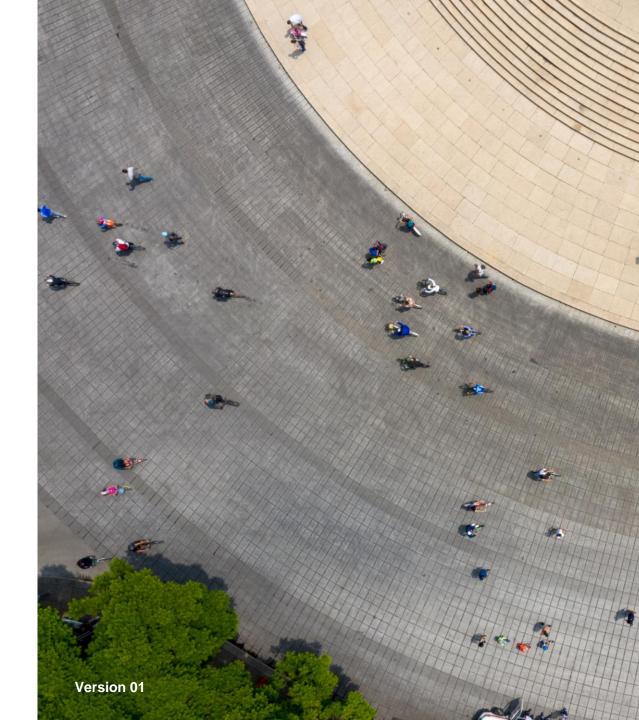


# **Local Authority**

Government Soft Landings (GSL) Interactive Navigator







#### Introduction

The need to improve the value offered by our construction activities is a key objective of the Local Government Soft Landings (GSL) strategy, with the specific goal "to align interests between those who design and construct our assets and the people who subsequently use them."

GSL can be incorporated into your organisation's briefing, design, construction and handover process and helps to maintain a 'golden thread' of the facility's purpose and also enables structured monitoring of performance standards during delivery and facility operation.

This interactive process map is designed to help you to practically apply GSL on your project. It has been developed by the Construction Innovation Hub with support and input from the Local Government Association (LGA) and the National Association of Construction Frameworks (NACF).







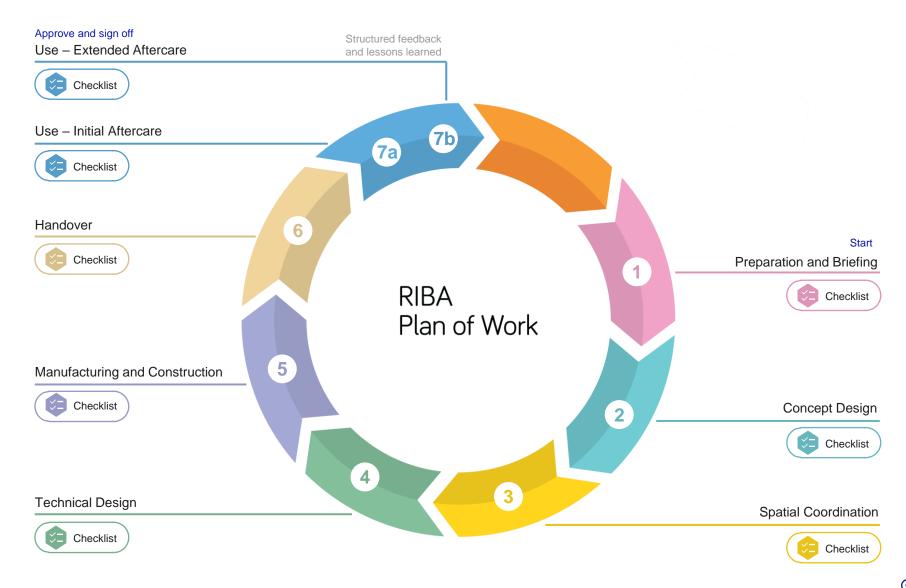
The Construction Innovation Hub is funded by UK Research and Innovation through the Industrial Strategy Challenge Fund







