

# BS 6701:2004

“Telecommunications equipment and telecommunications cabling  
- Specification for installation, operation and maintenance”

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## THE INSTALLERS PERSPECTIVE

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The Cabling Partnership

## Mike Gilmore

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Managing Director  
e-Ready Building

### Standards Activities



**Member:**  
ISO/IEC JTC1 SC25 WG3: Generic Cabling  
ISO/IEC JTC1 SC25 Project Team: SOHO  
  
**Convenor:**  
ISO/IEC JTC1 SC25 WG3 IPTG: Industrial Premises Cabling



**Convenor:**  
CENELEC TC215 WG1: IT Cabling  
CENELEC TC215 WG1 PT Industrial Premises Cabling  
**Secretary:**  
CENELEC TC215 WG1 PT Data Centre Cabling



**Chairman:**  
BSI TCT7/-1: IT Cabling  
BSI TCT7/-3: IT Cabling Support Group

**Technical and Standards Director:**  
Fibreoptic Industry Association

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## UK Installation Standards - 2001

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-  
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### TELECOMMUNICATIONS CABLING



BS 6701

Code of Practice for the installation of apparatus intended for connection to certain telecommunications systems

DEVELOPED BY	BSI TCT/7
PUBLICATION	BS 6701-1 and -2: 1986
REVISED	BS 6701-1 and -2: 1990
REVISED	BS 6701: 1994
AMENDED	BS 6701 A.1: 1997
AMENDED	BS 6701 A.1 and A.2: 1999

### OPTICAL FIBRE



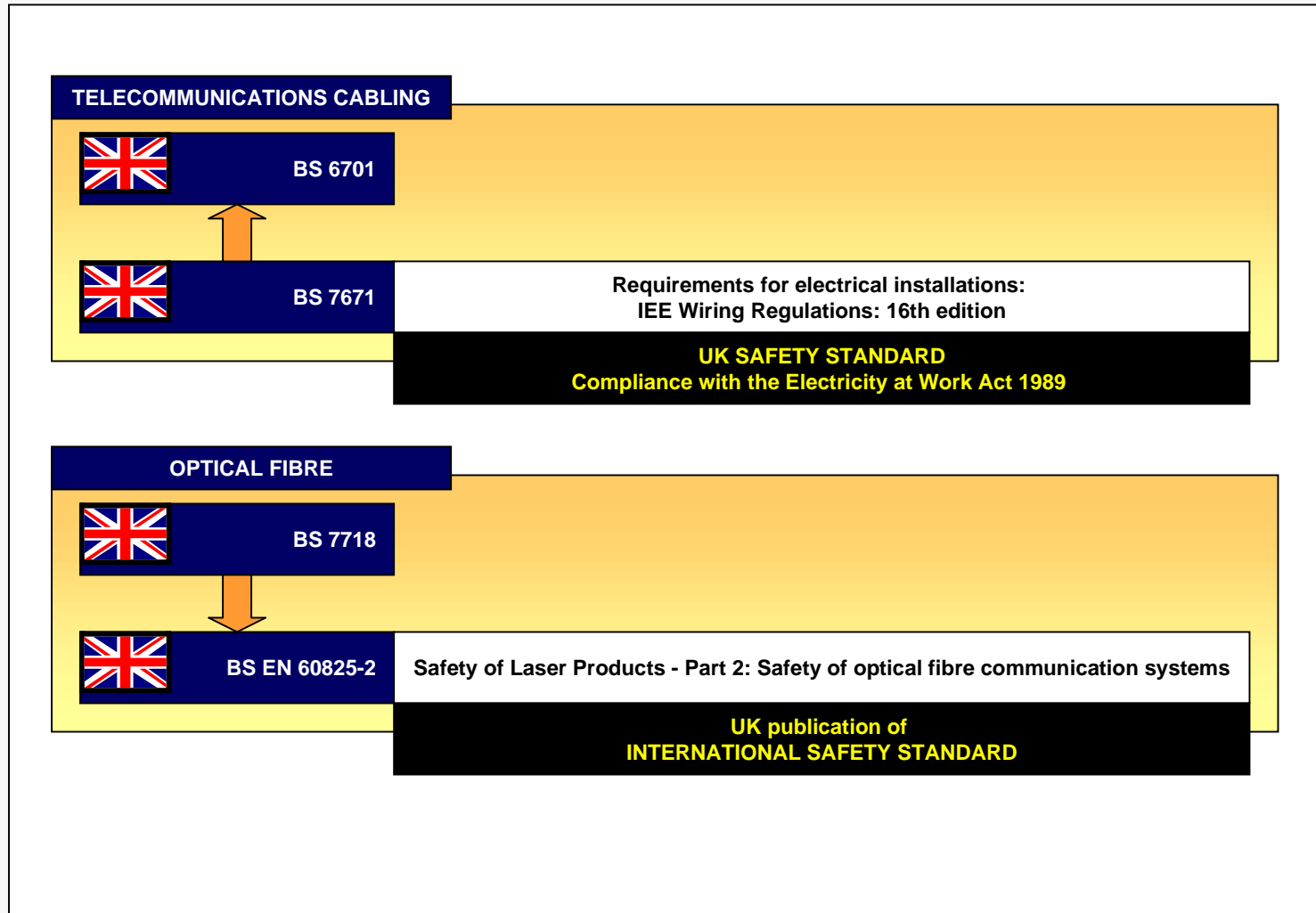
BS 7718

Code of Practice for the installation of fibre optic cabling

DEVELOPED BY	BSI ECL/22 WG3
INTERIM PUBLICATION	FIA as FIA-CCP/1/91: 1991
BS PUBLICATION	BS 7718: 1995
AMENDED	BS 7718 A.1: 1996

