Level 3 Implementing an ICT systems security policy (7540-032/7630-333)



www.cityandguilds.com September 2017 Version 5.0

Systems and Principles Assignment guide for Candidates

Assignment B



About City & Guilds

City & Guilds is the UK's leading provider of vocational qualifications, offering over 500 awards across a wide range of industries, and progressing from entry level to the highest levels of professional achievement. With over 8500 centres in 100 countries, City & Guilds is recognised by employers worldwide for providing qualifications that offer proof of the skills they need to get the job done.

City & Guilds Group

The City & Guilds Group includes City & Guilds, ILM (the Institute of Leadership & Management) which provides management qualifications, learning materials and membership services, NPTC which offers land-based qualifications and membership services, and HAB (the Hospitality Awarding Body). City & Guilds also manages the Engineering Council Examinations on behalf of the Engineering Council.

Equal opportunities

City & Guilds fully supports the principle of equal opportunities and we are committed to satisfying this principle in all our activities and published material. A copy of our equal opportunities policy statement is available on the City & Guilds website.

Copyright

The content of this document is, unless otherwise indicated, © The City and Guilds of London Institute 2010 and may not be copied, reproduced or distributed without prior written consent.

However, approved City & Guilds centres and learners studying for City & Guilds qualifications may photocopy this document free of charge and/or include a locked PDF version of it on centre intranets on the following conditions:

- centre staff may copy the material only for the purpose of teaching learners working towards a City & Guilds qualification, or for internal administration purposes
- learners may copy the material only for their own use when working towards a City & Guilds qualification

The Standard Copying Conditions on the City & Guilds website also apply.

Please note: National Occupational Standards are not © The City and Guilds of London Institute. Please check the conditions upon which they may be copied with the relevant Sector Skills Council.

Publications

City & Guilds publications are available on the City & Guilds website or from our Publications Sales department at the address below or by telephoning +44 (0)2072942850 or faxing +44 (0)2072943387.

Every effort has been made to ensure that the information contained in this publication is true and correct at the time of going to press. However, City & Guilds' products and services are subject to continuous development and improvement and the right is reserved to change products and services from time to time. City & Guilds cannot accept liability for loss or damage arising from the use of information in this publication.

City & Guilds
1 Giltspur Street
London EC1A 9DD
T +44 (0)844 543 0000 (Centres)
T +44 (0)844 543 0033 (Learners)

F +44 (0)20 7294 2413

www.cityandguilds.com learnersupport@cityandguilds.com

Contents

Level 3 Implementing an ICT systems security policy (7540-032/7630-333)

Assi	gnm	ent	B
11331	gillii		-

Introduction – Information for Candidates	2
Candidate Instructions	3

Level 3 Implementing an ICT systems security policy (7540-032/7630-333) Assignment B

Introduction – Information for Candidates

About this document

This assignment comprises all of the assessment for Level 3 Implementing an ICT systems security policy (7540-032/7630-333).

Health and safety

You are asked to consider the importance of safe working practices at all times.

You are responsible for maintaining the safety of others as well as your own. Anyone behaving in an unsafe fashion will be stopped and a suitable warning given. You will **not** be allowed to continue with an assignment if you compromise any of the Health and Safety requirements. This may seem rather strict but, apart from the potentially unpleasant consequences, you must acquire the habits required for the workplace.

Time allowance

The recommended time allowance for this assignment is **5 hours**.

Level 3 Implementing an ICT systems security policy (7540-032/7630-333)

Candidate Instructions

Time allowance: 5 hours

Assignment set up:

This assignment is made up of **four** tasks:

- Task A Compile a report detailing the issues revealed by the analysis
- Task B Compile a report with recommendations for Argosy Engineering to improve the security of their ICT systems
- Task C Draft a security policy for specified areas
- Task D Set up a computer to connect to the Internet via a dial-up modem connection

Scenario

Argosy Engineering is a medium sized company with an existing network that has grown over a period of time. You have been asked to carry out a survey of the company's current ICT systems and to make recommendations to improve the security. You are required to submit two reports, one reporting on the current situation highlighting the security risks you have identified, and one to include recommendations to address those issues. You will be supplied with a comprehensive network diagram of Argosy Engineering's ICT infrastructure together with some additional background information and details of the company's current security policies. Further information sources that you may require should be requested from your Assessor.

Task A – Compile a report detailing the issues revealed by the analysis

Using the scenario and attachments 1 and 2, analyse the current ICT network and identify areas that may pose a security risk to Argosy Engineering.

Write a report for Argosy Engineering detailing **seven** major security risks you have identified based on the information supplied.

For each of the security risks identified, you **must** provide reasons why this is a risk on this particular system.

Task B – Compile a report with recommendations for Argosy Engineering to improve the security of their ICT systems

- Following on from task A, you are required to provide Argosy Engineering with a proposal of the actions they should take to prevent the security risks you highlighted in your initial report. The report should contain:
 - a) the security risks being addressed by these proposals
 - b) recommended actions/solutions proposed
 - c) **two** possible impacts to the business if the recommendations are not accepted and implemented
 - d) a list and explanation of **four** of the main cost areas for these recommendations
 - e) the importance and purpose of a defined security policy
 - f) the legal, ethical and human resources issues.

Task C - Draft a security policy for specified areas

1 (Add the following as a section to your report)

Describe the features of the following aspects of X509 certificates:

- a) certificates
- b) certification authorities
- c) certification hierarchies.
- 2 (Add the following as a section to your report)

Argosy would also like a sample security policy draft, which can be short and in note form if necessary. The draft should address:

- a) **three** policies relating to portable media use and storage
- b) three policies relating to Internet and email use
- c) **two** policies relating to the attachment of equipment to the company network (at office sites or at home whilst connected to the corporate network)
- d) **three** policies relating to passwords to access the company network resources and to secure sensitive data.

Task D – Set up a computer to connect to the Internet via a dial-up modem connection

You are required to configure a computer to access the corporate network. This is required to provide dial-up access to the company network for both customers and employees. You are required to ensure a secure authentication method is selected whilst going through this process

1 Select and configure the most secure networking authentication protocol available to you.

When you have finished working:

- Sign each document above your name and label all removable storage media with your name.
- Hand all paperwork and removable storage media to your assessor.

If the assignment is taken over more than one period, all paperwork and removable media must be returned to the test supervisor at the end of each sitting.

End of assignment

Published by City & Guilds 1 Giltspur Street London EC1A 9DD T +44 (0)844 543 0000 (Centres) T +44 (0)844 543 0033 (Learners) F +44 (0)20 7294 2413 www.cityandguilds.com

City & Guilds is a registered charity established to promote education and training