#### Navigator









## Stage 0/1 tasks

Strategy definition/preparation and briefing

Government / Local Authority Management Policies and Targets

Local Authority's Asset Management Policy & Portfolio Management Strategy



#### Required activity

- 1.1 Define the project's operational vision and strategy
- 1.2 Establish GSL roles, duties and responsibilities
- 1.3 Appoint a project GSL Champion
- 1.4 Assimilate and summary lessons learnt from previous similar projects (Consider a project development day with other Local Authority and stakeholders to discuss key learning themes)
- 1.5 Create a project GSL strategy and implementation
- 1.6 Identify and map stakeholder groups / Undertake initial consultation
- 1.7 Define the Project's aftercare, FM strategy and outline plans
- 1.8 Establish Treasury five stage business case
- 1.9 Define the Project's "Information Management using BIM" strategy. Refer to and align with information requirements

#### **Desired activity**

- 1.10 Define high level performance outcomes and requirement: Benchmarks and review of past POE reports / out turn costs / Pre-occupancy Evaluations (if required)
- 1.11 Establish initial target costs (Elemental Cost Plan)
- 1.12 Prepare capital and operational cost estimates
- 1.13 Design, agree and set project programme timescales and project evaluation stages
- 1.14 Create project approval gateways, within the project brief
- 1.15 Create a project risk and opportunity register
- 1.16 Consider and set requirement for Modern Methods of Construction (MMC)
- 1.17 Consider undertaking BOPAS or similar assurance/accreditation scheme

Key Stage Authorisation Review



Information Exchanges to support key project decision points

RIBA Stage 0 Strategic Definition

























## Stage 0/1 checklist

Strategy Definition/Preparation and Briefing Strategic Assessment/Outline Business Case

#### Stage objective

Drives clarity about operational objectives and outcomes.

Soft landings roles and responsibilities clearly defined and appointment of a SL Champion.

Enablement of end-user involvement at an early stage and throughout the project.

Lessons learned reviewed from previous projects.

#### **Related Templates**

Soft Landings Guidance

Soft Landings Delivery Plan Template

Soft Landings Lessons Learned Register

Stakeholder Impact Matrix

Soft Landings PLQ

Alignment with BS 8536-1 Strategy 0 Strategy

BS 8536-1 Clauses 5.1



Ш	1.1	The project's operational vision and strategy has been defined
	1.2	GSL roles, responsibilities established
	1.3	Project GSL Champion appointed
	1.4	Lesson learned from previous projects assimilated
	1.5	Project GLS strategy and implementation plan created

### 1.6 Initial stakeholder group consultation

- 1.7 Project aftercare, FM strategy and outline plans defined
- 1.8 Five-stage business case for Treasury created
- 1.9 The Project's "Information Management using BIM" strategy defined
- 1.10 High-level performance outcomes defined

#### **Desired activity**

	1.12 Capital and operational cost estimates prepared
	1.13 Project programme timescales and project evaluation stages, designed and agreed
П	1.14 Project approval gateways created

1.11 Initial target costs established

- 1.15 Project risk and opportunity register created
- 1.16 Consider and set requirements for Modern Methods of Construction (MMC)
  - 1.17 Consider undertaking build offsite Property Assurance Scheme (BOPAS) or similar assurance/accreditation scheme























Common Data

Environment (CDE)

Established

## Stage 2 tasks

Final Business Case (FBC) /Briefing Stage

#### Required activity

- 2.2 Develop a Facilities Management strategy
- 2.3 Create a schedule for GSL opportunities and risks
- 2.6 Develop an environmental management plan and establish environmental targets
- 2.10 Develop targets for economic, security, functional and effectiveness
- 2.11 Develop tender with GSL requirements and assessment criteria and dispatch documentation

#### **Desired activity**

- 2.1 Assimilate Lessons Learnt and POE strategy from existing projects and past experience
- 2.4 Identify and agree stakeholder design requirements
- 2.5 Hold project team design reviews and reality checking workshops
- 2.7 Develop initial capital and operational budget cost plans
- 2.8 Set requirements for tender documentation and evaluation
- 2.9 Identify potential bidding contractors
- 2.12 BIMs / Simulation to test any early concept designs
- 2.13 Draft aftercare and FM strategy and benefits monitoring plan
- 2.14 Establish target monitoring plan

Key Stage Authorisation Review



Information Exchanges to support key project decision points

RIBA Stage 2 Concept Design





























## Stage 2 checklist

Final Business Case (FBC) /Briefing Stage

#### Stage objective

The primary output at this stage is a well-defined project brief, considering end-user and facility/ facilities manager requirements, aligned with measurable performance targets.

