RIBA Plan of Work 2013 and BIM

It is "not just about software". The RIBA Plan of Work 2013 has been developed to ensure that the many subjects that will facilitate successful project outcomes are considered in a holistic manner providing a Plan of Work suitable for a 21st century collaborative project team.

by Dale Sinclair

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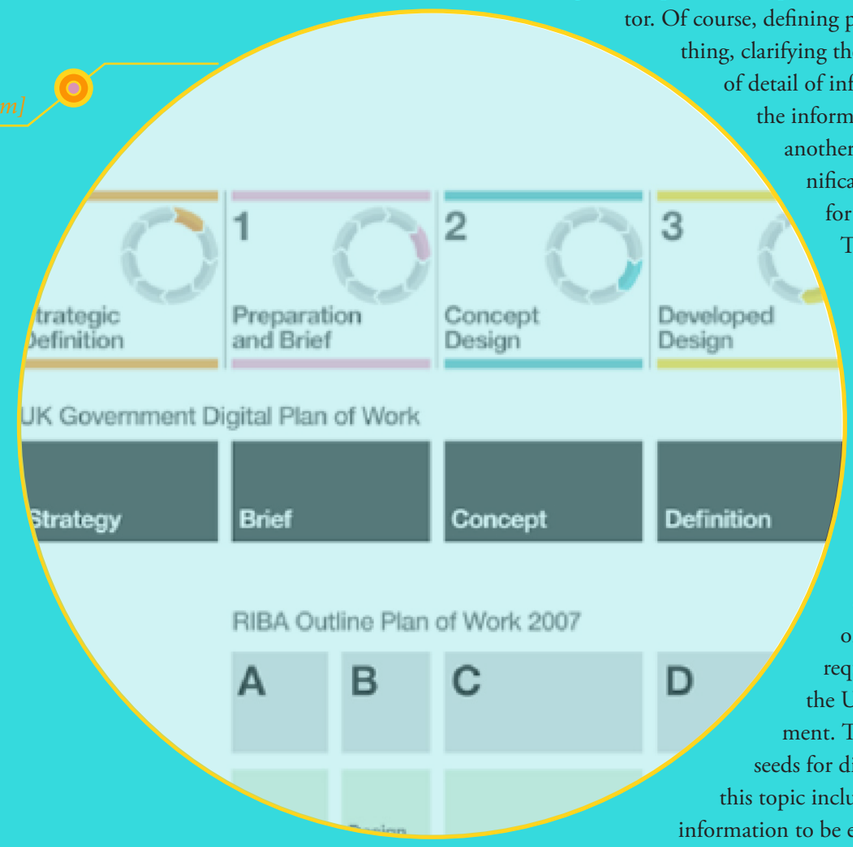
The RIBA Plan of Work is a core document referenced within the construction industry and the first major revamp in its 50 year history was published on 21st May. The new Plan is customisable and the tool that enables this, along with a free downloadable overview, is available at *www.ribaplanofwork.com*. A book setting out further guidance on the many new themes contained in the plan is also available at *www.ribabookshops.com*.

The new Plan uses the same stages as PAS1192 and the UK government's digital Plan of work. The stages were developed through a CIC Plan of Work task group in 2012 (see figure 1). Agreeing the stages is a great achievement and is crucial to future initiatives: the use of consistent stages by those developing supporting standards, protocols and tools is essential and greatly assists the development of particular themes, such as level of detail or information exchanges, bringing greater cohesion to the industry.

[view diagram]



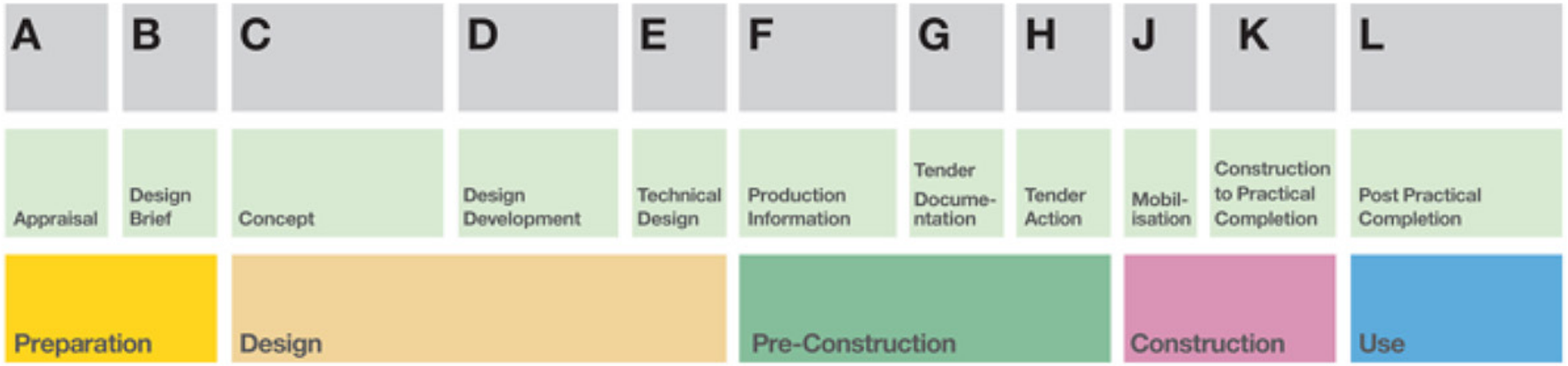
Information Exchanges and Level of Detail

