Simplified Assurance Process

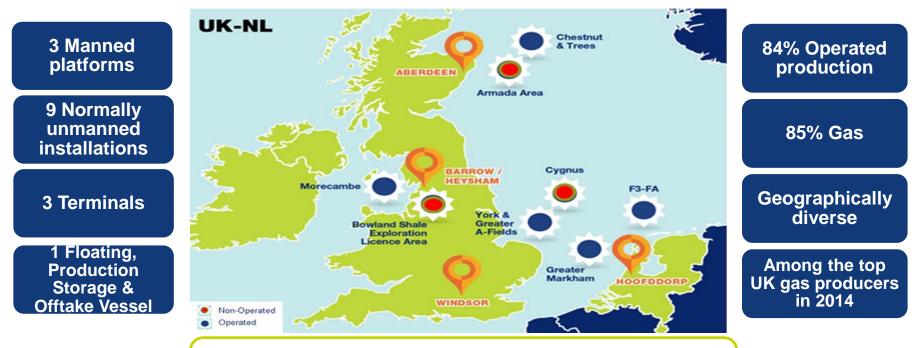
Girish Kabra





Centrica E&P, UK & the Netherlands

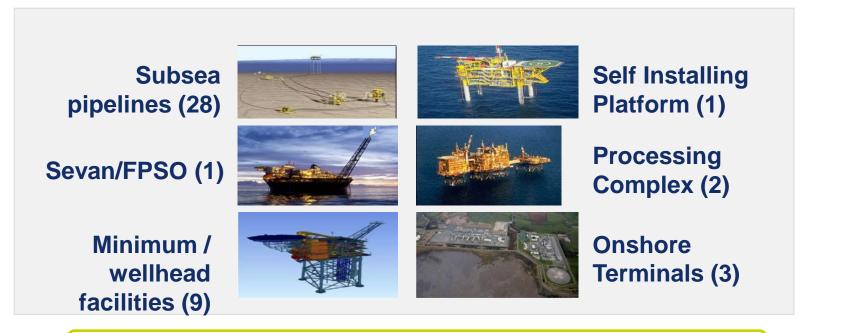
Assets & Operations



An integrated, mature oil and gas business, operating assets across their entire life cycle from development or acquisition to decommissioning or divestment.

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Centrica's Decommissioning Portfolio



Approval requirement varies with the type of facility

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Regulatory Landscape

Key Regulations

	International		UKCS				NLCS	
	Standard	Convention	Law	Regulation	Regulation	Guideline	Law	Regulation
Type of Infrastructure	IMO Guidelines & Standards 1989	OSPAR Convention 1992 & OSPAR Decision 98/3	Petroleum Act 1998	HSE; Pipeline Safety Regulations 1996	The Offshore Installations and wells regulations 1996	Oil & Gas UK Guidelines for the Suspension and Abandonment of Wells	The Mining Act and Mining Decree	Arbeidsom- standigheden-wet- en regelgeving (Working/Labour Conditions Act)
Installations (topsides & jackets)	x	x	x				x	
Subsea	x	x	x				x	
Pipelines			x	x			x	
Wells					x	x		
Other (drill cuttings, waste management)		x						x

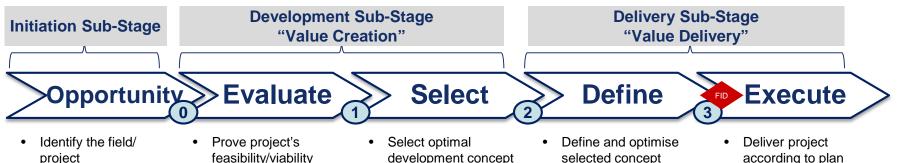
Sources: IMO Guidelines; DECC Homepage; Oil & Gas UK Homepage; OSPAR Convention; DECC Guidelines for Decommissioning v6, 2011





Stage Gate Assurance Process

Conventional Approach



- Frame the opportunity
- Validate strategic fit
- feasibility/viability Identify a range of •
- concepts and scenarios
- Confirm strategic fit/ regulatory compliance