Establishment of SMART success and performance targets which can be tested during design and construction stages.

Early establishment of aftercare, FM strategy and benefits monitoring plan.

#### **Related Templates**

Soft Landings Guidance

Soft Landings Delivery Plan Template

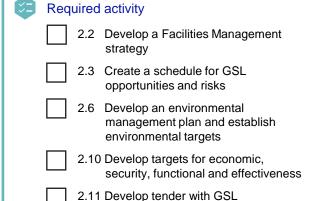
Soft Landings Lessons Learned Register

Stakeholder Impact Matrix

Soft Landings PLQ Specimens

Alignment with BS 8536-1 Stage 1 Brief

BS 8536-1 Clauses 5.2



requirements and assessment criteria

and dispatch documentation

#### **Desired activity**

	strategy from existing projects and past experience
2.4	Identify and agree stakeholder design requirements
2.5	Hold project team design reviews and reality checking workshops
2.7	Develop initial capital and operational budget cost plans
2.8	Set requirements for tender documentation and evaluation
2.9	Identify potential bidding contractors
2.12	BIMs / Simulation to test any early concept designs
2.13	Draft aftercare and FM strategy and benefits monitoring plan
2.14	Establish target monitoring plan

2.1 Assimilate Lessons Learnt and POE























## Stage 3 tasks

#### Required activity

- 3.3 Continue ongoing stakeholder engagement and include project walkabouts
- 3.4 Update the commissioning specification
- 3.5 Handover plan to include training requirements for end users.
- 3.6 Review construction and installation details. Highlight if any negative impact on the performance of asset.
- 3.7 Create forecasts for final capital and operational costs.
- 3.8 Create a detailed move-in plan.

#### **Desired activity**

- 3.1 Provide workshops in the procurement phase to review maintenance, servicing and operational efficiency requirements, against industry standards project team
- 3.2 Define and develop site / building operational and equipment training plan end users and facilities staff.





Information Exchanges to support key project decision points

#### RIBA Stage 3 Spatial Coordination



























## Stage 3 checklist

7	Required activity			
	3.3 Ongoing stakeholder engagement and project walkabouts			
	3.4 Commissioning specification updated			
	3.5 Handover plan competed			
	3.6 Construction and installation details reviewed			
	3.7 Forecast of final capital and operational costs created			
	3.8 Detailed move in plan created			

#### Desired activity

$\Box$	3.1	workshops undertaken during procurement stage
	3.2	Site/building operational and equipment training plan for
_		end users and facilities staff defined and developed























## Stage 4 tasks

#### Required activity

- 4.3 Review developed design specifications, assess whether target can be achieved
- 4.4 Update the information models with the additional operational and design data
- 4.5 Confirm unavoidable changes in design that could impact on the performance of the asset
- 4.6 Prove that targets, regulations and user needs can be achieved by modelling and testing design

#### **Desired activity**

- 4.1 Provide visualisation of designs for key spaces
- 4.2 Sign off by client and project team for designs of key function areas, e.g. spaces
- 4.7 Establish a target monitoring plan, create an SL delivery plan

Key Stage Authorisation Review



Information Exchanges to support key project decision points

RIBA Stage 4 Technical Design

























## Stage 4 checklist

Required activity

4.3 Developed design reviewed to ensue targets can be achieved
4.4 Information models updated
4.5 Any unavoidable changes in design confirmed
4.6 Design modelled and tested to prove targets, regulation and user needs can be achieved

