

# **Bill of Quantity**

**Civil- electrical-IT**

**First Floor - Estimated Bill of Quantity (Civil)**

Item		Description	Unit	Quantity	Unit price	Total Price
Security measures& mitigation	1-1 Doors	The main apartment wooden door (D1 see index 1) with the dimension of approx. (203cmx112cm) should reinforced with 6mm metal plate from inside, should be provided with metal bar lock too to adequate with the attached technical specifications. (See annex 1A).	No	1		
		The side main apartment wooden door (D2 see index 1) with the dimension of approx. (203cmx88cm) should reinforced with 6mm metal plate from inside, should be provided with metal bar lock too and should be provided with an exterior metal burglar protection. (See annex 1B and annex 14).	No	1		
		Remove the glass panels and replace with 6 mm wooden structure for the doors(D4-D5-D6-D7-D8-D9-D10-D11-D12) including any necessary repairs, including painting according to the plan drawing, and index 1-(for D3 annex 10)	m2	9		
		Remove the glass panels and replace with 6 mm wooden structure for doors(D3), and supply two wooden panel of 6mm thickness to the upper part of the door, including any necessary repairs, including painting according to the plan drawing, and index 1 and annex 10)	m2	2.3		
		Supply and install additional two wooden doors (D17& D18), similar shape to the current doors, with all required accessories and installations, including painting (according to the plan drawing, and index 2).	No	2		
		Supply and install additional metal door (D21 two parts, 97x 200 and 40x200cm) with all necessary accessories (according to index 2 and annex 12).	No	1		
		To maintain of the two attics doors with all required accessories including painting according to the plan drawing, and index 1	No	2		
		All locks of the apartment`s doors should be checked.	No	Lump sum		
	1-2 Windows	Supply and install single shelter resistance film (SRF) (200 microns inside only) for aluminum windows and doors glass (W2-W5-W6-W7-W8-W9-W11-W12-W14) according to the plan drawing and index 4	m²	19		
		Supply and install double shelter resistance film (SRF)Vice-versa (200 microns inside and outside ) for the front windows and doors glass that facing the street (W1-W3-W4-W10) according to the plan drawing and index 4	m²	27		
		All aluminum sliding doors (W3- W4- W7), according to the plan drawing and index 4) should be provided with frame catcher with all necessary accessories, these aluminum doors will be equipped with steel capture according to annex 3.	No	3		
		All aluminum sliding windows (W2-W6-W8-W9-W10), according to the plan drawing and index 4) should be	No	5		

		provided with frame catcher with all necessary accessories, these windows will be equipped with steel catcher. According to annex 2.				
		The aluminum sliding windows (W1), according to the plan drawing and index 4) should be provided with frame catcher with all necessary accessories, this window will be equipped with steel catcher. According to annex 6.	No	1		
		Install one exterior metal box to (W10, see the plan drawing and index	No	1		
		The aluminum sliding door (W7) according to the plan drawing and index3) should be provided with exterior metal burglar protections with all necessary accessories, according to (annex 11).	No	1		
		All aluminum sliding windows (W2-W6-W8-W9) according to the plan drawing and index3) should be provided with exterior metal burglar protections with all necessary accessories, according to (annex 11).	NO	4		
		The aluminum sliding door (W11-W14) according to the plan drawing and index3) should be provided with exterior metal burglar protections with all necessary accessories, according to (annex 14).	No	2		
		The aluminum door (W12) according to the plan drawing and index3) should be provided with exterior sliding metal burglar protections with all necessary accessories, according to (annex4).	No	1		
		Supply and install aluminum window (W9) approx. (100x150cm, according to the plan drawing and index 4).	No	1		
		Maintenance for all aluminum windows.	No	14		
<b>Subtotal</b>						
1-3 Safe heaven room	3-1	The wooden door (D14 see index 1) with the dimension of approx. (180cmx51cm) should reinforced with 6mm metal plate from inside the heaven room. The door should be provided with metal bar lock too. (See annex 8 and annex 11).		1		
	3-2	Supply and install additional sliding reinforced door (D20), in front of (D7) outside the safe heaven room. The door should be provided with metal bar lock too. (See annex 9).		1		
	3-3	Supply and install additional sliding reinforced window (D22) in front of (W5) inside the safe heaven room. The door should be provided with metal bar lock too. (See annex 13).		1		
	3-4	The aluminum sliding window (W5) according to the plan drawing and index3) should be provided with exterior metal burglar protections with all necessary accessories, according to (annex 14).		1		
<b>Subtotal</b>						
1-4 Metal emergency staircase	Supply and install additional metal emergency staircase lead from the edge of window (D5) to the back yard in the ground floor. 4-1 The supporting metal tube structure (4x4x0.3cm), including labors, materials and all required works, according the plan drawings. approx. 4-2 Supply and install supporting metal tube structure/L shape/		Kg	460		

