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2.1.3 Description of the building

2.1.3.1 Building frame

The Cedefop building consists of six separate but united building units of reinforced concrete, plus a seventh independent one.

The first two building units form the main volume of 5 levels, where offices are housed on the top 3 floors; a library and a restaurant are on the first ground floor, as well as the technical equipment, archives and car parking areas in the basement.

The third and fourth building units form a second volume of two floors, housing the conference rooms and two meeting rooms, as well as some other technical equipment and archive areas.

The fifth, two-floor unit houses the kitchen and its storage areas, while the sixth two-floor unit houses the post room and the doctor's consulting room.

The guard post in the entrance of the plot forms the seventh, independent building unit of one single floor.

All the civil assets of the buildings are included in the scope of services and are given below along with the total area for each floor:

LEVEL	SURFACE (M2)
0	3191,97
1	3028,19
2	1220,45
3	1328,00
4	796,67

Civil assets of buildings include but are not limited to:

- Floors (carpets, entrance mats, linoleum, tiles, PVC tiles, granite, ceramic tiles, false floors, pebbled floors stamped floors, paint skirting, marble, concrete, wood, epoxy etc.)
- Walls (i.e. general partitions, concrete, bricks, gypsum boards, inox, wooden, painted plaster, tiling, skirting boards, signs, hand-rails, etc.)
- Wooden doors (i.e. frame, rubber, handle, stoppers, hinges, glass)
- Windows (i.e. frame, joint rubber, glazing, opening, seal, blinds)
- Ceiling (i.e. tiles, gypsum board, concrete, access panels, dampers, wood stripes, metal stripes)
- Building facades and building surrounding areas (i.e foot paths, ramps, stairs, sunshades, granites, security barriers, pavements, sidewalks, aluminium structures, external metal structures, external staircases, fences, gates etc.)
- Various elements (railings, signs, road markings, evacuation plans etc.)
- Buildings roofs

2.1.3.2 Ceilings, insulation and water-tightness

The first two units, which form the main volume of 5 office floors, are covered by a metal roof above the level 4 offices and by a tiled balcony above the front offices in level 3.

The third and fourth units, forming the volume where the conference rooms are housed, are covered by a horizontal roof, broken by the metal frames of the light wells and rendered watertight by bituminous paper covered with pebbles.

The fifth and sixth two-floor units are covered by a horizontal roof which is rendered watertight by bituminous paper covered with pebbles and is tiled on top. The seventh unit is covered by a horizontal roof with bituminous paper covered with pebbles.

The outside parking area is covered with a cover of polycarbonate material.

2.1.3.3 Metal structures, Frames, Doors and Windows

All glass panes installed at Cedefop are laminated and heat-strengthened.

Among other things, there are **185** windows with two opening modes (vertically or inclined) and **7** small windows of a simple opening mode, two double sliding French doors (one motorised), one double sliding window and **35** external doors (**13** single and **22** double-panel) with aluminium frames.

Apart from aluminium frames, there are a number of steel frames for the light wells of the roof of the conference rooms and the escape stairways at the edges of the main volume of the offices.

The south edge emergency staircase itself is a metal structure made of steel from level 2 upwards. The other steel constructions are the whole external enclosure as well as some other internal security enclosures, the external door for entering the plot, a construction above the guard post and a protective construction above the main entrance to the office building.

The Conferences rooms have also sky lighting via a metallic roof structure with glass panels.

2.1.3.4 Rainwater Drainage

Rainwater is routed to free flow canals ending in basins with grids and it is drained through heavy-duty 4-inch gutters.

2.1.3.5 Lightning Protection

The building complex is covered by a surge arrester mesh network connected to the vertical rainwater drainage pipes, which are earthed. Further TVSS (Transient Voltage Surge Suppression System) protection has been installed on sensitive electrical panels.

2.1.3.6 Masonry

Internal masonry of spaces of common use, offices, sanitary facilities, conference rooms and other storage areas of the Centre are made of:

- visible coloured concrete;
- concrete with visible decorative bricks;
- coloured trowel led plaster;
- coloured plaster;
- coloured plaster boards;
- bricks covered by ceramic tiles;
- perforated wooden slabs for sound absorption.