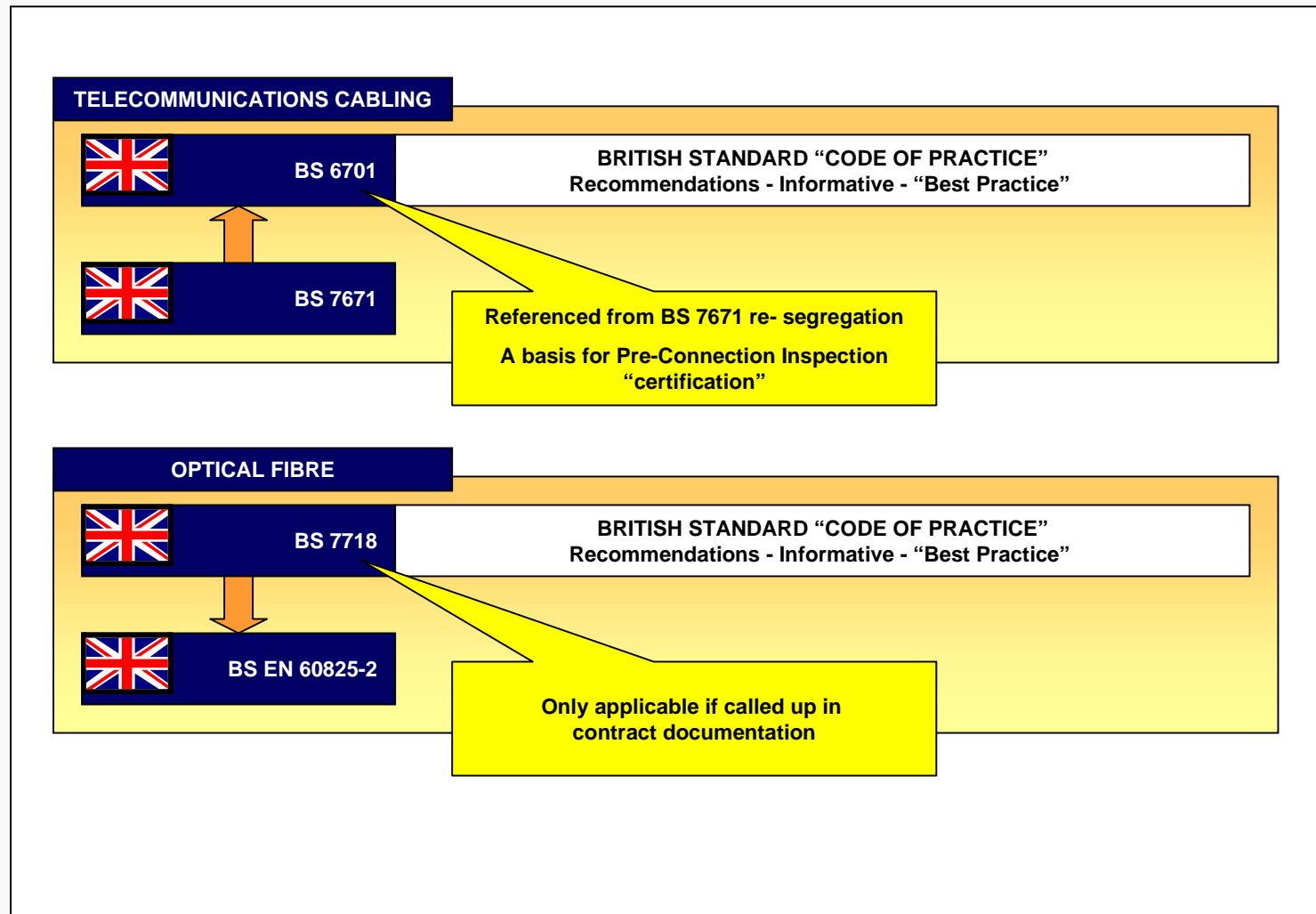
# UK Installation Safety Standards - 2001

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-  
THE  
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MPN SEMINARS 2004



# Standards Status - 2001

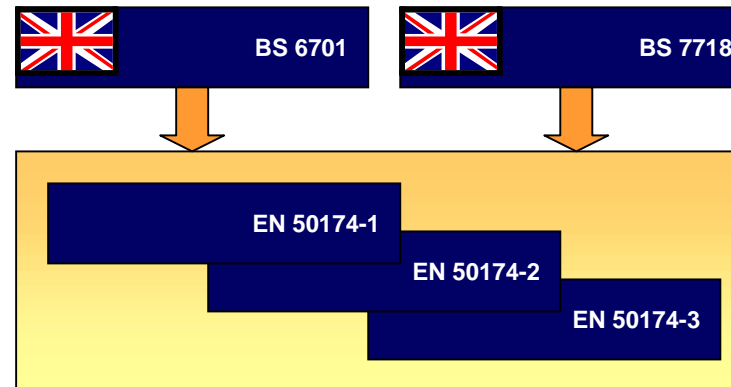
BS 6701:2004  
-  
THE  
INSTALLERS PERSPECTIVE  
  
MPN SEMINARS 2004






## BS EN 50174-X Standards

BS 6701:2004  
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THE  
INSTALLERS PERSPECTIVE

