

### Background

We at Philips have extensive experience in delivering all types of plans, from large scale hospital wide installations to single room projects.

In 2015 the decision was made to create a more robust process for our enabling works projects, to ensure that we provided a professional and value service for our customers. This led to the creation of a Project Management Office (PMO) within Philips whose role is to harmonise the 'cost breakdown' structure and make it possible to customise this for our customers. By providing a tier one framework for contractors, based on experience in delivering enabling works solutions for imaging rooms, we are able to provide a best practice service within the challenging healthcare environment with a diversity of technical and functional requirements. The UK PMO is aligned with our Global procurement team and our way of selecting contractors is based on contractors compliance to Philips governance and our framework is based on experience, resources, quality, H & S and cost.

#### **Tender Documents**

- · Architectural drawings and specification
- Mechanical and electrical drawings
- · Philips equipment specification
- Pricing document
- Instructions to tender
- Preliminaries document
- Non collusion declaration

#### **Selection Criteria**

This was based on the following areas and scored against the table below Construction Management

- Design Experience
- · Quality Management
- Supply Chain Management
- Labour Resource
- Risk & Issue Management

#### **Procurement Process**

Month 1	Month 2	Month 3	Month 4	Month 5	Go Live
PQQ – 23 contractors	ITT – 9 contractors	Analysis	Supplier Presentations	Post tender negotiations	Award
<ul> <li>Litigation</li> <li>Insurance</li> <li>Financial Status</li> <li>Membership of professional bodies</li> </ul>	• Digital X ray, CT & MRI	<ul> <li>Tender return</li> <li>Technical Ability – 70%</li> <li>H&amp;S – 15</li> <li>Commercial – 15</li> </ul>	• 4 contractor interviews	Maximise commercial benefit	<ul><li> 3 preferred partner</li><li> Provision to select other, with agreement</li></ul>

Unacceptable	0	No answer submitted or the proposal is noncompliant.	
Serious reservations	2	Major reservations on the submitted response and/or little or no evidence to support the response.	
Minor reservations	4	Minor reservations on the submitted response and/or insufficient evidence to support the response.	
Satisfactory	6	The submitted response addresses the question without any reservations with reasonable evidence to support the response.	
Good	8	In addition to providing a response that would be deemed 'Satisfactory', the response identifies factors that offer potential to improve value for money with reasonable supporting evidence.	
Excellent	10	In addition to providing a response that would be deemed 'Good', the response identifies factors that offer potential to significantly improve value for money with full supporting evidence	





#### **3rd Party Products**

Procurement of 3rd party products

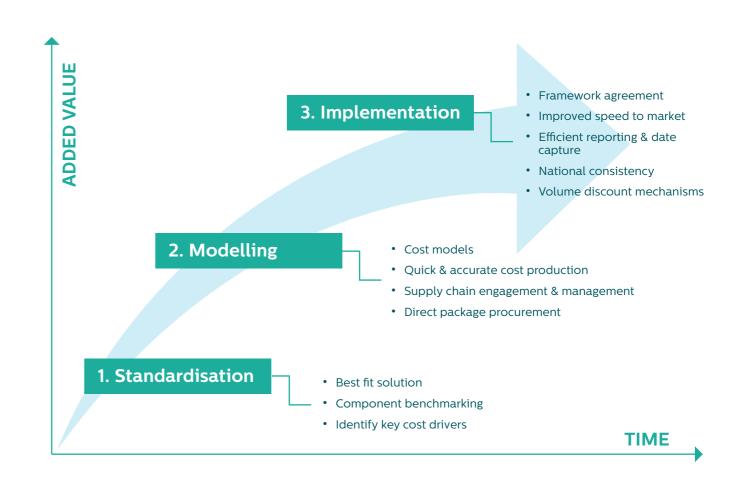
- · Align with Global and UK preferred partners
- Improved pricing
- Consistency on core 3rd party products— RF cages, chillers, electrical panels etc.
- · Supply Chain Management
- Regular reviews to maintain and drive additional value

# Enabling Works Building Works workflow

Steps to be taken depending on type project

Phase	Process steps or groups of activities	Activity-drivers	Supported	Role	Templates			
Hase	O. Set-up activities for building infrastructure in a market  O. Set-up activities for building infrastructure in a market							
Initiative	Influence general manager of health infra department	# customer visits	Local	Sales	training materials, partner reports			
	2. Drive marketing plan for TK BW	fixed	Global	Pricing mngr	markeing materials			
	3. Setup, select and maintain preferred supplier base	# suppliers	Local	Proc	supplier selection criteria			
Definition	4. Give input on RFP/RFQ based on SoW	# quoted projects	Local	Sales + PM				
	5. Site visits	# quoted projects	Local	PM (+GC)	site check list			
	6. Define Bill of Quantities	# quoted projects	Local	PM (+GC)	LocalBoQ framework, Cost breakdown			
	7. Make 3D scanning of a room	# quoted projects	Local	PM (+GC)				
	8a. Make an expert estimation	# small quoted projects	Regional	PM (+GC)				
	8b. Make a clean sheets calculation	# large quoted projects	Local	PM (+GC)				
	9. Engineering product drawings	# won projects	Regional	Site Planning				
	10. Engineering construction drawings	# won projects	Local	Architect				
	11. Procurement of materials	# suppliers	Local	Proc	RFQ template			
	12. Procurement of labor	# suppliers	Local	Proc	RFQ template			
	13. Harmonise and leverage 2nd tier sourcing	fixed, continuous	Local/Reg.	СМ	catalogue-items			
	14. Organise value engineering supplier workshops	yearly event	Regional		workshop programs			
	15. Daily project management oversight	# won projects	Local	PM (+GC)				
	16. Manage project itegrally	# won projects	Local	PM				
	17. Monitor and deploy technology developments to all	fixed, continuous	Global	Site planning				
	18. Improve modular pricing by cost engineering	fixed, continuous	Global	Site planning				
	19. Risk management and compliance program	fixed, continuous	Global	СМ				



