



EXIN BCS Foundation
Certificate in Business Change

Preparation Guide

Edition 201611



BCS
BUSINESS
ANALYSIS

Copyright © BCS, The Chartered Institute for IT 2016.

Copyright © EXIN Holding B.V. 2016. All rights reserved.

® BCS and the BCS logo are trademarks or registered trademarks of BCS.

Contents

1. Overview	4
2. Exam requirements	6
3. Business Change Frameworks, Models and Techniques	10
4. Levels of Knowledge / SFIA Levels	21
5. e-CF Mapping	22
6. Exam Literature	23

1. Overview

BCS Foundation Certificate in Business Change (BCF.EN)

Scope

The BCS Foundation Certificate in Business Change delivers a holistic view of the business change lifecycle and the activities, techniques and models employed when carrying out business change work. Much of the focus is on the use of Information Technology (IT) to enable business change. It is important to consider IT in the context of business needs and as a driver for business change, if the benefits from using IT are to be maximized.

The BCS Foundation Certificate in Business Change will be awarded to candidates who are able to demonstrate knowledge and understanding of the principles, approaches and techniques used to conduct business change activities. The key areas of the syllabus include:

- Business and IS strategy
- Business improvement definition
- Business change design and implementation
- Benefits management and realisation

Summary

The BCS Foundation Certificate in Business Change provides an entry qualification for anyone wishing to understand the process and techniques used in delivering business change.

The syllabus is based upon a business change lifecycle which incorporates the techniques, frameworks and models used in business change activities. The certificate is relevant for anyone who requires an understanding of business change.

The certificate provides a foundation for the BCS Certificates in Business Analysis Practice, Requirements Engineering, IS Consultancy Practice, Benefits Management and Business Acceptance, and Modelling Business Processes.

Context

This Foundation in Business Change certificate can be studied alongside other BA Foundation certificates, prior to progressing to Practitioner level.

Target group

The BCS Foundation Certificate in Business Change provides an entry qualification for anyone wishing to understand the process and techniques used in delivering business change.

Requirements for certification

There are no formal entry requirements for accredited courses although attendance at an accredited course is strongly recommended.

Examination details

Examination type: Computer-based or paper-based multiple-choice questions

Number of questions: 40

Pass mark: 65%

Open book/notes: No

Electronic equipment/aides permitted: Yes

Time allotted for examination: 60 minutes

The Rules and Regulations for EXIN's examinations apply to this exam.

Use of calculators

Simple non-programmable calculators can be used during paper based examinations (to be provided by the candidate). Candidates taking on-line examinations will have access to an on screen calculator. No other calculators or mobile technology will be allowed.

Training

Candidates can study for this certificate in two ways: by attending training courses provided by Accredited Training Organizations or by self-study. An accredited training course will require a minimum of 21 hours of study run over a minimum of three days. A reading list to support self-study is provided below.

Contact hours

The recommended number of contact hours for this training course is 21. This includes group assignments, exam preparation and short breaks. This number of hours does not include homework, logistics for exam preparation and lunch breaks.

Indication study effort

21 hours, depending on existing knowledge

Training provider

You can find a list of our accredited training providers at www.exin.com.

2. Exam requirements

The exam requirements are specified in the exam specifications. The following table lists the topics of the module (exam requirements) and the learning objectives.

Exam requirement	Learning objectives	Weight %
1. Business Change Principles	To appreciate the principles, process and roles involved in business change.	10
2. Business and IT Alignment	To understand the importance of aligning the organization with external and internal influences and the approaches used to do this.	20
3. Business Improvement Definition	To understand the business analysis approach and techniques used to identify business improvements.	20
4. Business Change Design	To design the inter-related elements required to implement successful business change.	20
5. Business Change Implementation	To understand the processes that should be employed to deploy business change effectively.	15
6. Benefits Management and Realisation	To manage the classification, review and realisation of benefits.	15

