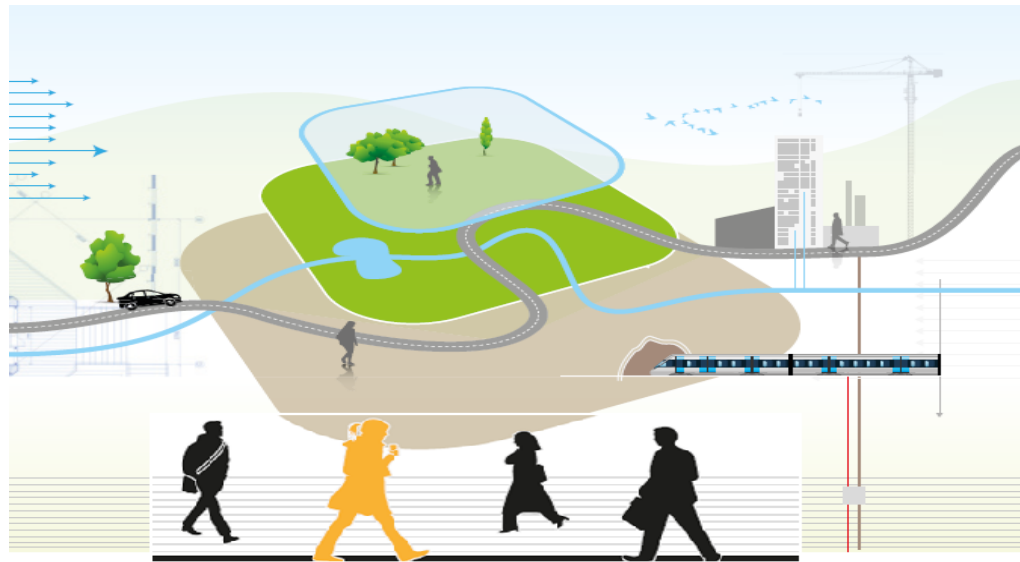


Government Soft Landings enabled by BIM



Who's this really all about?

Construction customers are not getting the assets and outcomes they need?



Dropping the baton at key stages

What a Hard Landing looks like...

While this unit might be the designer's dream come true...



... it's a nightmare for the maintenance team!



A nice idea to have commuters waiting in natural daylight. However, if they can't see their departure boards because of the sun then they'll probably blame the idiotic hole in the roof when they miss their trains and connections...

A disjointed, uninformed design and construction process leads to an unhappy property asset user...

Meet Unhappy Humphrey...



The first day at our new office was horrendous as no one knew how to work the new security system so we were left standing outside

They can't turn the lights OFF in my children's school!

The queues in my local train station run right across the entrance to the station, which is a nightmare to get through every morning on my way to work

The toilets in our local library don't flush if more than one is used in quick succession.

My new office came equipped with state of the art energy management technology so why are the energy bills three times more expensive than they would be without the new gadgets?

The wavy textured designer wall in our local community centre looked fantastic for a few months but they cannot clean it

What a Soft Landing looks like...

The designers of the London 2012 Velodrome attribute the fact that they were able to create the fastest indoor cycle track in the world to the early consultation they conducted with Sir Chris Hoy and his team, who were recognised as the ultimate end users of the facility.



In 2005 Barclays new HQ in Canary Wharf won the BIFM customer services award, which was attributed to the fact that an facilities management specialist was engaged in the earliest stages of the design project and saw the work through to full occupation.

A streamlined, well-informed design and construction process leads to a happy property asset user...

Meet Happy Henry...



The new layout and the staffing of my local train station is so efficient that I never seem to queue

My work space is so well designed it has helped improve productivity of the whole team

We couldn't really afford the expensive seats at the concert we went to but the sound quality was amazing and our view was unobstructed.

When I am working in our new office, I never have to look far for a power socket for my laptop and mobile phone charger as they are situated in convenient places

The reception area in our local council is so well designed that you always feel like you are at the front of the queue

The new signage at our local hospital helped me get to the maternity unit just in time to see my son being born

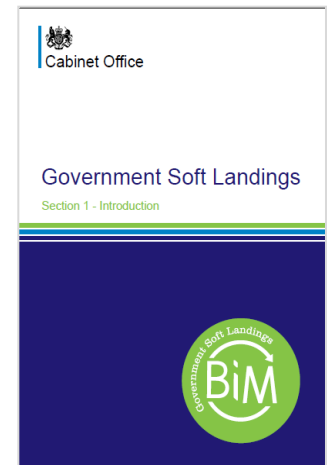
The new storage system at work looks really classy and it's so practical too – everything we need is right at our fingertips and visitors are always commenting on how nice it is to be in a well designed space.

GSL policy – launched Sept 2012

Delivering alignment of design and construction with operation and asset management.