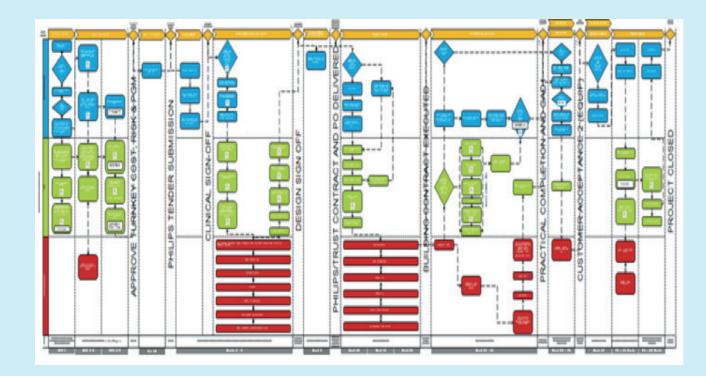


# Methodology for delivering Enabling Works projects

#### **Our PMO Concept**

Philips Healthcare has developed a holistic Programme Management Office (PMO) approach to the delivery of Enabling Works solutions that provides Cambridge University Hospital Addenbrookes with assurance of successful delivery and certainty of outcome for this important project.

As part of our PMO approach we have developed a detailed and standardised approach to the delivery of **enabling works** projects, as shown in our project process map below.





Our Enabling Works project process is controlled by a series of key stages or gateways. Our ethos is that in order to maintain control and certainty of outcome the project will not proceed to the next stage until the requirements of the preceding gateway have been satisfied. Our understanding of the key project stages is summarised as follows:

- G1/G2 Preparation and submission of tender During this stage we undertake our initial site survey utilising a standard pro-forma that considers all aspects of the project. Initial clinical drawings are then prepared and a quotation produced based on standard room data sheets that we have produced. Any unknown aspects of the project are discussed with the customer prior to tender submission and any unresolved issues or assumptions are clearly stated in our proposal to provide complete transparency of price. The tender rates that we utilise have been competitively market tested with our framework supply chain.
- G3 Clinical sign off Once our quotation has been accepted we will work closely with Northampton General Hospital to obtain clinical sign off for the required modalities. We see this as an essential gateway as subsequent design development of the project will be based around these clinical requirements.
- G4 Design sign off We will take the project
  through a detailed design development process led by
  our allocated project manager. This will entail a series
  of engagements (or design team meetings) with our
  allocated framework contractor and key stakeholders
  to develop a solution that meets the project brief.
  During this stage we will also undertake any required
  further investigations or surveys to clarify any unknown
  aspects of the project in order to provide price and
  programme certainty prior to a final design sign off
  meeting.
- G5/G6 Contract Execution In order to protect
  the interests of all parties and provide robust
  administration of the works it is important that
  executed contracts are in place prior to works staring

- on site. Our PMO is structured to be flexible enough to work with the Northampton General Hospital preferred form of contract. JCT D&B 2011. Mobilisation and pre-start activities will also take place during this stage to ensure minimum disruption to Northampton General Hospital operations during the site phase.
- G7 Practical Completion of enabling works works –
   The site phase will progress to Practical Completion,
   including regular site meetings and monitoring led by
   our Project Manager. Our aim is to achieve a snag free
   handover to programme timescales with all supporting
   documentation to enable customer acceptance of the
   enabling works project so that clinical installation can
   commence promptly in a fit for purpose environment.
- **G8** Customer Acceptance (Equipment) Following installation of clinical equipment by Philips Healthcare engineers, final completion of works, clinical clean and RPA sign off will be coordinated by our project manager. Only when these activities have been completed to our satisfaction will customer acceptance be sought.
- **G8 to G9** Handover, training and closure Following customer acceptance we will instigate clinical handover and training. During this stage we will also ensure that all project information is handed over and final accounts agreed within four weeks of acceptance. Finally we will arrange a post 12 week project review meeting with the customer to capture any lessons learnt and make sure that the **enabling works** solution is operating to expected requirements.

