

## WWRO, Kosovo

### Waste Collection Supply Tariff Policy Options

The following table sets out many policy options available to the WWRO for the adoption as a publicly declared Tariff Policy for waste collection. They are not all mutually exclusive and the selection of one option may impact upon the choice of other options elsewhere in the policy.

Broad category	Sub-category	Policy option	Advantages	Disadvantages	WWRO implications	Preferred position
<b>Institutional arrangements</b>	<b>Responsibility for payment of waste collection services</b> (who should be responsible for payment of services and how should the finance be raised?)	Current system of waste collection companies raising revenue directly from customers	Already established and no changes necessary	No enforcement provisions leading to poor revenue collection Inefficient pricing, billing and revenue control systems Regulation complex	Tariff setting responsibilities retained by WWRO	Kosovo should adopt the conventional municipal model for domestic waste collection and should encourage competition for the market for which the POEs could compete for against private operators.
		Transfer responsibility of waste collection to the municipalities with the waste collection companies contracted to them (standard municipal model)	Economically and operationally efficient Revenue collection more efficient through taxation Opportunities for competition (for the market on a periodic basis) Regulation simplified (even eliminated if subject to competition)	Increased local taxes (but possibly less than current waste fees) and possible adverse socio-political responses from the public Institutional upheaval. POEs to be restructured to level playing field with private operators (possibly privatised).	Regulatory responsibilities for waste collection regulation effectively falls away, limited to governance monitoring activities, e.g. procurement of services in accordance with regulations and good practice.	Non-domestic waste should be open to individual market arrangements but system necessary to protect against some customers falling out of the waste collection system, e.g. rural customers.
<p><b>Note: the following policy options are based upon the assumption that the institutional arrangements are unchanged. If there are any major changes as recommended above, or similar, the regulatory responsibilities of the WWRO could be very different (or even disappear altogether) and the tariff policy options and approach will change or disappear also</b></p>						

Broad category	Sub-category	Policy option	Advantages	Disadvantages	WWRO implications	Preferred position
<b>Institutional arrangements</b> (continued)	<b>Domestic vs non-domestic waste collection</b> (should these two sectors be treated very differently)	Continue with current arrangements whereby the WWRO sets tariffs for non-domestic waste collection	Already established.	Not subject to competition Potential for inefficient cross subsidies to develop Unfair competition with existing private operators service non-domestic customers Limited scope for efficiency gains as compared to private operators	Complex regulation ensuring price equity and the removal of cross-subsidies	Under the current legal and institutional framework WWRO is bound by the current operating arrangements but would prefer a full deregulated framework managed by municipal authorities subject to legal and institutional reforms of the sector (see the WWRO draft policy statement on PSP)
		Allow POES to undertake waste collection from non-domestic customers on a commercial basis (unregulated by WWRO)	Subject to competition. Efficient pricing.	Requires significant restructuring to ensure competition is free and fair (ring-fencing of accounts etc.) New investment required to ensure separation of domestic and non-domestic waste.	Significant audit requirements to ensure clear separation of domestic and non-domestic costs and revenues. Oversight of competition processes	
		Remove the responsibility of non-domestic waste collection from the POESs, i.e. domestic waste collection services only	Allows total open competition for the non-domestic waste collection activities.	Impracticable, and inefficient by forcing two or more operators to duplicate rounds of waste collection. POEs may not be viable if limited to domestic waste collection only.	Simple to regulate if focussing only on domestic waste collection.	