	<p>(4x4x0.3cm), supporting the staircase body, including labors, materials and all required works, according the drawings, approx. weight (100kg).</p> <p>4-3 The metal plates (3mm) as stairs (dimension: 90x20cm) including labors, materials and all required works, according the drawings.</p> <p>4-4 The rail tube (3x3x0.2), including labors, materials and all required works, according the plan drawings. (See the plan).</p>				
<b>Subtotal</b>					

Metal staircase Index 5							
Metal tube							
Item	Description	Dimensions mm	Thickness mm	Length M	Weight Kg	Unit price	Total price
8-1	Supply and install supporting metal tube structure/L shape/, including labors, materials and all required works, according the drawings	40x40	3m.m	57	100		
8-2	Supply and install supporting metal tube structure, including labors, materials and all required works, according the drawings	40x40	3m.m	63	220		
Metal plates							
8-3	Supply and install metal plates as stairs, including labors, materials and all required works, according the drawings		3m.m	10m2	240		
8-4	Supply and install metal plates, as double layers for walls and ceiling of the staircase body including labors, materials and all required works, according the drawings		6m.m	72m2	6912		
8-5	Ceiling extension	Length M	Width m	Thickness cm	Area m2		
	Supply and install additional part steel & cement as an extension ceiling to the ground floor next to the metal staircase with a thickness of 20 cm according to the plan drawing and section drawing.	3	1.5	30	4.5		
8-6	Painting						
8-6-1	Painting Works for walls, ceiling, and the supporting tubes, including labors, materials and all required works, oil paint (semi-gloss) for all flat walls, ceiling and supporting tubes, two painting coats ( interior& exterior).	150m2	-	-	-		
8-7	Stairs dressing						
8-7-1	Supply and install the stairs dressing with marble shits (thickness of 20m.m)including labors, materials and all required works, according the drawings	18m2	-	-	-		
Subtotal price							

Index 6					
Fire alarm system					
Symbol	Item	Description	Quantity	Unit price	Total Price
		The fire alarm system will contain detector units in each and every room and closed space in the apartment (see annex 16) and they are as follows:	-	-	-
H	Heat detector	In main kitchen space	1		
S	Smoke detector	In all spaces (according to annex 16)	6		
M	Manual alarm button	As shown in the main first floor (annex 16)	2		
X☐	Siren with flashes	Located inside the first floor as described and shown in the first floor plan.	1		
X☐	Siren with flashes	Located in the security guards control room in the ground floor plan.	1		
CCTV system					
⌵ IC	Indoor cameras	The places as described and shown in the main floor plan (annex 16). All technical specifications of the cameras will be detailed in the IT sheet of requirements.	7		
⌵ OC	Outdoor cameras	The places as described and shown in the main floor plan (annex 16). All technical specifications of the cameras will be detailed in the IT sheet of requirements.	6		
Outdoor Projectors led light					
☐	Outdoor projectors led light (50 w) should be provide and located as described and shown in the main floor plan and annex 16). All projectors light will be connected and controlled by the convenient switch breakers that will be supplied and installed in the security guards control room in the ground floor.		7		
Subtotal price					