2.1.3.7 Ceilings

In all ceilings, apart from those in the basement, there are false ceilings so that the routings of air ducts, pipes and cabling can be covered. Specifically in the spaces of common use, coloured plaster boards have been used with perforated metal and mineral slabs.

Coloured plaster boards have been used in offices and sanitary facilities. In conference rooms, coloured plaster boards have been used as well as perforated wooden slabs for improved acoustics. Finally, visible or coloured concrete has been used in the remaining storage areas and auxiliary areas.

2.1.3.8 Floors

Floors within the buildings and in spaces of common use or purely working areas are as follows:

- False floors with linoleum tiles in spaces of common use and office areas
- Marble surface floors in spaces of common use and in sanitary facilities
- Floors and walls of sanitary facilities lined with ceramic tiles
- False floors made of chipboard with aluminium lining and covered by wall-to-wall carpets in conference rooms and interpreters' booths

- Industrial concrete floors in the remaining storage areas
- Epoxy floors in the indoor garage and in the kitchen.

2.1.3.9 Doors

Doors can be classified as follows, according to their use:

Areas of common use:

- 2 Double steel doors for the entrance to the land (one motorised)
- Single steel door at the entrance to the land
- 1 Steel roll door at the entrance of the garage (motorised)
- 5 Double steel doors with a reinforced glass pane
- 35 aluminium doors with glass panel
- 17 double fire doors, all having emergency devices.
- Offices: 104 steel frames with a light wooden door.
- Sanitary facilities: 55 steel frames with a light wooden door.
- Conference rooms: Double wooden doors with an antechamber.

Technical areas

- 20 fire doors and
- 3 steel doors

2.2.3 Description of the electromechanical installations and kitchen equipment

Cedefop's electromechanical installations are described in summary below.

It is noted that any non-reference to an individual piece of equipment does not imply that it is excluded from the maintenance schedule.

2.2.3.1 Building Management system and Energy management system (BMS, EMS)

It is noted that many of the existing electromechanical installations are combined with a BMS and EMS electronic monitoring system. For example, all our HVAC units and also our lighting are controlled through our BMS using mostly Landis & Steefa sensors.

The current software programs that we are using are:

Honeywell Symmetry R410.12 for the BMS and

Honeywell Energy management essentials for the Ems

The maintenance and repair of the above mentioned BM and EM systems must be performed by the company that installed them: Controline AE Veikou 2 Athens tel: +30 210 9221946

The contractor will be responsible for their maintenance and repair from 04/8/2017.

2.2.3.2 Middle voltage substation

In the basement of the building there is a PPC (Public Power Corporation) substation providing middle voltage (20 kV) current to Cedefop.

Connection through a middle voltage cell:

Middle voltage cell:

(Connection–disconnection) with earthing, located in a special closed area in the basement, next to the PPC substation.

Manufacturer	ABB Kraft AS	Norway
Representative/Tel:	ABB HELLAS	2102891900
Type/Model	RGC CV	24 kV
Serial Number – Year of Manufacture	18328	04/1999

Middle voltage transformer:

Middle/low voltage transformer located in a special closed area in the basement, next to the substation.

Manufacturer	Electromeccanica di Marnate	Italy
Representative/Tel:	ipel	2109719180
Type/Model	Dry cast resin TTA-RES	8046
Serial Number – Year of Manufacture	20556	1998
Transform Power	20 KV/400 V	800KVA

The transformer is overheating protected through a dedicated monitor T154 on local UPS unit Emerson.-Liebert 1000V/A.

2.2.3.3 Network distribution system

The more sensitive or critical electrical panels are TVSS protected.

Main distribution panels:

The main distribution panels are in a special closed area in the basement next to the substation and consist of:

- A direct distribution system (power and lighting);
- A backup distribution system supported by the electrical generator (emergency lighting, lift cabin, kitchen refrigerators, control and security systems etc.);
- A continuous distribution system without interruptions, supported by UPS (computer power supply network)

Local distribution panels

Local distribution panels are in various points across the building on every floor.