Exam specifications

1. Business Change Principles	(10%)
1.1. The distinction between IT projects, pure business change projects and the IT enabled business change projects	
1.2. The distinction between IT as a driver and IT as an enabler	
1.3. The degrees of business change	
1.4. The distinction between improving business operations and improving business information	
1.5. IT as a core competence and the implications for the outsourcing business model	
1.6. The business change lifecycle	
1.7. The stages in the business change life cycle	
1.8. The identification, analysis and management of stakeholders	
1.9. The business, project and external stakeholders	
1.10. The roles and responsibilities of key stakeholders:	
<ul style="list-style-type: none"> • Sponsor/Senior Responsible Officer • Business Analyst • Programme Manager • Project Manager • Business Change Manager • Business Actor • Developer 	
2. Business and IT Alignment	(20%)
2.1. Aligning the organisation with the External Environment, the Vision, Mission, Objectives, Strategy and Tactics, and the Enterprise Architecture	
2.2. The external and internal business environments for organisations	
<ul style="list-style-type: none"> ▪ The importance of understanding external environment influences ▪ The importance of analysing the internal organisational capability ▪ The importance of understanding culture 	
2.3. Organisational Cultures	
2.4. National Cultures	
2.5. The implications of culture for business change projects	
2.6. Corporate and IT governance and the relevance to benefits management and risk management	
2.7. Elements of an Enterprise Architecture	

3. Business Improvement Definition	(20%)
3.1. Investigating the business situation: rationale and techniques	
3.2. Holistic approach and systems thinking	
3.3. Gap analysis: purpose and approach	
3.4. Business requirements elicitation and analysis	
3.5. The contents of the business case	
<ul style="list-style-type: none"> • Options • Costs • Benefits • Risks • Impacts • Decisions 	
3.6. Stakeholder responsibilities and the business case	
3.7. The business case lifecycle	
3.8. Programme definition	
<ul style="list-style-type: none"> • The change programme • The relationship between programmes and projects • The role of the programme office 	

4. Business Change Design	(20%)
4.1. Aspects of organisational change	
<ul style="list-style-type: none"> ▪ The organisation structure: boundaries and relationships ▪ Organisation performance measurement 	
4.2. Aspects of people change	
<ul style="list-style-type: none"> ▪ Defining roles and jobs ▪ Defining required skills and competencies ▪ Managing performance of individuals ▪ Communications planning 	
4.3. Aspects of process change	
<ul style="list-style-type: none"> ▪ The distinction between the functional and process views ▪ The elements of a business process ▪ 'As is' and 'To be' business processes ▪ Modelling tasks ▪ Improving business processes 	

4.4. Information analysis and modelling		
	<ul style="list-style-type: none"> ▪ Information management modelling ▪ Levels and types of information ▪ Information modelling and the representation of business rules 	
4.5. Aspects of information technology		
	<ul style="list-style-type: none"> ▪ Systems development lifecycles: bespoke and off the shelf software solutions ▪ Architecture and service management concerns 	
5. Business Change Implementation		(15%)
5.1. Planning the acquisition, deployment and acceptance		
5.2. Acquiring the solution		
	<ul style="list-style-type: none"> ▪ Pros and cons of bespoke deployment ▪ Pros and cons of off the shelf software solutions ▪ Business acceptance testing 	
5.3. Deploying the solution		
	<ul style="list-style-type: none"> ▪ Roles required to deploy business change ▪ Approaches to deploying business change ▪ The change process – unfreeze, transition, refreeze 	
5.4. Ensuring acceptance		
	<ul style="list-style-type: none"> ▪ Emotional impact of changes ▪ The learning cycle ▪ Analysing the forces that assist and resist change 	
5.5. Reviewing the change		
	<ul style="list-style-type: none"> ▪ Purpose of post-implementation review ▪ The distinction between PIR and benefits review 	
6. Benefits Management and Realisation		(15%)
6.1. Benefits management in the business change lifecycle		
6.2. Classifying benefits		
6.3. Investment appraisal techniques		
6.4. Benefits and the Balanced Business Scorecard, CSFs and KPIs		
6.5. Roles and responsibilities in benefits management		
6.6. The purpose, conduct and outcomes of a benefits review		
6.7. Benefits realisation: significance and challenges		

3. Business Change Frameworks, Models and Techniques

Business change principles

The section of the syllabus introduces the key models, principles and concepts used in business change work.