Civil work						
Item	Title	Description	Unit	Quantity	Unit price	Total price
Architecture	1-1 Painting	Painting Works for walls and ceiling including labors, materials and all required works, oil paint (semi-gloss) for all flat walls two coats including touch up by putty with all work needed, especial treatment for the damaged spots in the walls	m <sup>2</sup>	400		
		Painting works for roller shutter including labors, materials and all required works.	pieces	9		
	1-2 Additional gypsum board walls in kitchen and salon	Supply and install Fixed gypsum board for wall with metal support structure according to the plan drawing	m <sup>2</sup>	85		
		Supply and install additional convenient ceramic skirt fixed to the new gypsum wall ( two sides) in the kitchen	M	11		
		Supply and install additional convenient marble skirt fixed to the new gypsum wall ( two sides) in salon	M	28		
	3-	remove the glass within the balcony`s railings.	-	Lump sump		
	4-	Install two metal plate layers of 6mm thickness to the three ceiling openings. (According to the plan and Annex 7).	m <sup>2</sup>	4.5		
	5- kitchen	4-1 Supply and install Fixed gypsum board as a wall with metal support structure to close the slot of door (D16) according to the plan drawing	m <sup>2</sup>	1.5		
		4-2 Peeling off and modifying the existing kitchen basin and the kitchen closet, according to the plan drawing.	-	Lump sump		
		4-3 Peeling off and excavation works of the existing concrete edge under the kitchen window	m 3	0.5 m3		

		(D9) (see the current plan drawing).				
		4-4 Check and repair the existing drainage system on the apartment/ when necessary/.	-	Lump sump		
		Supply and install water system (PEX tubing) outlets valve fitting, in kitchen with all necessary accessories.	-	Lump sump		
		4-5 Supply and install waste water System (PVC pipes) and all required accessories and installation	-	Lump sump		
	5 Light device	5-1 supply and install the necessary circle ceiling Lighting device in every indoor space and staircase, 220V 2x26W installed in ceiling-Flash Power Save lamp with all accessories.	Pieces	17		
	6 Air conditioning	6-1 Supply and install two A.C. split system unit (1800 BTU) in saloon.	Pieces	2		
		6-2 Cleaning the indoor and the outdoor units of the central air conditioning system.	-	Lump sump		
		6-3 Cleaning the indoor and the outdoor units of the air conditioner split unit.	-	1		
	7 ventilation	7-1 Supply and install Ventilation Industrial fan for safe heaven room with all required electrical installation.	Pieces	1		
		7-2 Supply and install Ventilation Industrial fan for kitchen and two bathrooms with all required electrical installation.	Pieces	3		
Subtotal price						