The 22 local distribution panels consist of a PPC supply panel, a power supply panel for the generator and a power supply panel for the UPS.

Every technical area has its own panel. Circuit breakers in all panels are manufactured by ABB.

2.2.3.4 Electricity generator

The electricity generator is located in a special closed area in the basement, next to the substation.

It provides power to all the building through a special panel and its own distribution network.

Manufacturer	SDMO	France
Representative/Tel:	IPEL	2109719180
Motor/Type	Cummings	6 CTA8- 3- G
Serial Number – Year of Manufacture	FJ 092977 / 03	10/1998
Starter battery	12 V/160 AH	To be changed in 2007
Alternator/Type	Leroy Sommer	A 461 S2 C 6 / 4
Power	3 Φ /400 V/217 A	150 KVA/1500 rpm

2.2.3.5 UPS (for voltage stabilisation and constant power supply)

The uninterruptible power supply unit is located in a special closed area in the basement, next to the call Centre.

Note: Maintenance and repair of this equipment must be performed by the authorised representative. The Contractor is obliged to instigate, on an annual basis, the inspection of the uninterruptible power supply installations by the authorised manufacturer, submitting the relevant testing reports and certificates of proper operation inspection to Cedefop.

Batteries should be checked twice a year (every 6 months) to verify good status of operation and loading. Bad batteries should be replaced in cooperation and agreement of the Facilities Manager of Cedefop.

Manufacturer	SOCOMEK	ITALY
Representative/Tel:	ALPHA GRISSIN	210-9315137
Type/Model	Masterys MAS 2 MC	360 T-00
Serial Number – Year of Manufacture	P 487613001	2008
	P 100793002	2008
Autonomy / Power	2 x (8 Minutes / 60 KVA)	2 x 48 KW
Batteries	2 x (40x12 V/40 Ah)	

2.2.3.6 Lighting network

The electrical lighting network explicitly includes the following:

- fluorescent office lights; 60cm/18 W and 160cm/58W
- 102 motion detectors
- entrance security Street LED lights 3 x 120W
- roof lights PL 2x26 W;
- wall lights PL 2x26 W, half of which outdoors;
- outdoor halogen security lights, 500 W switched with movement sensors
- indoor wall lights HQI 250 W;
- outdoor lights HQL 125 W; and street LED 30W
- Halopar cool beam lights 50 W 230 V;
- Halolux ceram lights 230 V 150 W;
- local switches;
- switches – remote control buttons per repeater;
- local switches - rheostats

2.2.3.7 Power network

The network supplies power to:

- the central heating units;
- the central cooling units;
- the central ventilation units;
- the local cooling-heating units;
- the local ventilation units;
- the kitchens;
- the lifts;
- the circulation pumps of the heating and cooling circuits;
- the pressure pumps of the water distribution network;
- the pressure pumps of the fire fighting network;
- the motors of the office cooling-heating units;
- the conference systems;
- the external blinds and curtains;
- the plot's main door;
- the door to the underground car parking area;
- 80-litre water heaters;
- 16 hand driers;
- 2-ring heated plates in the kitchenettes, etc.

It distributes current in the work areas through local electric sockets allocated as follows:

- 800 simple electrical current sockets, Schuko type;
- 150 multiple sockets, Schuko type;
- 600 simple Schuko type sockets, red in colour, connected to the UPS.

2.2.3.8 Access Control, CCTV Systems and X-Ray

In the Centre's premises there are 45 access control points distributed across all levels and connected to 5 main control panels (AMC II) through an addressing circuit. The operating software is CABA EXOS 9300.

There is a closed circuit television system which consists of Geutebrulk cameras connected to two main recorders.

Maintenance and repair of the above described systems must be performed by the authorised representative: SCAN ABEE tel: 2111068400. Ethinis Antistaseos 40 Chalandri.

There is a Smiths & Heimann HI Scan 6030di X-ray scanning device which is under warranty until 15-6-2017. The contractor has the obligation to perform any maintenance and repair actions with the authorised representative in Greece (Proton AE tel.: 2102806200)

There is an alarm system which includes, among other parts, 40 peripheral motion detectors at various points of the building, magnetic contacts on all emergency exits and 8 portable remote control units.

