guidelines that all LWAs be governed by IPaRT. UDIA NSW advocates that DEUS's role in establishing guidelines is an unnecessary duplication of government resources leading to a diminution of IPaRT's intent. LWAs are declared as monopoly providers by IPaRT and therefore their activities should be governed by IPaRT in accordance with the *Independent Pricing and Regulatory Tribunal Act 1992* (IPaRT Act).

The following summarises UDIA NSW's issues with the DEUS Guidelines and their implementation:

- UDIA NSW contends that the most significant failure of good governance arising from the DEUS Guidelines has been the lack of accountability and transparency. Many of the problems in the DEUS Guidelines arise because the principles on which they are based are different to those originally adopted by IPaRT. This has not been addressed by consultation with the development industry.

- UDIA NSW contends that the DEUS Guidelines do not provide guidance for local water authorities on some critical aspects of a DSP, demographic analysis being one major shortcoming.

- UDIA NSW contends that the various mechanisms, including return on investment (ROI) have been used by the DEUS Guidelines to add significantly and unreasonably to the charges.

- A major concern is the Best Practice Management Guidelines which impose a number of specific mandatory requirements on the DEUS Calculation Guidelines. These tend to enforce a number of interpretations which are contrary to the IPaRT principles. The Calculation Guidelines are legally 'to be considered' according to the Act, and thus are flexible, and not mandatory.

UDIA NSW contends that a single set of DSP guidelines should apply equally to the entire state. These guidelines should be based exclusively upon the industry preferred IPaRT Determination as well as sound financial management principles.

1. RESPONSE TO ISSUES PAPER INTRODUCTION

According to the DEUS Guidelines, there are 126 LWAs in NSW. The Issues Paper suggests LWAs have 'vastly different' local hydrological, geographic and demographic conditions. This is not supported by fact.

A review of the Shoalhaven LWA and Hastings LWA performance data supplied by DEUS will show there are a number of statistical similarities. In addition the infrastructure elements are very similar in many respects.

Water sources are varied but generally adequate. There is little evidence that location is a critical factor (comparatively). Supplementary supply from aquifers is one different source, in the MidCoast area for example. It does not however appear to be a factor that puts costs pressures on the charges either up or down.

1.1 Impetus for review

The data sources provided in DSP's have improved, but in most instances they are not well managed, available or verifiable.

The reference to the DEUS Best Practice Management of Water Supply and Sewerage Guidelines (BMPG) is noted.

The effectiveness of these is doubted as:

1 charges using the required interpretation of the calculation methodology, as gauged by the current spate of charges have become unaffordable;

2 design criteria are generally excessive and therefore the systems are not cost-effective;

3 some LWAs have reasonable planning strategies but these vary considerably in quality. Some of the coastal LWAs have few relevant strategies;

4 financial planning is a particularly vexed question. A number of councils run dual systems. Their own is the first and the Department's FINMOD is the second. While FINMOD has not been available for direct scrutiny, it seems some LWAs regard it only as a necessity to obtain subsidy, rather than to manage their businesses;

5 for water pricing there is no single consistent policy. The policy allows a mix of usage and access charges;

6 there is little evidence of demand management. LWAs pay lip service to the demand management concept but it has not been evidenced by efficient design factors, innovative water-user incentives or allowance for BASIX requirements. There is support for water use reductions by the community which has lead the LWAs, not followed them.

Transfer of any system design efficiency benefits to the calculation of developer charges appears to depend on whether or not LWAs have remote monitoring of system operations (flows etc);

7 Integrated Water Cycle Management (IWCM) is being discussed and strategies are being prepared in some LWAs. There is good evidence of practical applications in

some LWAs relative to others;

8 there is no evidence that the possible efficiencies from IWCMs have had any positive effects upon development charges;

9 the BMPG insist on implementation of 'commercial charges'. This is unofficially advised to councils as exceeding $10,000 for the combined water and sewer development charges; and

10 the check list on page 39 of the BMPG contains the following anomalies:

- 'failure to include' future water and sewerage assets is interpreted as needing to included assets being contemplated up to 30 years out in the future. The DEUS Calculation Guidelines refer to a five year threshold which is used by SWC.
- 'Failure to include pre 1970 assets' conflicts with the IPaRT Guidelines.
- 'Failure to use 1996 as the effective year of commissioning for pre 1996 assets' results in valuing the assets in 2007$ but applying a return on those asset values from 1996. A 2020 DSP with assets valued in 2020$ would also charge interest from 1996. This is obviously a 'double-dip'.
- 'Overestimation of demand per ET' is generally unlikely as all authorities examined understate the development take-up, some substantially.
- 'Failure to agglomerate' is contrary to the IPaRT Guidelines which require pricing signals. The effects in the Bega Valley LWA area were illustrated in the background report on the DEUS Guidelines (page 10). The DEUS approach agglomerates charges between $3,500 and $35,000. The effect is to increase the lower charges by up to 169%.

