

RAG 2

CLASSIFICATION OF EXPENDITURE

CONTENTS

1. Asset categories
2. Expenditure categories
3. Proportional Allocation

Annex 1: Classification of Expenditure by Asset Type and Purpose

CLASSIFICATION OF EXPENDITURE

This Regulatory Accounting Guideline covers the classification of expenditure by purpose category under infrastructure renewals accounting and supersedes the previous version, RAG 2.01 issued in February 1991. Companies are required to follow this RAG from reporting year 1996-97.

1 Asset categories

1.1 Infrastructure assets generally comprise:

- underground systems of mains and sewers;
- impounding and pumped raw water storage reservoirs;
- dams;
- sludge pipelines;
- sea outfalls;
- information about infrastructure assets e.g. zonal investigations.

All other assets, typically above ground, are classified as non-infrastructure.

1.2 Non-infrastructure assets are depreciated in line with current accounting conventions, under historic or current cost accounting as appropriate, and the appropriate depreciation charge made to the profit and loss account to represent the economic consumption by the business during the year .

1.3 Infrastructure assets are not depreciated. Instead, an infrastructure renewals charge (IRC) is made to the profit and loss account to represent the maintenance of asset value by the business during the year. The IRC is equivalent to the annual average of the required expenditure forecast over a number of years to maintain infrastructure asset serviceability and operating capacity. The IRC is taken to the balance sheet as a provision (for liabilities and charges) and actual expenditure (IRE) on infrastructure assets is set off against this provision as it occurs. Any difference from year to year between IRC and IRE is accumulated in the balance sheet as a cumulative accrual (IRA) or prepayment as appropriate.

2. Expenditure categories

2.1 Expenditure on each type of assets is categorised by purpose either as

- **base service provision**, which is required to maintain the current (most recently established base) level of serviceability to customers; or as
- **enhancement** where there is a permanent increase in the current level of serviceability to a new "base" level.

Enhancement is further divided as follows:

- **quality** where expenditure is required to comply with **new** (i.e. since the base service level was established) legally enforceable quality obligations;
- **enhanced service level** where expenditure provides an identifiable, measurable and permanent step change in overall level of service to existing customers above the standard previously provided;
- **supply/demand balance** where expenditure
 - provides water and sewerage services for new customers with no net deterioration from the current level of service provided to existing customers; and/or
 - accommodates the increased use of water by existing customers at the current level of service.

2.2 As compared with the REVENGE classification in RAG 2.01, infrastructure base service provision supersedes REV and backlog, infrastructure enhancement replaces ENG and investment to improve efficiency (E) is included in base service provision.

2.3 Routine maintenance not included in capital expenditure and other maintenance expenditure arising in reactive way on a day to day basis are treated as an operating cost and taken directly to the profit and loss account. For full details, see the July Return Reporting Requirements and Definitions Manual Table 21 lines 23 and 24, Table 22 lines 24 and 25.

2.4 Annex 1 to this guideline classifies the categories of capital expenditure in the tables 32, 35 and 36 of the July Return as infrastructure/non-infrastructure and by purpose (Base, Qual, ESL, and SDB). The associated operating expenditure should appear in table 21 or 22 and also on the appropriate line of table 35 or 36.

3. Proportional Allocation

3.1 Proportional allocation of capital expenditure is required between purpose categories as follows:

- base service provision, which includes all expenditure required to maintain current levels of serviceability to existing customers;
- quality;
- enhanced service level; and
- supply/demand balance.

3.2 As noted above, the last three purpose categories represent an enhancement: a permanent increase in aggregate service level to existing customers and/or the provision to new customers of the current service level. Enhancement projects may serve several purposes and in most cases will involve an element of maintenance works being carried out earlier than otherwise necessary. This advanced maintenance element should be allocated to base service provision.

3.3 Guidance issued for the 1994 Strategic Business Plans (section C6.2.3) and reiterated in the JRRRDM (chapter 35) is repeated below for convenience. It should however be noted that where enhancement service levels arise from expenditure required for other purpose categories then only the incremental expenditure, if any, should be allocated to ESL. Allocation to ESL should represent expenditure incurred solely for the purpose of achieving an identifiable, measurable and permanent stepped improvement in aggregate service levels.

3.4 Schemes and projects under each service area should be allocated by proportion to each of the relevant purpose categories to at least the nearest 5%. However, threshold limits have been set on scheme values above which expenditure must be proportionally allocated because of the effect that a large individual scheme may have on the allocation of expenditure to a particular purpose category.