#### Desired activity

4.2	Design of key function areas signed off
4.7	Target monitoring plan established, SL delivery plan created

4.1 Visualisation of designs completed























## Stage 5 tasks

#### Required activity

- 5.4 Update the risk and opportunity register
- 5.5 To ensure performance targets are met implement information exchanges at key stages of project
- 5.6 Create building readiness and commissioning plans. Also include a schedule for pre-commissioned activities
- 5.7 Trial the transfer of information between the project information model to the asset information model which may include the asset register or CAFM solution
- 5.8 Identify skills of end-users before conducting any commissioning demonstrations

#### **Desired activity**

- 5.1 Produce plan for and conduct site project and factory tours during construction
- 5.2 Arrange supply chain asset operational plant and equipment demonstration event
- 5.3 Full accessibility review by project team
- 5.9 Prepare forecasts of final capital and operational costs Detailed CHT Master Plan





Information Exchanges to support key project decision points

RIBA Stage 5 Manufacturing and Construction





























## Stage 5 checklist

Construction

#### Stage objective

A design and constructed capital works that have been tested to ensure that it will meet performance targets, requirements and will meet the end-users' needs.

Well-considered and effective commissioning and prehandover activities.

#### **Related Templates**

Soft Landings Guidance Soft Landings Delivery Plan Template Soft Landings Lessons Learned Register Stakeholder Impact Matrix

Required activity			Desired activity			
	5.4	Risk and opportunity register updated		5.1	Project site tour plan produced	
	5.5	Information exchanges at key stages of projected implemented		5.2	Supply chain operational equipment demonstration event arranged	
	5.6	Building readiness and commissioning plan created		5.3	Project team reviewed Full accessibility	
	5.7	Trial information transfer undertaken		5.9	Forecast of final capital and operational costs prepared. Detailed	
	5.8	Identify skills of end-users before			CHT Master Plan prepared	

conducting any commissioning

demonstrations

























## Stage 6 tasks

#### Required activity

- 6.4 Transfer the project information model to the client FM
- 6.7 As-built information model delivered to client
- 6.8 Compile Building User Guide (BUG) and building log book
- 6.9 Develop, review and agree upon building operational and maintenance schedules and take receipt of digital copy
- 6.11 Put in place the initial and extended aftercare plans whilst mobilising team

#### **Desired activity**

- 6.1 Review, develop and confirm completion date for the recording process for performance targets
- 6.2 Prepare building readiness programme and develop snagging process and timings in conjunction
- 6.3 Start to prepare and check building and system commissioning records
- 6.5 Confirm approach to and provide delivery plan for site / building operational and equipment training end users and facilities staff
- 6.6 Commence development plan for existing building decant and new building occupation and/or old building mothball processes
- 6.10 Develop initial draft of the Operation & Maintenance (O&M) manuals

Key Stage Authorisation Review



Information Exchanges to support key project decision points

RIBA Stage 6 Pre-handover/Handover

























## Stage 6 checklist

Pre-handover

#### Stage objective

The completed capital works are aligned with end users' needs.

An accurate "As-built" PIM is in place and data effectively transferred to the Board's asset management systems.

Estates and operational stakeholders trained and familiar with the completed capital works.

#### **Related Templates**

Soft Landings Guidance

Soft Landings Delivery Plan Template

Soft Landings Lessons Learned Register

Stakeholder Impact Matrix

Soft Landings PLQ Specimens

#### Alignment with BS 8536-1

BS 8536-1 stage: 6 Handover and Close-out

BS 8536-1 clause: 5.7

### Required activity 6.4 Project information model transferred to client FM 6.7 As-built model delivered to client

#### 6.8 Building User Guide (BUG) and building log book compiled

6.9	Building operational and maintenance
•	schedules agreed upon, developed
	and reviewed

6.11 Initial and extended aftercare plan put
in place

#### **Desired activity**

Ш	6.1	Completion date for recording process for performance targets, reviewed, developed and confirmed
	6.2.	Building readiness programme prepared and snagging process developed
	6.3	Building system and commissioning recorded checked and prepared
	6.5	Approach to deliver plan for site / building operational and equipment training end users and facilities sta confirmed and provided
	6.6	Development plan for existing building decant and new occupation commenced