2 THE DEUS DEVELOPER CHARGES GUIDELINES

2.1 Objectives

Most LWA's produce postage stamp developer charge prices which do NOT signal the real cost of developing in some expensive locations.

DEUS Guidelines 'allow' differential charging. However DEUS has specifically allowed LWAs to ignore the provision of the Guidelines to permit 'agglomeration' of the charges regardless of the size of variation in them. (e.g. see Bega Valley charges adopted in February 2006).

2.2 Developer Charges Concept

The NPV method is widely *'accepted and understood'"* and was developed in consultation with the industry. RoI was not.

The paper did not mention Return on Investment (RoI) which has been used exclusively by most LWAs.

The DEUS methods are claimed to be simpler but this is untrue.

It is also claimed that metropolitan authorities are different - better financials (though not available to industry in the sort of detail required), subject to periodic review and regulation (superficially), and there are only four (two of which are local councils. One, Wyong Shire, has the most transparent model).

These differences have not been quantified to show why these mean that any difference is substantive. The fact is that the systems used to deliver the services are essentially the same.

2.3 Overview of DEUS Guidelines

Much is made of NPV which is rarely used by LWAs. Where these have been used, the method has been flawed. The predominant method proposed is RoI.

The "Capital Charge" in the formula on page 6 of the Issues Paper, is calculated by the formula on page 15 of the Guidelines. viz:

"Capital Charge = Capital Cost x Return on Investment Factor(RoI)"

2.3.1 Levying

At Hastings the water charge is $8,225 per ET. The sewer charge is $3,423 per ET (for Port Macquarie and Wauchope). This meets the DEUS 'commercial charge' requirement as the combined charges exceed $10,000 per ET.

2.3.2 DSPs

A DSP charge is generally calculated for each catchment/area as a first step. The requirements have been examined in full detail in the Background paper to the Principles Study.

2.4 Calculations

The calculations principally depend upon asset cost, capacity and takeup, as with the IPaRT Guidelines. The differences arise in how the various elements are treated.

2.4.1 Which Assets

The assets to be excluded are noted (Table 2.1). The pre-1970 assets to be included are in effect all water headworks and major sewerage works. As this process is a determination of a headworks charge, it is not hard to see that everything can legitimately be included (see note 2 on page 16 of the Guidelines)

The allowance of up to and beyond 5 years has resulted in assets being included over the next 30 years (see Hasting Sewerage DSP 2005)

2.4.2 Valuation

Valuation methods used vary considerably.

2.4.3 Capita Charge Calculations

The RoI method is not simpler - a comparison between DSP's from Sydney Water and any regional LWA will illustrate this when considering the volume of data alone.

The description of the RoI Factor given clearly illustrates the circularity of the method/approach.

The Guidelines suggest that the spreadsheet approach 'smooths out' lumpy capital expenditures. This is misleading. NPV very accurately reflects the present value and cash flow effects of an annual stream of revenues and costs.

2.4.4 Discount Rate

There is good reason to ask for a reduction to 6% real based upon the last 10 years' bond rate plus 3% less inflation.

2.4.5 Agglomeration

The 30% percent rule has been abandoned by DEUS as per advice to Bega Valley. The charges are weighted and averaged regardless of size.

The weighting is different to the method of calculation of the charge.

2.5 Calculating the net Revenue Amount

The 'iterative approach' to calculation of the net revenue is justified as being in the 'context of total revenue needs of the business'. In other words the development charge is integrated with the annual charge and costs are transferred to development's disadvantage. LWA officers understand this effect.

2.5.1 NPV of Annual Charges

The DEUS method does not match the IPaRT method as illustrated in Part 4 of the

Guidelines.

2.5.2 Direct NPV method

This method is in fact indirect. The previous method if properly applied accurately calculates the double dip effect.

2.6 Comparison with IPaRT Methodology

The DEUS Guidelines claim to adhere to the IPaRT principles but in practice they do not. This has been amply illustrated by the industry's Principles Study.