Annual Capital Expenditure Programme (1992-93 price base)	Threshold Scheme/Project Size for which Proportional Allocation is required
£0 – 10m	£10,000
£10m - £100m	£50,000
> £100m	£100,000

- 3.5 Total scheme expenditure should be proportioned across the purpose categories in relation to the relative magnitudes of each element of the scheme. A single physical measure should be identified that is appropriate to all the relevant investment categories in a service area for example, rate of flow, equivalent population or hydraulic capacity.
- 3.6 Companies should continue to apply the allocation rules that they adopted for the preparation of the 1994 Strategic Business Plan Submissions and provide comment in their July Return on any material changes in allocation methodology.

CLASSIFICATION OF EXPENDITURE BY ASSET TYPE AND PURPOSE

WATER SERVICE AREAS

Water Resource Facilities

Water Treatment Works

Water Distribution Mains

Service Reservoirs and Water Towers

Booster Pumping Stations

Management and General – Water Services



SEWERAGE SERVICE AREAS

Sewerage

Sea Outfalls and Headworks

Sewage Treatment Works

Sludge Treatment

Sludge Disposal

In-line Pumping Stations

Terminal Pumping Stations

Management and General – Sewerage Service

Asset Type Table, Line, Column	Infra/ Non-infra structure	WATER SERVICES – ALL AREAS	Expenditure Purpose Table, Line
32, *, 01, 32, *, 02 or 32, *, 03	Infra or Non-infra	Element of works solely to achieve an identifiable, measurable and permanent stepped improvement in service levels above the most recently established base service level.	ELS 35, 11
32,*, 01, 32, *, 02 or 32, *, 03	Infra or Non-infra	Element of works required solely to meet demand from new customers and/or increased demand from existing customers.	SDB 35,18
<p>Notes: Line(s) on table 32 (*) to be between 1 and 14 according to service area(s); Column 01 for infrastructure (underground) assets; Column 02 for non-infrastructure (above ground) operational assets. Column 03 for other non-infrastructure assets (eg non-operational plant, machinery, vehicles, see RAG 1.02 page 23 for full details)</p>			

Asset Type Table, Line, Column	Infra/ Non-infra structure	WATER RESOURCE FACILITIES	Expenditure Purpose Table, Line
32,18,02	Non-infra	All dams and impounding reservoirs holding raw water; all pumping stations in raw water systems including in-line transfer pumping, river intakes, boreholes and wells requiring simple disinfection prior to forwarding into the supply system; and all mains or aqueducts associated with the transfer of raw water either between sources or from source to treatment.	
32,18,01	Non-infra	RESOURCE DEVELOPMENT Refurbishment of boreholes, river intakes and related facilities.	Base 35,03
32,18,01	Infra	RESERVOIR MAINTENANCE INCLUDING SAFETY Repointing and repair of dam/spillway, extending height of dam wall and freeboard, extending/widening spillway, rehabilitation work.	Base 35,02
32,18,02	Non-infra	PUMPING STATIONS New/renewal of/other work to pumping stations size for size element and/or rationalisation	Base 35,03

Asset Type Table, Line, Column	Infra/ Non-infra structure	WATER RESOURCE FACILITIES Continued	Expenditure Purpose Table, Line
32,18,01	Infra	<p>AQUEDUCT REFURBISHMENT</p> <p>Size for size/equivalent metric size element of mains Replacement irrespective of material.</p>	Base 35, 02
32,18,01	Infra	Scraping and lining/relining to address condition/pressure/flow/interruption problems.	Base 35, 02
32,01,01	Infra	Relining arising solely from need for final water supplied to meet the terms of the Water Supply (Water Quality) Regulations and resulting in a pipe capable of delivering water to an appropriately increased standard. Note: Subsequent scraping and lining would be maintenance and therefore Base.	Qual 35,06
32,18,01	Infra	General preservation of the network including repointing, scouring, pipe bursting size for size and investigation of aqueduct condition.	Base 35,02
32,18,01	Infra	Refurbishment/replacement of pipe bridges, tunnels, conduits, valves and chambers.	Base 35,02
32,18,01	Infra	Works to secure/provide alternative supplies in order to maintain base service provision.	Base 35,02
32,18,01	Infra	Size for size element of diversions.	Base 35,02
		GENERAL	
32,18,01 32,18,03	Infra Non-infra	Works to comply with Health and Safety legislation - below ground; - above ground.	Base 35,02 Base 35,03
32,18,01 32,18,02	Infra Non-infra	Works to improve efficiency eg energy conservation - below ground; - above ground.	Base 35,02 Base 35,03