MPN SEMINARS 2004

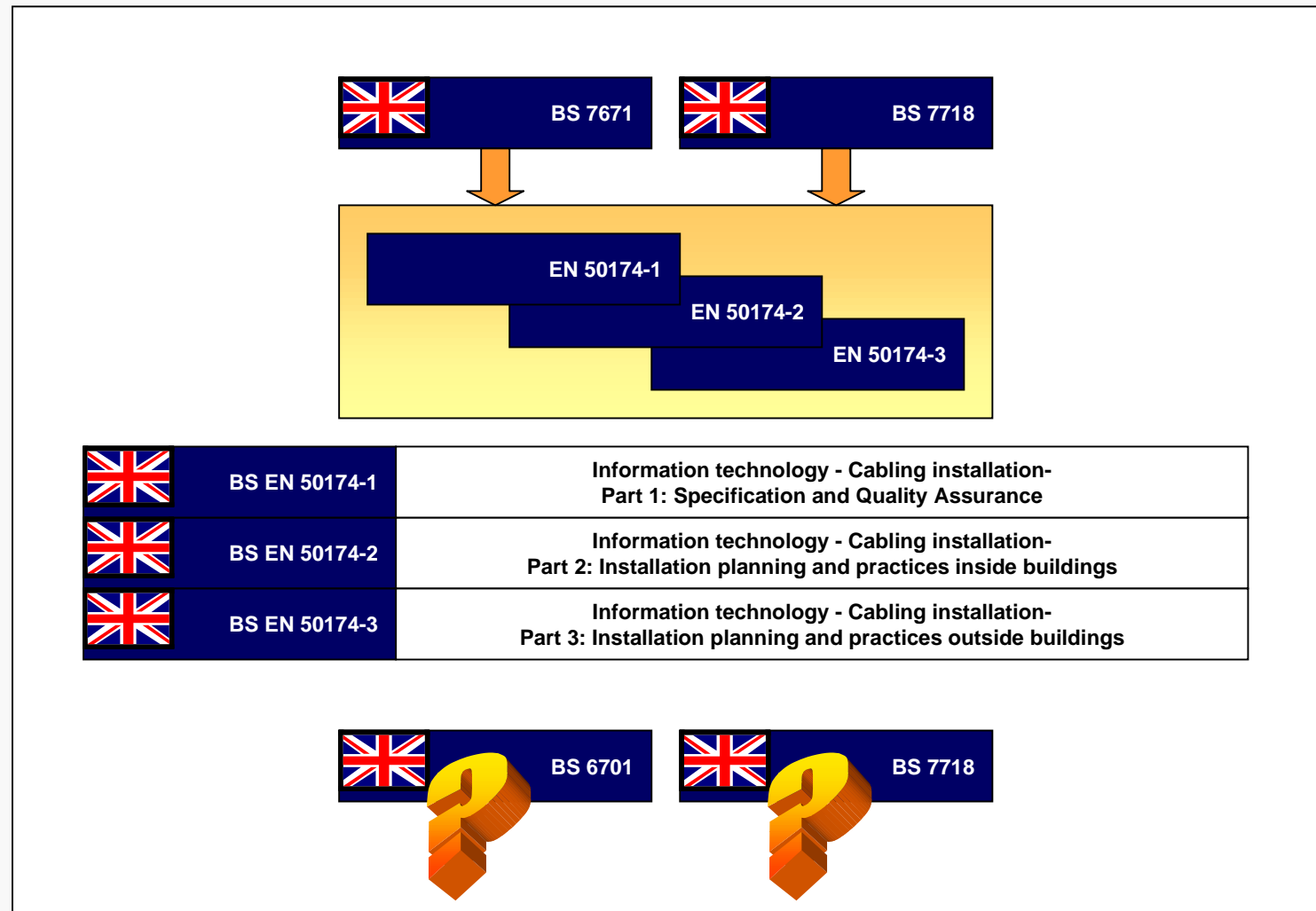


	<b>BS EN 50174-1</b>	<b>Information technology - Cabling installation- Part 1: Specification and Quality Assurance</b>
	<b>BS EN 50174-2</b>	<b>Information technology - Cabling installation- Part 2: Installation planning and practices inside buildings</b>
	<b>BS EN 50174-3</b>	<b>Information technology - Cabling installation- Part 3: Installation planning and practices outside buildings</b>

## The Impact of BS EN 50174-X Standards

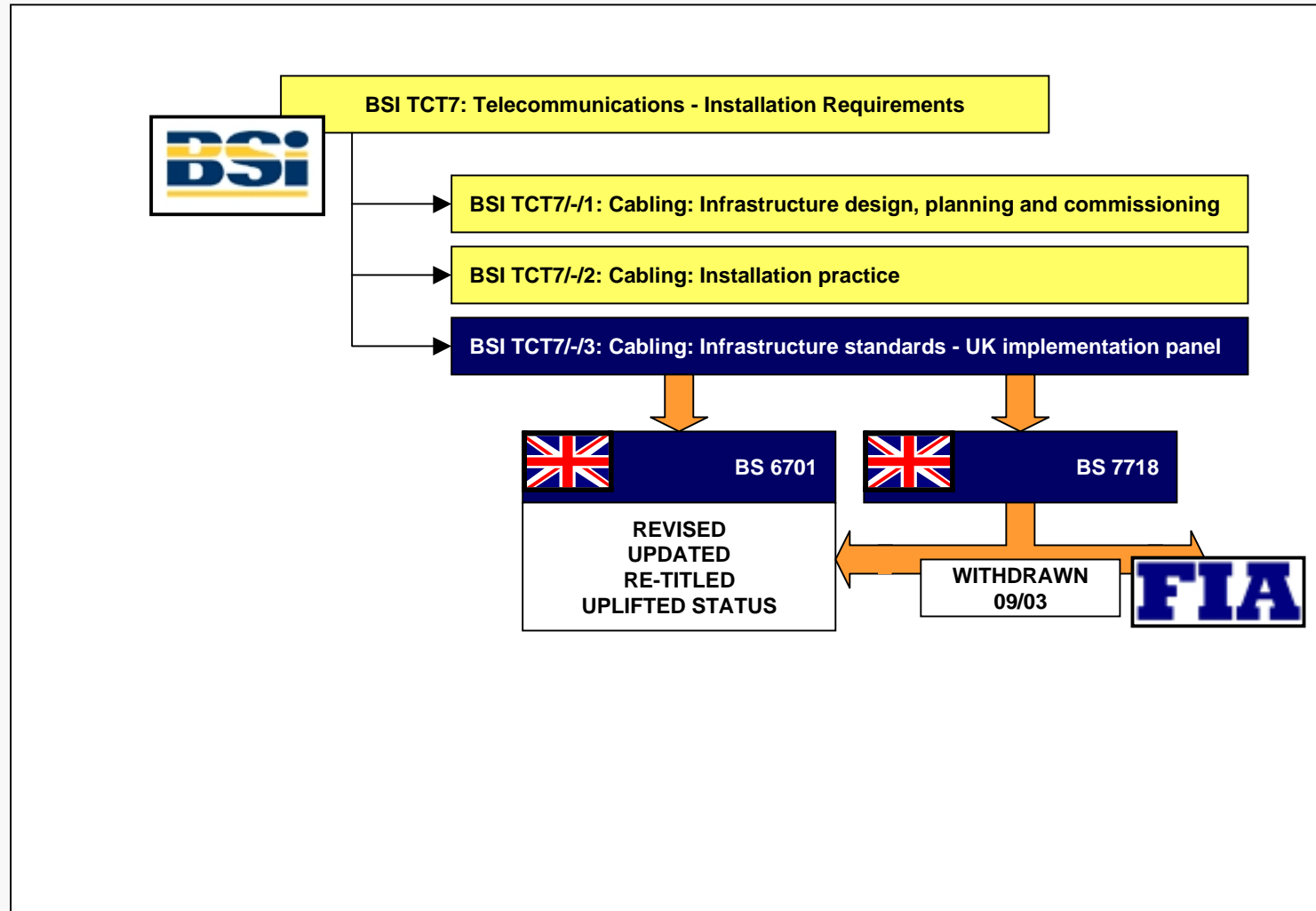
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-  
THE  
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MPN SEMINARS 2004