The Plan has been devised in a manner that facilitates a transition from an "analogue" world to a "digital" one. For example, despite using CAD, and drawing "full size" for 30 plus years, we still refer to drawing scales and level 2 BIM advocates 2D slices printed from the BIM model to ensure contractual clarity in the short term. Moving forward, discussions have already commenced on how to frame level of detail in a digital manner by considering the purpose of a BIM model: for example, for a planning submission or to enable design development by a specialist subcontractor. Of course, defining purpose is one thing, clarifying the actual level of detail of information in the information model is another and is a significant challenge for the industry. The RIBA Plan of Work 2013 contains an Information Exchanges task bar with an optional bar referencing the information exchanges, or data drops, required by the UK government. These bars sow seeds for discussion on this topic including the right information to be exchanged at each stage as well as enabling the

Comparison of RIBA and digital Plan of Work stages

UK Government Digital Plan of Work

RIBA Outline Plan of Work 2007



outputs from digital level of detail initiatives to be relevant when they are developed and available. In the analogue world, it enables discussion on the contents of a stage 2 or stage 3 report.

Design Responsibility Matrix

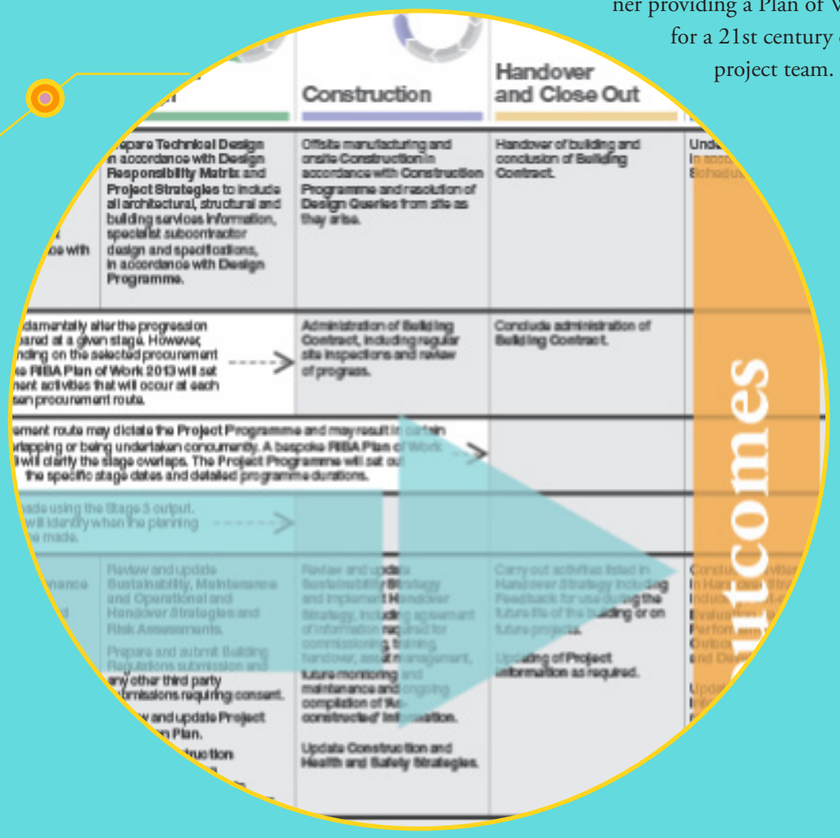
A subject related to level of detail is design responsibility. BSRIA published their BG/6 design framework for building services a number of years ago. This template schedules all of the design activities required to successfully deliver the building services installation within a building allowing them to be allocated to the relevant party on a project. This enables fees for the building services consultant to be properly considered and also ensures that the contractor is aware of his design responsibilities from the outset. More crucially, the document also includes a section that sets out the level of detail a design should be taken to at each stage bringing further clarity on this subject. The CIC Schedules of Services also contains a template that sets out but building elements allowing design responsibility to be allocated. In some respects the BSRIA document is too detailed with the CIC template too simplistic. The Design Responsibility Matrix referred to in the RIBA Plan of Work 2013 foresees a document, for all members of the design team, derived from these two documents that clarifies the most appropriate transition point between design team members and specialist subcontractors. Clarity on this subject is long overdue.

