

Student: Gareth Leek (2126325)
Module: Maintenance & Asset
Management (ACBA7000)
Presented to:
Ka Leung, LOK (Lawrence)
Verification: Chris House



Asset Management Strategy Review



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Asset Management

“asset management excellence is the balance of performance, risk, and cost to achieve an optimum solution.”

Campbell, Jardine, A. K. S., McGlynn, J., & Jardine, A. K. S. Andrew K. S. (2010)

“asset management involves the balancing of costs, opportunities and risks against the desired performance of assets, to achieve the organizational objectives. The balancing might need to be considered over different timeframes

ISO 55000 Asset management Overview, principles and terminology (2014)

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Portfolio

BELFAST

Part 2nd Floor, The Linenhall, Linenhall Street, Belfast
Size- 560m²
Lease dated – 01/10/2007
Contractual term – 15 Years (plus 2-year extension)
Break date – 30/9/2023

CARDIFF

Crown Way, Cardiff
Size- 29,861m²
Lease dated – 31/03/2021
Contractual term – 15 Years

EDINBURGH

Fourth Floor, 135/139 Fountainbridge, Edinburgh
Size- 725m²
Lease dated – 16/01/2009
Contractual term – 15 Years
Break date - Passed

LONDON

Ground Floor, 79-80 Petty France, London SW1H 9EX
Lease dated - 28/06/2019
Contractual term – 10 years from and including the
date of the lease
Break date 28/06/2024

First Floor, 79-80 Petty France, London SW1H 9EX
Lease dated - 28/06/2019
Contractual term – 10 years from and including the
date of the lease
Break date 28/06/2024

Total Size- 263m²



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Case Study

Built: 1976

Purpose: Non Residential Office

Storeys: 5

Structure: Reinforced Concrete Slab,
Flat Roof

Land Status: Freehold

Size (in Scope): 29,000m²

Occupiers: Multi -occupied

Location: Cardiff



Companies House, Crown Way, Cardiff

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Plant & Equipment - Cardiff

Purpose	Building	Plant	Detail
Space Heating	Office	➤ 1 x Biomass Boiler ➤ 2 x Gas Condensing Boilers ➤ 5 x VSD Duty Pumps ➤ 2 x 11,000 litre buffer vessels	Gas provides high and low peaks as well used for resilience for biomass failure Gas serves x 4 Zones BMS Controlled
Hot Water	Office	➤ 45 x Point of use Electric heaters (Est)	Serving toilets and kitchenette taps
Ventilation	Office	➤ Natural Ventilation	NA
Lighting	Office	➤ 60% LED lighting fittings installed	LED rollout commenced in 2016
Space Heating and Hot Water	Amenity	➤ 2 x Combination Atmospheric Gas Boilers	LTHW for space heating described above also provide HWS to commercial kitchen
Ventilation	Amenity	➤ Natural Ventilation	
Gas (Cooking)	Amenity	➤ Mix of gas and electrical appliances.	Commercial kitchen serving restaurant
Lighting	Amenity	➤ 100% LED	NA
Air Conditioning	Server Farm Building	➤ X 8 air handlers ➤ X 12 condensers	Services moving to Cloud in 2022. Equipment to be decommissioned



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Asset Management Delivery



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Strategic Asset Management Plan

“The strategic asset management plan translates the property strategy for the organisation into plans, programmes and projects for implementation”

Government Functional Standard GovS 004: Property Cabinet Office (2021)