# The Impact of BS EN 50174-X Standards

BS 6701:2004  
-  
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MPN SEMINARS 2004



## FIA Technical Support Documents

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-  
THE  
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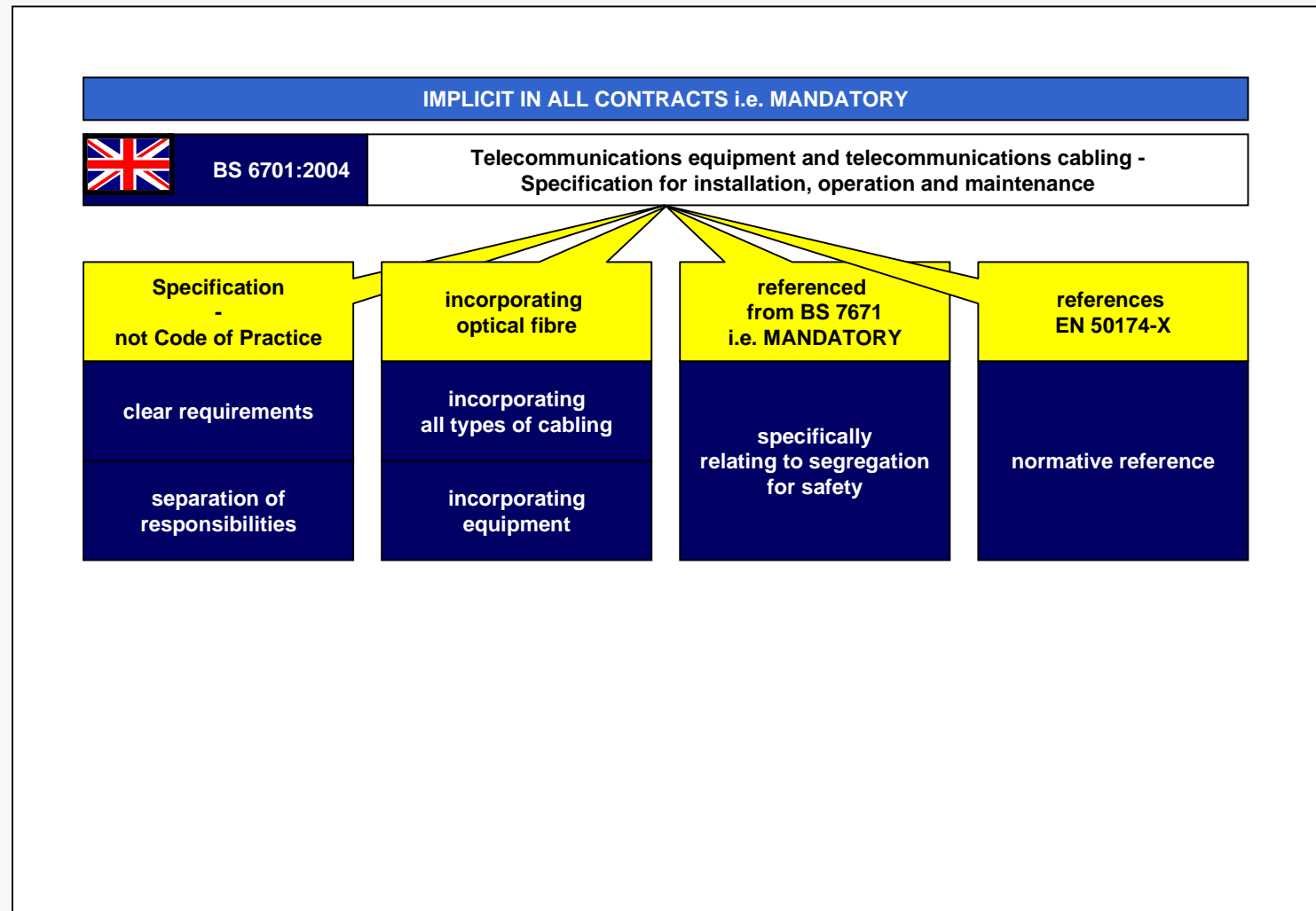
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	TSD	
DESIGN	2000-1-1	OPTICAL FIBRE CABLING: LAN APPLICATION SUPPORT GUIDE
	2000-1-3	OPTICAL FIBRE CABLING: DARK FIBRE SUPPORT GUIDE
OPERATION	2000-3-2-1	ADMINISTRATION: USER GUIDE
	2000-3-2-2	ADMINISTRATION: CORDS
	2000-3-3	POLARITY MAINTENANCE
INSTALLATION	2000-4-1-1	INSTALLATION PRACTICE: SPLICING
	2000-4-2-1	TESTING OF INSTALLED CABLING: ATTENUATION USING LSPM EQUIPMENT
	2000-4-2-2	TESTING OF INSTALLED CABLING: ATTENUATION USING OTDR EQUIPMENT
SAFETY	2000-5-1	OPTICAL POWER: SAFETY LEVELS
	2000-5-2	OPTICAL FIBRE: HANDLING OF PROCESSING CHEMICALS
	2000-5-3	OPTICAL FIBRE: DISPOSAL OF WASTE