Business Change Lifecycle

The business change lifecycle is made up of five stages. These are:

Business and IT Alignment	Ensuring the alignment of the organisation with external and internal influences.
Business Improvement Definition	The analysis of business situations and the definition of the programme of required business improvements.
Business Change Design	The design of the inter-related elements comprising the business changes.
Business Change Implementation	The deployment of the business changes.
Benefits Realisation	The review and realisation of the predicted business benefits.

Venkatraman's Business Transformation Model

Venkatraman's model shows five degrees of IT Enabled Business Transformation. These levels represent increasing levels of business change and benefits:

Evolutionary	Localised Exploitation	Deployment of individual systems. For example, the use of a specific system such as a sales support package within a customer services environment.
	Integral Integration	Use of IT across a business process. May include a replacement of existing systems by an integrated package, for example to link distribution to customer services.
Revolutionary	Business Process Redesign	IT is used as a lever to redesign the organisation and the business processes.
	Business Network Redesign	Use of IT to change the relationships and information exchange across the participants in a business network of organisations.
	Business Scope Redefinition	The use of IT to redefine the business scope, including partnerships with other organisations.

4-View Model

The 4-view model is used to ensure a holistic view is taken of a business situation. The four areas are:

Organisation:	the structure, roles and resources
People:	the actors carrying out the work
Processes:	the business processes that deliver the products and services
Technology:	the infrastructure and systems that support the work or the organisation

Stakeholder Wheel

A stakeholder can be defined as anyone with an interest in the business change. The stakeholder wheel sets out categories of stakeholder, both internal and external to the organisation.

Internal:	Employees, Managers, Owners
External:	Customers, Partners, Suppliers, Regulators, Competitors.

Stakeholder Analysis

Stakeholders may be analysed and categorised using the power/interest grid. Individual stakeholders or groups of stakeholders are plotted on the grid using the two axes: level of power of the stakeholder; level of interest the stakeholder has in the business change project.

This categorisation helps form the basis for engaging with stakeholders and managing stakeholder communication.

Business and IT Alignment

This section of the syllabus considers the forces that influence the direction and strategy of an organisation.

PESTLE

PESTLE provides a framework that may be used to analyse the forces within an organisation's external business environment. The results of a PESTLE analysis are used to populate the opportunities and threats elements of the SWOT.

Political:	Political factors derive from Government policies and priorities.
Economic:	Economic factors relate to the state of the economy (or economies for multi-national organisations).
Socio-Technical:	Socio-cultural factors derive from the needs of the market and the customers.
Technological:	Technological factors are concerned with developments in technology, including information technology.
Legal:	Legal factors derive from laws and regulations.
Environmental:	Environmental factors derive from concerns about the natural environment.

Porter's 5-Forces

Porter's 5-Forces model is used to analyse a business domain or industry. The results of a 5-forces analysis may be used to populate the opportunities and threats elements of the SWOT. The five forces that are analysed are:

- Threat of new entrants
- Rivalry among existing firms
- Bargaining power of suppliers
- Bargaining power of buyers
- Threat of substitute products or services

VMOST

VMOST provides a framework for the examination of the direction and focus of an organisation. The results of a VMOST analysis can be used to populate the strengths and weaknesses elements of the SWOT.

Vision:	The overall vision of the future for the organisation.
Mission:	The high level direction set for the organisation.
Objectives:	The defined goals to be achieved by the organisation.
Strategy:	The means of achieving the goals over the medium to long term.
Tactics:	The detailed means of delivering the strategy over the short term.

SWOT

A SWOT analysis provides a summary of the key strengths and weaknesses of the organisation and the external opportunities and threats that face it.

Handy's Organisational Culture

Handy identified four types of organisational culture:

Power Culture:	A culture where power is centralised with the most senior person in the organisation.
Role Culture:	A culture where a bureaucracy exists with highly structured, well-documented procedures.
Task Culture:	A culture where work is done through empowerment, flexibility and teams.
Person Culture:	A culture that is focused around individuals who are likely to be connected by strong values.

Hofstede's International Culture

Hofstede researched the culture of different nations, initially identifying four dimensions and later adding a fifth. The dimensions are measured along a spectrum from high to low.

