

1. ☐ ΕΓΚΡΙΝΕΤΑΙ. Εργασίες μπορούν να εκτελεσθούν.
APPROVED. Works may proceed.
2. ☐ ΑΝΑΘΕΩΡΗΣΗ ΚΑΙ ΕΠΑΝΥΠΟΒΟΛΗ. Δεν μπορούν να εκτελεσθούν εργασίες.
REVISE AND RESUBMIT. Works should not proceed.
3. ☐ ΔΕΝ ΑΠΑΙΤΕΙΤΑΙ ΕΛΕΓΧΟΣ. Εργασίες μπορούν να εκτελεσθούν.
REVIEW NOT REQUIRED. Works may proceed.

ΑΔΕΙΑ ΕΦΑΡΜΟΓΗΣ ΣΧΕΔΙΟΥ ΔΕΝ ΑΠΑΛΛΑΣΣΕΙ ΤΟΝ ΑΝΑΔΟΧΟ ΑΠΟ ΤΙΣ ΕΥΘΥΝΕΣ ΤΟΥ ΠΟΥ ΑΠΟΡΡΕΟΥΝ ΑΠΟ ΤΗ ΣΥΜΒΑΣΗ ΟΥΤΕ ΑΠΟΤΕΛΕΙ ΑΠΟΔΟΧΗ ΤΗΣ ΕΠΑΡΚΕΙΑΣ ΚΑΙ ΑΚΡΙΒΕΙΑΣ ΤΗΣ ΜΕΛΕΤΗΣ.

PERMISSION TO PROCEED DOES NOT RELIEVE CONTRACTOR FROM HIS RESPONSIBILITIES IMPOSED BY CONTRACT NEITHER DOES IT CONSTITUTE ACCEPTANCE OF THE ADEQUACY AND EXACTNESS OF THE DESIGN.

ΤΕΧΝΙΚΟΣ ΕΛΕΓΧΟΣ ΑΠΟ: TECHNICAL REVIEW BY: _____ ΥΠΟΓΡΑΦΗ: SIGNED: _____ ΗΜΕΡΟΜΗΝΙΑ: DATE: _____	ΕΓΚΡΙΘΗΚΕ ΑΠΟ: APPROVED BY: _____ ΥΠΟΓΡΑΦΗ: SIGNED: _____ ΗΜΕΡΟΜΗΝΙΑ: DATE: _____
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F									
E									
D									
C									
B									
A	23.10.14	GRI	IFU	G. Galluzzi	<i>[Signature]</i>	A. Ruggi	<i>[Signature]</i>	DFD stage – First issue.	
ΑΝΑΘ. REV.	ΗΜ/ΝΙΑ DATE	ΣΥΝΤ. INIT.	ΕΛΕΓΧ. CHK.	ΟΝΟΜΑ/Ν.Α.ΜΕ	ΥΠΟΓΡ./SIGN.	ΟΝΟΜΑ/Ν.Α.ΜΕ	ΥΠΟΓΡ./SIGN.	ΠΕΡΙΓΡΑΦΗ / DESCRIPTION	
				ΕΓΚΡΙΘΗΚΕ / APPROVED		ΕΠΙΚΥΡΩΘΗΚΕ / AUTHORIZED			

ΜΕΤΡΟ ΘΕΣΣΑΛΟΝΙΚΗΣ THESSALONIKI METRO  ΑΤΤΙΚΟ ΜΕΤΡΟ Α.Ε.	ΜΕΤΡΟ ΘΕΣΣΑΛΟΝΙΚΗΣ «ΝΕΟΣ ΣΙΔΗΡΟΔΡΟΜΙΚΟΣ ΣΤΑΘΜΟΣ – ΣΤΑΘΜΟΣ Ν. ΕΛΒΕΤΙΑ ΚΑΙ ΑΜΑΞΟΣΤΑΣΙΟ ΠΥΛΑΙΑΣ» THESSALONIKI METRO "NEW RAILWAY STATION – N. ELVETIA STATION AND PILEAS DEPOT" ΕΡΓΟ / PROJECT: CON-06/004 ΜΕΛΕΤΗ, ΚΑΤΑΣΚΕΥΗ ΚΑΙ ΘΕΣΗ ΣΕ ΛΕΙΤΟΥΡΓΙΑ ΤΟΥ ΜΕΤΡΟ ΘΕΣΣΑΛΟΝΙΚΗΣ DESIGN, CONSTRUCTION AND COMMISSIONING OF THESSALONIKI METRO
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ΝΟΜΙΜΟΙ ΕΚΠΡΟΣΩΠΟΙ / AUTHORIZED SIGNATORIES ΕΓΕΚ - INFRASTRUTTURE E SERVIZI SELI - ANSALDOBRED A  ΓΙΑ ΧΡΗΣΗ ΣΕ ΤΕΧΝΙΚΑ ΕΓΓΡΑΦΑ ΜΟΝΟ FOR TECHNICAL DOCUMENTS ONLY	ΑΝΑΔΟΧΟΣ – ΕΚΔΙΔΟΥΣΑ ΕΤΑΙΡΕΙΑ ΕΓΓΡΑΦΟΥ CONTRACTOR – DOCUMENT ISSUING COMPANY  Κουσερτζή ΜΕΤΡΟ ΘΕΣΣΑΛΟΝΙΚΗΣ ΕΡΓΟ: CON - 06 / 004
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ΤΙΤΛΟΣ / TITLE		
CBACS (Σύστημα Κεντρικό Ελέγχου Αυτοματισμού Κτιρίων) <Greek Title> CBACS (Central Building Automation Control System) DFD – System Architecture Block Diagrams		
ΑΝΑΦΟΡΑ ΑΝΑΔΟΧΟΥ / CONTRACTOR'S REFERENCE _ _ _ _ _	ΓΛΩΣΣΑ / LANGUAGE EN	ΑΡΙΘΜΟΣ ΕΓΓΡΑΦΟΥ – ΣΧΕΔΙΟΥ / DOCUMENT – DRAWING NUMBER 1 G 0 0 P S 2 5 0 C 7 0 2 A
ΑΡΧΕΙΟ / FILENAME 1G00PS250C702A_EN_00.doc	ΚΑΙΜΑΚΑ / SCALE _ _ _ : _ _ _	ΣΕΛΙΔΑ / SHEET No 1 of 14