6.10 Initial O&M manual draft developed

























## Stage 7a tasks

#### Required activity

- 7.1.4 Update asset information model
- 7.1.6 Regular formal project end review meetings and sign off
- 7.1.7 Undertake seasonal commissioning
- 7.1.8 Undertake and report on POE surveys

#### **Desired activity**

- 7.1.1 Contractors and project aftercare teams, weekly on-site based meetings
- 7.1.2. Provide direct support
- 7.1.3 Weekly walkabouts in new buildings
- 7.1.5 Regular informal communication meetings
- 7.1.9 Complete building readiness programme and manage / complete snagging process
- 7.1.10 New building occupation review and compile record of all Lessons Learnt





Information Exchanges to support key project decision points

RIBA Stage 7a Use - Initial Aftercare



























## Stage 7a checklist

In Use/Operational Phase

#### Stage objective

The primary objectives at this stage are to ensure that:

The capital works are performed according to the brief and meet client's requirements.

The aftercare period is implemented and supported.

The performance of capital works is monitored and evaluated via POE and other methodology.

Processes are in place for the AIM to be maintained.

Lessons learned are captured and shared.

#### **Related Templates**

Soft Landings Guidance

Soft Landings Delivery Plan Template

Soft Landings Lessons Learned Register

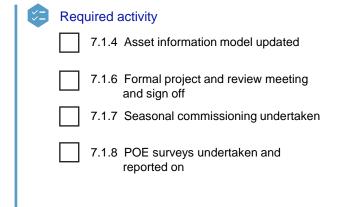
Stakeholder Impact Matrix

Soft Landings Post Occupancy Evaluation Template

#### Alignment with BS 8536-1

BS 8536-1 stage: 7 Operation and End of life

BS 8536-1 clause: 5.8



#### **Desired activity**

Ш	7.1.1	teams, based weekly on site
	7.1.2	Direct support provided
	7.1.3	Weekly walkabout in new buildings undertaken
	7.1.5	Regular informal communication meetings taken place
	7.1.9	Building readiness programme and snagging process complete
	7.1.10	New building occupation reviewed and lessons learned compiled

744 Contractors and project offerences























## Stage 7b tasks

#### Required activity

- 7.2.1 Organise formal monthly aftercare review meeting / workshops and walkabouts. Maintain records
- 7.2.9 Update building log book
- 7.2.10 Complete a scheme benefits review

#### **Desired activity**

- 7.2.2 Log and review technical and utility performance data
- 7.2.3 Assess then fine-tune building technical and equipment systems
- 7.2.4 Record and update details of fine-tuning and usage changes in draft O&M
- 7.2.5 Communicate fine-tuning, usage changes and updates
- 7.2.6 Measure and evaluate changes and updates to technical systems and utility performance
- 7.2.7 Set up and co-ordinate corporate strategy for POE and BPE
- 7.2.8 Review and compile records of Lessons Learnt

Approve and sign off



RIBA Stage 7b Extended Aftercare























Structured Feedback including defects, non-conformance and Lessons Learnt





## Stage 7b checklist

In Use/Operational Phase

3	Required activity			ac
		Aftercare review meeting / workshops and walkabouts organised. Records maintained	7.2.2	2
	7.2.9 E	Building and logbook updated	7.2.3	3
	7.2.10 S	Scheme benefits review completed	7.2.	4
			7.2.	5
			7.2.0	6
			7.2.	7

#### ctivity

7.2.2	Technical and utility performance data logged and reviewed
7.2.3	Building technical and equipment systems assessed and fine-tuned
7.2.4	Fine-tuning and usage changes in draft O&M recorded and updated
7.2.5	Fine-tuning and usage changes communicated
7.2.6	Changes and updates to Technical system & utility performance measured and evaluated
7.2.7	Corporate strategy for POE and BPE set up and coordinated
7.2.8	Lessons Learnt compiled and reviewed





















## Main

## Here is a selection of free resources to help you on your Soft Landings journey:







BS 8536-1 & 2



**RIBA PoW Overview** 



https://www.youtube.com/watch?v=Q6az0AG77OQ



**UK BIM Framework** 





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