Upon award of the contract the contractor will have access to more information regarding the above systems.

2.2.3.9 Audio visual systems

The conference complex is part of Cedefop's premises. It is in operation since November 1999. The conference complex and its associated Audio-Visual Conference Infrastructures (AVCI) comprise mainly a continuous complex of three interconnected, adjacent meeting rooms of different capacities (148, 71 and 36 delegates respectively).

All three rooms are equipped with a Digital Conferencing Network, offering audio services, voting, interpretation integrated with audio-visual capabilities such as sound, video, projectors, cameras (delegate tracking), integrated video-conferencing, lighting, lectern, PC integration, public address system etc.

All three rooms are monitored by two adjacent control rooms containing the hardware and software resources to process and manage AVC content and ensure integration with ICT technologies (LAN, IP, ISDN networks).

As concerns interpretation, the larger room (Europa) has 12 standard interpretation booths (ISO/DIS 2663); simultaneous interpretation: up to 12 outgoing languages (extensible to 16); each booth accommodates 3 interpreters (possibility to extend to 4).

The medium size room (Montessori) has 6 interpretation booths, (6 +1 outgoing languages channels; each booth accommodates 3 interpreters (extension to 4 possible). The smaller room (Emile Rousseau) is connected to 2 interpretation booths, 2 outgoing languages, each booth accommodates 3 interpreters (Please see Annex A).

AVC at Cedefop are based on a wired infrastructure, an IP/telephony end-point is available per 2 delegates, wiring is installed under false-floor, the rooms avail of a false ceiling.

Video-conferencing technologies used are ISDN and IP video-conference based on Cisco and Tandberg equipment.

2.2.3.10 Fire Detection and Alarm System

The main central monitoring panel described hereafter is installed at the security booth at the entrance of the building.

Manufacturer	NOTIFIER	USA
Representative/Tel:	Zarifopoulos S.A.	2310422431
Type/Model	ID 3000	2011

An active repeater **Notifier IDR 6A** is installed at the reception desk of the main building.

A graphic application software (ONYXWORKS) is installed in 3 specific PCs that allows remote control of our fire detection system.

Fifteen local panels are installed, located at the local fire-extinguishing units.

Fire detection sensors and alarm sirens

Some 17 heat sensors around and 300 smoke detectors are currently distributed across all levels in an addressing circuit, as well as 18 sirens, not including the sirens of the local systems whose control panels are connected to the main panel.

Fire extinguishing unit/Position under pressure

The fire-extinguishing complex is located in the central pump station in the basement.

Manufacturer	Marko Pumps	Tel. 2310 522946
Model	Marco Fire Compact	
Oil pump	45 HP Ruggerini	Italy
Main Electr. Pump	30 KW Western Elec	Australia
Auxiliary Pump	30 KW Western Elec	Australia

Water supply, water tank and Network distribution system for fire extinguishing

It is located on the main water supply point at level 0, close to the water tank which has a capacity of 30 m³. It consists of:

- 1 (one) 2" float
- 1 (one) 2" ball valve
- 1 (one) 4" feed collector
- 1 (one) 4" start-up collector
- 10 (ten) 4" throttle valves
- 1 (one) 4" filter
- 1 (one) 4" shock absorber
- 1 (one) 4" non-return clack valve
- 2 (two) 1.5" clack valve
- 1 (one) 1.5" ball valve
- 1 (one) air control valve with a pressure regulator for fire extinguishing sprinklers
- 1 (one) pressostat
- 1 (one) pressure gauge

Hydrants, fire extinguishing sprinklers and fire extinguishers

25 hydrants (fire cabinets) are distributed across all levels, 3 of them are coupled to 1" fully automatic hoses.