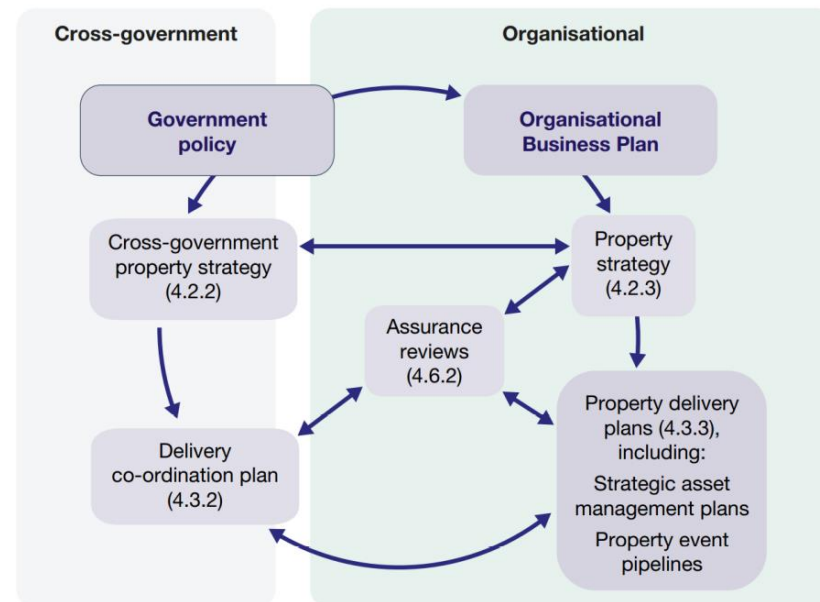


Figure 1 Government Functional Standard GovS 004: Property Cabinet Office (2021)

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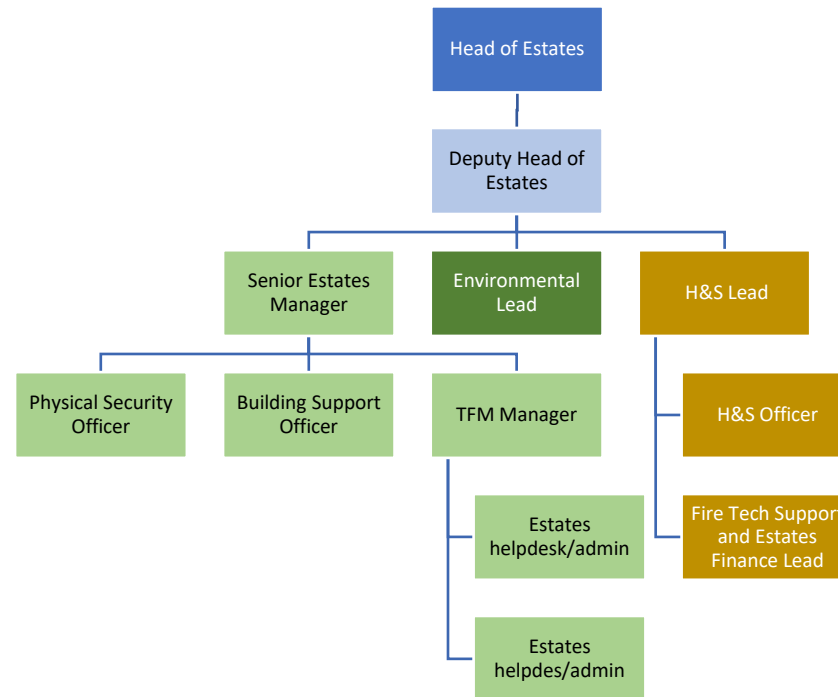
Strategy

- Space
- Management of Building and Facilities
- How and where we work
- Capability
- Net Zero

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Capacity



Capability

Alignment to Government Property Career Framework

Figure 1 CH Estates Team, Organogram

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2022-2023 Budget

Software Licence	6042	4,803.10
Government Legal	6562	-
Professional Fees	6503	28,481.00
TFM Management fees	6504	156,491.00
Office Furniture	6352	14,611.00
RATES	8052	876,166.00
Building Refurbishment	8053	64,549.00
Maintenance Contract	8101	666,648.00
Rolling Maint.&minor contracts	8110	201,885.00
TFM Cost Stream 2	8111	588,979.00
Environmental costs	8551	89,579.80
Water	8201	25,675.00
Gas	8211	30,213.00
Electricity	8221	855,384.00
Wood Pellets	8241	39,505.74
Security	8311	438,493.00
Cleaning Contract	8411	456,860.00
Fire Protection	8556	40,482.00
Miscellaneous licences	6474	1,440.48
Total		4,580,246.12
		4,580,246.12