Power Distance	A society with high power distance is one in which the members expect that power is distributed unequally and are less likely to question the person at the top.
Individualism	A society with high individualism is one in which the ties between individuals are loose. People are expected to look after themselves and their family. The opposite is Collectivism.
Masculinity	A society with high masculinity is one where values such as assertiveness and competitiveness are prevalent and where women are less likely to be treated as equals. The opposite is Femininity.
Uncertainty Avoidance	A society may have a low tolerance for uncertainty and ambiguity or a high tolerance for uncertainty and ambiguity.
Orientation	A society may value perseverance and have a long-term orientation or alternatively may have a short-term orientation. Hofstede added this fifth dimension later.

Enterprise Architecture

The business change cycle recognises the importance of the alignment of business and IT strategy in the initial phase. An Enterprise Architecture (EA) is a target model of the organisation covering both business components (processes and information) and technology components (applications and infrastructure).

These give rise to the four main components of an EA:

- Business processes
- Information (and data)
- IT Applications
- IT Infrastructure

Zachman

One of the most well-known Enterprise Architecture frameworks is the Zachman framework. This model contains the following two dimensions:

The rows: six levels – Scope (Contextual), Business Model (Conceptual), System Model (Logical), Technology Model (Physical), Component model (Configurable), Functioning Enterprise (Operational).

The columns: six core questions – What? (Data), How? (Function), Where? (Network), Who? (People), When? (Time), Why? (Motivation).

The intersection of the levels and questions results in a matrix of 36 cells. Traditionally IT has focused on the bottom three levels of the Zachman framework whereas business change is mostly concerned with the top three levels. This syllabus is concerned with the top three levels of the model.

TOGAF

The Open Group Architecture Framework (TOGAF) is a framework for developing an Enterprise Architecture. There are four elements to the framework.

- Business architecture
- Data architecture
- Applications architecture
- Technology architecture

Risk Heat Maps

A risk heat map is used to plot risks against two axes: level of impact and level of probability. Appropriate risk strategies may be considered depending upon the cell of the heat map to which the risk is allocated. For example; low probability, low impact risks would fall into a 'green' cell so the strategy may be to accept the risk; a high probability, high impact risk would fall into a 'red' cell and so would require actions to be taken to manage the risk.

Business Improvement Definition

The objective of this section of the syllabus is to provide an understanding of the business analysis approach to identifying business improvements. It introduces tools and approaches used to investigate business situations, model business systems and evaluate options for business improvement through the production of a business case.

- Investigation techniques
- Interviews
- Workshops
- Background research
- Observation

Soft Systems Methodology (SSM)

A methodology devised by Professor Peter Checkland and his team at Lancaster University. The methodology comprises seven stages and provides an approach to the investigation and analysis of problem situations in organisations.

Stages:

- The problem situation: unstructured and expressed
- Root definitions of relevant systems
- Conceptual models
- Comparison of the expressed model with the conceptual model
- Feasible, desirable changes
- Action to improve the situation

An approach devised by Professor Peter Checkland to analyse perspectives on a business system. CATWOE stands for:

Customer	The beneficiaries of the system
Actor	Those performing the transformation
Transformation	The activities that convert the input into the output
World View (or Weltanschauung)	The stakeholder's beliefs, values and priorities regarding the system.
Owner	The person with the power to start up or close down the system, as well as to make key decisions regarding the transformation.
Environment	The external constraints outside the scope of the system and the control of the owner. These constraints have to be taken as given.

Requirements engineering framework

The requirements engineering framework is a process for undertaking a disciplined and rigorous approach to the requirements process. There are five areas:

Requirements Elicitation	Gathering the requirements.
Requirements Analysis	Reviewing the requirements to remove inconsistencies and duplication, organising the requirements and prioritising the requirements.
Requirements Validation	External review of the requirements to ensure that they have been defined at the required level of accuracy and detail.
Requirements Documentation	Recording the information about the requirements and modelling the requirements.
Requirements Management	Managing changes to the requirements in order to ensure traceability.

Requirements classification

Requirements are classified into four major types. These are:

Functional requirements	Features the solution must offer
Non-functional requirements	The level of performance provided by the solution in areas such as speed of response, usability, capacity and security.
General requirements	Business constraints and business policies with which the solution must comply.
Technical requirements	Hardware and software constraints with which the solution must comply.