Item Title
CBACS (Central Building Automation Control System)
DFD – System Architecture Block Diagrams

Item Code
1G00PS250C702

History of Revisions:

4	29.09.14	C. Agliottone	R. Palma	G. Rizzi	I. Fulgieri	DFD stage – Engineer's name having authorization role have been changed. Then, relevant cover-sheet's field has been updated.
3	10.07.14	R. Palma	P. Rapacciuolo	G. Rizzi	I. Fulgieri	DFD stage: - Updated PBS codes removing zeroes in room number section. - Updated PBS codes of Power Supply Cabinet and Power Distribution Box. - Updated PBS code of Depot-CBACS components at OCC Central Control Room, OCC Equipment Room and Depot Control Room. Acronym of geographic area updated from D14 to B14. - Input documents code has been changed; in particular, Bill of Materials has now code 1G00PS250K111, whilst Components' Datasheets has now code 1G00PS250G211. - Equipment out of subsystem's scope have been clearly identified by '*' symbol.
2	11.06.14	R. Palma	P. Rapacciuolo	G. Rizzi	I. Fulgieri	DFD stage: - Rooms' codes have been changed to comply with System's architectural drawing documents. Then, location codes in the relevant PBS codes have been updated. - Engineer's name having authorization role have been changed. Then, relevant cover-sheet's field has been updated. "From-To" tables have been added.
1	31.12.13	R. Palma	P. Rapacciuolo	G. Rizzi	I. Fulgieri	DFD stage – First issue.
ΑΝΑΘ. REV.	ΗΜ/ΝΙΑ DATE	ΣΥΝΤ. INIT.	ΕΛΕΓΧ. CHK.	ΕΓΚΡΙΘΗΚΕ APPROVED	Πελάτης ΕΛΕΓΧ. Customer CHK.	ΠΕΡΙΓΡΑΦΗ DESCRIPTION

Communications and Open Issues:

1						
ΑΝΑΘ. REV.	ΚΩΔΙΚΟΣ CODE	ΑΠΟΣΤ. SENDER	ΠΑΡΑΛ. RECEIVER	ΠΕΡΙΓΡΑΦΗ DESCRIPTION	ΑΠΟΚΡΙΣΗ RESPONSE	ΚΑΤΑΣ. STATE

TOMEAS A
Ελληνική Γλώσσα

SECTION B
English Language

A	23.10.14	1G00PS250C702A_EN_00.DOC	CBACS (Σύστημα Κεντρικό Ελέγχου Αυτοματισμού Κτιρίων)	1G00PS250C702
Αναθ.- Rev.	Ημ/νια- Date	Αρχείο-Filename	<Greek Title> CBACS (Central Building Automation Control System) DFD – System Architecture Block Diagrams	Σελίδα-Page 4 / 14

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None.

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1 Introduction

1.1 Context Description

This document is relevant to the Central Building Automation Control System (CBACS) and the Depot Central Building Automation Control System (Depot-CBACS) of Thessaloniki Metro Project.

Both subsystems, CBACS and Depot-CBACS, are the HMI level of the Building Automation Control System (BACS); thus, they don't include BACS' Field level.

The CBACS allows monitoring and, where applicable, command building automation equipment in the stations, tunnels and along the railway.

The Depot-CBACS allows monitoring and, where applicable, command building automation equipment at the depot.

The building automation equipment can be grouped in the three below listed types:

- Electro-Mechanical (escalators, lifts, UPS, pumps, fire detectors);
- Heating, Ventilation and Air Conditioning (HVAC);
- Ventilation (exhaust fans, over-track exhaust fans, supply air fans, blast shaft fans, jet fans).