3. Broad Issues with the DEUS Guidelines

3.1 Simplicity

The Tribunal welcomes comments on whether the DEUS guidelines achieve the pricing objective of simplicity. Do the various methods allowed by the guidelines for calculating the capital charge and reduction amount add unnecessary complexity? How can the methods allowed be simplified in light of better data, more experience and a greater understanding of how developer charges are levied? Will simplifications lead to a loss of flexibility?

Comment

There can be no doubt that the aim of simplicity has not been achieved as evidenced by:

- the broad lack of understanding of the requirements of the process and calculations by officers of the LWAs;
- reliance by authorities on DEUS preferred consultants (even by large and well resourced authorities);
- verbal advice from one officer who was obliged to re-write the DSP, that the process was overly complex.
- a simple comparison on the size of the reports and the shear volume of the calculations.
- the conflicting and confusing advice in the guidelines;
- numerous members of the development industry having expressed their dismay at the complexity of the process; and
- experts find a number of aspects of the process very challenging.
- The problem is not, for coastal LWAs at least, a lack of data as most are reasonably well resourced.
- The main problem with the claimed simplicity is that a proper application of the RoI model requires a good understanding of financial management principles. Otherwise, many of the assumptions in the model will result in flawed outcomes. Errors encountered include:
- incorrect interest calculations - in a NPV model the distinction between the critical dates is easier;
- asset capacity does not reach the assumed “Year of Full Takeup” - extra interest is added for years after full capacity is reached;
- errors in capacity – this is a common problem as assumptions are not well documented and do not conform with national codes;
- Year commissioned errors - in a NPV model there is only 2 dates (DSP Date, DSP end date); pre DSP date assets are in 2 categories. One post 1996 and one pre 1996 - for the purpose of the discount rate applicable.

Reduction amount calculations and the agglomeration calculations are far from simple and in some respects unfathomable.

The reduction amount in recent draft DSPs produced by SWC have simplified as well as rectified the calculation process. This is because the takeup rate for the net-revenue offset is determined using the same takeup rate as the asset or capital charge calculation. The main problem with the SWC approach still remains that actual asset capacity is not provided.

The DEUS Guidelines acknowledge capacity as the basis of apportionment as do the IPaRT Guidelines. Regional LWAs use capacity but their generally poor demographic analysis affects the assessment of the timing of provision and takeup of that capacity. The DEUS Guidelines provide little help in this regard.

The agglomeration process has a number of flawed assumptions but principally it fails because it is not logically based. It may also be unreasonable if it substantially inflates other charges. Cross subsidisation between developments is also an unreasonable impost on the industry. It fails to achieve the balance between annual and development charges.

Resolution

A separate schedule of assets should be prepared with description, location, size, cost, and date data so that the source data can be checked. This sort of information is generally provided by LWAs but the descriptions are scant and locations not often provided.

The essential elements can then be transferred to a NPV model in a way that can deal with the variations in takeup, timing and amount of cost and variations in capacity.

If there is a desire to amalgamate some areas in close proximity and price, the only reasonable method is to combine these catchments into one NPV model. Other methods are unfair and difficult to evaluate.

3.2 Transparency

The Tribunal welcomes comments on whether there is a need for greater transparency in the developer charges guidelines. If so, in which areas is there a lack of transparency and how can this be improved? Are there any difficulties for LWAs in meeting transparency requirements?

A Background and Concept Report should be compiled for the benefit of the general public, industry members, consultants and council officers.

This report should be provided on request to industry consultants.

Future reviews would benefit from a clearly stated plan as the original preparing officers may change or the information may be otherwise kept on a myriad of files. CD's of the final data sets and reports should be included so that there is a clear consolidated reference.

The minimum requirements for transparency are the provision of the background information as follows:

1. Digital data to be provided for all calculations;

2. The asset register set out in order corresponding with the DSP calculations.

3. References (in the Concept Report) to design strategies supporting decisions about future infrastructure and details of the strategies included.

4. Inclusion of the demographic data relied upon and substantial analysis of population projections and conversions to EP's and ET's, including vacant blocks and commercial / industrial areas.

3.3 Consistency of charging across NSW

The Tribunal welcomes comments on the advantages and disadvantages of a common approach to developer charge calculation across NSW. Should or could the Tribunal's methodology be adopted for use across the State? How else could consistency be improved?

There would be a number of advantages in having a state-wide system.

The industry perspective is that:

- IPaRT supervision would provide a stabilising influence upon the process, with external review and supervision separate from the LWAs and DEUS.

  Informal discussions with representatives of the Association of Consulting Surveyors, Sydney Water officers have generally agreed that the role of IPaRT as a more pro-active participant would be welcomed. IPaRT's greater involvement would especially assist in resolving what was mutually agreed are occasional and relatively limited issues of interpretation. The extension of IPaRT's role across NSW in dealing with "in principle" matters is regarded as important and would more quickly settle areas of disagreement between the industry and agencies.