Based on the BSRIA Soft Landings Framework

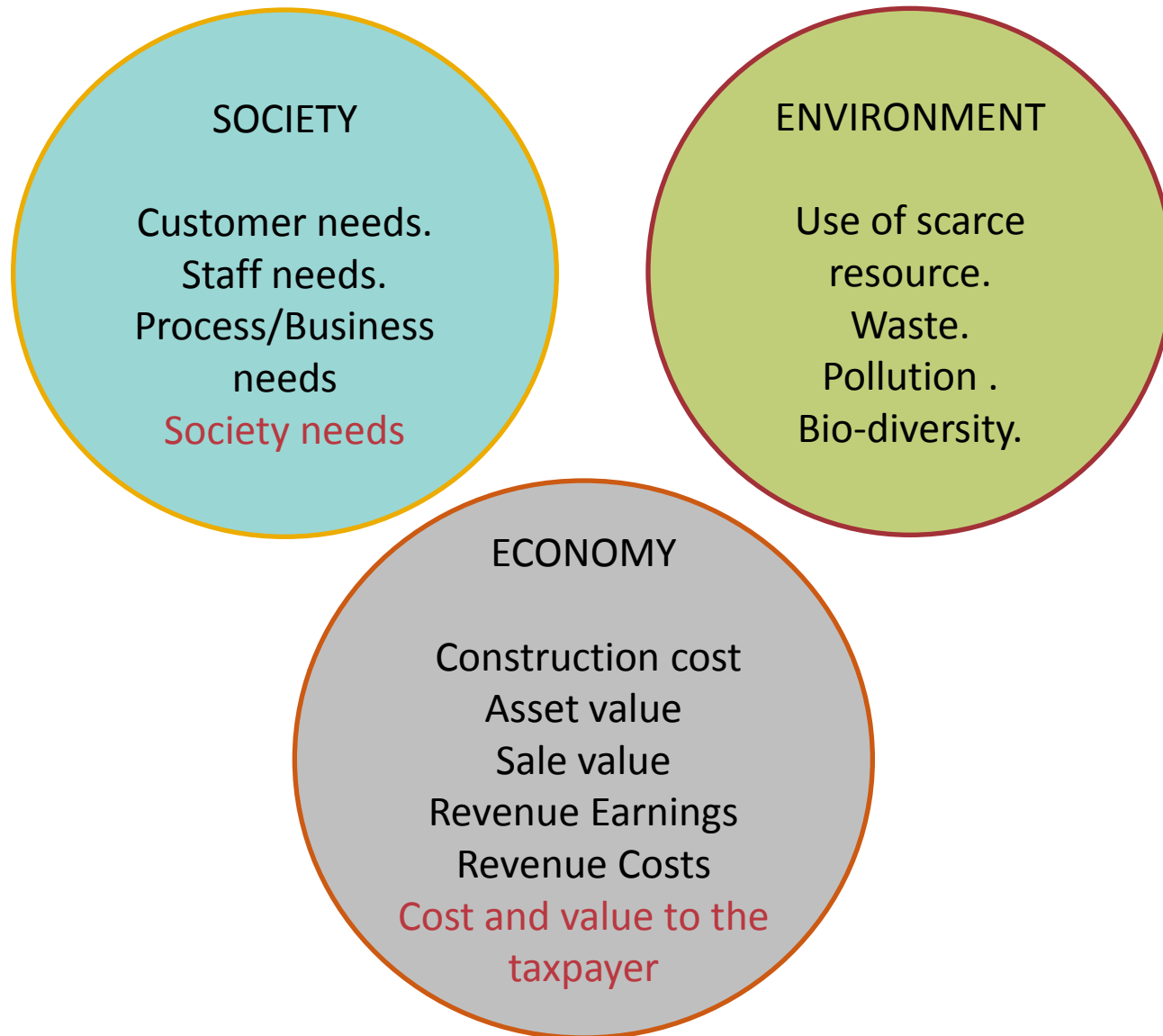
Output: Government Soft Landings Policy agreed by Government Construction Board Sept 2012 to be mandated in 2016 in alignment to BIM Level 2.



Sustainable Development

- Sustainable development: the necessity of working to ensure that economic development - and all its supportive infrastructural needs including transport systems – is environmentally and socially sustainable: meeting the needs of the present in ways that do not compromise the ability of future generations to meet their own needs.