Business case lifecycle

Lifecycle stage	Business case stage
Feasibility study	Initial business case produced to assess feasibility before major resources committed
Requirements analysis and specification	Business case confirmed after detailed requirements defined
Solution design	Business case reviewed and confirmed once detailed development costs have been estimated
Solution development and implementation	Business case revisited before deployment of the solution
Post implementation	Benefits predicted in the business case are reviewed

Business Change Design

This section of the syllabus covers the main areas required to design business changes effectively, including the organisational, people, information, technology and process aspects.

Porter's value chain

A model that may be used to identify and analyse the primary activities that collaborate to deliver value to an organisation's customers. The model also identifies areas of support activity that enable the primary activities to work effectively.

Business process modelling

A modelling technique used to show the following aspects of a business process:

Event triggering the process

- Actors (swimlanes)
- Tasks
- Decisions
- Process flow
- Outcome

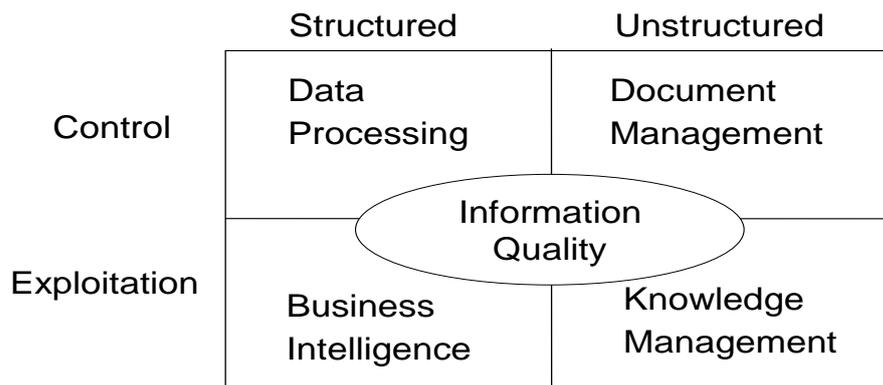
Information Management Model

The Information Management Model categorises information according to two dimensions:

Information can be categorised as structured or unstructured. Structured data includes financial numbers, such as price or sales revenue, which will normally be held in a fixed format. Examples of unstructured data include a free format address or a picture.

Information may also be controlled or exploited. Controlled means ensuring that it is secure and legally compliant. Exploited means analysed and used for organisational advantage.

These dimensions are shown in the *Information Management Model*.



Source: Dr Sharm Manwani, Henley Management College

The contents of the quadrants are:

Data Processing	The processing and control of structured data.
Document Management	The control of unstructured data.
Business Intelligence	The consolidation and analysis of structured data.
Knowledge Management	The process of sharing knowledge; some that is written down (explicit) and some that is understood but not stated (tacit).

Information Quality This central element ensures that the information contained in all four quadrants is fit for purpose.

Information modelling – Entity Relationship Diagram notation

The structured approach to modelling information sets. Key components:

- Entities
- Relationships
- Degree and optionality of the relationships

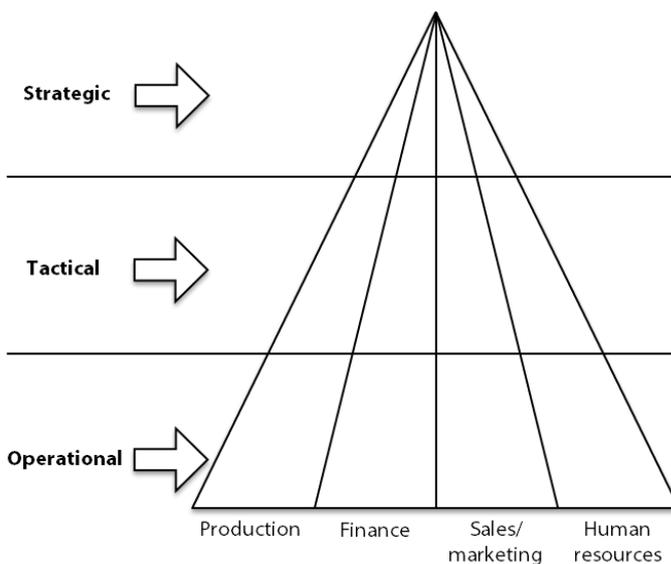
Information modelling – Class Diagram notation

The UML approach to modelling information sets. Key components:

- Classes
- Attributes
- Operations
- Associations
- Multiplicity of the associations

Anthony's Triangle

This model shows three horizontal views of organisational data: operational, tactical and strategic levels. These views are then sectioned vertically to take a functional view of the data across the three levels.