- Anomalies in the current process with differing procedures and principles between the IPaRT and DEUS Guidelines would be resolved;

- IPaRT would be independent of other operational aspects of DEUS and the LWAs.

  The industry perceives that DEUS has a potential conflict of interest in that it advises on design and financial processes, provides funding through subsidy and insists upon minimal levels of contributions to be charged by LWAs.

  The industry has little doubt that Councils see a risk to their subsidy if they contemplate a different balance between annual and development charges to that advocated in the DEUS Guidelines and the Best Practice Guidelines.

  The LWAs perspective is of interest to the industry. At the 1996 Development Charges Seminar a number of councils expressed concern with the Department's approach. It is likely that an independent system would be welcomed by many of the larger LWAs which would prefer more discretion in how they set their charges. It is obvious from their DSP charges that a number of LWAs are mindful of the impact of high upfront charges on their community members. Affordability is perhaps better recognised in many regional areas, where incomes and household budgets are more restricted than in the metropolitan area.

3.4 Cost Reflectivity

The Tribunal welcomes comments on issues associated with the cost reflectivity of developer charges. Are there significant differences between developer charges within local government areas? Should LWAs have the right to balance developer and periodic charges within their areas in the way they see fit?

The cost of providing water supply and sewerage services is distorted in a number of ways.

1. In Bega Valley Shire (similar to other areas) all of the charges are agglomerated and the effect is to increase the charges by up to 128% in new development areas.

2. The most significant cause of distortion is where reticulation costs are included in headworks charges.

   This happens in a number of ways. For example, where the maximum size sewerage reticulation size is set at say 195mm, all pipes above that size are treated as reticulation regardless of use. Examination of asset registers reveals that there are many larger pipes within existing urban street systems which although clearly listed as "reticulation" have been included in the calculations as if they were headworks.

   In the Bega Valley village backlog developments, low pressure vacuum system reticulation pipes in the streets connecting individual properties have been incorrectly included in the DSP headworks charge calculations.

   In other backlog areas it is suspected that reticulation is included but up until the DSPs were formally adopted, access to any background information has been denied. Bega Valley Shire Council finally offered industry access to its data two days prior to adoption of draft DSPs despite the industry requesting access to the data one year earlier.

3. The sewerage revenue offset in Shoalhaven City's sewerage DSP calculated using the DEUS model and FINMOD produced a present value of $300 per ET.

   Using Council's own 20-year financial model (their actual financial management model - although they also run FINMOD to satisfy DEUS requirements) the amount derived using the IPART method was $2,630 per ET, almost nine times the DEUS amount.

3.5 Treatment of Subsidies

3.5.1 Treatment of cross-subsidies from existing development

The Tribunal welcomes comments on the treatment of subsidies in the calculation of developer charges. Should cross subsidies be permitted where the extent of the cross subsidy is disclosed? Should there be limits on the amount of cross subsidisation allowed? Should any subsidies be paid out of Council's general fund rather than funded through higher water and sewerage charges on existing residents?

New users purchasing lots pay a cross subsidy in many DSPs. The DEUS method calculates and includes a cross subsidy over 30 years.

The DEUS approach is to cross-subsidise new development in more expensive areas (via agglomeration) including backlog areas which are subsidised by the state government. This

approach is comprehensively demonstrated in the Bega Valley Shire DSPs.

There is a triple effect in that:

1. higher cost areas are cross subsidised.
2. state government subsidy of backlog areas is cross subsidised by new development.

3. reticulation costs in backlog areas are cross subsidised.

3.5.2 Backlog Service Areas

The Tribunal welcomes comments on how the costs of servicing backlog areas should be treated.

Backlog areas are routinely included in DSPs and consequently cross-subsidisation of these areas by new development occurs.

In Shoalhaven in the 1970s and 1980s backlog areas initially had their own local rate structure. Council subsequently amalgamated all areas into a single rate. The effect on the annual rates charges in Nowra at the time was estimated at $5 per annum, which was considered reasonable.

Council's development charge from 1989 to 2006 was based upon an assessment of the cost to serve a 12,000 ET area at East Nowra and the charge was widely made on new development for all parts of the Shoalhaven.

Industry's argument is that most new development has little nexus with backlog areas and costs of servicing these backlog areas should not be included in the new development charge. Dubbo City Council reasonably resolved to set the overall charge as that determined for the new development areas. This charge was then applied to the few new developments occurring in backlog areas.