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<b>Social fairness</b>	<b>POE's role with respect to social responsibility</b> (To what extent is the responsibility for social redistribution of wealth fall upon the POE and to what extent does government have a role?)	The Government to be responsible for providing financial support to the economically disadvantaged.	2004/49 10.1 (f) sets out the responsibility of government and local institutions to provide such support. Protects the financial integrity of the POEs. Economically efficient. By supporting the poorest the tariffs could be allowed to increase to the affordability ceiling of the remaining customers leading towards cost recovery.	Imposes financial burdens on government and local institutions that will need to be met by fiscal means.	Simple to regulate.	The Government to take responsibility for the provision of financial support to the economically disadvantaged thus allowing POEs to operate on a fully commercial and economically efficient basis. Government policy decision, not WWRO.
		The POEs to provide financial support to the economically disadvantaged	Relieves government of the financial burdens.	Undermines the financial integrity of the POEs. Creates market distortions and is economically inefficient (cross subsidies). Discourages competition and investment in the sector.	Complex regulation in determining the degree to which cross subsidy mechanisms can be applied and how they are monitored and enforced. WWRO decisions vulnerable to challenge.	
<b>Social fairness</b> (continued)	<b>Uniformity of tariffs</b> (To what extent should the tariffs be uniform by region?)	Uniform tariffs throughout the POE's defined area of supply.	Perceived as fair.	Economically inefficient in that in some areas the revenues may not cover the costs of service, whereas in others the revenues may substantially exceed the costs of supply.	Simple to regulate based upon overall operator costs and revenue Further regulatory input is required to ensure that service provision obligations are satisfied and that unprofitable areas are not unfairly discriminated against.	The tariffs should be determined on the basis of uniform tariffs throughout a POE's service area.
		No uniformity of tariffs and each individual town or area may separate cost reflective tariffs.	Economically efficient with tariffs reflective of actual costs.	Social perceptions of unfairness. Complex accounting, monitoring and reporting systems to monitor costs on a town by town basis.	The number of schemes and towns would impose a high regulatory workload on the WWRO. Complex tariff determination procedures and vulnerability to challenge.	

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Social fairness (continued)	<b>Different tariffs for different levels of service</b> (should the tariff structure allow for a different charge for customers served by communal bins than those whose waste is collected individually?)	Separate tariffs for communal and individual waste collection services	Current system in tariff schedule and regulations although not applied.  Cost reflective.  Delivers lower tariffs to poorer households (generally communal customers)  Politically easy to sell to the public.	Added regulation in determining fair prices  Will deliver higher prices to households enjoying individual collection services.	Regulatory effort in determining fair prices.	Tariffs should separate communal services from individual services to be cost reflective in accordance with the current regulations.
		Uniform tariff irrespective of type of collection service	Significantly more efficient.  Does not discriminate against shared connections.  Does not discourage (as much) personal investment in improved hygiene, e.g. flush toilets.  May encourage more investment in poorer areas where the returns are improved.	Not cost reflective  Does not deliver lower tariffs to poorer households	Simple regulation	
	<b>Fixed charges – domestic waste collection</b> (should the domestic waste collection service be based upon a simple monthly charge to the household)	Only one viable option available as charging by weight or volume not possible	Simple	Costs depend on weight and/or volume and therefore difficult to determine appropriate household charge	Regulation required to determine appropriate level of charges.	Retain the current system of a fixed charge per household per month
	<b>Fixed and variable charges – non-domestic waste collection</b> (should the non-domestic waste collection service be based upon a simple fixed charges of rather by weight or lifts)	Only one viable option available as per current arrangements of communal services for non-domestic charged on the basis of monthly charges whereas those customers with individual containers charged on the basis of each lift (rates vary according to size of container)	Simple  For larger customers with individual containers prices more cost reflective.	Costs depend on weight and/or volume and therefore difficult to determine appropriate monthly charge where applicable	Regulation required to determine appropriate level of charges.	Retain the current system of a mix of pricing systems