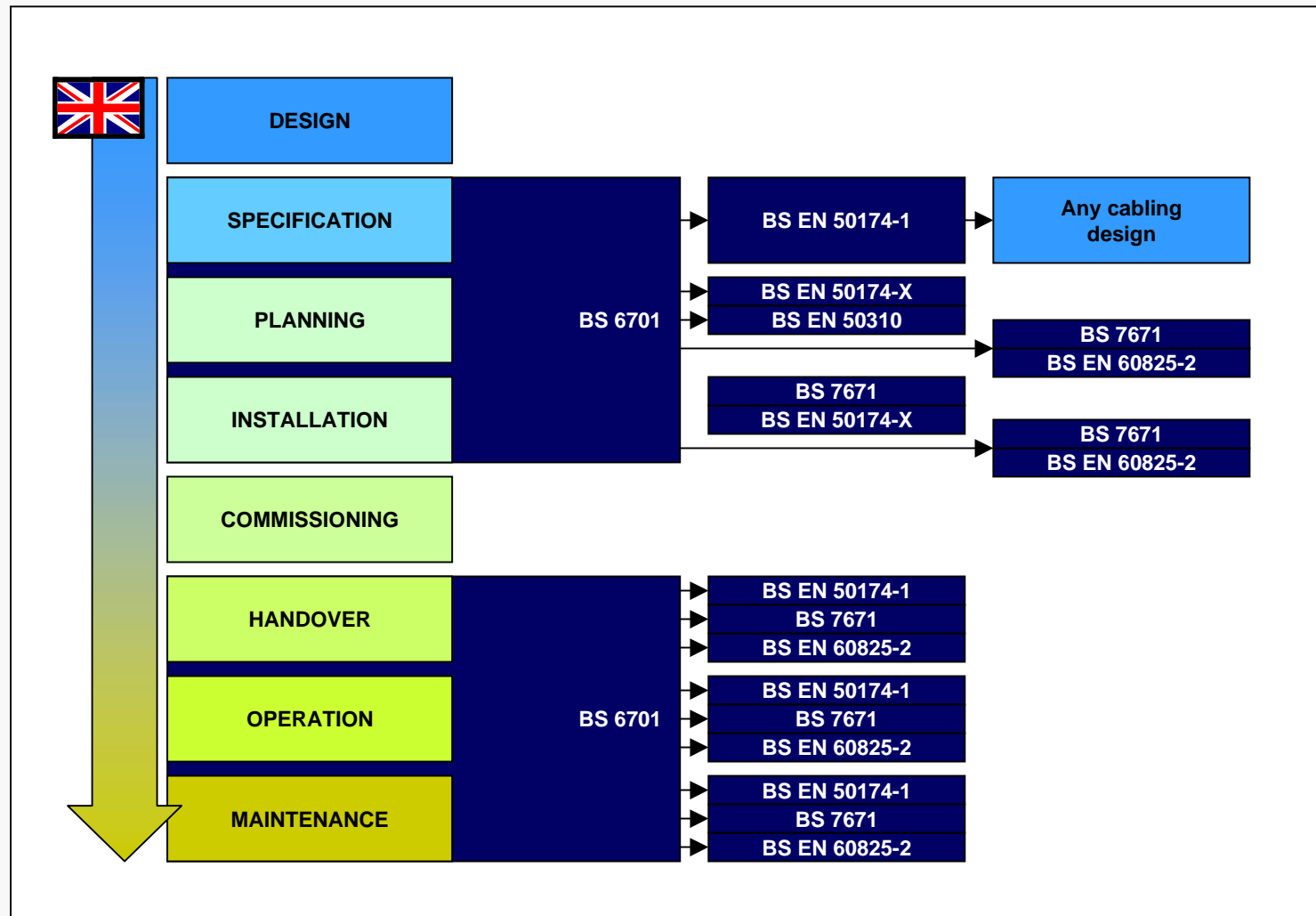
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BS 6701:2004  
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THE  
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MPN SEMINARS 2004



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BS 6701:2004  
-  
THE  
INSTALLERS PERSPECTIVE  
  
MPN SEMINARS 2004



## Responsibility under BS 6701: 2004

BS 6701:2004  
-  
THE  
INSTALLERS PERSPECTIVE

MPN SEMINARS 2004


	<b>BS 6701:2004</b>	<b>Telecommunications equipment and telecommunications cabling - Specification for installation, operation and maintenance</b>
1	Foreword	
2	Scope	
3	Normative references	
4	Terms, definitions and abbreviations	
5	Requirements for installers of telecommunications equipment and telecommunications cabling	
	Requirements for owners of premises housing telecommunications systems	
	Bibliography	

<b>INSTALLER</b>	the person/organization undertaking the physical installation of the cabling	<b>Clear, unambiguous Verifiable</b>
<b>OWNERS OF PREMISES</b>	may delegate the responsibilities specified to authorized persons such as specifiers, operators and maintainers of the telecommunications systems.	

# Roles and Responsibilities

BS 6701:2004  
-  
THE  
INSTALLERS PERSPECTIVE

MPN SEMINARS 2004


	<b>BS 6701:2004</b>	<b>Telecommunications equipment and telecommunications cabling - Specification for installation, operation and maintenance</b>
	Foreword	
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	Bibliography	

<b>INSTALLER</b>	4.1.1 Documentation	All relevant documentation shall be provided to enable the user to implement operating procedures for the telecommunications system(s).
<b>OWNERS OF PREMISES</b>	5.2 Operating procedures	Telecommunications equipment and telecommunications cabling shall be operated in accordance with the instructions provided by the installer.

# BS 6701 - Defining Minimum Requirements

BS 6701:2004  
-  
THE  
INSTALLERS PERSPECTIVE

MPN SEMINARS 2004

IMPLICIT IN ALL CONTRACTS i.e. MANDATORY	
	<b>BS 6701:2004</b> <b>Telecommunications equipment and telecommunications cabling - Specification for installation, operation and maintenance</b>
1	Foreword
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5	Requirements for installers of telecommunications equipment and telecommunications cabling
	Requirements for owners of premises housing telecommunications systems
	Bibliography