3.5.3 Inclusion of subsidies in developer charge calculations

The Tribunal welcomes comments on whether subsidies given to LWAs for infrastructure provision should be excluded from the calculation of developer charges.

In 1990 the NSW Court of Appeal decided in the Allsands v Shoalhaven Council case that any grant or subsidy should be deducted from the "cost to Council" prior to it apportioning the cost to determine a contribution under s94. This applied to water and sewerage charges at the time.

The then Department of Public Works made it plain at the time that it intended to defeat this decision. The Department had been party to the case but Shoalhaven Council did not argue the Department's methods, as it did not use them.

Subsequent amendments to s64 of the Local Government Act and the linked Water Supply Authorities Act to exclude subsidy and remove the right of appeal, was a most unfair decision from the industry's perspective.

The Allsands decision still stands as far as "cost to Council" principle applies to s94.

All NSW taxpayers contribute via state taxes and/or GST to state revenue. The excluding of subsidy from income calculations means that new dwelling users are in effect paying twice. It should be noted however that if the backlog areas are removed from the DSPs, this effect will be substantially reduced. Backlog areas attract much of the subsidy payments in coastal areas for sewerage infrastructure.

3.6 Regulatory Oversight

The Tribunal welcomes comments on the extent to which the DEUS guidelines provide latitude with compliance and whether and how, enforcement and dispute resolution processes included in the guidelines can be strengthened.

1 Legal advice has been that the dispute resolution process outlined in the Guidelines is far too loose and likely to be the subject of variable interpretation. For example there is no start-up process. Further whether the LWAs are in fact obliged to participate and how is unclear. Nevertheless all Councils appear to agree that this will be the dispute resolution process.

2 In regard to compliance there should be a pro-active role for IPaRT. The current process at both IPaRT and DEUS is mere registration of DSPs, which is insufficient. Reliance on arbitration is also unreasonable when it places a severe onus upon small to medium scale applicants. The industry regards these resolution processes as valuable, indeed essential, but they are a last resort. At this stage there have been no arbitrations in either metropolitan or country areas.

   There is little else to provide a unifying management and interpretive influence.

3 In a separate DEUS advice not available on the DEUS website, the DEUS Guidelines' 30% agglomeration limit of the difference between charges has been changed to allow all charges to be agglomerated regardless of amount. This restriction was removed by DEUS following a request from Bega Valley Council. The means is believed to be additional layers of agglomeration.

3.7 Developer Charges for Non-Residential Development

The Tribunal welcomes comments on how the developer charges guidelines pertaining to non-residential developments can be enhanced to better take into account available demand and cost allocation information.

This aspect was well covered by the NSW Regional DSP Study 2006 already provided. Industry's principle concern is that average demand for water in not reflected in the split between residential and non-residential ETs. It appears that part of this may be public water use e.g. on parks and gardens but as the method of determining the amount of non-residential ETs for any of the LWAs is not defined, this remains uncertain. Substantial discrepancies are common in DSPs.

4. TECHNICAL ASPECTS OF THE GUIDELINES

4.1 Which assets should be included in developer charges?

4.1.1 Pre 1970 Assets

The Tribunal welcomes comments on whether any pre-1970s assets should be included in developer charges calculations. In particular, where it is suggested that there still capacity available in these assets to serve new development, how should this capacity be assessed and the cost incorporated in developer charges? Is MEERA appropriate for valuing pre-1970s assets?

The inclusion of very old assets at between 30 and 40 times historic cost, using the DEUS Construction Cost Indices, is grossly unfair. Most of these assets would not have imposed any cost on existing ratepayers for the past 50 years, having been fully paid for decades ago.

While the DEUS Guidelines provides discretion about their inclusion, the Best Practice Guidelines impose a sanction if they are not included (see p39).

The industry position is that the pre 1970 assets should not be included as these are "sunk" as agreed by the discussions of the Water Industry Forum in the early 1990's for the IPaRT Determinations 1995 and 2000.

It is unreasonable and inequitable that costs paid for by a grandfather, father and son should be charged again to subsequent generations at inflated prices? This is true inter-generational inequity. The forebears have already met the full cost. This inclusion disadvantages young families needlessly.

There can be no reasonable basis for inclusion and thus revaluing pre 1970 assets.

Additional Matter

A further consideration is that now 37 years on (and 10 years since the first determination), the 1970 threshold should be moved forward one year annually. The same arguments apply to this proposal as, the longer 1970 threshold stays in place, the less effective it will be in maintaining equity. Assets are progressively paid off and the process should recognise this effect.