Sustainable Development – Public spending



GSL Process

Review new design requirements and expectations through feedback

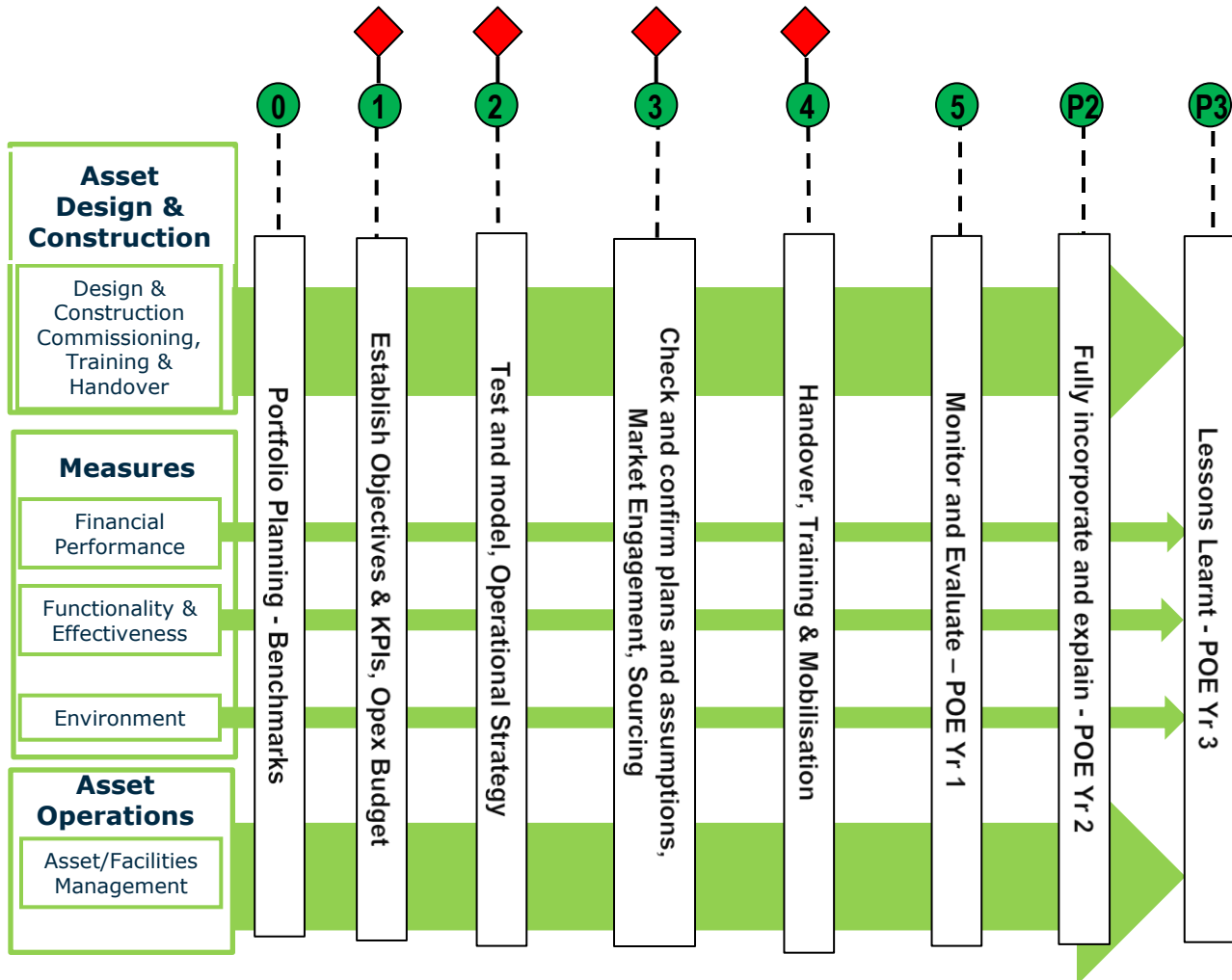
◆ Client decision points

● Information Exchange points

Define outcomes and measures of success

Identify & deliver user / operator needs

Collect and compare actual operational performance against planned targets



GSL – A bit more of the process

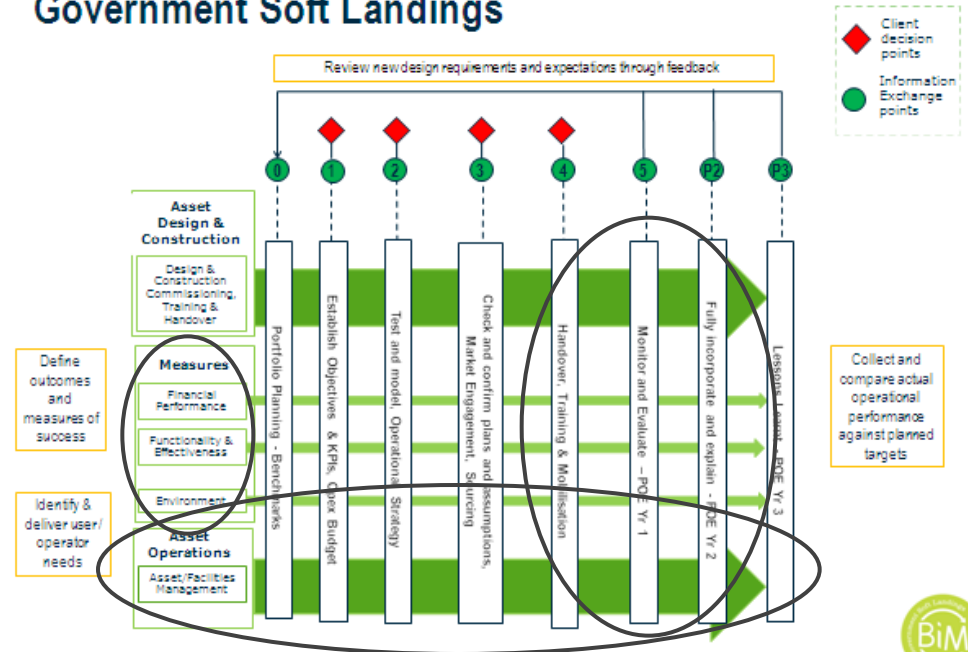
Government Soft Landings

Ensuring that the client identifies the high level outcomes that they require.

Making sure that the client works with the operations team and construction team to set performance targets related to the Economic, Social and Environment components of sustainable development.

Ensuring that the client requires and plans for performance evaluation in use.

Ensuring that the client plans for feeding back lessons learned to all parties, maintaining records of performance and setting updated benchmarks for performance.



Handover and aftercare from the construction team with the operation team.

Initial Aftercare – first few weeks in use.

Extended Aftercare – years 1, 2 and 3

Conducting performance evaluation.

Recording performance and advisory reports.

Feedback to all parties.

Setting benchmarks.

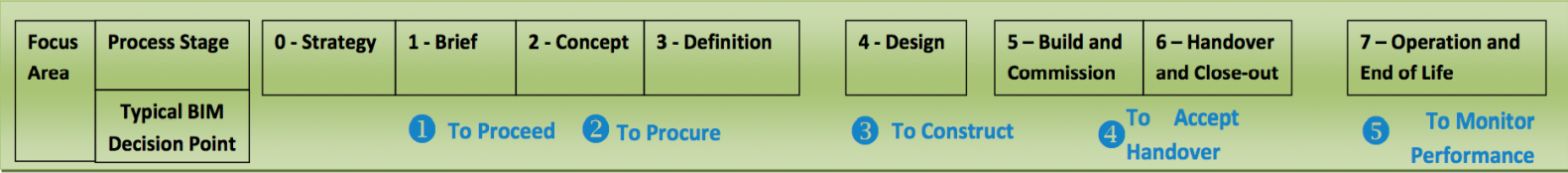
Greater involvement with operators and users

Bringing them on board earlier, making operational plans, setting operational budgets.

Having operators as part of the review of project proposals

Identifying the role of the operator in delivering the required outcomes.

1.7 GSL Master Process Map



FUNCTIONALITY & EFFECTIVENESS
Buildings to meet the needs of the government department occupiers; performance outcomes, comfortable, usable, manageable and maintainable environments conducive to occupant productivity.

ENVIRONMENTAL