1.2 Scope of the Document

The scope of this document is to describe for both subsystems, CBACS and Depot-CBACS, the relevant architecture block diagrams, then:

- Location where the HW components are installed and operate;
- Power supply and network connecting cables' quantity and type for each HW components.

A	23.10.14	1G00PS250C702A_EN_00.DOC	CBACS (Σύστημα Κεντρικό Ελέγχου Αυτοματισμού Κτιρίων)	1G00PS250C702
Αναθ.- Rev.	Ημ/νια- Date	Αρχείο-Filename	CBACS (Central Building Automation Control System) DFD – System Architecture Block Diagrams	Σελίδα-Page 7 / 14

1.3 Reference Documents

1.3.1 Input Documents

Table 1-1 – Input Documents

Item #	Code	Title	Date	Rev #
ID.01	1G00PS250G105	CBACS. DFD Technical Specification.		A
ID.02	1G00PS250K111	CBACS. DFD Bill of Materials.		A
ID.03	1G00PS258G105	CBACS Safe. DFD Technical Specification.		A
ID.04	1G00PS258K111	CBACS Safe. DFD Bill of Materials.		A

1.3.2 Applicable Documents

Table 1-2 – Applicable Documents

Item #	Code	Title	Date	Rev #
AD.01	1G00PS250G211	CBACS. DFD Components Datasheets.		A
AD.02	1G00PS250C106	CBACS. DFD OCC Server Rack Electrical Schemes and Diagrams.		A
AD.03	1G00PS250O111	CBACS. DFD Racks and Equipment Description.		A

1.3.3 Previous Stage Document

This paragraph defines if this document has been already issued in previous project's stages GFD1 or GFD2. If yes, the revision 'A' of this document takes as input the previous stage document, in the last issued revision, and relevant open issues.

Table 1-3 – Previous Stage Document

Item #	Code	Title	Date	Rev #
PD	1G00PS250B702	CBACS. GFD2 System Architecture Block Diagrams.		B

1.3.4 Literature Documents

Table 1-4 – Literature Documents

Item #	Code	Title	Date	Rev #
LD.01	None.	None.	None.	None.

1.3.5 Customer's Design Review Documents

First issue of this document, then no Customer's design review document referred.

Table 1-5 – Customer's Design Review

Item #	Code	Title	Date	Rev #
DD.01	None.	None.	None.	None.

1.3.6 Verification Documents

Table 1-6 – Verification Documents

Item #	Code	Title	Date	Rev #
VD.01	1G00PS250G105	CBACS. DFD Technical Specification.		A
VD.02	1G00PS250K111	CBACS. DFD Bill of Materials.		A
VD.03	1G00PS258G105	CBACS Safe. DFD Technical Specification.		A
VD.04	1G00PS258K111	CBACS Safe. DFD Bill of Materials.		A

1.4 Reference Standards and Regulations

Table 1-7 – Reference Standards and Regulations

Item #	Code	Title	Date	Rev #
ST.01	None.	None.	None.	None.

1.5 Glossary of Terms

Table 1-8 – Glossary of Terms

Term	Description
None.	None.

1.6 Glossary of Acronyms

Table 1-9 – Glossary of Acronyms

Acronym	Description
BACS	Building Automation Control System.
CBACS	Central Building Automation Control System.
CCR	Central Control Room.
DCR	Depot Control Room.
Depot-BACS	Depot Building Automation Control System.
Depot-CBACS	Depot Central Building Automation Control System.
DFD	Detailed Final Design.
DTS	Digital Transmission System.
DTSR	Digital Transmission System Rack.
EQP	Equipment Room.
GFD1	General Final Design 1.
GFD2	General Final Design 2.
HW or H/W	Hardware.
IT	Information Technology Infrastructure.
KVM	Keyboard Video Mouse.
LAN	Local Area Network.
LRU	Lowest Replaceable Unit or Line Replaceable Unit.
OCC	Operation Control Centre.
PBS	Product Breakdown Structure.
PLC	Programmable Logic Controller.
SMR	Station Master Room.
SW or S/W	Software.
TLC	Telecommunication System or Telecom Room.
UPS	Un-interruptible Power Supply.
WAN	Wide Area Network.

2 History of Revisions

2.1 Revision A

2.1.1 List of Changes

First issue of this document, then no list of changes is defined.

Table 2-1 – Revision A – List of Changes

Item #	Reference	Remark / Question / Deficiency	Response	Changed Sections
RA.01	None.	None.	None.	None.

2.1.2 List of Open Issues

First issue of this document, then no list of open issues is defined.

Table 2-2 – Revision A – List of Open Issues

Item #	Reference	Remark / Question / Deficiency	Response
OA.01	None.	None.	None.