NOT DRACONIAN LEGISLATION

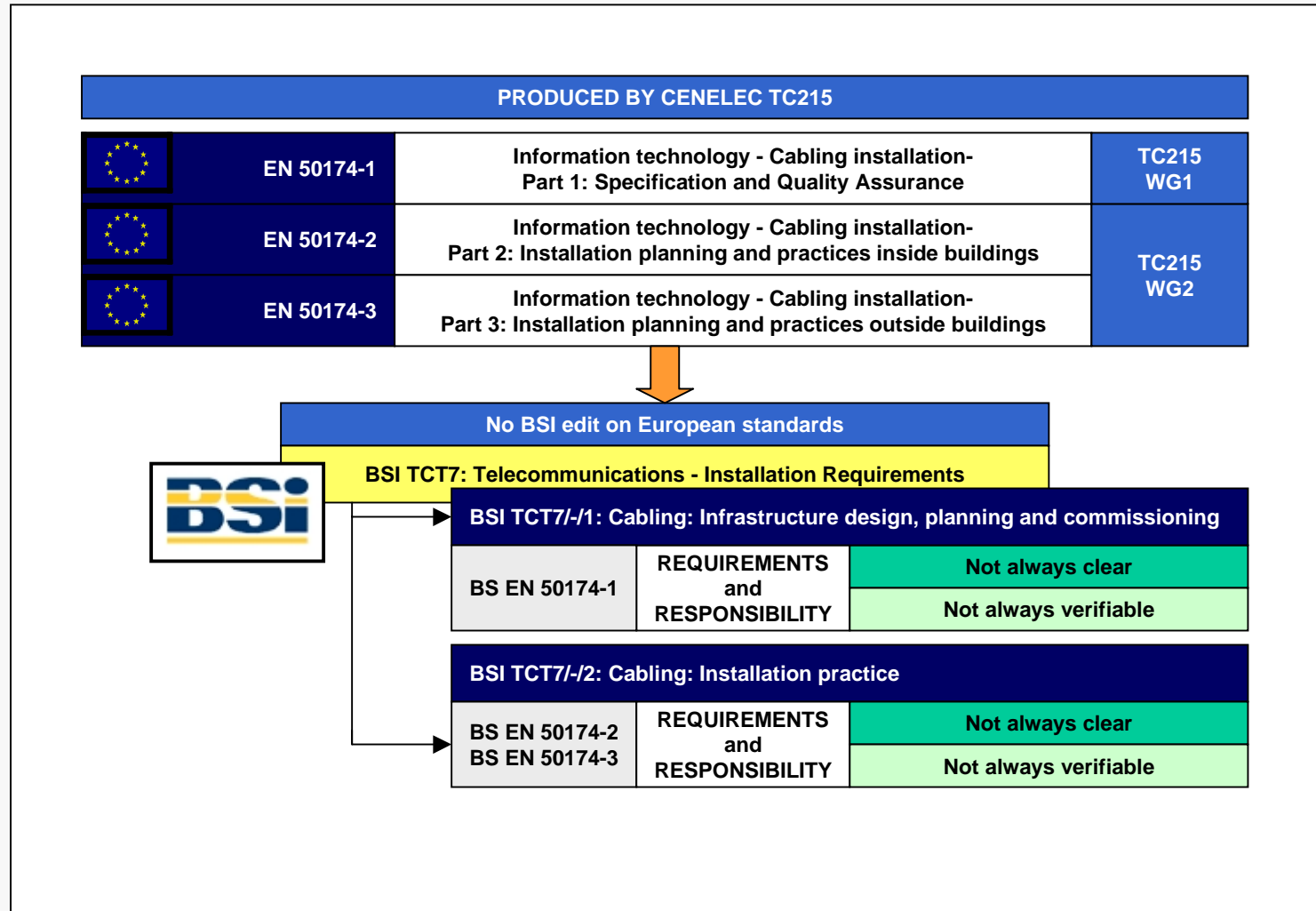
A REMINDER OF EXISTING LEGAL OBLIGATIONS

A BASIS FOR LEGAL JUDGEMENT

A BASIS FOR INSTALLER APPROVAL SYSTEMS

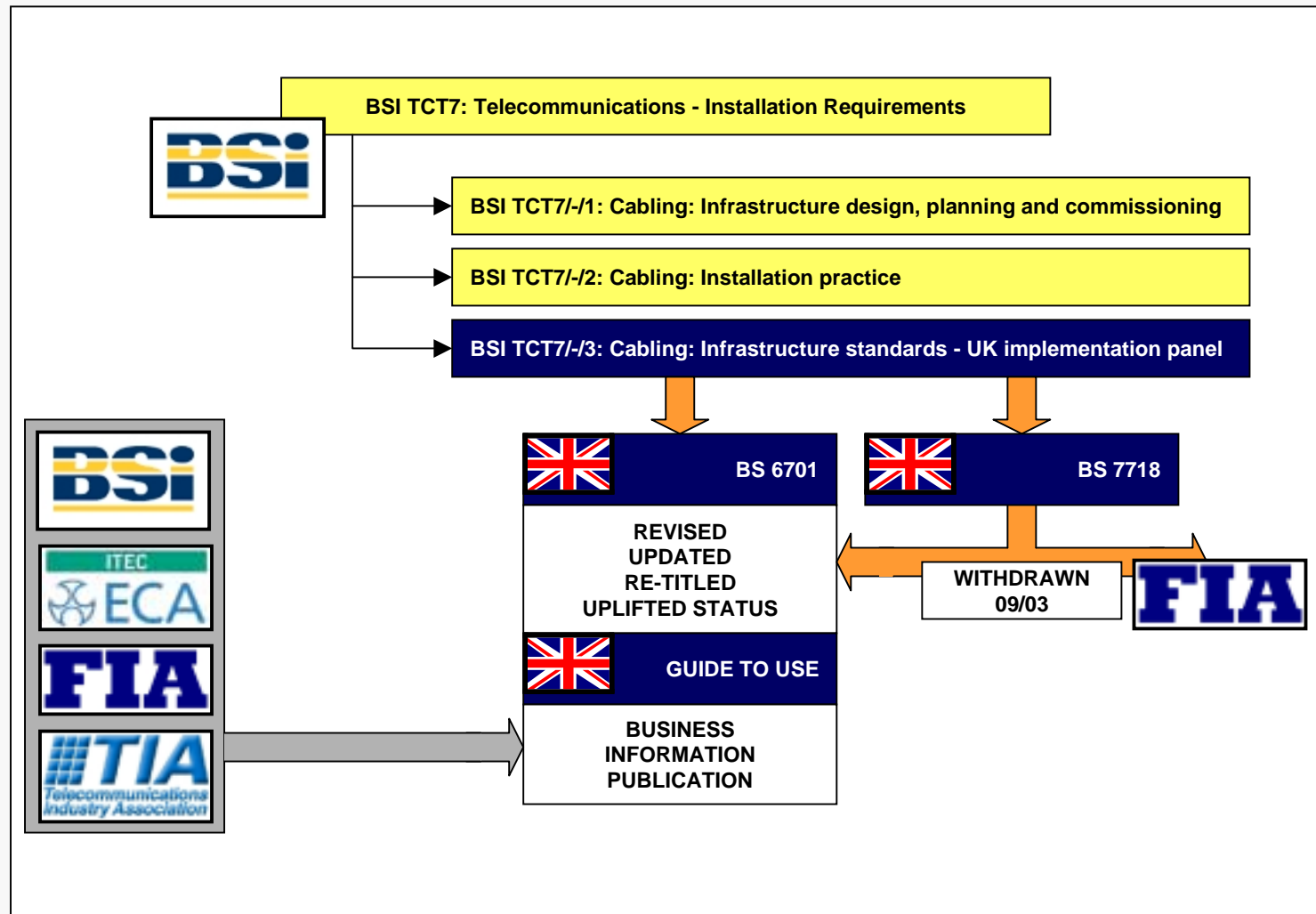
# External References

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THE  
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# The Overall Plan