Asset Type Table, Line, Column	Infra/ Non-infra structure	WATER TREATMENT WORKS	Expenditure Purpose Table, Line
		All water treatment works, but excluding both simple disinfection associated with groundwater boreholes/wells and also secondary disinfection included with the distribution system .	
32,19,02	Non-Infra	Size for size element of additional/enhanced treatment facilities, renewals of existing works including Instrumentation Control and Automation.	Base 35,03
32,19,02	Non-Infra	New Instrumentation Control and Automation to improve operational efficiency even if it improves treatment quality.	Base 35,03
32,02,02	Non-Infra	Element of additional/enhanced treatment facilities arising solely to comply with legal quality obligations for the current works aggregate capacity and resulting in treatment works capable of supplying water to an appropriately increased quality standard.	Qual 35,06
32,19,03	Non-Infra	Works to comply with Health and Safety legislation.	Base 35,03
32,19,02	Non-Infra	Works to improve efficiency eg energy conservation.	Base 35,03

Asset Type Table, Line, Column	Infra/ Non-infra structure	WATER DISTRIBUTION MAINS	Expenditure Purpose Table, Line
		All mains associated with the supply of water for industrial and domestic uses including associated pipe bridges, tunnels/conduits, service tunnels, culverts, valves, chambers and system ancillaries.	
		MAINS	
		Diversion, duplication, new, relining, requisitioned, replacement, reinforcement, scraping and lining	
32,20,01	Infra	- size for size/equivalent metric size element, irrespective of material to maintain base service provision;	Base 35,02
32,03,01	Infra	- element arising solely from the need for current capacity to comply with legal quality obligations and covered by a S19 undertaking to the Secretary of State.	Qual 35,06
32,20,01	Infra	Renewal of pipe bridges, tunnels, conduits, valves and chambers.	Base 35,02
		CUSTOMER ANCILLARIES	
32,20,02	Non-Infra	Renewal/replacement of flow/pressure meters and chambers.	Base 35,03
		Replacement/enhancement of communication/service pipes	
32,20,01	Infra	- element to address condition/pressure/ interruption problems;	Base 35,02
32,03,01	Infra	- element arising solely from the need to replace lead communication pipes under the terms of a S19 undertaking to the Secretary of State.	Qual 35,06

Asset Type Table, Line, Column	Infra/ Non-infra structure	WATER DISTRIBUTION MAINS Continued	Expenditure Purpose Table, Line
		OTHER WORK	
32,20,01	Infra	Zonal investigations.	Base 35,02
32,20,02	Non-infra	Pressure and flow monitoring.	Base 35,03
32,20,02	Non-infra	Secondary disinfection.	Base 35,03
32,20,01	Infra	Works to comply with Health and Safety legislation.	Base 35,02
32,20,03	Non-infra	- below ground; - above ground.	Base 35,03
32,20,01	Infra	Works to improve efficiency eg energy conservation	Base 35,02
32,20,02	Non-infra	- below ground; - above ground.	Base 35,03

Asset Type Table, Line, Column	Infra/ Non-infra structure	SERVICE RESERVOIRS AND WATER TOWERS Water service storage	Expenditure Purpose Table, Line
		All treated water service reservoirs and towers within the water supply system and water treatment works and secondary disinfection plant on reservoir sites. Include break pressure tanks.	
32,21,02	Non-infra	Renewal of/other work to service reservoirs and water towers.	Base 35,03
32,21,03	Non-infra	Works to comply with Health and Safety legislation.	Base 35,03
32,21,02	Non-infra	Works to improve efficiency eg energy conservation	Base 35,03

Asset Type Table, Line, Column	Infra/ Non-infra structure	PUMPING STATIONS Treated water	Expenditure Purpose Table, Line
		Pumping stations drawing on treated water storage. Note: Pumping stations in raw water systems are included under Water Resource Facilities and interstage pumping stations at water treatment works under Water Treatment.	
32,22,02	Non-infra	New/renewal of/other work to pumping stations size for size element and/or rationalisation.	Base 35,03
32,22,03	Non-infra	Works to comply with Health and Safety legislation.	Base 35,03
32,22,02	Non-infra	Works to improve efficiency eg energy conservation	Base 35,03