Assembling the Collaborative Team

Using BIM, design options can be progressed more efficiently and more complex solutions and geometries can be considered. However, there is no point in design progressing if a robust brief has not been prepared and if the project team has not been properly assembled. Figure 2 underlines the importance of the project brief in delivering the desired project outcomes and how the outcomes of one project can inform the next.

The RIBA Plan of Work 2013 includes the need to consider a strategic brief at stage 0, to ensure that the right project is being progressed, with the Initial Project Brief fleshed out at stage 1. In parallel, the Plan advocates clearly assembling the project team at stage 1. By spending time considering who is in the team, what they will do, when and how they will do it the project team can be focused on the delivery of the best possible concept design at stage 2.

[view diagram]



Project Strategies

The digital Plan of Work mentions the need for various strategies to be developed in conjunction with the information models and the new RIBA Plan of Work does likewise. It includes the need for Construction, Operational & Maintenance, Health and Safety, Handover and other strategies that required to ensure that the project information is robust and aligned to the client's objectives.

In conclusion, many writing about BIM underline that it is "not just about software". The RIBA Plan of Work 2013 has been developed to ensure that the many subjects that will facilitate successful project outcomes are considered in a holistic manner providing a Plan of Work suitable for a 21st century collaborative project team.

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Dale Sinclair is a Director of Dyer, an international architectural practice based in London. He is responsible for managing all aspects of the business as well as providing strategic advice externally on a consultancy basis.

He is an RIBA Councillor, chair of the RIBA Large Practice Group and is vice chair of the RIBA Practice & Profession Committee. He was the editor of the BIM Overlay to the RIBA Outline Plan of Work 2007 and chaired the RIBA task group responsible for developing the new RIBA Plan of Work 2103 as well as editing the new Plan and authoring the supporting documents. He is also a member of the CIC BIM Forum and on the board of BuildingSMART UK.

Dale's core expertise is in the delivery of large scale projects and he has experience in health, leisure, education, offices and retail projects. He leads the development of Dyer's delivery processes and is passionate about delivering projects more effectively, believing that the lead designer's role is core to achieving this goal. His publication in 2011 for RIBA Enterprises: Leading the Team: An Archtects Guide to Design Management is aimed at those who share these objectives.

Importance of briefing to achieving outcomes

RIBA Plan of Work 2013

RIBA

The RIBA Plan of Work 2013 organises the process of briefing, designing, constructing, maintaining, operating and using building projects into a number of key stages. The content of stages may vary or overlap to suit specific project requirements. The RIBA Plan of Work 2013 should be used solely as guidance for the preparation of detailed professional services contracts and building contracts.