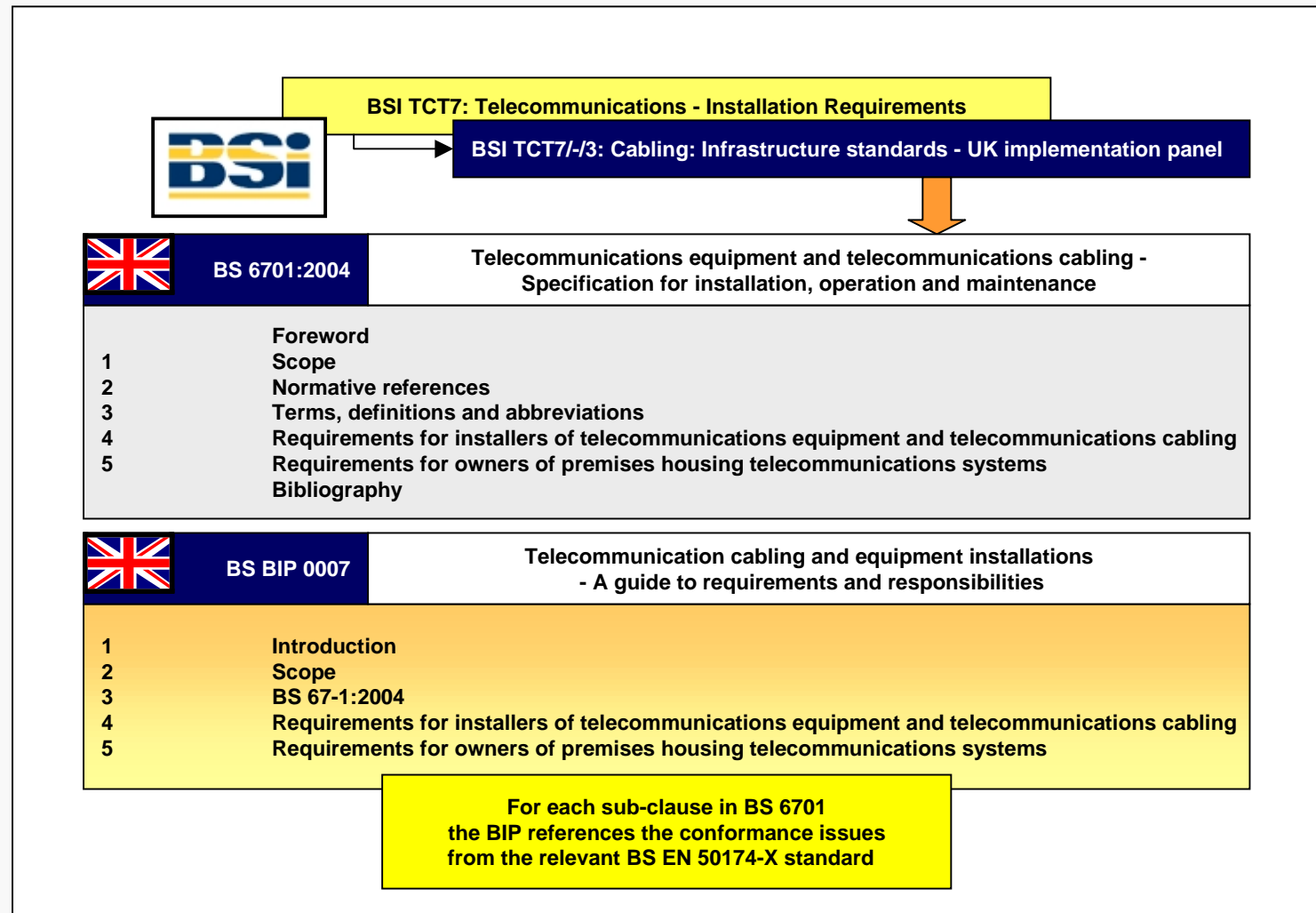
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THE  
INSTALLERS PERSPECTIVE  
  
MPN SEMINARS 2004



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-  
THE  
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MPN SEMINARS 2004



# Installation Specification

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-  
THE  
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## INSTALLER'S RESPONSIBILITIES

## PREMISES OWNER'S RESPONSIBILITIES



BS 6701:2004

Telecommunications equipment and telecommunications cabling -  
Specification for installation, operation and maintenance

An installation specification shall be provided in accordance with BS EN 50174-1 for telecommunications equipment and telecommunications cabling other than that specified in BS EN 50174-1.

In addition, the installation specification shall define the approach to segregation of circuits with regard to electromagnetic interference in accordance with the BS EN 50174 series of standards.

The classification of areas containing optical fibre telecommunications equipment and optical fibre telecommunications cabling shall be undertaken in accordance with BS EN 60825-2.

## BS EN 50174-1

[5.1] requires that an Installation Specification is agreed with the installer prior to the installation commencing.

[5.1] requires that an Installation Specification be provided and shall contain a technical specification, scope of work and contractual requirements.

[5.1] requires that an Installation Specification is agreed with the installer prior to the installation commencing.

[5.2.5] requires that modifications, changes and deviations to the Installation Specification are agreed between with the Installer.

# Quality Plan

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-  
THE  
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MPN SEMINARS 2004

## INSTALLER'S RESPONSIBILITIES

## PREMISES OWNER'S RESPONSIBILITIES



BS 6701:2004

Telecommunications equipment and telecommunications cabling -  
Specification for installation, operation and maintenance

A quality plan shall be provided in accordance with BS EN 50174-1 for telecommunications equipment and telecommunications cabling other than that specified in BS EN 50174-1.