2.1.3 Verification Report

Table 2-3 – Revision A – Verification Report

Item #	Reference	Verification Description	Result
VA.01	VD.01	All HW groups and subgroups defined in the VD.01 document are included in this document.	Success.
VA.02	VD.02	- All HW groups and subgroups defined in the VD.02 document are included in this document. - PBS coding rules defined in the VD.02 document have been applied to this document.	Success.
VA.03	VD.03	All HW groups and subgroups defined in the VD.03 document are included in this document.	Success.
VA.04	VD.04	- All HW groups and subgroups defined in the VD.04 document are included in this document. - PBS coding rules defined in the VD.04 document have been applied to this document.	Success.

3 CBACS' Architecture Block Diagrams

3.1 General Description

CBACS' HW components are installed and operate in the below listed locations:

- OCC rooms:
 - Equipment Room;
 - Central Control Room;
 - Maintenance Room;
- The thirteen Station Master Rooms.

3.2 Architecture Drawings

CBACS' architecture drawings are included in the [Annex #2](#).

They show, for each HW component:

- Position in the relevant location;
- Power supply and network connecting cables' relationship.

3.3 Cables Specifications

Mechanical Specifications:

CONDxSECTION	TYPE	D.ext	Rmin	Weight [kg/km]
3G1.5	XLPE	10.7	130	163
3G2.5	XLPE	11.06	140	205
3G4	XLPE	12.5	150	260
3G6	XLPE	14.3	170	369
3G10	XLPE	17	200	529

EMI Specifications:

MN	NS	230Vac / 400Vac / 110Vdc / 24Vdc cables.
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The [Annex #3](#) defines the FROM TO Table (OCC and SMRs).

4 Depot-CBACS' Architecture Block Diagrams

4.1 General Description

Depot-CBACS' HW components are installed and operate in the below listed locations:

- OCC rooms:
 - Equipment Room;
 - Central Control Room;
- Depot Control Room.

4.2 Architecture Drawings

Depot-CBACS' architecture drawings are included in the **Annex #2**.

They show, for each HW component:

- Position in the relevant location;
- Power supply and network connecting cables' relationship.

4.3 Cables Specifications

Mechanical Specifications:

CONDxSECTION	TYPE	D.ext	Rmin	Weight [kg/km]
3G1.5	XLPE	10.7	130	163
3G2.5	XLPE	11.06	140	205
3G4	XLPE	12.5	150	260
3G6	XLPE	14.3	170	369
3G10	XLPE	17	200	529

EMI Specifications:

MN	NS	230Vac / 400Vac / 110Vdc / 24Vdc cables.
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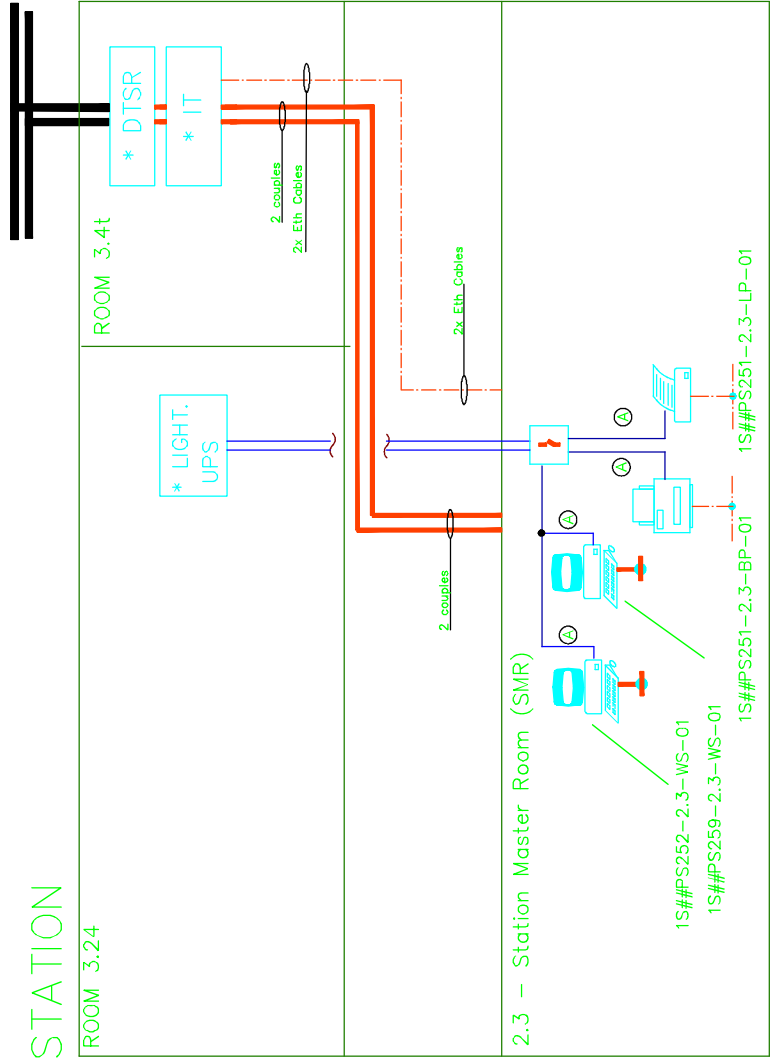
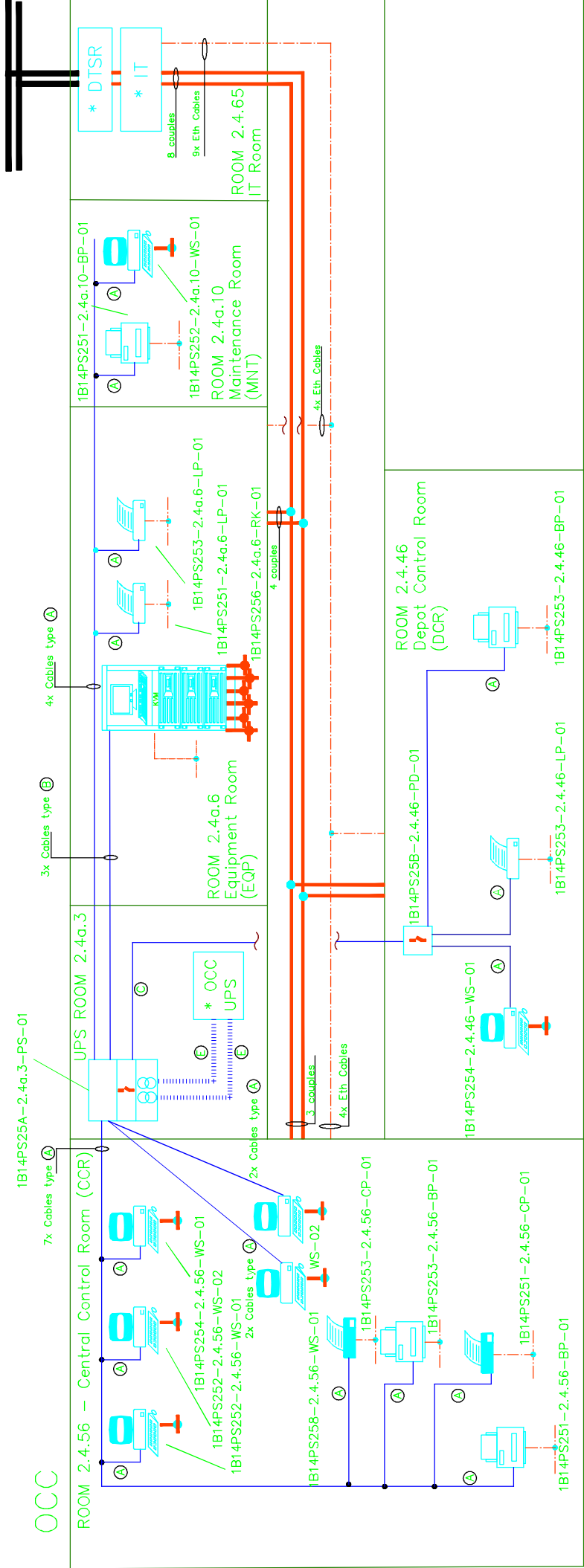
The **Annex #3** defines the FROM TO Table (OCC and DCR).

ΠΑΡΑΡΤΗΜΑΤΑ / APPENDICES

A/A R/N	ΚΩΔΙΚΟΣ CODE	ΤΙΤΛΟΣ TITLE	ΑΝΑΘΕΩΡΗΣΗ REVISION
1	01	CBACS DFD – System Architecture Block Diagrams	A
2	02	CBACS DFD – System Architecture Block Diagrams	A
3	03	CBACS DFD – System Architecture Block Diagrams	A

L E G E N D	
DETAILS	
.....	HARDWIRED POINTS
=====	WAN (Redundant Optical Fiber) see NOTE 1, 3
=====	ETHERNET LAN (Redundant STP Copper) see NOTE 1, 3
-----	ETHERNET – STP (COPPER) see NOTE 3
	REDUNDANT 400Vac POWER SUPPLY CABLES A= 3G1.5 see NOTE 1, 3 B= 3G2.5 C= 3G4 D= 3G6 E= 5G10
—	230Vac POWER SUPPLY CABLE see NOTE 2, 3
N O T E S	
1 – Separate cable ways for Redundant Cables 2 – Separate cable ways for 2 x Cables @230Vac to OCC Server Rack and to SMR Power Distribution Cabinet	
* IT	IT INFRASTRUCTURE [Out of CBACS Scope] COLOUR LASER PRINTER
* DTSP	DTSP [Out of CBACS Scope]
	LINE PRINTER LCD MONITOR
	B/W LASER PRINTER POWER DISTRIBUTION CABINET
	SERVER RACK
	POWER SUPPLY CABINET
* LIGHT. UPS	LIGHTING UPS [Out of CBACS Scope]
* OCC UPS	OCC UPS [Out of CBACS Scope]
PBS – GEOGRAPHICAL LOCATION CODE where ## = 01 = New Railway station 07 = Papafi station 02 = Dimokratias station 08 = Efklidi station 03 = Venizelou station 09 = Fleming station 04 = Ag. Sofias station 10 = Andipseos station 05 = Sintrivani station 11 = Patrikiou station 06 = Panepistimio station 12 = Voulgari station 13 = Nea Elvetia station	