Meet government department performance targets for energy use, carbon dioxide emissions, water usage and waste production

COST
Meet government department targets for capital expenditure and operational expenditure

FACILITIES MANAGEMENT
A clear, cost efficient strategy for managing the operations of the building

COMMISSIONING, TRAINING AND HANDOVER
Projects delivered, handed over and supported to meet the needs of the end users

Establish Objectives

Consider feedback from previous projects. Define required departmental outcomes; business outcomes, social outcomes, comfort, facilities, amenity, impression and impact.

Consider previous projects. Establish performance targets that are based on government and departmental policy and project targets. Produce draft Environmental Plan.

Establish department targets for capital CAPEX and operational costs OPEX

Develop Project Operational Brief, Business Case and Core Objectives from Department Operational Management Strategy / Vision.

Identify key aspects of required operational performance. Appoint someone from client team for this (GSL Champion). Identify previous learning. Agree required asset data format.

Test and model

Consolidate brief to develop requirements for design delivery. Provide commentary on design proposals and understand how they are to be assessed during operation.

Objectives are to be translated into measurable targets. Post Occupancy Evaluation (POE) Plan to be developed. Review design predictions against performance targets.

Review CAPEX and OPEX budgets against targets. Review construction team Whole Life Costing.

Identify Operational Management Plan, Operational Model and Operational Expenditure Budget. Functionality should be mapped at this stage.

Develop Strategy for CT&H and embed this into briefing / procurement. Develop a CT&H plan and Aftercare plan.