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<b>Full cost recovery</b>	<b>Definition</b> (what is meant by full cost recovery)	Accounting definition on the basis of costs as defined in pure accounting terms equalised by cash revenues plus a fair allowance for a return on capital	Simple to determine based upon strict but conventional accounting rules Attractive for private sector investment in the sector	Minor distortions due to inflation effects.	Simple regulation inputs but required to be undertaken annually	The short-run nature of the business including short life assets makes the accounting method as a viable definition of cost recovery and should be adopted in accordance with Kosovo or International Accounting Standards. This will require a change to the current WWRO rules.
		Cash revenues sufficient for the utilities to finance their activities in compliance with their quality and service obligations and an allowance for a return on capital	Nil	Needlessly complex for	Complex tariff determination methods.	
	<b>Time based cost recovery</b> (what is the timetable for achieving full cost recovery?)	Short term cost recovery (annual)	Immediate elimination of subsidies Attractive to investors Fits comfortably with the recommended definition of cost recovery	May result in price shocks Results in financing existing inefficiencies	Simple to regulate	Waste collection in a market where there is competition should operate on a full cost recovery basis immediately. Postponing cost recovery is a market distortion and will discourage competition..
		Medium to long term cost recovery, e.g. 5 to 10 years.	Smooths tariffs to a near uniform rate (or steadily rising rate) easing affordability constraints. Allows time for improved efficiency to be attained Eliminates price shocks.	Short run nature of the business does not lend itself to long run cost recovery programmes. Anti-competition. Reduces profitability in early years (losses may even be reported) with higher profitability in later years. Risk of political interference that resists higher profits in later years needed to replace previous losses.	More complex regulation and subject to political influence.	
	<b>Efficiency expectations including revenue collection performance</b> (how should the expected improvements in efficiency be determined?)	Operating and capital efficiency expectations set by WWRO and incorporated in tariff determinations.	Promotes improved efficiency in POE and operators.	Can damage the financial standing of POE if efficiency targets set too high and not satisfied. Not suitable for competitive markets.	Professional judgement for determination of reasonable efficiency targets.	WWRO should set a limited amount of efficiency improvement expectations as long as they are comparable to market performance criteria.
		POE to set out its own efficiency expectations.	POE risk. Suits competition	May result in low expectations of efficiency resulting in tariffs higher than they would otherwise be.	Limited WWRO regulation input.	

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<b>Full cost recovery</b> (continued)	<b>Capital investment</b> (how should capital investment be recovered)	Recovered annually through historic cost depreciation	Assumes an accounting definition of full cost recovery  Acceptable for short life assets as used in the waste collection business  Simple to determine	Minor distortions due to inflation effects	Calculation of depreciation provision is simple.  Dilemma as to whether or not to allow for recovery of back-log of depreciation from previous years.	Simple historic cost depreciation for assets is considered to be an appropriate and practicable mechanism for return of capital	
		Recovered through the tariff annually by current cost depreciation	Adequate provisions for capital maintenance incorporated in tariff.	Unnecessarily complicated for short life assets	Complicated calculations for inflation adjustments  Dilemma as to whether or not to allow for recovery of back-log of depreciation from previous years.		
		Depreciation recovered on a long term basis through a long-term cost recovery calculation.	Smooths tariffs to a near uniform rate (or steadily rising rate) easing affordability constraints.  Eliminates price shocks.	Does not fit in a competitive market.  Does not suit short run business models such as waste collection.	Complicated discounted cash flow calculations with little or no benefit over simple accounting approach.		
	<b>Grants and gifted assets</b> (how should the WWRO treat assets financed by grants and soft loans)	Consider all assets to be treated identically irrespective of how they are financed	Simple to determine  Fits with competitive markets.	Effectively gives the POE returns on an investment it has not made resulting in higher tariffs than they would otherwise be	WWRO could be subject to challenge by allowing returns greater than they would need to be.		The choice of which approach depends upon the government's and WWRO's position with respect to competition in the sector. If competition is not to be encouraged then disregard depreciation on gifted assets but if competition is encouraged such unfair distortions should be removed.
		Disregard depreciation for gifted assets or apply equalisation technique of balancing depreciation against the value of the grant being treated as income over the life of the asset	Establishes a fair basis for the determination of returns on capital based upon actual investments made by the operating entity  Reduces tariffs	Unfair competition where competitors raise finance through own resources or commercial borrowing	Less open to challenge.		