ISSUED BY:		DOCUMENT NUMBER:	
AEGEK – IMPREGILO – Ansaldo STS. – SELI – ANSALDOBREDA JOINT VENTURE		1 G 0 0 P S 2 5 0 C 7 0 2 A 0 1	
TITLE		SCALE : n.a.	
CBACS – DFD System Architecture Block Diagrams – ANNEX 1		SHEET No : 1/1	



ISSUED BY:		DOCUMENT NUMBER:	
AEGEK – IMPREGILO – Ansaldo STS. – SELI – ANSALDOBREDA JOINT VENTURE		1G00P S250C702A02	
TITLE		SCALE : n.a.	
CBACS – System Architecture Block Diagrams – ANNEX 2		SHEET No : 1/1	

From To Cable table																									1G00PS250C702A_EN_03										Rev.	A		
Technical description:		CBACS																							Doc Number:		PS250											
Location description:		OCC and Station Master Rooms																							Subsystem Code :		P250											
CABLE NUMBER		STARTING EQUIPMENT																							Location Code :		ENDING EQUIPMENT											
Area	System	Prog	ES	Area	PBS Code	Location	Description	Area	trans	Area	PBS Code	Location	Function	Component	Description	OIS	COND x SEC	TYPE	Dist	Rmin	EMI	EM/EMC	L Parz (m)	L Tot (m)	MOD													
Routing			CBACS	001			Power Supply Cabinet				IB14PS25A-2.4x3-PS-01	Power Supply Cabinet			CBACS OCC Workstation 01		351.5	XLPE	10.7	130	MN	NS		100														
Routing			CBACS	002			Power Supply Cabinet				IB14PS25A-2.4x3-PS-01	Power Supply Cabinet			CBACS OCC Workstation 02		351.5	XLPE	10.7	130	MN	NS		100														
Routing			CBACS	003			Power Supply Cabinet				IB14PS25A-2.4x3-PS-01	Power Supply Cabinet			Depot CBACS OCC Workstation		351.5	XLPE	10.7	130	MN	NS		100														
Routing			CBACS	004			Power Supply Cabinet				IB14PS25A-2.4x3-PS-01	Power Supply Cabinet			CBACS Safe OCC Workstation 01		351.5	XLPE	10.7	130	MN	NS		100														
Routing			CBACS	005			Power Supply Cabinet				IB14PS25A-2.4x3-PS-01	Power Supply Cabinet			CBACS Safe OCC Workstation 02		351.5	XLPE	10.7	130	MN	NS		100														
Routing			CBACS	006			Power Supply Cabinet				IB14PS25A-2.4x3-PS-01	Power Supply Cabinet			CBACS OCC Black and White Laser Printer		351.5	XLPE	10.7	130	MN	NS		100														
Routing			CBACS	007			Power Supply Cabinet				IB14PS25A-2.4x3-PS-01	Power Supply Cabinet			CBACS OCC Color Laser Printer		351.5	XLPE	10.7	130	MN	NS		100														
Routing			CBACS	008			Power Supply Cabinet				IB14PS25A-2.4x3-PS-01	Power Supply Cabinet			Depot CBACS OCC Black and White Laser Printer		351.5	XLPE	10.7	130	MN	NS		100														
Routing			CBACS	009			Power Supply Cabinet				IB14PS25A-2.4x3-PS-01	Power Supply Cabinet			Depot CBACS OCC Black and White Laser Printer		351.5	XLPE	10.7	130	MN	NS		100														
Routing			CBACS	009			Power Supply Cabinet				IB14PS25A-2.4x3-PS-01	Power Supply Cabinet			Depot CBACS OCC Color Laser Printer		351.5	XLPE	10.7	130	MN	NS		100														
Routing			CBACS	010			Power Supply Cabinet				IB14PS25A-2.4x3-PS-01	Power Supply Cabinet			CBACS OCC Server Rack		352.5	XLPE	11.06	140	MN	NS	Line 1	100														
Routing			CBACS	011			Power Supply Cabinet				IB14PS25A-2.4x3-PS-01	Power Supply Cabinet			CBACS OCC Server Rack		352.5	XLPE	11.06	140	MN	NS	Line 2	100														
Routing			CBACS	012			Power Supply Cabinet				IB14PS25A-2.4x3-PS-01	Power Supply Cabinet			CBACS OCC Line Printer		351.5	XLPE	10.7	130	MN	NS		100														
Routing			CBACS	013			Power Supply Cabinet				IB14PS25A-2.4x3-PS-01	Power Supply Cabinet			Depot CBACS OCC Line Printer		351.5	XLPE	10.7	130	MN	NS		100														
Routing			CBACS	014			Power Supply Cabinet				IB14PS25A-2.4x3-PS-01	Power Supply Cabinet			CBACS OCC Maintenance Workstation		351.5	XLPE	10.7	130	MN	NS		100														
Routing			CBACS	015			Power Supply Cabinet				IB14PS25A-2.4x3-PS-01	Power Supply Cabinet			CBACS OCC Maintenance Black and White Laser Printer		351.5	XLPE	10.7	130	MN	NS		100														
Routing			CBACS	016			Power Distribution Box				IB14PS25B-2.4.46-PD-01	Power Distribution Box			Depot CBACS DCR Black and White Laser Printer		351.5	XLPE	10.7	130	MN	NS		100														
Routing			CBACS	017			Power Distribution Box				IB14PS25B-2.4.46-PD-01	Power Distribution Box			Depot CBACS DCR Line Printer		351.5	XLPE	10.7	130	MN	NS		100														
Routing			CBACS	018			Power Distribution Box				IB14PS25B-2.4.46-PD-01	Power Distribution Box			Depot CBACS DCR Workstation		351.5	XLPE	10.7	130	MN	NS		100														
Routing			CBACS	019			Power Supply Cabinet				IB14PS25A-2.4x3-PS-01	Power Supply Cabinet			Power Distribution Box		351.5	XLPE	10.7	130	MN	NS		100														
Routing			CBACS	020			DTSR IT				DTSR IT	DTSR IT Ethernet Switch			CBACS OCC Workstation 01		8 x 24AWG	FTP CAT5e						100														
Routing			CBACS	021			DTSR IT				DTSR IT	DTSR IT Ethernet Switch			CBACS OCC Workstation 02		8 x 24AWG	FTP CAT5e						100														
Routing			CBACS	022			DTSR IT				DTSR IT	DTSR IT Ethernet Switch			Depot CBACS OCC Workstation		8 x 24AWG	FTP CAT5e						100														
Routing			CBACS	023			DTSR IT				DTSR IT	DTSR IT Ethernet Switch			CBACS Safe OCC Workstation 01		8 x 24AWG	FTP CAT5e						100														
Routing			CBACS	024			DTSR IT				DTSR IT	DTSR IT Ethernet Switch			CBACS Safe OCC Workstation 02		8 x 24AWG	FTP CAT5e						100														
Routing			CBACS	025			DTSR IT				DTSR IT	DTSR IT Ethernet Switch			CBACS OCC Black and White Laser Printer		8 x 24AWG	FTP CAT5e						100														
Routing			CBACS	026			DTSR IT				DTSR IT	DTSR IT Ethernet Switch			CBACS OCC Color Laser Printer		8 x 24AWG	FTP CAT5e						100														
Routing			CBACS	027			DTSR IT				DTSR IT	DTSR IT Ethernet Switch			Depot CBACS OCC Black and White Laser Printer		8 x 24AWG	FTP CAT5e						100														
Routing			CBACS	028			DTSR IT				DTSR IT	DTSR IT Ethernet Switch			Depot CBACS OCC Color Laser Printer		8 x 24AWG	FTP CAT5e						100														
Routing			CBACS	029			DTSR IT				DTSR IT	DTSR IT Ethernet Switch			CBACS OCC Server Rack		8 x 24AWG	FTP CAT5e						100														