Systems Development Lifecycles

Approaches used to develop IT systems. Systems development lifecycles include:

- The waterfall approach
- The V model
- The incremental model
- The spiral model

Business Change Implementation

This part of the syllabus concerns the activities that should be employed in the implementation of business change programmes.

Implementation approaches

Approaches to implementing business change:

- Pilot
- Parallel running
- Phased
- 'Big bang'.

Force field analysis

A technique used to consider the forces supporting a change proposal and those forces that will oppose it. The strength of each force is also considered.

Learning cycle

The four stages of learning:

- Unconscious incompetence
- Conscious incompetence
- Conscious competence
- Unconscious competence

Emotional curve

This is a model representing the emotions felt during the change process. Two scales - self-esteem and time are modelled. Five emotional stages are identified: shock, anger, rejection, acceptance and hope.

Benefits Management

One of the most essential parts to any business change programme is to ensure that the benefits are identified, classified and managed so that they are realised. This section covers the benefits management process.

Benefits management process

A process for ensuring that benefits are identified, classified, quantified (when possible) monitored and realised. During a change project, benefits are reviewed when relevant to ensure that they are still valid or to assess the impact of changes upon the benefits. Following the deployment of the change, a series of benefits reviews should take place, comparing actual benefits with those that have been predicted. A benefits realisation report will be produced as a result of these reviews. Further actions may be identified which will support the realisation of the benefits.

- Benefits classification
- Observable
- Measurable
- Quantifiable
- Financial

Investment appraisal techniques

Investment appraisal concerns the financial evaluation of a proposed investment. Three key techniques:

Payback	Cashflow forecast for the investment using current values
Discounted Cash Flow/Net Present Value	Cashflow forecast for the investment using discounted values to take account of the time value of money
Internal Rate of Return	Calculation of a percentage discount rate that returns a Net Present Value of zero

Balanced business scorecard, CSFs, KPIs

Definition of business performance measures using four perspectives:

- Financial
- Customer
- Internal business process
- Learning and Growth

Reading References

IT-Enabled Business Transformation: from Automation to Business Scope Redefinition. N Venkatraman, Sloan Management Review, Winter 1994, Page 73.

Business Analysis Techniques: 72 Essential Tools for Success. J Cadle, D Paul, P Turner. BCS IT-Enabled Business Change. S Manwami. BCS

4. Levels of Knowledge / SFIA Levels

This course will provide candidates with the levels of difficulty / knowledge highlighted within the following table, enabling them to develop the skills to operate at the levels of responsibility indicated.

The levels of knowledge and SFIA levels are explained in on the website www.bcs.org/levels

The levels of knowledge above will enable candidates to develop the following levels of skill to be able to operate at the following levels of responsibility (as defined within the SFIA framework) within their workplace:

Level	Levels of Knowledge	Levels of Skill and Responsibility (SFIA)
K7		Set strategy, inspire and mobilise
K6	Evaluate	Initiate and influence
K5	Synthesise	Ensure and advise
K4	Analyse	Enable
K3	Apply	Apply
K2	Understand	Assist
K1	Remember	Follow

5. e-CF Mapping

The mapping of this certificate against the [e-Competence Framework](#).

EXIN BCS Foundation Certificate in Business Change							
		e-Competence level	1	2	3	4	5
A.1.	IS and Business Strategy Alignment						
A.3.	Business Plan Development						
D.10.	Information and Knowledge Management						
E.2.	Project and Portfolio Management						
E.4.	Relationship Management						
E.7.	Business Change Management						

	competence is covered
	partial coverage
	superficial coverage

6. Exam Literature

- A. James Cadle, Debra Paul & Paul Turner Publisher:
Business Analysis Techniques: 99 Essential Tools for Success 2nd Edition
BCS Publication Date: September 2014
ISBN 978-1780172736
<http://shop.bcs.org>
- B. Sharm Manwami
IT-Enabled Business Change
BCS Publication Date: September 2008
ISBN 978-1902505916
<http://shop.bcs.org>

Contact EXIN

www.exin.com