Monitor and Evaluate

Conduct interim reviews to ensure that the design vision and required performance outcomes are addressed through the construction and operational plan.

Outputs from design are to be translated into construction. Review proposals to check that performance targets can still be met. Review required operational skills and training.

Review CAPEX and OPEX tenders against targets. Plan the recording process for OPEX costs.

Review design and use it to commence supplier engagement and a budget review. Procure and mobilise FM Providers and suppliers. Plan production of the asset register and maintenance plans.

Plan Testing & Commissioning. Plan for Building Operational Handover to FM. Agree roles, responsibilities and attendance. Plan the production of the asset register and operation and maintenance manuals.

Incorporate and Explain

Ensure that corrective actions needed for delivery of performance outcomes are considered.

Compare final predicted performance with required performance. Review the building logbook for completeness and quality.

Analyse and record actual CAPEX out-turn cost (POE). Commence the recording process for OPEX costs.

Plan to measure the building management service performance against KPI's. Ensure an agreed change mechanism in place. Monitor FM services against building asset performance and whole life cost prediction.

Commissioning services and operational teams to work closely to ensure that optimum performance is reached. Ensure change control and performance monitoring methods are understood.

Monitor Review and Learn

Assess (POE) for three years to ensure facility meets performance targets. Assess how well the design and operational approach meet required performance outcomes. Manage Aftercare.

Maintain records and ensure that any operational changes are recorded. Evaluate performance in use for three years (POE). Manage Aftercare.

Record OPEX costs for a period of three years (POE) and optimise performance.

Continued monitoring at agreed periods actual v planned performance and costs considering operation and other impacts. Use KPI's. Consider impact of FM performance on POE measures

Identify areas where performance has required additional work beyond that envisaged and lessons learnt. Undertake KPI's as required.

DATA DROP DESCRIPTIONS

| |
|---|
| Drop 1 Approximately RIBA 2013 Stage1 Outline Business Case and Massing Model Produced. |
| Drop 2 Approximately RIBA 2013 Stage2 Data allows contractor selection. Function, carbon and cost can be assessed. |
| Drop 3 Approximately RIBA 2013 Stage 4 Agreement of guaranteed maximum price should be possible. Co-ordinated drawings and associated schedules should be available for construction. |
| Drop 4 Approximately RIBA 2013 Stage 6 Operational and functional information to support FM operations should be available at this stage. |
| Drop 5 Approximately RIBA 2013 Stage 7 The building should be in use and its performance being optimised and measured. |

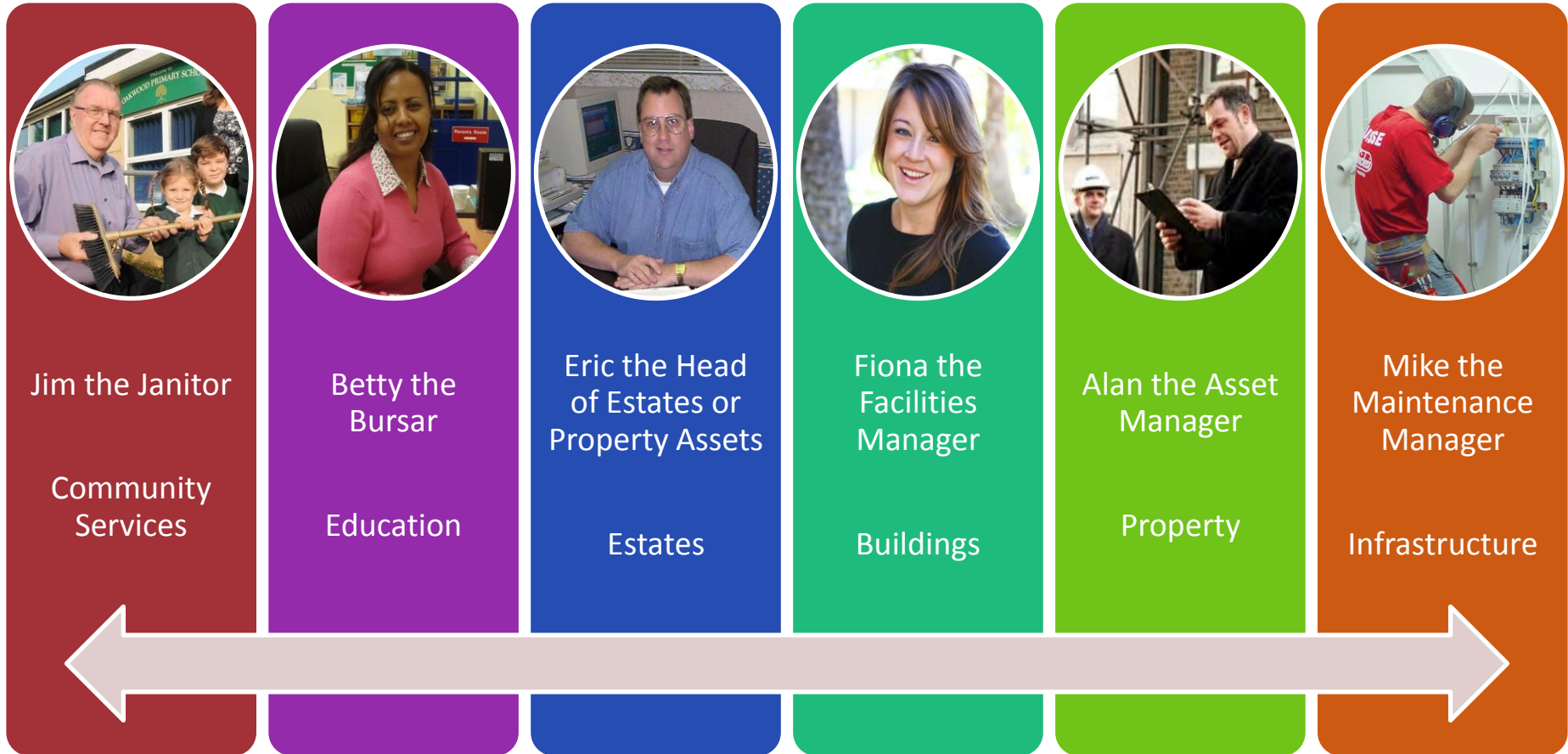
Finding a GSL Champion on each project.