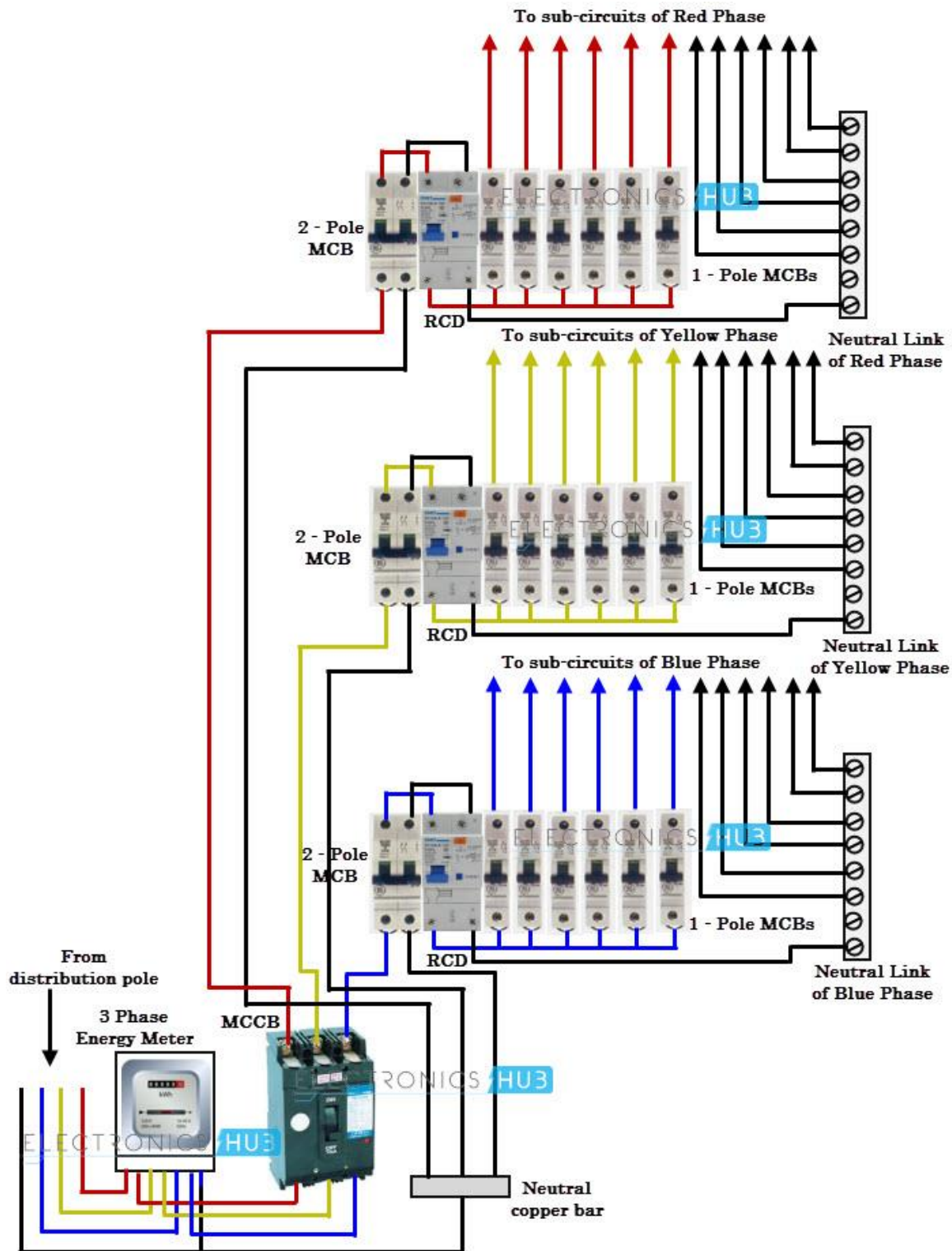
### Index 7- Electrical Sow

Total Price	Unit Price	Qty.	Description	Item	No.
		1	<ul style="list-style-type: none"> <li>- Capacity not less than 36 MCB circuit breakers.</li> <li>- Eaton/ Moeller, Legrand, Hager or equivalent...</li> <li>- Wall mounted / indoor.</li> <li>- Transparent impermeable cover.</li> <li>- Place for labeling each breaker.</li> <li>- Layout as per attached drawing.</li> <li>-Installed below the existing Main Distribution Board.</li> </ul>	<b>Main Distribution Board</b>	1
		3	<ul style="list-style-type: none"> <li>-Phase Indication Light.</li> <li>-To be installed in the new Main Distribution Board.</li> </ul>	<b>Phase Indication Lights</b>	2
		1	<ul style="list-style-type: none"> <li>- Eaton/Moeller, Legrand, Hager or equivalent...</li> <li>- MCCB 60-63A – Three Pole.</li> <li>-To be installed next to the 3-Phase Energy Meter.</li> </ul>	<b>Circuit Breaker</b>	3
		3	<ul style="list-style-type: none"> <li>- Eaton/Moeller, Legrand, Hager or equivalent...</li> <li>- MCB 60-63A – 2-Pole.</li> <li>-To be installed in the new Main Distribution Board.</li> </ul>	<b>Circuit Breaker</b>	4
		3	<ul style="list-style-type: none"> <li>- Eaton/Moeller, Legrand, Hager or equivalent...</li> <li>- 60-63A – 2-Pole. 30 mA Trip Current.</li> <li>-To be installed in the new Main Distribution Board.</li> </ul>	<b>RCD</b>	5
		11	<ul style="list-style-type: none"> <li>- Eaton/Moeller, Legrand, Hager or equivalent...</li> <li>- MCB 20A - SP</li> <li>- To be installed in the new Main Distribution Board.</li> </ul>	<b>Circuit Breaker</b>	5
		25	<ul style="list-style-type: none"> <li>- Eaton/Moeller, Legrand, Hager or equivalent...</li> <li>- MCB 25A - SP</li> <li>- To be installed in the Main Distribution Board.</li> </ul>	<b>Circuit Breaker</b>	6
		3	<ul style="list-style-type: none"> <li>-15 KVA single phase Automatic Voltage Regulator (220 VAC – 50 Hz).</li> <li>-Al-Hadara or equivalent.</li> </ul>	<b>Automatic Voltage Regulator</b>	7