4.1.2 Future Assets

The Tribunal welcomes comments on whether five years is an appropriate planning horizon for future assets. What are the issues associated with forecasting investment in assets into the future? Is it appropriate to include assets beyond five years in developer charges?

There is a problem for some Councils planning more than 5 years into the future where growth is slow. Up to 10 years may be reasonable.

The current problem is that there are instances of inclusion of assets up to 30 years in the future.

The most unsatisfactory aspect of distant future asset inclusion is a lack of planning and design documentation. This is a problem with all assets in many DSPs, but it is a particular problem with major assets included more than 10 years out in the future.

This problem seems to arise because of a lack of understanding of the process and methodology. If a package of assets increases the overall system capacity to meet potential demand out say 15 years in the future and that capacity is provided before 10 years, the takeup should cease at 15 years. Other assets may provide capacity for even longer periods, up to 30 years.

4.1.3 Definition of System Assets

The Tribunal welcomes comments on issues associated with the way system assets are defined in the DEUS guidelines. How could system assets and reticulation mains be better defined to ensure that costs are recovered appropriately?

The industry recommends that the WSAA definitions and diagrams provide good basic guidance for the definition of system elements.

There is little doubt that LWAs have included reticulation mains despite these be defined as such in their asset registers.

The resolution can only be that the LWAs should provide sufficient asset register and plan information to demonstrate that the location, design and use of the works are in fact for headworks and not reticulation.

4.1.4 Assessing the capacity of assets

The Tribunal welcomes comments on the extent to which LWAs are using different design standards for system capacity and the reasons for this. The Tribunal also seeks comments on whether it is desirable and practical to develop a consistent set of design standards.

The Tribunal welcomes comments on the way LWAs are treating vacant lots and unoccupied dwellings in their calculation of capacity in water and sewerage systems. How can this issue be clarified in the guidelines?

The Tribunal welcomes comments on the treatment of spare system capacity available for development and excess unused capacity beyond the 30 year planning period.

Capacity

A fundamental flaw in the capacity process is that theoretical capacities are offered instead of actual performance capacities.

Many LWAs have remote wireless monitoring of their major system elements such as pump stations (water and sewerage) and reservoirs. MidCoast Water varied their capacity data in the second draft of their DSPs to more closely match their monitoring data.

As an example, the 1984 PWD manual required that reservoirs provide 4,000 litres per day peak demand. Current DSPs contain various peak capacity amounts from 1,500 to 2,500 litres per day.

An analysis of reservoir capacity using the WSAA Code based upon demand revealed that the DSP capacity allowances were from 12% to 125% more. Capacities between 1,500 and 2,000 litres per day (the latter for smaller demand areas) are considered reasonable.

Assumed higher capacities increase the charge.

Takeup

A common error in metropolitan and regional DSPs where takeup and capacity are considered to be the same.

Capacity is determined to meet demand. That demand will be expressed in ETs. Assets will be sized using various criteria and their costs included in a DSP. Design criteria, such as average, peak, instantaneous, daily or annual demand are used to determine the appropriate asset size. There is no such thing as a peak ET as some MWAs and LWAs quote. The process is the reverse. The system is designed to serve an ET.

Demand in ETs remains immutable. ETs are however the connection between capacity and takeup.

ETs (equivalent tenements) is essentially a demographic number. An ET is defined as a separate dwelling in ABS statistical terms. The ET for other dwellings and non-residential use are determined in relation to standard separate dwellings on the basis of occupancy for other dwelling types or average demand for non-residential users.

A projection of future takeup over the DSP period is an essential starting point. The capacity in ETs for the various infrastructure elements should then be analysed to see whether capacity is limited or sufficient, or alternatively if there is surplus capacity.

Demography

A base demographic analysis is required to determine residential demand. As development charges are a buy-in price for capacity and future service, the analysis cannot assume that the population divided by the occupancy rate is the complete answer, as commonly applies.

All lots and multi dwellings will be vacant at the time of paying the charge i.e. at subdivision certificate ("linen plan") or construction certificate stage. In the future some of lots and residences will be vacant at census date which is when official measurements are made. All demographic analysis depends on census day counts representing a point in time each four years for determining the population, dwellings, lots etc.

The NSW Regional DSP - Principles Study outlines the principles to be used. This is supported by detailed analysis by Colin Menzies in the accompanying Background Reports.

Spare Capacity

The simplest method of dealing with spare or residual ET capacity is to pro-rata the cost of the assets in calculations.