- Government spending review bid
- Spend reforecast internally in September

Figure 2 Property Spend 22-23

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“when organizations employ a total facilities management (TFM) that enables the cost advantage from economies of scale and scope”

KATCHAMART, A. (2013)

Contract:

Cross Government Contract (GPA Led)

Services:

All Hard and Soft FM

Delivery:

Direct resource for on site maintenance, security and cleaning services.

Specialised works – sub contracted.

Helpdesk:

Yes

Performance Management:

Monthly meetings

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“Launched in 1990 by the Building Engineering Services Association (BESA), SFG20 is recognised as the industry standard for building maintenance specifications”

SFG20 Website (2022)

Maintenance Schedules

	Unique Number	GR Label Number	Bar Code	Site Name	Building	Asset Description	Qty	Floor
1								
2	10017			Cardiff Computer House	Main Building	Lighting - Internal 5Ft Twin LED	15	B
3	10018			Cardiff Computer House	Main Building	Emergency Lighting - Self Contained 5Ft LED	4	B
4	10019			Cardiff Computer House	Main Building	Emergency Lighting - Self Contained Emergency Exit (Running Man)	1	B
5	10020	3452		Cardiff Computer House	Main Building	Water Heaters - Direct Fired	1	B
6	10021			Cardiff Computer House	Main Building	Floor	1	B
7	10022	3483		Cardiff Computer House	Main Building	Pump - Circulating Pump - DHW/S	1	B
8	10023	3484		Cardiff Computer House	Main Building	Expansion Vessels - 4	1	B
9	10024	3485		Cardiff Computer House	Main Building	Expansion Vessels - 5	1	B
10	10025	3486		Cardiff Computer House	Main Building	Expansion Vessels - 6	1	B
11	10026	3487		Cardiff Computer House	Main Building	Expansion Vessels - 3	1	B
12	10027	3488		Cardiff Computer House	Main Building	Expansion Vessels - 2	1	B
13	10028	3489		Cardiff Computer House	Main Building	Expansion Vessels - 1	1	B
14	10029			Cardiff Computer House	Main Building	Fire Extinguishers - Powder	1	B
15	10030			Cardiff Computer House	Main Building	Fire Extinguishers - Carbon Dioxide	1	B
16	10031			Cardiff Computer House	Main Building	Sink - Belfast	1	B
17	10032	3490		Cardiff Computer House	Main Building	Pump - Pressurization Pump - Pressurization Unit - LTHW	1	B
18	10033	3491		Cardiff Computer House	Main Building	Boiler - Biomass	1	B
19	10034	3492		Cardiff Computer House	Main Building	Fan - Extract - Biomass	1	B
20	10035			Cardiff Computer House	Main Building	Floor	1	B
21	10036	3493		Cardiff Computer House	Main Building	Control Panels - Electrical Services - Biomass Control Panel	1	B
22	10037	3494		Cardiff Computer House	Main Building	Boiler - Forced Draught Gas Condensing Boiler - Gas Boiler No1	1	B
23	10038	3495		Cardiff Computer House	Main Building	Boiler - Forced Draught Gas Condensing Boiler - Gas Boiler No2	1	B
24	10039	3496		Cardiff Computer House	Main Building	Pump - Circulating Pump - Gas Boiler 1 Primary Pump	1	B
25	10040	3497		Cardiff Computer House	Main Building	Pump - Circulating Pump - Reservoir Heating Pump 1	1	B
26	10041	3498		Cardiff Computer House	Main Building	Pump - Circulating Pump - Reservoir Heating Pump 2	1	B
27	10042	3499		Cardiff Computer House	Main Building	Pump - Circulating Pump - Canteen Heating Pump 1	1	B