- development concept
- Reconfirm viability and • strategic fit
- Confirm risk and uncertainty levels are acceptable
- selected concept
- Confirm economic viability and strategic fit
- Prepare project execution plan & budget
- Prepare tender packages

- according to plan Meet/exceed design
- performance and business case assumptions



Catalyst for Change Challenging Status Quo

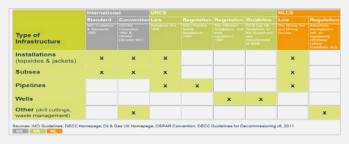
Oron and a state of the state o VariedPortfolio LacksInnovation DuplicationOfWork Cumbersome notFitForPurpose LowOilPriceEnvironment PrescriptiveRegulatoryGuidance DiminishingReturns



Opportunity for Simplification

External vs Internal

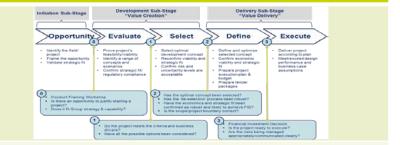
Regulatory Environment



- Multiple layers of regulations international, EU, national
- Different requirements by type of infrastructure

Ability to influence	Low		
Ease of change	Low		
Impact on cost	High		

Internal Assurance



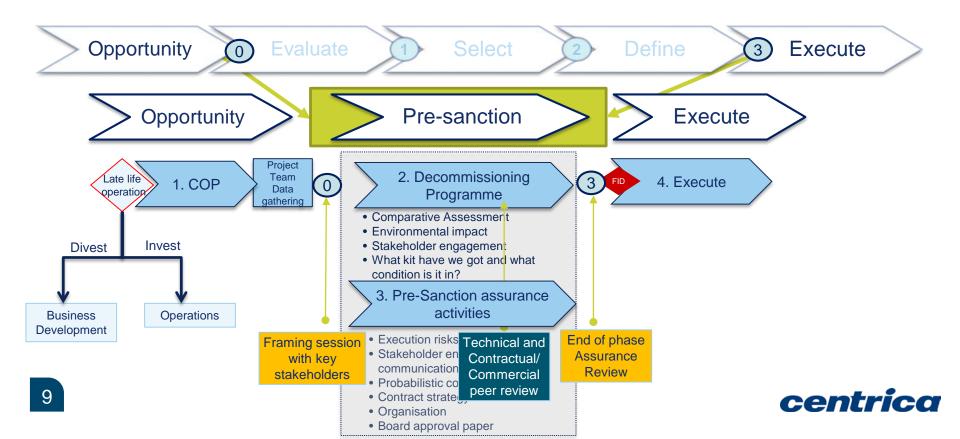
- Conventional approval processes supporting CAPEX investment
- Assurance process not fit for diverse portfolio

Ability to influence	High
Ease of change	High
Impact on cost	Med

'Fit for Purpose' internal assurance process

Stage Gate Assurance Process

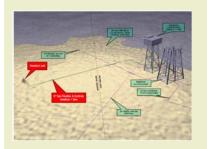
New Approach: Three Stages, Two Gates



Process in Practice

Two Pilot Projects in Centrica Portfolio

STAMFORD



FIELD INFO

- 10 km subsea tie back to J6A platform
- Well P&A, Protection structure, pipeline and umbilical removal
- · Cross border field between the UK and Netherlands waters
- UK and NL Regulatory approvals

ACHIEVEMENTS

- Framing session done in Jun 2014.
- Project sanctioned in Apr 2015
- Decommissioning programme (DCP) approved by DECC on 30th April 2015

ROSE



FIELD INFO

- 17 km subsea tieback to Amethyst A2D platform
- Well P&A, Protection structure, pipeline and umbilical removal
- · Commercial complexity due to host platform operated by Others

ACHIEVEMENTS

- Framing session done in Oct 2014.
- Project sanctioned in May 2015
- Decommissioning programme (DCP) approved by DECC on 22nd May 2015



The Benefits

- Aligns internal & regulatory assurance requirements
- Allows early engagement with regulator and SMEs
- Significantly reduces project approval time
- Improves behaviours and alignment between the project and assurance teams
- Assurance process complements delivery of decommissioning plan (minimises rework/recycle)

Pre-sanction costs reduced by c.30%