As outlined by the IPaRT Determination, if the surplus is excessive because of previous and changed demand which is not now used, the cost of the assets involved should be deleted. This is a similar argument to that of sunk cost.

4.2 Valuation of Assets

The Tribunal welcomes comments on issues associated with the valuation of assets for inclusion in developer charges. Are local water authorities including unreasonable contingency allowances in their developer charges calculations? What, if any, is a reasonable amount or should the risk associated with contingencies be captured in the rate of return?) Are amendments to the DEUS guidelines needed to better specify the method for valuing assets?

Sydney Water and Hunter Water have cost manuals these have not been made available except to selected consultants. The NSW Reference Rates published by DEUS are not readily available outside government. They are supplied to councils and can be purchased from DEUS. There is no advice provided of current issue to the industry.

These rates are not MEERA values, but are an indexed average from past contracts. They include on costs between 26% to 32% for SID and Contingency. The NSW Reference Rates amounts are however generally less than those quoted for the metropolitan agencies.

10% Contingency factors are provided as a form of risk protection. As the discount rates already include a 3% risk factor (49% over the period of the DSP), the need for this further contingency is questioned.

The Reference Rates amounts should be discounted by 10%, if used to value assets for a DSPs.

4.3 Agglomeration of DSPs

The Tribunal is interested in the extent to which agglomeration takes place and seeks comments on whether the agglomeration rule outlined in the DEUS guidelines is reasonable. Is there a better way of minimising the number of DSPs? The Tribunal is also interested in the issue of how much greater the administrative burden would be on LWAs if the agglomeration rule, in particular, the 30 per cent factor, were to be altered.

There is some support for a common charge over wider areas, however there have been significant distortions created by the DEUS method. The previous DEUS 30% rule has now been effectively abandoned.

The DEUS agglomeration methodology is flawed, because the weighting is done in a different fashion to the way that the charges are calculated. The only solution is to amalgamate the areas chosen and to have a common charge calculated in a single model.

The Hastings Sewerage approach is recommended where a reasonable base charge was selected and the balance of the cost was spread over existing and future rate payments at $29 per annum per ET. As mentioned above Dubbo City Council have a similar approach.

Resolution of the variation in these charges requires professional judgement, and consideration of community interest (including those of future ratepayers), equity and affordability.

The DEUS approach lacks proper consideration of all of these issues.

4.4 Calculation of the capital charge where lot take up in non-uniform

The Tribunal welcomes comments on whether the return on investment approach is appropriate for calculating the capital charge where lot take up is non-uniform. What are the impediments, if any, to LWAs using a net present value approach in these circumstances? Should the guidelines be modified to require use of the net present value approach where lot take up is non-uniform? Alternatively, should the guidelines be modified to require use of the net present value approach in all circumstances, in line with the IPaRT methodology?

Take up in development is rarely uniform over time. The DEUS Guidelines so called "simplicity" has resulted in distortions. The industry has always supported the adoption of NPV as a standard approach and this should apply to the whole of NSW.

4.5 Calculation of the reduction amount

The Tribunal welcomes comments on whether the calculation of the reduction amount unde the DEUS guidelines should be more closely aligned with the Tribunal's methodology with a view to achieving greater transparency. What are the practical considerations of LWAs adopting such an approach?

As already indicated the DEUS method is complex and confusing. The results can be significantly different to the IPaRT method. In part this will be caused by the FINMOD financial management model which is run in parallel with their own package by some LWAs.

The working projected Operational Statement (Income and Expenditure) prepared by most councils can be readily used to simply calculate the net revenue amount. Only two NPV algorithms are required in lieu of 30 for the DEUS method.

The items to be included in expenditure and income can be readily identified. A schedule of inclusions and exclusions from a study prepared by Mr C Taylor in the early 1990's has been used in DSP analysis by the industry over the past few years.

For Bega Valley the FINMOD Operational Statement provided a net revenue offset of $1,850 per ET while the DEUS model produced between $1,900 and $940 per ET. Council adopted a final figure of $967 per ET in the DSP.

In practice the data is available to apply a reasonable methodology.

4.6 Equivalent Tenements

The Tribunal welcomes comments on whether the DEUS guidelines should be more explicit about the determination of equivalent tenements. What is the most appropriate demographic data to use for forecasting new development? How should an equivalent tenement be defined? Is it relevant to discount equivalent tenement based on monetary factors for vacant lots?

The calculation of Equivalent Tenements for takeup is a contentious matter. In the case of Bega Valley, Council's projected demand is 17,985 ETs for the BV Water Supply DSP Nov 2005.