			-LCD display (Voltage, Current, etc.). -OFF/By-pass Switch. -Installation place to be determined during site survey. -To be installed between the 3 Phase MCCB 60-63A and the 2-pole 60-63A MCB's.		
		68	-Preferable EU origin. -Wall mounted. -Grounding clips. -To be installed as per the apartment layout drawing.	<b>Wall sockets Schuko</b>	8
		To be determined by contractor upon site survey in agreement with UNDP	-Hosh Blas NYY Cables: -3x2.5 mm2, 3x4mm2, 3x16mm2.etc... -To be connected between every 25A circuit breaker installed in the main distribution board and every 4 x Schuko sockets as per the attached layout. -To be connected between every 20A circuit breaker installed in the main distribution board and every AC, IT cabinet and Fire System locations as per the attached layout.	<b>Power cables</b>	9
		To be determined by contractor upon site survey in agreement with UNDP	-Sizes to be determined by the contractor to fit all power cables, IT and phone cables connected to every room as per the attached layout.	<b>PVC Conduits</b>	10
		1	-Old and new Main Distribution Boards to be connected also to the ATS output of the Genset.	<b>Genset connection</b>	11
		To be determined by contractor upon site survey in agreement with UNDP	-Existing Ground for the apartment below shall be tested by the contractor. In case the resistance measured lies between 0.5 Ohm and 5 Ohm the ground of the new apartment can be connected to the existing one. Otherwise a new grounding net has to be established.	<b>Grounding net</b>	12
		2	-Shall be from a well-known manufacturer. -Cold and Hot Air Conditioning. -18000 BTU / 1.5 Ton. -Silent Operation.	<b>Air Conditioners (Split-Units)</b>	13
		<b>Subtotal price</b>			

### **Terms and Conditions:**

1. Site Visit is mandatory for anybody who wants to participate in the electricity part of the tender.
2. All items provided should have a one Year warranty.
3. Printed labels for all breakers in the new and old Distribution Boards indicating the room numbers and items connected shall be provided.
4. Lighting, Kitchen, Bathrooms, Central Air Conditioning unit and all non-Schuko sockets shall be connected to the existing Main Distribution Board.
5. Contractor has to inspect the existing electricity network and conduct any needed maintenance or replacement of faulty cables, switches or sockets connected to the existing Main Distribution Board.
6. Electrical works shall not exceed 2 weeks.
7. All electrical works will be supervised by a UNDP engineer in order to meet all the needed requirements related to modifications and or additions.