From To Cable table																							Rev.	A
Technical description:		Doc Number:										PS250										Rev.		
CABLE NUMBER		Subsystem Code :										OCC												
Location description:		Location Code :										OCC												
STARTING EQUIPMENT		ENDING EQUIPMENT										CABLE DATA												
Area	System	Prog	ES	Area	PBS Code / Location	Description	Area	trans	Area	PBS Code / Location	Function	Component	Description	ONS	COND x SEC	TYPE	Dist	Rmin	EMI/EMC	L Parz (m)	L Tot (m)	MOD		
	CBACS	030				DTSR IT				1B14PS256-2.4s.6-RK-01			CBACS OCC Server Rack			8 x 24AWG	FTP CAT 5e					100		
Routing																								
	CBACS	031				DTSR IT				1B14PS256-2.4s.6-RK-01			CBACS OCC Server Rack			8 x 24AWG	FTP CAT 5e					100		
Routing																								
	CBACS	032				DTSR IT				1B14PS256-2.4s.6-RK-01			CBACS OCC Server Rack			8 x 24AWG	FTP CAT 5e					100		
Routing																								
	CBACS	033				DTSR IT				1B14PS256-2.4s.6-RK-01			CBACS OCC Server Rack			8 x 24AWG	FTP CAT 5e					100		
Routing																								
	CBACS	034				DTSR IT				1B14PS256-2.4s.6-RK-01			CBACS OCC Server Rack			8 x 24AWG	FTP CAT 5e					100		
Routing																								
	CBACS	035				DTSR IT				1B14PS251-2.4s.6-LP-01			CBACS OCC Line Printer			8 x 24AWG	FTP CAT 5e					100		
Routing																								
	CBACS	036				DTSR IT				1B14PS253-2.4s.6-LP-01			Depot-CBACS OCC Line Printer			8 x 24AWG	FTP CAT 5e					100		
Routing																								
	CBACS	037				DTSR IT				1B14PS252-2.4s.10-WS-01			CBACS OCC Maintenance Workstation			8 x 24AWG	FTP CAT 5e					100		
Routing																								
	CBACS	038				DTSR IT				1B14PS251-2.4s.10-BP-01			CBACS OCC Maintenance Black and White Laser Printer			8 x 24AWG	FTP CAT 5e					100		
Routing																								
	CBACS	039				DTSR IT				1B14PS253-2.4.46-BP-01			Depot-CBACS DCR Black and White Laser Printer			8 x 24AWG	FTP CAT 5e					100		
Routing																								
	CBACS	040				DTSR IT				1B14PS253-2.4.46-LP-01			Depot-CBACS DCR Line Printer			8 x 24AWG	FTP CAT 5e					100		
Routing																								
	CBACS	041				DTSR IT				1B14PS254-2.4.46-WS-01			Depot-CBACS DCR Workstation			8 x 24AWG	FTP CAT 5e					100		
Routing																								
	CBACS	042				SMR POP				1S##PS252-2.3-WS-01			CBACS SMR Workstation			361.5	XLPE	10.7	130	MN	NS		100	
Routing																								
	CBACS	043				SMR POP				1S##PS256-2.3-WS-01			CBACS Safe SMR Workstation			361.5	XLPE	10.7	130	MN	NS		100	
Routing																								
	CBACS	044				SMR POP				1S##PS251-2.3-BP-01			CBACS SMR Black and White Laser Printer			361.5	XLPE	10.7	130	MN	NS		100	
Routing																								
	CBACS	045				SMR POP				1S##PS251-2.3-LP-01			CBACS SMR Line Printer			361.5	XLPE	10.7	130	MN	NS		100	
Routing																								
	CBACS	046				DTSR IT				1S##PS252-2.3-WS-01			CBACS SMR Workstation			361.5	XLPE	10.7	130	MN	NS		100	
Routing																								
	CBACS	047				DTSR IT				1S##PS256-2.3-WS-01			CBACS Safe SMR Workstation			361.5	XLPE	10.7	130	MN	NS		100	
Routing																								
	CBACS	048				DTSR IT				1S##PS251-2.3-BP-01			CBACS SMR Black and White Laser Printer			361.5	XLPE	10.7	130	MN	NS		100	
Routing																								
	CBACS	049				DTSR IT				1S##PS251-2.3-LP-01			CBACS SMR Line Printer			361.5	XLPE	10.7	130	MN	NS		100	
Routing																								

