Lancaster University: ISS

Commissioning Specifications for New Buildings or Major Building Projects

V1e

Craig MacDonald
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ISS

1 REVISION HISTORY

Date	Version	Author	Comments
	1a	IA	Initial Rev
14/03/11	1b	IA	Incorporating comments received: For Issue
04/12/13	1d	IA	Minor revisions, contacts changes
24/02/17	1e	CM	Minor revisions to contacts, references to other documents

2 DISTRIBUTION SCHEDULE

Name	Title
Mark Jameson	Head Technical Infrastructure ISS
Craig MacDonald	Head of Networking
Paul Boyd	Senior Network Specialist
Gary Tootle	Assistant Director of Estates (Operations)
Simon Corless	Electrical Engineer
	Facilities Dept. Project Managers

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4 BACKGROUND

This document exists to assist design teams & contractors in planning for the handover of a major project on Campus. This document should be read in conjunction with the ISS Specifications for Data Network Physical Infrastructure and the Facilities FMAG042 documents.

5 CHANGE CONTROL

Upon each revision of this document, it will be issued to those named on page one. It is the responsibility of each design team and contractor to ensure that they are using the most recent revision of the document.

6 ISS CONTACTS

It's recommended that contact is made with ISS early in the project planning process. ISS want to help all parties achieve successful, timely and high-quality project completion and will assist in any way possible.

6.1.1 Site & Contractor Liaison

Paul Boyd	01524 510103
Senior Network Specialist	07870 594104
	p.boyd@lancaster.ac.uk
Richard du Feu	01524 510102
Senior Network Specialist	r.dufeu@lancaster.ac.uk

6.1.2 Escalation

Craig Macdonald	01524 510112
Head of Networking	c.macdonald@lancaster.ac.uk
Mark Jameson	01524 5100100
Head of Technical Infrastructure	m.jameson@lancaster.ac.uk

7 ACCESS TO ISS DATACENTRES

If contractors require access to the ISS data centres, whether ISS or Faraday, then they should contact Paul Boyd (or Craig MacDonald) giving at least 5 working days' notice. This should state the areas required to be accessed, the Names of individuals requiring access and the task(s) to be undertaken. An access token can then be allocated for the duration of the works. This requirement is in addition to any Facilities permit to work that may be required.

8 COMMISSIONING

The commissioning of a building in its entirety is a complex task and elements of the building infrastructure rely on ISS services to be fully commissioned. Only once the ISS elements have been witness tested and accepted can these building elements be connected onto the ISS elements

8.1 WITNESS TESTING

ISS will undertake witness testing on items which it has specified. It is recommended that all witness testing is completed 1 week prior to the connection of any other building elements and at least 2 weeks prior to the planned handover of the project. Witness testing is a consecutive rather than concurrent activity and timelines should be planned accordingly. Should any remedial works be identified through the witness testing procedures then these will need to be re-witnessed prior to acceptance and subsequent connecting of any building elements.

8.1.1 CW1308 Telephone Cabling
The installation & testing requirements are captured in the ISS Specifications for Data Network Physical Infrastructure. The test results should be issued to ISS one week prior to witness testing. ISS will then undertake witness testing with the installation contractor.

8.1.2 CAT6 Structured Cabling
The installation & testing requirements are captured in the ISS Specifications for Data Network Physical Infrastructure. The test results should be issued to ISS one week prior to witness testing. ISS will then undertake witness testing with the installation contractor.

8.1.3 Fibre Cabling
The installation & testing requirements are captured in the ISS Specifications for Data Network Physical Infrastructure. The test results should be issued to ISS one week prior to witness testing. ISS will then undertake witness testing with the installation contractor.

8.2 DATA NETWORK CONNECTIVITY

It should be pointed out that ISS will not install any active network equipment into the building prior to building handover. This means that some building elements will only be locally commissioned at handover then a return visit will be required to commission the system onto the relevant site-wide systems once data connectivity is installed. Data network connectivity is usually commissioned within 5 working days following building handover.

8.2.1 IP Addresses
Certain building management systems or equipment will require the assignment of IP addresses to them. Contractors should request IP addresses via the LU Project Manager by supplying the following information for each IP address requested;

1. Equipment Name/Purpose
2. MAC (Physical Hardware) address of equipment.
3. Label of Datapoint that equipment will connect to.
4. LU room number of location of equipment.

Project managers should send the request to the ISS Service Desk, ISS will then supply IP addresses within 5 working days of the request.

8.3 BUILDING ELEMENTS REQUIRING USE OF ISS INFRASTRUCTURE

8.3.1 Fire Alarm

The fire alarm panel requires connecting to the site-wide fibre network, in order for this to occur, ISS need to have accepted the fibre installation. Once accepted, the Lancaster University commissioning contractor will need to liaise with ISS to patch relevant links to bring the new panel into the fibre ring.

8.3.2 Lift Alarm

The lift will generally require a telephone connection. In order to connect this, ISS need to have accepted both the CAT6 and CW1308 installations. Once accepted, the contractor should inform ISS of the datapoint label of the lift alarm connection and ISS will patch onto the CW1308 telephone infrastructure. The contractor should make arrangements for the provision of an appropriate number of telephone circuits on the University telephone exchange via the LU project manager.

8.3.3 Refuge Alarm

The refuge alarm system will generally require a telephone connection. In order to connect this, ISS need to have accepted both the CAT6 and CW1308 installations. Once accepted, the contractor should inform ISS of the datapoint label of the refuge alarm connection and ISS will patch onto the CW1308 telephone infrastructure. The contractor should make arrangements for the provision of an appropriate number of telephone circuits on the University telephone exchange via the LU project manager.

8.3.4 Building Management Systems (BMS)

The BMS will require IP addresses for the addressable equipment; this must be requested in advance from ISS (see IP Addresses section above). The BMS should be commissioned, tested and demonstrated locally as a stand-alone building; once the data connectivity is installed a return visit will be required to commission the building onto the supervisor PC and load graphics.

8.3.5 Energy Metering

The energy meters will require IP addresses for the addressable equipment; this must be requested in advance from ISS (see IP addresses section below). The energy meters should be commissioned, tested and demonstrated locally as a stand-alone building; once the data connectivity is installed a return visit will be required to commission the building onto the head-end data collection system.

8.3.6 Audio-Visual Equipment

The AV equipment will require IP addresses for the addressable equipment; this must be requested in advance from ISS (see IP addresses section above). The AV equipment should be commissioned, tested and demonstrated locally as a stand-alone building; once the data connectivity is installed a return visit will be required to commission the building onto the central AMX control system.

8.3.7 Access Control

The access control equipment will require IP addresses for the addressable equipment; this must be requested in advance from ISS (see IP addresses section below). The cardlock controllers should be commissioned, tested and demonstrated locally as a stand-alone building; once the data connectivity is installed a return visit will be required to commission the building onto the central control system.

8.3.8 CCTV

The CCTV cameras require connecting to the site-wide fibre network, in order for this to occur, ISS need to have accepted the fibre installation. Once accepted, the Lancaster University commissioning contractor will need to liaise with ISS to patch relevant links to bring the new cameras into the site-wide systems.

8.3.9 Intruder Alarm

The intruder alarm system will generally require a telephone connection. In order to connect this, ISS need to have accepted both the CAT6 and CW1308 installations. Once accepted, the contractor should inform ISS of the datapoint label of the intruder alarm connection and ISS will patch onto the CW1308 telephone infrastructure. The contractor should make arrangements for the provision of an appropriate number of alarm or Redcare™ circuits via the LU project manager.