A public sector specialist who will become the GSL Champion when it is time to build or reconfigure a property/infrastructure asset.

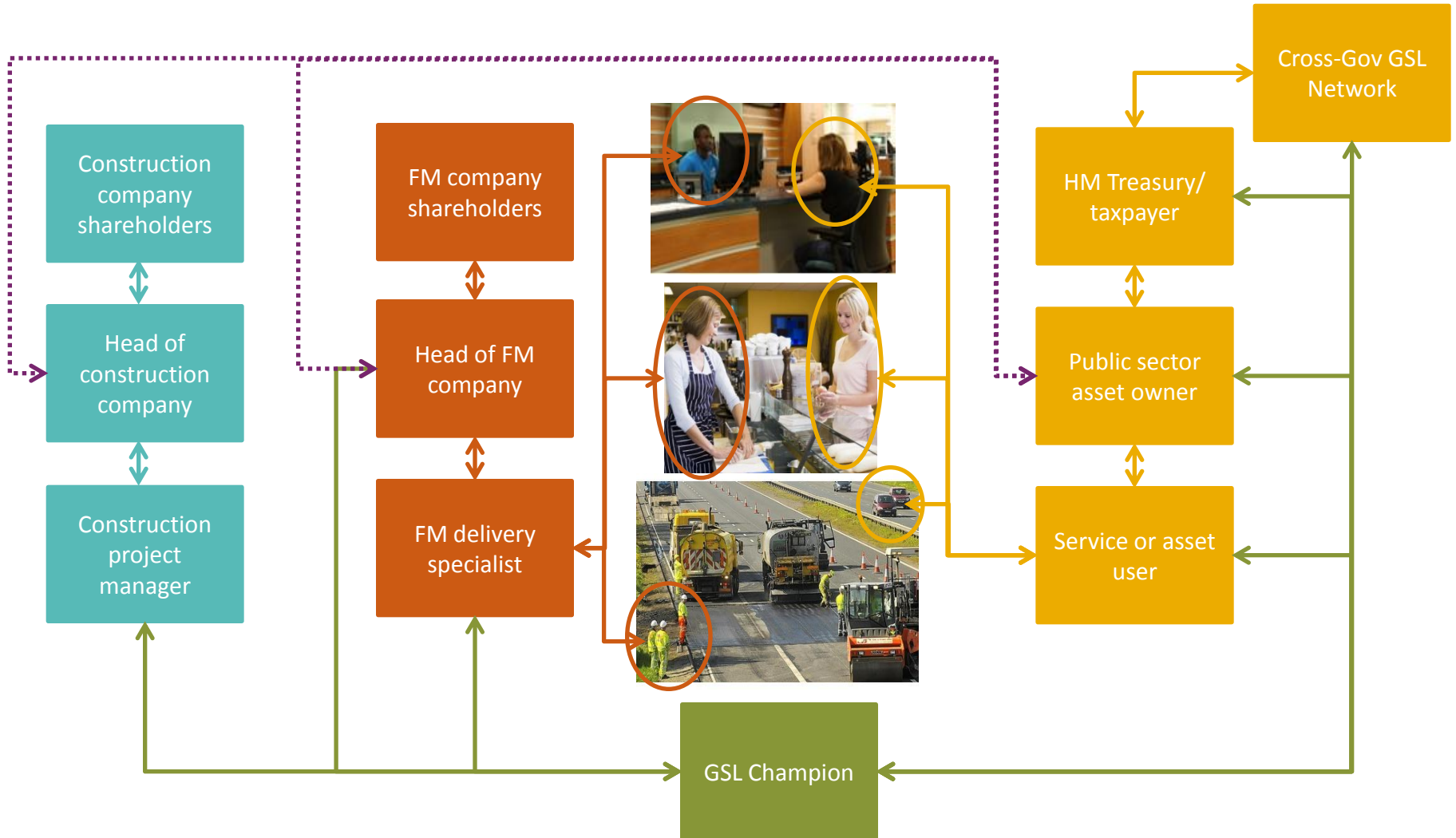


Finding your GSL Champion