Water sprinkler fire extinguishing networks, one in the car parking area and one in an archiving room in the basement and one in the kitchen

2.2.3.11 Local fire extinguishing systems

Location	Detection	Extinction type	Quantity
Boilers room	1 Local panel	Kidde dry powder IND 75	3 x 35 Kg
Heating oil tanks		Kidde dry powder IND 75	1 x 35 Kg
Middle voltage station	1 Local panel	Hygood liquid: FM 200	1 x 17 Kg
Transformer		Hygood liquid: FM 200	1 x 10 Kg
Electricity generator		Hygood liquid: FM 200	1 x 22 Kg
Generator oil tank		Hygood liquid: FM 200	1 x 3 Kg
Power distribution panels		Hygood liquid: FM 200	1 x 8 Kg
Computer room	1 Local panel	Hygood liquid: FM 200	1 x 33 Kg
Europa meeting room	1 Local panel	Hygood liquid: FM 200	1 x 21 Kg
Montessori meeting room	1 Local panel	Hygood liquid: FM 200	1 x 21 Kg
Heavy Elevator pump room	1 Local panel	CO2	1 x 45 Kg
Personnel Elevator pump room	1 Local panel	CO2	1 x 45 Kg
Personnel Elevator pump room	1 Local panel	CO2	1 x 45 Kg
Location	Detection	Extinction type	Quantity
Kitchen cooking area	No panel	Bonpet	1 x 12 Kg
General Archives main room	1 Local panel	Kidde liquid: FM 200	1 x 186 Kg
General Archives false ceiling	1 Local panel	Kidde liquid: FM 200	2 x 214 Kg
			???

Apart from the local fixed fire-extinguishing units, the following are distributed across the whole building:

130 portable 6-kg dry powder fire extinguishers.

17 portable 6-kg CO2 fire extinguishers.

3 Breathing apparatuses

All the above fire detection and extinguishing systems must be maintained and tested within the frame of the present call according to the existing legislation and the directives of the Fire Servic. The Bonpet Fire extinguishment system needs to be maintained by a BONPET authorised representative. The number of the fire extinguishers and the breathing apparatuses that will be removed during the annual maintenance and re-filling will be replaced temporarily until they return.

2.2.3.12 Perimeter safety lighting

It consists of 500W halogen floodlights on the perimeter which are activated by the corresponding motion detectors.

2.2.3.13 Television network

UHF, VHF, FM antennas and two 120 cm satellite antennas with multiple use heads

4-input analogue amplifier with a signal switch

digital satellite receivers

memory expansions with 14 modulators

40 television sockets

2.2.3.14 Public Announcement system

It consists of:

1x Bosch LBB 1990/00Plena voice alarm controller

1xBosch LBB 1992/00 Plena Voice alarm Router

4x Bosch Plena Amplifiers

130 speakers are installed around the building.

2.2.3.15 Voice-Data Network

Cedefop uses fibre and copper based structured cabling infrastructure. The current cables include CAT5e in copper cables running at speeds of 10-100-1000Base-T, fibre OM3 cables running in 100Base-FX, and 10GBase-FX. All data networks and plugs have been properly certified after installation according to IEEE 802.x standards.

Any installation of copper and fibre data networks should be compatible with class F shielded S/FTP 10GBase-T for copper data networks, OM3 and OM4 (for up to 100Gbits) for fibre data networks.

2.3.3 Description of heating installations

2.3.3.1 Central Heating

The central heating system includes two boilers connected in parallel.

Manufacturer	TASSO/Wiessman	Tel. 210 970703
Type/Model	Diesel	VH 14
Serial Number – Year of Manufacture	7178401501003108 and 7178401501002101	2015
Power/Consumption	2X550000 KCal	
Operating pressure/temperature	4 Bar	<90 ⁰ Centigrade
Burners	Riello	RL 70
Serial Number	02508000132 and 133	1998
A' stage/B' stage	20/40 l/hour – 255/474 KW	40/70 l/hour – 474/830 KW
Motor	400V/1.1 KW	2800 rpm

NOTE: The Contractor must submit to Cedefop the control sheets for burner and boiler inspection by an authorised technician at least twice a year, according to the existing laws (indicatively, October and March)

Fuel Tanks

Two tanks with a capacity of 6000 litres each

Electrical panel

It is installed in the boiler room in the basement. This panel aggregates all devices for command transmission, power, configuration, control and safety.