Asset Type Table, Line, Column	Infra/ Non-infra structure	MANAGEMENT AND GENERAL - WATER SERVICE	Expenditure Purpose Table, Line
32,23,01	Infra	General mapping and updating of network records and associated improvements in efficiency.	Base 35,02
32,23,02	Non-infra	New/extensions to existing land, buildings, laboratories, depots and workshops.	Base 35,03
32,23,02	Non-infra	New/renewal of telemetry/communications systems, leakage control/monitoring equipment, analytical/sampling plant and equipment, land, buildings, laboratories, depots and workshops.	Base 35,03
32,23,03	Non-infra	New/renewal of computers (pcs, mainframes and software) , vehicles and mobile plant.	Base 35,03
32,23,03	Non-infra	Recreation/conservation.	Base 35,03
32,23,03	Non-infra	Site security.	Base 35,03
32,23,03	Non-infra	Works to comply with Health and Safety legislation.	Base 35,03
32,23,02	Non-infra	Works to improve efficiency eg energy conservation.	Base 35,03

Asset Type Table, Line, Column	Infra/ Non-infra Structure	SEWERAGE SERVICES – ALL AREAS	Expenditure Purpose Table, Line
32, *, 05, 32, *, 06 or 32, *, 07	Infra or Non-infra	Element of works solely to achieve an identifiable, measurable and permanent stepped improvement in service levels above the most recently established base service level.	ELS 36, 11
32, *, 05, 32, *, 06 or 32, *, 07	Infra or Non-infra	Element of works required solely to meet demand from new customers and/or increased demand from existing customers.	SDB 36,18
<p>Notes: Line(s) on table 32 (*) to be between 1 and 14 according to service area(s); Column 05 for infrastructure (underground) assets; Column 06 for non-infrastructure (above ground) assets. Column 07 for other non-infrastructure assets (eg non-operational plant, machinery, vehicles, see RAG 1.02 page 23 for full details)</p>			

Asset Type Table, Line, Column	Infra/ Non-infra structure	SEWERAGE	Expenditure Purpose Table, Line
		<p>All foul water, combined, relevant surface water and Former Section 24 sewers including interceptor Sewers, manholes, overflows, sewage pumping mains, syphons, tank and transfer sewers.</p> <p>Diversion/duplication/new /renewal/replacement/ Requisitioning of sewers, interceptor sewers, storm Overflows, storage capacity and step irons/manhole Covers; drainage area investigations including flow Surveys and catchment specific records upgrading.</p>	
32,24,05	Infra	- size for size/equivalent metric size element, rationalisation;	Base 36,02
32,07,05	Infra	- element required solely either to improve unsatisfactory overflows or to comply with new discharge consents, in either case for current capacity and previously agreed with Environment Agency.	Qual 36,06
32,24,05	Infra	Works to comply with Health and Safety legislation.	Base 36,02
32,24,05	Infra	Works to improve efficiency eg energy conservation	Base 36.02

Asset Type Table, Line, Column	Infra/ Non-infra structure	SEA OUTFALLS AND HEADWORKS	Expenditure Purpose Table, Line
		Sea outfalls include all pipelines/diffusers used for the disposal of foul and surface water and sewage effluent to the marine environment and comprise the length below the spring tide high watermark. Pipe above this watermark is included in sewerage.	
32,25,05	Infra	Renewal/refurbishment/size for size element of other works/rationalisation of sea outfalls.	Base 36,02
		Headworks	
32,25,06	Non-infra	- renewal/refurbishment/size for size element of other works/rationalisation;	Base 36,03
32,08,06	Non-infra	- element required solely to comply with legal quality obligations and previously agreed with the Environment Agency that result in headworks of current capacity capable of treating effluent to the required more exacting quality standards.	Qual 36,06
32,25,06	Non-infra	Renewal/new Instrumentation Control and Automation even if it improves treatment quality.	Base 36,02
32,25,05 32,25,07	Infra Non-infra	Works to comply with Health and Safety legislation - below ground; - above ground.	Base 36,02 Base 36,03
32,25,05 32,25,06	Infra Non-infra	Works to improve efficiency eg energy conservation - below ground; - above ground.	Base 36,02 Base 36,03

Asset Type Table, Line, Column	Infra/ Non-infra structure	SEWERAGE TREATMENT WORKS	Expenditure Purpose Table, Line
		<p>Include all sewage treatment works with one or more treatment stages, interstage pumping facilities and sludge holding tanks with provision for dewatering.</p> <p>New treatment works/work carried out to existing works to increase treatment facilities/capacity</p>	
32,26,06	Non-infra	- size for size element and rationalisation;	Base 36,03
32,09,06	Non- infra	- element required solely either to comply with legal quality obligations that result in works of current capacity capable of treating effluent to the required more exacting quality standard or to meet requirements of the National Environment Programme as agreed with the Environment Agency.	Qual 36,06
32,26,06	Non-infra	New Instrumentation Control and Automation (ICA) to improve operational efficiency even if it improves Treatment quality, renewals of existing treatment works ICA, size for size element of other work carried out to existing works to improve treatment facilities/capacity.	Base 36,03
32,25,07	Non-infra	Works to comply with Health and Safety legislation.	Base 36,03
32,26,06	Non-infra	Works to improve efficiency eg energy conservation	Base 36,03