www.ribaplanofwork.com

intelligent brief

project outcomes

Stages / Tasks	0 Strategic Definition	1 Preparation and Brief	2 Concept Design	3 Developed Design	4 Technical Design	5 Construction	6 Handover and Close Out	7 In Use
Core Objectives	Identify client's **Business Case** and **Strategic Brief** and other core project requirements.	Develop **Project Objectives**, including **Quality Objectives** and **Project Outcomes**, **Sustainability Aspirations**, **Project Budget**, other parameters or constraints and develop **Initial Project Brief**. Undertake **Feasibility Studies** and review of **Site Information**.	Prepare **Concept Design**, including outline proposals for structural design, building services systems, outline specifications and preliminary **Cost Information** along with relevant **Project Strategies** in accordance with **Design Programme**. Agree alterations to brief and issue **Final Project Brief**.	Prepare **Developed Design**, including coordinated and updated proposals for structural design, building services systems, outline specifications, **Cost Information** and **Project Strategies** in accordance with **Design Programme**.	Prepare **Technical Design** in accordance with **Design Responsibility Matrix** and **Project Strategies** to include all architectural, structural and building services information, specialist subcontractor design and specifications, in accordance with **Design Programme**.	Offsite manufacturing and onsite **Construction** in accordance with **Construction Programme** and resolution of **Design Queries** from site as they arise.	Handover of building and conclusion of **Building Contract**.	Undertake **In Use** services in accordance with **Schedule of Services**.
Procurement *Variable task bar	Initial considerations for assembling project team.	Prepare **Project Roles Table** and **Contractual Tree** and continue assembling the project team.	The procurement strategy does not fundamentally alter the progression of the design or the level of detail prepared at a given stage. However, **Information Exchanges** will vary depending on the selected procurement route and **Building Contract**. A bespoke **RIBA Plan of Work 2013** will set out the specific tendering and procurement activities that will occur at each stage in relation to the chosen procurement route.			Administration of **Building Contract**, including regular site inspections and review of progress.	Conclude administration of **Building Contract**.	
Programme *Variable task bar	Establish **Project Programme**.	Review **Project Programme**.	Review **Project Programme**.	The procurement route may dictate the **Project Programme** and may result in certain stages overlapping or being undertaken concurrently. A bespoke **RIBA Plan of Work 2013** will clarify the stage overlaps. The **Project Programme** will set out the specific stage dates and detailed programme durations.				
(Town) Planning *Variable task bar	Pre-application discussions.	Pre-application discussions.	Planning applications are typically made using the Stage 3 output. A bespoke **RIBA Plan of Work 2013** will identify when the planning application is to be made.					
Suggested Key Support Tasks	Review **Feedback** from previous projects.	Prepare **Handover Strategy** and **Risk Assessments**. Agree **Schedule of Services**, **Design Responsibility Matrix** and **Information Exchanges** and prepare **Project Execution Plan** including **Technology** and **Communication Strategies** and consideration of **Common Standards** to be used.	Prepare **Sustainability Strategy**, **Maintenance and Operational Strategy** and review **Handover Strategy** and **Risk Assessments**. Undertake third party consultations as required and any **Research and Development** aspects. Review and update **Project Execution Plan**. Consider **Construction Strategy**, including offsite fabrication, and develop **Health and Safety Strategy**.	Review and update **Sustainability, Maintenance and Operational** and **Handover Strategies** and **Risk Assessments**. Undertake third party consultations as required and conclude **Research and Development** aspects. Review and update **Project Execution Plan**, including **Change Control Procedures**. Review and update **Construction** and **Health and Safety Strategies**.	Review and update **Sustainability, Maintenance and Operational** and **Handover Strategies** and **Risk Assessments**. Prepare and submit Building Regulations submission and any other third party submissions requiring consent. Review and update **Project Execution Plan**. Review **Construction Strategy**, including sequencing, and update **Health and Safety Strategy**.	Review and update **Sustainability Strategy** and implement **Handover Strategy**, including agreement of information required for commissioning, training, handover, asset management, future monitoring and maintenance and ongoing compilation of **'As-constructed' Information**. Update **Construction** and **Health and Safety Strategies**.	Carry out activities listed in **Handover Strategy** including **Feedback** for use during the future life of the building or on future projects. Updating of **Project Information** as required.	Conclude activities listed in **Handover Strategy** including **Post-occupancy Evaluation**, review of **Project Performance**, **Project Outcomes** and **Research and Development** aspects. Updating of **Project Information** as required, in response to ongoing client **Feedback** until the end of the building's life.
Sustainability Checkpoints	**Sustainability Checkpoint — 0**	**Sustainability Checkpoint — 1**	**Sustainability Checkpoint — 2**	**Sustainability Checkpoint — 3**	**Sustainability Checkpoint — 4**	**Sustainability Checkpoint — 5**	**Sustainability Checkpoint — 6**	**Sustainability Checkpoint — 7**
Information Exchanges (at stage completion)	**Strategic Brief**.	**Initial Project Brief**.	**Concept Design** including outline structural and building services design, associated **Project Strategies**, preliminary **Cost Information** and **Final Project Brief**.	**Developed Design**, including the coordinated architectural, structural and building services design and updated **Cost Information**.	Completed **Technical Design** of the project.	**'As-constructed' Information**.	Updated **'As-constructed' Information**.	**'As-constructed' Information** updated in response to ongoing client **Feedback** and maintenance or operational developments.
UK Government Information Exchanges	Not required.	Required.	Required.	Required.	Not required.	Not required.	Required.	As required.

***Variable task bar** – in creating a bespoke project or practice specific RIBA Plan of Work 2013 via www.ribaplanofwork.com a specific bar is selected from a number of options.