Industry analysis using the principles contained in the UDIA Principles Study - Table 2, calculated 29,391 ET for the BV Water Supply DSP Nov 2005.

LWA staff often have poor demographic skills and poor data to rely on. In addition there is very little help in the DEUS Guidelines in Attachment 5. The view that an ET can be calculated by reference to annual charge fails to understand the processes of capacity and takeup.

The calculation of ETs as a demand factor should be based upon a proper demographic analysis for residential development.

The DEUS Guidelines make no allowance for the proper calculation of non-residential ETs which should be based upon comparative annual demand.

CONCLUSION

UDIA NSW appreciates the opportunity to comment on the IPaRT Water – Issues Paper and commends the NSW Government and IPaRT for pursuing a review of DEUS Developer Charges Guidelines for Water Supply, Sewerage and Stormwater (DEUS Guidelines). IPaRT is asked to give consideration to this submission.

The industry concerns with the DEUS Guidelines are extensive and are demonstrably supported by this submission and the comprehensive analysis provided in the *UDIA NSW Regional DSP Principles Study*. There is sufficient evidence to support the contention that the preparation of the DEUS Guidelines has resulted in significant departures from the principles provided in the IPaRT Guidelines as promulgated in 1995 and amended in 2000.

UDIA NSW maintains that a single set of DSP guidelines should apply equally to the entire state. UDIA NSW contends that the IPaRT Guidelines represent the preferred approach to developer charges, particularly with respect to the use of Net Present Value (NPV).

Furthermore, UDIA NSW recommends that to assist in generating increased consistency of application of the Guidelines that all LWAs be governed by IPaRT. UDIA NSW advocates that DEUS's role in establishing guidelines is an unnecessary duplication of government resources leading to a diminution of IPaRT's intent. LWAs are declared as monopoly providers by IPaRT and therefore their activities should be governed by IPaRT in accordance with the *Independent Pricing and Regulatory Tribunal Act 1992* (IPaRT Act).

RECOMMENDATION

UDIA NSW contends that a single set of DSP guidelines should apply equally to the entire state. These guidelines should be based exclusively upon the industry preferred IPaRT Determination as well as sound financial management principles.

8. ABOUT THE UDIA

UDIA Mission

UDIA is the voice of development. We represent the industry which develops new communities and proudly advocate for its interests. We pursue access to land for development, encourage the creation of a positive regulatory environment, and seek to moderate the burden of taxes and charges on our customers. We believe in affordable, sustainable, and liveable communities.

The Urban Development Institute of Australia (UDIA) is Australia's peak representative body for all segments of the urban development industry.

The UDIA NSW Code of Ethics

A UDIA member shall:

- Demonstrate ethical principles and observe the highest standards of integrity and honesty in all professional and personal dealings.
- Uphold and promote the reputation of the Urban Development Institute of Australia (NSW) and not misuse the authority of office for personal gain.
- Respect the confidentiality of information given to the member in the course of the Institute's work.
- Engage in continued learning to maintain and improve professional skills and competence within the industry and promote innovation and excellence in practice.
- Strive to achieve sustainable development.
- Respect for the rights of consumers and maintain the public's confidence and trust in the urban development industry.

UDIA NSW is a progressive organisation driven by its members. Our President, Council, Chapters and Committees, Executive Director and staff ensure that we give members and sponsors maximum value for their investment.

UDIA's Goals

- Promote high standards for the urban development industry

- Promote respect for the inherited and natural environment while creating quality, dynamic built environments

- Ensure the skills which make up the membership of the Institute will be applied to principles of good planning, efficient land utilisation and sustainability of resources for future generations

- Institute a continuing education and research program to support and assist the industry and for the benefit of others associated with urban development

- Promote greater understanding in the community on the role and achievements of the urban development industry.

UDIA's Activities

Advocacy
Lobbying government so that urban development can be undertaken positively and creatively for the widest benefit

Learning
Keeping members and others up to date on critical industry issues and best practice through seminars, conferences and communications. Our regular UDIA journal, The Developers Digest, is a quality publication for those serious about their business and profession. We also communicate the latest news and views through our e-newsletter, The Developers Update.

Innovation
Encouraging innovation and excellence through the annual UDIA NSW Awards for Excellence and giving exposure to the best in contemporary development throughout the year.

Better Business
Providing opportunities for business networking and learning. The UDIA NSW programme includes a full calendar of events with technical seminars, site visits and business luncheons as well as our annual State Conference and the year's climax event, the annual Awards for Excellence Gala.