Asset Type Table, Line, Column	Infra/ Non-infra structure	SLUDGE TREATMENT Excluding sludge holding tanks	Expenditure Purpose Table, Line
		All sludge treatment plant which changes the nature of the raw sludge prior to its final disposal. Sludge holding tanks are included under Sewage Treatment Works.	
		New/enhanced treatment/storage facilities, renewal of existing sludge treatment works, pumping stations and pipelines	
32,27,06	Non-infra	- size for size element and rationalisation;	Base 36,03
32,10,06	Non- infra	- element required solely to comply with new legal quality obligations either on the disposal of existing amounts of sludge or for the increased amounts of sludge resulting from more exacting effluent quality standards.	Qual 36,06
32,27,06	Non-infra	New Instrumentation Control and Automation to improve operational efficiency even if improves capacity.	Base 36,03
32,27,07	Non-infra	Works to comply with Health and Safety legislation.	Base 36,03
32,27,06	Non-infra	Works to improve efficiency eg energy conservation.	Base 36,03

Asset Type Table, Line, Column	Infra/ Non-infra structure	SLUDGE DISPOSAL Excluding sludge disposal vehicles	Expenditure Purpose Table, Line
		Include all plant and transfer arrangements associated with the final disposal of treated sludge. sludge disposal vehicle are included under management and General.	
32,28,05	Infra	Maintenance of existing long sea outfalls, short sea outfalls and other sludge pipelines.	Base 36,02
32,28,06	Non-infra	Maintenance of existing headworks, sludge disposal plant.	Base 36,03
32,28,05 32,28,07	Infra Non-infra	Works to comply with Health and Safety legislation - below ground; - above ground.	Base 36,02 Base 36,03
32,28,05 32,28,06	Infra Non-infra	Works to improve efficiency eg energy conservation - below ground; - above ground.	Base 36,02 Base 36,03

Asset Type Table, Line, Column	Infra/ Non-infra structure	IN-LINE PUMPING STATIONS	Expenditure Purpose Table, Line
		All pumping stations associated with the sewer system but excluding terminal pumping stations.	
32,29,06	Non-infra	Renewal/rationalisation of structures, mechanical, electrical and telemetry equipment.	Base 36,03
32,29,07	Non-infra	Works to comply with Health and Safety legislation.	Base 36,03
32,29,06	Non-infra	Works to improve efficiency eg energy conservation	Base 36,03

Asset Type Table, Line, Column	Infra/ Non-infra structure	TERMINAL PUMPING STATIONS	Expenditure Purpose Table, Line
		All terminal and storm pumping stations including those on sewage treatment work sites but excluding interstage pumping within treatment works.	
32,30,06	Non-infra	Renewal/rationalisation of structures, mechanical, electrical and telemetry equipment.	Base 36,03
32,30,07	Non-infra	Works to comply with Health and Safety legislation.	Base 36,03
32,30,06	Non-infra	Works to improve efficiency eg energy conservation	Base 36,03

Asset Type Table, Line, Column	Infra/ Non-infra structure	MANAGEMENT AND GENERAL - SEWERAGE SERVICE	Expenditure Purpose Table, Line
32,31,05	Infra	General mapping and updating of network records and associated improvements in efficiency.	Base 36,02
32,31,06	Non-infra	New/extensions to existing land, buildings, laboratories, depots and workshops.	Base 36,03
32,31,06	Non-infra	New/renewal of telemetry/communications systems, leakage control/monitoring equipment, analytical/sampling plant and equipment, land, buildings, laboratories, depots and workshops.	Base 36,03
32,31,07	Non-infra	New/renewal of computers (pcs, mainframes and software), vehicles and mobile plant.	Base 36,03
32,31,07	Non-infra	Combined heat and power plants.	Base 36,03
32,31,07	Non-infra	Site security.	Base 36,03
32,31,07	Non-infra	Works to comply with Health and Safety legislation.	Base 36,03
32,31,06	Non-infra	Works to improve efficiency eg energy conservation.	Base 36,03