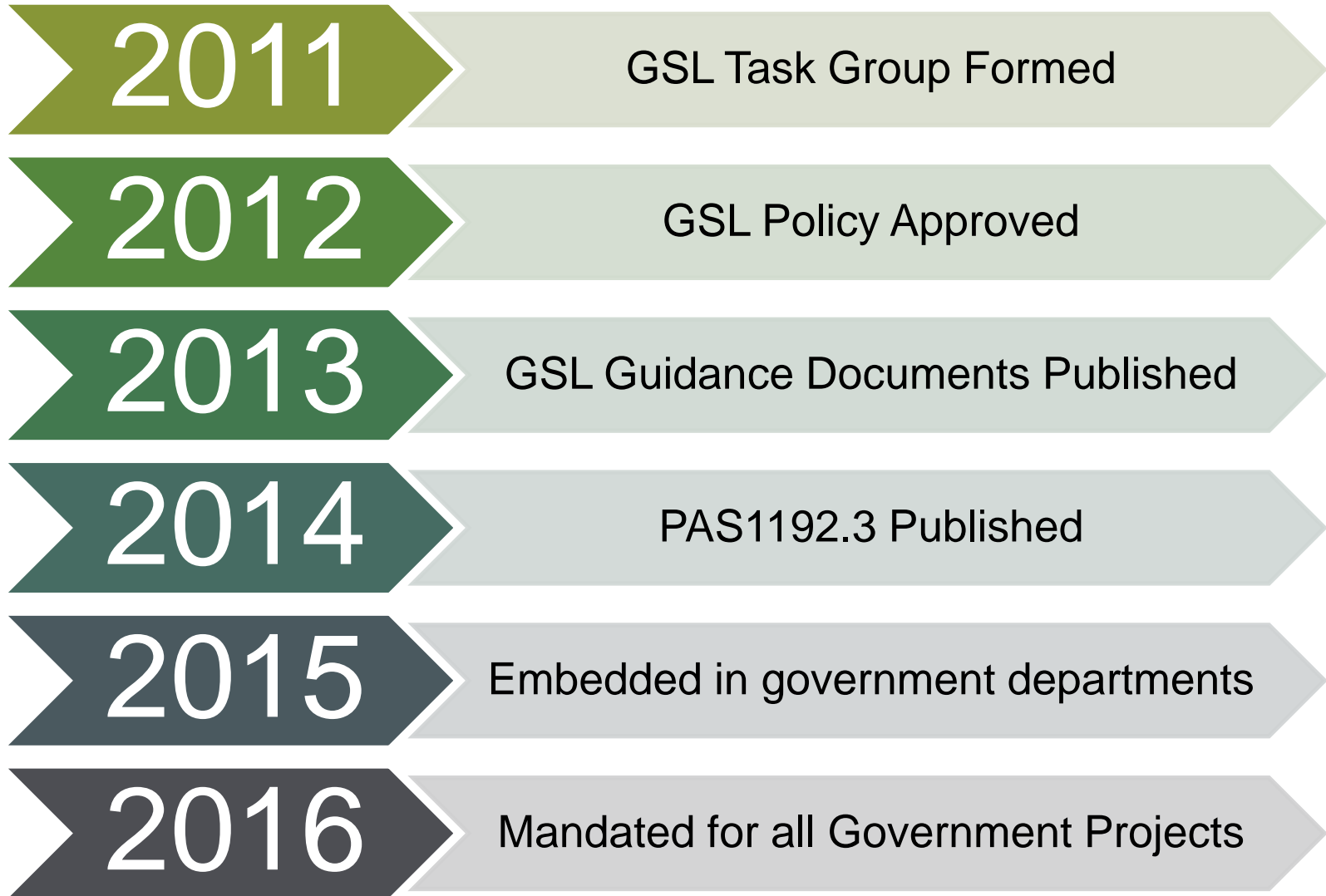
The diagram below demonstrates that the GSL Champion will vary depending on the specific nature of the project and the sector of the industry you are operating in.