2.3.3.2 Heating Network

Main heating circuit

It consists of one (1) pair of pumps: 2 x 1.5 KW, **WILO**, filter, pressostats, three (3) contact electrovalves, **L&S** temperature sensors, throttle valves, non-return clack valve, safety valves, two (2) expansion tanks with a capacity of 500 litres / 1.5 bar each

Feed and return collectors

It consists of eight (8) Pairs of pumps, **WILO**, filters, 13 throttle valves, regulation valves, non-return clack valves, **L&S** temperature sensors, thermometers, 17 pressure gauges, 45 ball stopcocks, (open-close).

2.3.3.3 Hot water distribution system in the air conditioning – ventilation units

The 12 air inlet and inlet-outlet units condition the air of the spaces of common use and the conference rooms, and their hot water supply comes from **4** separate circuits.

Each circuit consists of :three (3) contact valves **L&S ‘SQS65’ + valve body RG5**, drainage taps 3/4’, 1.5” ball stopcocks, 1” ball stopcocks, air circuit initial temperature sensors, 1 filter pressostat, 2 air supply pressostats, two (2) regulation valves **1 SEZ61.100 regulator**, 2 automatic discharge valves, and one (1) humidifier electrovalve

2.3.3.4 Heaters

Level 0: 60 heaters with simple valves

Level 1: 27 heaters with simple valves

Level 2: 7 heaters with simple valves

Level 3: 14 heaters with simple valves

Level 4: 6 heaters with simple valves

2.3.3.5 FCU Air-conditioning unit distribution system

Each FCU unit is equipped with 4 ball stopcocks, open-close, and 2 electrovalves connected to the thermostat in the area.

Level 0: A total of 5 cooling – heating units, false-ceiling type, with a thermostat and adjustable fan.

Level 1: A total of 35 cooling – heating units with a thermostat and adjustable fan, of which 26 are of a false-ceiling type and 9 are floor-mounted.

Level 2: A total of 35 cooling – heating units with a thermostat and adjustable fan, of which 5 are of a false-ceiling type and 30 are floor-mounted.

Level 3: A total of 45 cooling – heating units with a thermostat and adjustable fan, floor-mounted.

Level 4: A total of 30 cooling – heating units with a thermostat and adjustable fan, floor-mounted.

2.3.4 Cooling system

2.3.4.1 Cooling units

Two units of Air-Cooled Cooling Complexes connected in parallel for the cooling system (installed in the external side of the back part of the building, at level 2).

An adiabatic cooling system is installed in order to reduce power consumption. A “Tracer summit” software program controls in cooperation with our BMS the operation of both the chillers and the adiabatic system, achieving:

- 1 Parallel function and operational communication of two chillers;
- 2 Energy upgrade and reduction of power consumption;
- 3 Graphic representation of functional parameters;
- 4 Remote check and control of chillers.

NOTE: Maintenance of the above mentioned equipment must be performed in cooperation with the manufacturer or an authorised representative. The Contractor must submit to Cedefop on an annual basis the inspection report sheets for the spring start-up, for any on call visit and for the analysis of the refrigeration lubricants by TRANE HELLAS or an authorised representative; the Centre shall view these sheets as a certificate of proper maintenance.

Manufacturer	TRANE	
Representative/Tel.:	TRANE HELLAS S.A.	210 8112200
Model/Performance	RTAA 213 STD	112.4 RT
Serial Number– Year of Manufacture	EKI 6638, EK1 6639	10/1998
Power	2 X 230 KW	
Circuits/Compressors	2 x 2 x 96KW screw type	R 404 A 2 x 250Kg
Start-up/Maximum level	600/340, 50 HZ, 400 V	

2.3.4.2. Electrical panel

It is installed in the boiler room in the basement. This panel aggregates all devices for command transmission, power, configuration, control and safety. It is the same one as the electrical panel in the boiler room.