LEGEND:	LEGEND:
CABLE NUMBER	CABLE INFORMATION
Area: starting locality / cable beginning	OS: Object Identification System Document
System: cable owner system	COND x SEC: numbers of conductors (cables) and their sections
ES: Cable electromagnetic	COND: cable conductor type
ES: Cable electromagnetic	DEST: Cable destination
STARTING EQUIPMENT : EQUIPMENT from which the cable begins	Rmin: Minimum cable radius of curvature
LC: starting locality / cable beginning, place where the EQUIPMENT is set	EMI: EMI Code
OS: Object Identification System Document	EMI/EMC : functional segregation cable characteristics during its particular service according to CWR/TS-COB-3.5 Electrical Installation cap. 6.4.4
COMPARTMENT : for EQUIPMENT assemblies	L parz (m): cable length routed into the locality
OS: Object Identification System Document	Emi: maximum design cable length according to its functional electrical characteristics, expressed in linear meters
DESCRIPTION : short description	NOTES : additional information
LC trans: locality codes in which the cable passes (if there are), not including LC e LC-e	MOD : cable revision index (it takes the following values to apply for the first document emission; for the next emissions: empty for not changed cable, N for new emission)
ENDING EQUIPMENT : EQUIPMENT in which the cable ends (*)	(*) In case the cable ends into an another subsystems' EQUIPMENT, the ending EQUIPMENT data must be univocal for both the subsystems. Moreover, the subsystems
LC-e: ending locality / cable ending, place where the ending EQUIPMENT is set	
OS: Object Identification System Document	
COMPONENT : remarkable elements inside the EQUIPMENT/Compartment to which cables must be connected (es. terminals, switchboards, ecc)	
OS: Object Identification System Document	
DESCRIPTION : short description	
LC trans: locality codes in which the cable passes (if there are), not including LC e LC-e	
ENDING EQUIPMENT : EQUIPMENT in which the cable ends (*)	
LC-e: ending locality / cable ending, place where the ending EQUIPMENT is set	
OS: Object Identification System Document	
COMPONENT : remarkable elements inside the EQUIPMENT/Compartment to which cables must be connected (es. terminal strips, switchboards, ecc)	
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