Using these established and proven key stages we are able to provide transparency and certainty of outcome at the earliest possible stage. Our aim will be to provide the Northampton General Hospital with an operational **enabling works** solution as quickly and efficiently as possible.



## Risk management

We have an established and proven approach to risk management integral to our PMO approach.

Every project will have a dedicated risks and issues register, which captures project related risks and issues along with a clear mitigation plan, owner and resolution timescale. This register is held centrally on our Philips Hub, which is a web based project and document management tool designed specifically for the delivery of Philips Healthcare enabling works projects. Our customers will have access to this portal and they will be able to track the real time status of risks relating to their projects throughout.

Project specific risks are owned by our PMO project delivery team and managed by our allocated project manager. Beyond this there is a swift escalation procedure to the Philips Healthcare PMO Manager and Board providing Northampton General Hospital with assurance that the risk mitigation and intervention process is swift and effective to prevent an issue turning into an incident that material impacts the project programme or cost.

## Health & Safety

At Philips Healthcare Health and Safety is our first and foremost priority. Our Health and Safety track record in the delivery of projects of this type is exemplary and is a key focus for our senior management team. This is embraced by our PMO approach which has Health, Safety and Compliance as a fundamental requirement, summarised as follows:

- Competence We have engaged with competent suppliers within our PMO framework, all with proven experience of delivering projects of this type. Our PMO, deploys project managers and service experts who are experienced in construction related Health and Safety and provide a monitoring and validation service throughout the project cycle. Our supply chain contractors have all been assessed against our stringent internal requirements and have demonstrated a proven track record and established Health and Safety processes.
- Design Development Health and Safety is a fundamental part of our design process, During this phase we establish the availability of all necessary information to inform decisions and where necessary further investigations are undertaken to close gaps (for example Asbestos Surveys). As far as possible inherent safety risks are designed out as part of this process.

- CDM Our project process requires compliance with CDM 2015 regulations, which is a primary legislation governing construction work. No project can pass through a gateway approval without the required information being in place. Under the revised regulations we envisage that Philips Healthcare would assume the role of Principal Designer and Principal Contactor.
- Compliance Monitoring Our project management team will monitor process and regulation compliance at all stages (for example IEE/BS electrical compliance or compliance with HTM requirements). This includes site auditing and monitoring of our allocated contractor during site phase delivery.
- Incident Reporting In the unlikely event of an unsafe practice being witnessed we have an established escalation procedure in place to reach a swift resolution. In addition our delivery team has stop work authority to immediately cease any activity that is deemed to be dangerous or noncompliant.

An industry leading Health and Safety culture is at the center of our approach to project delivery, which includes KPI measurements to track incidents or the risk of incidents to zero.



# Approach to quality control

Our PMO approach is designed to provide a high quality solution and certainty of outcome for every enabling works project that we deliver.

#### How we do this is summarised as follows:

- Gateway Control Our process stages, articulated earlier in this response, are controlled by a number of Gateways (G1-G9). Each gateway requires the approval of our PMO management team before proceeding to the next stage. No gateway can be passed without the pre-requisite documentation being in place, as stipulated in our project process map.
- Standardised Toolkit Our project process is underpinned by a bespoke toolkit developed specifically for the delivery of enabling works projects. This means that our project delivery is consistent and effective, drawing upon best practice tools and templates to support all activities within the process.
- Quality Monitoring and Validation Our allocated project manager will be responsible for monitoring quality of outputs and site works throughout. Where

- necessary our project managers are also able to draw upon subject matter experts to validate specific aspects of the project deliverables (for example CDM compliance or M&E commissioning). Our project manager will produce regular site reports highlighting specific quality issues that need addressing with the aim of achieving a snag free project at Practical Completion
- Key Performance Indicators We measure and monitor the collective performance of our project delivery team through a KPI matrix. Examples of key KPI metrics include regulatory compliance, variance from agreed programme/quotation and handover issues at completion addressed within agreed tolerances. Our KPI performance for each project is evaluated with our customers in order to drive continuous improvement within our PMO.

Our aim is to provide a right first time approach to every **enabling works** project that we deliver. We believe that time spent during the critical planning and design development stages to get the required solution clearly defined is time well spent, leading to predictably of cost and programme and minimal variance during the site delivery phase. This combined with our engagement with our experienced and proven framework partners leads to high quality outcomes for the **enabling works** projects that we deliver.





# Project communication

We recognise that consistent and effective communication is essential throughout the project life-cycle. Communication with the Northampton General Hospital will be led and coordinated by our allocated project manager, providing single point of contact for all issues.

Our primary means of communication is Philips project manager.

Philips PM with the PMO will provide real time updates on progress, key milestones and risks for the project. Listed below is a high level overview of their duties.

- · Access to project documents
- Updated cost information
- Progress against key gateways & milestones
- Change Register
- · Risk Register
- Incident Register (H&S)
- Key Actions and status
- · Project Calendar

This communication strategy is underpinned by our PMO governance and reporting structure, where required meeting regimes, format, frequencies and reporting cycles are clearly defined (e.g. Design Team Meetings, Site Meetings, Flash Reports etc.)