SFG20

Core

56-02 Cold Water Storage Tanks and Cisterns

Date: 09 Dec 2019

Version: 7

Unit of Measure: Nr

Summary	
Frequencies	Tasks
3M (Months) 15 mins	1 2
6M (Months) 20 mins	3 4 5 6 7 8
12M (Months) 45 mins	9 10 11 12 13 14
Annual Timing	145 mins

Introduction

1 Approved Code of Practice - Legionnaires disease

1.1 The control of legionella bacteria in water systems: Approved Code of Practice, L8, sets out certain statutory requirements. In particular each water system must be identified and assessed for legionellosis risk. Once a risk has been identified and assessed a scheme must be prepared for preventing or controlling it, precautions implemented and managed records kept. The L8 has a special legal status, Part 1 being regulatory and Part 2 guidance which has been replaced by a separate Technical Guidance publication, HSG274 parts 1, 2 and 3.

2 The client must ensure that one person of adequate status is appointed as being responsible for overseeing the assessment and implementation of the precautions. Responsibility and lines of communication must be properly defined and personnel must be properly trained.

3 For guidance refer to 'Safe Work in Confined Spaces' - Approved Code of Practice, regulations and guidance.

4 Whilst legionella bacteria are most active in the temperature range 20°C to 45°C, occasions can occur where growth is promoted even in cold water systems. This can arise where the local temperature is raised by:

4.1 heat build-up due to solar gain or the proximity to hot water services, or

4.2 the storage capacity is far greater than is necessary. In general terms the storage capacity should not exceed one day's usage.

4.3 seasonal variations. In the summertime it is not unusual to have incoming mains supplies exceeding 20°C. When this occurs the systems should be reassessed with the likely outcome of increasing regular flushing to these outlets in a safe manner with minimal aerosolisation.

5 Cleanliness of the system is of primary importance to ensure that the legionella bacteria do not have any nutrients for growth and survival. Such nutrients can come from vegetable, animal and even mineral substances and it is for this reason that storage cisterns must be free from rust, dust, slime, mould, fungi and such items as dead birds, rats, mice, insects etc. and that non-metallic materials satisfy the requirements of British Standards. Lists of materials approved by the water industry (WRAS) are published in the Water Fittings and Materials Directory (see Standards List). All new and replacement water fittings must satisfy current Water Supply (water fittings) Regulations requirements and be listed in the WRAS directory (WRAS Simple Steps to Approval).

6 Cleansing of tanks, cisterns and associated pipework must be followed by full disinfection in accordance with the procedures laid down in current British Standards and as per chemical manufacturer's specification.

7 Cisterns must have close fitting lids, which should not be of timber or other porous materials. Lids must have vent pipes of adequate cross section to prevent suction developing on water draw off. All vent pipes and overflows must be fitted with close mesh to prevent the ingress of foreign matter. These must be checked annually and cleaned if necessary.

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Staff	1200+
Working Type	Hybrid
Repository Storage	9,000m ²
Office Space:	Desking, Collaboration, Meeting Space, Kitchen, Break Out Space, Restaurant, Secure Area, Printing Access, Conference Facilities Access.
Opening Hours	06.00-20.00hrs
Security	24/7
Parking	Yes – 900 spaces
Cycling/Showers	Yes
WIFI	Gov Wifi
Operational Resilience	N+1 UPS System and Back-up generator for critical services

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Internal	External
Portfolio Committee	Spending Review – Cabinet Office
Finance and Investment Committee	Parent Department
Commercial Governance	Government Property Standards/Professionalisms
Spend Approvals	Government Property Agency

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Analysis

ISO 55000:2014 Asset
management overview

- Context of the organization
- Leadership
- Planning
- Support
- Operation
- Performance evaluation
- Improvement

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References

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Thank you.