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<b>Capital structure</b>	<b>General principles</b> (should WWRO consider capital structure of the utilities in the tariff determination process)	WWRO to take into account capital structure of POE in determining tariffs, i.e. to incorporate debt interest and repayment of principal in the tariff with returns on equity determined by the WWRO.	Protects POE's position with respect to risk and cash flow.	Contrary to conventional economic theory that the capital structure has no direct bearing on the performance of a business. Subject to price fluctuation if capital structure varied.	Complex financial analysis.	On the basis that the POEs should be seeking short run full cost recovery on a competitive basis the WWRO should consider the capital structure of the utilities as a matter for their management and not considered as a regulatory concern. However, the WWRO should take an interest in the capital structure with respect to cash flow.
		WWRO to consider capital structure as an internal POE management issue only, i.e. for WWRO to determine an appropriate return on total capital from which POE can manage its debt service obligations.	In accordance with conventional economic theory that the capital structure has no bearing on the operating performance of the business (other than tax).  Promotes price stability irrespective of variations in capital structure.	POE is exposed to risk related to borrowing.	Financial analysis simplified	
<b>Capital value and return on capital</b>	<b>Definition of capital value upon which a return can be earned</b> (what is the WWRO position as to the regulatory capital value of the POEs?)	Capital value determined as the accounting book value of assets	Simple to determine based upon financial statements (asset register)	Minor distortions due to inflation effects May include assets gifted or freely inherited and it would be improper to allow a return on capital on such assets	Would have to allow for complex calculations in determining an appropriate return on capital that allows for a mixture of funding sources.	The WWRO should establish the capital value based upon the investments made by the POEs' own financial resources. However, if the government divested itself of the operations a different view on capital value will be required reflecting the purchase price of the business.
		Capital value determined as the accounting book value of assets adjusted for inflation	Nil	Unnecessarily complicated for short-run business model of waste collection. May include assets gifted or freely inherited and it would be improper to allow a return on capital on such assets	As above	
		Capital value determined on the basis of the value of the investments made by the POEs' own financial resources	Delivers lower tariffs than other methods. Provides a basis for the fair value of assets that reflects the real costs of investment to the operator. Determination of the allowable return on capital is simplified	Clear accounting rules needed to ensure separation of assets	Once initially set up it is easy for the regulator to maintain a register of the regulatory capital value of the business	

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Capital value and return on capital (continued)	Return on capital (what is the WWRO position with respect to return on capital?)	WWRO to not consider return on capital as an allowable portion of the tariff	Minimises tariffs Simple in that there is no real issue with regulatory capital value determination	Does not cover the cost of debt (interest) No finance available for service improvements Unable to finance repayment of principal debt Unfair competition	While state-owned the government may elect not to expect any returns on capital and therefore the WWRO may be obliged to adopt this model.	The return on capital should be based upon market expectations of return on capital using economic tools such as CAPM	
		WWRO to determine the return on capital on the basis of market expectations utilising economic tools such as the Capital Asset Pricing Model (CAPM).	Attractive to internal and external private investment in the sector. Promotes competition	Adverse tariff implications. Should only be used if private sector investment is employed, i.e. inappropriate to expect private sector returns on capital with public sector levels of inefficiency.	Complex rules on the determination of what a fair return on capital is but it is possible to take the lead from similar private sector operations elsewhere in the world.		
		WWRO to establish a return on capital based upon minimum cash flow requirements.	Minimises tariffs Attractive for government and donor investment in the sector.	Unattractive for internal and external private investment in the sector. Unfair competition	May be appropriate for the current POE model. Government, as the principal shareholder, may state its position with regard to what it requires in the way of a return on capital.		
	Return on capital and taxation (what is the WWRO position regarding taxes?)	To determine tariffs on the basis of a 'post tax' return on capital.	Easier to determine market expectations for return on capital on a 'post tax' basis as opposed to a 'pre-tax' basis.	Calculation of tax obligations in advance of tariff determinations.	Nil		There is no need to consider the taxation issue other than to feed the value of taxes into the cost base under the current institutional arrangements.
		To determine tariffs on a 'pre-tax' return on capital.	Simple calculation without the need to estimate tax obligations in advance	Determination of market expectations for a pre-tax return on capital more complex.	Nil		

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Process	Review periods (how long should the time between major tariff reviews be?)	WWRO to review tariffs annually.	Ensures that tariffs track costs. Promotes competition	No incentive for improved efficiency as any benefits will be lost in the next review. Results in high tariffs in early years with tariffs falling in later years. Unattractive for private investors.	Simple to regulate.	For the year 2007/8 the tariffs should be determined on an annual basis in which time the tariff policy can be developed with a complete set of rules that can facilitate longer periods between reviews. In the longer run tariffs may be determined periodically on the basis of tendering and other service procurement methods.
		WWRO to review tariffs on a periodic basis (say every 3 to 5 years) with allowances for interim automatic adjustments for inflation and other factors.	Profit incentives for improved efficiency. Tariff smoothing possible. Attractive for investment.	POE may get away with higher than intended profits.	WWRO to employ more complex tariff determination methods.	