Installation, operating and maintenance instructions for all telecommunications equipment and telecommunications cabling shall be obtained.

## BS EN 50174-1

[5.1] requires that a Quality Plan be provided.

[5.1] requires that a Quality Plan is agreed with the owner prior to the installation commencing.

[5.3] contains general requirements for a Quality Plan.

[5.1] requires that a Quality Plan is agreed with the installer prior to the installation commencing.

# Documentation

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-  
THE  
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MPN SEMINARS 2004

## INSTALLER'S RESPONSIBILITIES

## PREMISES OWNER'S RESPONSIBILITIES



BS 6701:2004

Telecommunications equipment and telecommunications cabling -  
Specification for installation, operation and maintenance

Documentation shall be provided to the user detailing the power requirements of the telecommunications equipment to be supplied and installed.

All relevant documentation shall be provided to enable the user to implement operating procedures for the telecommunications system(s).

Final acceptance, as defined in the quality plan shall only proceed following marking, labelling and fitting of all components associated with the telecommunications cabling.

Information relating to telecommunications equipment and telecommunications cabling shall be complete and accurate.

The location of the CMET shall be documented and the information shall be available for inspection.

# Operation

BS 6701:2004  
-  
THE  
INSTALLERS PERSPECTIVE  
  
MPN SEMINARS 2004

## INSTALLER'S RESPONSIBILITIES

## PREMISES OWNER'S RESPONSIBILITIES



BS 6701:2004

Telecommunications equipment and telecommunications cabling -  
Specification for installation, operation and maintenance

Telecommunications equipment and telecommunications cabling shall be operated in accordance with the instructions provided by the installer.

The selection and operation of optical fibre telecommunications equipment, test equipment and optical fibre telecommunications cabling shall be in accordance with BS EN 60825-2.

The operation of telecommunications equipment and telecommunications cabling in situations where explosive or flammable materials are generated, prepared, processed, handled, stored or otherwise encountered shall be carried out in accordance with BS EN 60079-14.

## BS EN 50174-2

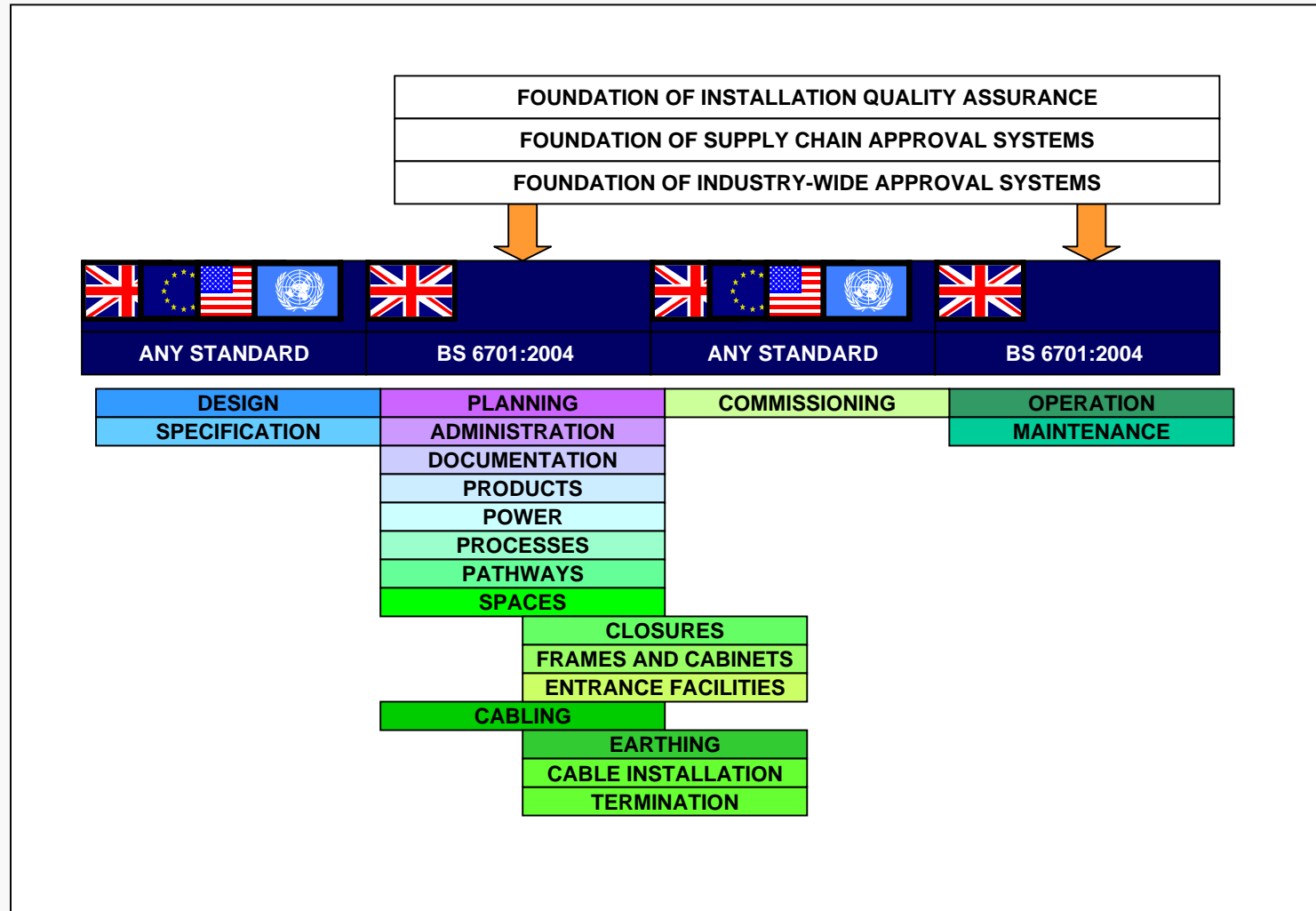
[4.2.1] requires that telecommunications equipment meets relevant specifications in relation to protection against electric shock.

[6.3.2] requires that screened cabling channels require continuous screen (tx to rx)

# Quality Assurance and Approval Systems

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-  
THE  
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MPN SEMINARS 2004



# Timelines

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THE  
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MPN SEMINARS 2004