Index8- IT works					
Total Price	Unit Price	Qty	Description	Item	
		1	-24U -Preferable EU origin made -Has a transparent impermeable cover with lock and key -Equipped with fan and two multi socket power -Shelf included	<b>Communication Cabinet</b>	1
		2	-Brand 3M -RJ45 48 ports cat 6 -To be installed in the communication cabinet	<b>Patch Panel</b>	2
		2	-Brand : Cisco 24 ports switch -24 10/100 Ethernet ports -2 10/100/1000 Ethernet ports -2 POE ports -To be installed inside the communication cabinet	<b>Network switch</b>	3
		100	-Brand: 3M -1m length - cat 6	<b>Patch cord cables</b>	5
		27	-Brand: 3M -Includes one RJ45 jack and one RJ11 jack -Includes two labeling area -The RJ45 and RJ11 jacks should be frontal (not facing the ceiling or the ground) -To be installed as per the drawing	<b>Voice&amp; Data wall outlet</b>	6
		12	-Brand: 3M -Includes one RJ45 jack - The RJ45 jack should be frontal (not facing the ceiling or the ground) -To be installed as per the drawing	<b>Data wall outlet</b>	7
		To be determined by contractor upon site survey	-Cat 6 STP -To be connected and terminated to the patch panel from one side and to data outlets from the other side as per the drawing	<b>Data cables</b>	8
		To be determined by contractor upon site survey	-Brand: 3M -Cat 6 STP (Cable for each outlet) -To be connected and terminated to the voice patch panel from one side and to voice outlets from the other side as per the drawing	<b>Phone cables</b>	9
		To be	-Made of good plastic quality	<b>Conduits</b>	10

		determined by contractor upon site survey	-Sizes to be determined by the contractor to fit all data & phone cables extended to every data/voice outlet as per the drawing		
		2	-Cat 6 SFTP to be extended between both 2 <sup>nd</sup> floor communication cabinet and 1 <sup>st</sup> floor 's cabinet	<b>Ethernet Cable</b>	11
		1 cable with approximately 80m length	- 32 or 48 Pair cable to be connected between both communication cabinet 's voice patch panel and 1 <sup>st</sup> floor 's voice patch panel	<b>Voice cable</b>	12
		2	-Brand: Cisco -2.4 GHz -Type: indoor -POE -802.11 bgn -Features: DHCP,MAC filtering,WPA,WPA2,WEP -Multiple SSID -Support Vlan -Operational modes: AP, WDS, Wireless bridge -Preferable US brand -To be installed as per the drawing	<b>Wireless Access point</b>	13
		1	-Type: Online -Form factor: Rack mounted -Preferable US or EU origin -To be installed in the communications cabinet	<b>1 KVA UPS</b>	14
		Please refer to security Section for the quantity and location	-Fixed dome -Color -Lenses: 6 mm -Resolution: 700 TVL - 25fps -No audio -Motion detection -IR: range 45ft ,work in total darkness -Day/night vision: Auto switch between night and day mode -Connectivity: BNC -Motion detection support	<b>Indoor camera</b>	15
		Please refer to security Section for the quantity and location	Outdoor with wall/ceiling mount kit -Color -Lenses: 2.6-12 mm -Weather Proof - Resolution: 700 TVL - 25 fps - No audio - Motion detection - IR: range 45ft ,work in total darkness - Day/night vision: Auto switch between night and day mode	<b>Outdoor camera</b>	16

			- Connectivity :BNC - Motion detection support		
		To be determined by contractor upon site survey	-Combined Data & power -To be extended between 1st floor 's DVR and outdoor/indoor cameras	<b>Camera Power and data cables</b>	17
		1	-Capacity should be sufficient to support 15 cameras -To be installed in 1 <sup>st</sup> floor cabinet	<b>Power Unit</b>	18
		<b>Subtotal price</b>			

### **General Terms and Remarks:**

1. The delivery time for finalizing all IT and electricity works is 5 weeks from day of signing the contract
2. All IT equipment provided should have a one Year warranty
3. Printed labeling for all breakers in the main switch board having Room and device indicated
4. Printed labeling for the patch panel, patch cords, cameras, Access pints and all data & voice outlets
5. Cameras 's locations could be adjusted if needed
6. Contractor is required to provide weekly progress report on all items
7. Contractor might advise on solutions that reduces cables and conduits 's quantities

## 16

## Electrical & IT

## Annex 15

AP Access Point

vD Voice &amp; Data Outlet

## D Data Outlet

DC Data Cabinet

Schuko Socket

Airconditioner  
1800 BTU

A