The GSL accountability landscape



GSL timeline



More Information?

Government Soft Landings

[Home – GSL](#)

[GSL Policy](#)

[GSL Summary](#)

[FAQs](#)

[Early Adopters](#)

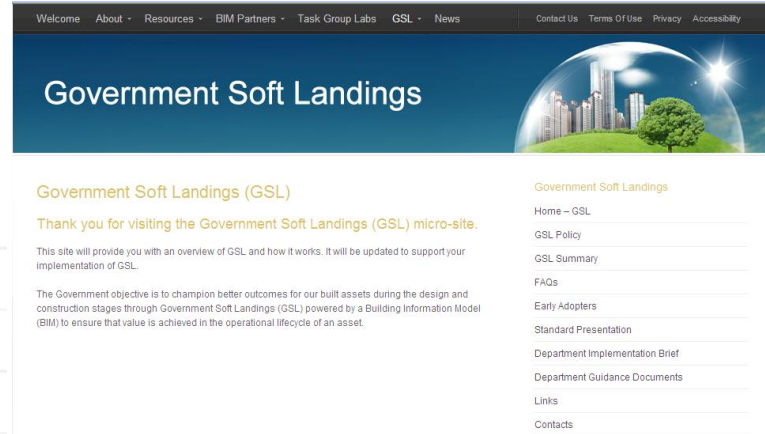
[Standard Presentation](#)

[Department Implementation Brief](#)

[Department Guidance Documents](#)

[Links](#)

[Contacts](#)



The screenshot shows the homepage of the Government Soft Landings (GSL) website. At the top, there is a navigation menu with links for Welcome, About, Resources, BIM Partners, Task Group Labs, GSL, and News. On the right side of the menu are links for Contact Us, Terms Of Use, Privacy, and Accessibility. Below the menu is a header banner with the title "Government Soft Landings" and a graphic of a globe with a city skyline and a tree. The main content area is divided into two columns. The left column contains a heading "Government Soft Landings (GSL)" followed by a thank you message and a brief description of the site's purpose. The right column contains a heading "Government Soft Landings" followed by a list of navigation links: Home – GSL, GSL Policy, GSL Summary, FAQs, Early Adopters, Standard Presentation, Department Implementation Brief, Department Guidance Documents, Links, and Contacts.

- www.bimtaskgroup.org/gsl/

Government Soft Landings



GSL Department Guidance Documents

The attached draft documents are to be considered as work in progress.

The documents are attached for the purpose of giving guidance to government departments in implementing the Government Soft Landings approach and in conducting early adopter projects. The principles of Government Soft Landings are reasonably intuitive however these documents should be of help to those who require a little more detail. The early adopter experience and lessons learned will be used to develop and correct the content during 2013.

[Government Soft Landings Executive Summary - PDF](#)

[Government Soft Landings Section 1 – Introduction - PDF](#)

[Government Soft Landings Section 2 – GSL Lead GSL Champion - PDF](#)

[Government Soft Landings Section 3 – Functionality and Effectiveness - PDF](#)

[Government Soft Landings Section 4- Capital Cost and Operating Cost - PDF](#)

[Government Soft Landings Section 5 – Environmental Management - PDF](#)

[Government Soft Landings Section 6 – Facilities Management – PDF](#)

[Government Soft Landings Section 7 – Commissioning, Training and Handover - PDF](#)

[Government Soft Landings Section 8 – Planning for Aftercare - PDF](#)

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Next steps for GSL

- GSL Stewardship Group meetings
- Post Occupancy Evaluation measures to be agreed
- GSL Champion Training
- Contractual linkage – Predicted v Actual Performance
- GSL for Infrastructure

Performance Evaluation

- The Green Construction Board are currently funding a review of the available performance evaluation measures.
 - Economic. Capital Cost and Operating Cost
 - Environment. Energy use. Carbon dioxide emissions. Water use. Waste disposed.
 - Social. Access. Space. Uses. Performance. Engineering. Construction. Urban and Social Integration. Internal Environment. Form and Materials. Character and Innovation.

GSL Champion Training

- A GSL Lead for each department has been identified.
- They will nominate GSL Champions on each new project
- A learning outcomes framework is being prepared.
- It will be shared with the civil service training provider who will be asked to identify what and how training should be provided.
- The civil service training provider might involve external training providers.

Contractual Linkage of Target v Actual Performance

- Being reviewed by a task group.
- What are the contractual implications of implementing GSL?
- What are the implications of trying hold construction teams responsible for failure to deliver to the required targets?
- Would it be more effective to incentivise performance?

GSL for infrastructure

- The ICE have accepted the challenge of assisting to modify the GSL guidance to reflect the needs of infrastructure projects