Cooling Network

2.3.4.3. Main cooling circuit

It consists of one (1) common expansion tank,, four (4) filters, two (2) pairs of pumps: 4 X 3 KW, WILO, four (4) non-return clack valves, regulation valves, throttle valves, L&S temperature sensors, L&S flow sensors, shock absorbers, valves - clack valves, thermometers, pressure gauges, ball stopcocks (open-close).

2.3.4.4 Feed – return collector

It consists of: six (6) pairs of pumps: WILO, filters, 17 throttle valves, 6 regulation valves, 6 non-return clack valves, L&S temperature sensors, thermometers, 17 pressure gauges, 45 ball stopcocks (open-close).

2.3.5 Ventilation system

Most units are installed in the basement areas, are manufactured by the **INTERCLIMA** company and consist of components manufactured by this company or the Italian company **COMEFRI**.

Inlet component	Centrifugal fan	
Air mixing component	Air flow control blinds with an L&S GBB161.1E motor	Remote controlled
Filter component	Washable Prefilter and a Sack filter arrangement	Change every year
Heat exchanger component	One cold water exchanger One hot water exchanger A moisturizing sprinkler	
Outlet component	Centrifugal fan	

Inlet and outlet units

There are 6 units of varying characteristics, with a power of 2 to 8 KW and providing from 6 372 m³/h up to 15 156m³/h. These units are equipped with heat exchangers components, one for hot water and one for cold water.

Inlet units

There are 6 units of varying characteristics, with a power of 0.2 to 4 KW and providing from 450 m³/h up to 10 500 m³/h. These units are equipped with heat exchangers components, one for hot water and one for cold water.

Outlet units

There are 2 units of varying characteristics, with a power starting at 2 KW and providing from **4 410** m³. These units cooperate with the air inlet unit in the office areas and are equipped with heat exchangers components for heat recovery through exporting air from the offices and the boiler chimneys.

Electrical panels

They are installed in the 5 areas of the heating-ventilation system in the basement. These panels aggregate all devices for command transmission, power, configuration, control and safety with cabinets which may connect to the **L&S Apogée 600** automatic systems.

Outlet units cooperating with inlet units

There are 5 units of varying characteristics, providing from 360 up to 8850m³/.

Simple inlet unit

1 unit, providing 3600 m³/for the entry of fresh air into the former archive areas.

Simple outlet units

5 units of varying characteristics, providing from 950 up to 13 500 m³/for the exit of air from the former archive areas, the parking area and other technical areas.

Simple outlet units in sanitary facilities

8 units of similar characteristics, providing from 950 m³/

Air duct network and inlet or outlet nozzles

Hundreds of meters of air ducts are installed, of various cross-sections, flexible ones with cylinder-shaped cross-sections $\Phi 100$ up to $\Phi 250$ and inflexible ones with parallelepiped-shaped cross-sections, with dimensions from 200X100 up to 1500X1200.

At the exit point of every outlet unit there is a noise reduction device (36 units). Air ducts are also equipped with 12 manual clack valves for adjusting supply and automatic fire safety clack valves, as well as internal fire safety sensors. The air ducts end in nozzles of various types:

- 22 round ones, $\Phi 600$
- 360 grids from 200X125 up to 500X125
- 75 grids from 200X200 up to 2000X200
- 130 grids from 300X300 up to 1200X300

2.3.6 Individual Local Cooling-Heating Units

Computer - Servers Room – 3 Units

Manufacturer	EMERSON- LIEBERT	Italy
Representative	Alpha Grissin	Tel. 2310 456855-7
Internal/External Unit Model	CRV/R020RA107SD 12115010PAEEE	HCR 51
Serial Number	10340360001	
Year of manufacture	10/2011	10/2011
Coolant / Humidifier	R 410 A	Steam

Manufacturer	EMERSON- LIEBERT	Italy
Representative	Alpha Grissin	Tel. 2310 456855-7
Internal/External Unit Model	HPM/S170A001V300010P0	HCE 24
Serial Number	7089600001	
Year of manufacture	10/2007	10/2007
Coolant / Humidifier	R 407 C	Steam

Manufacturer	HIROSS	Italy
Representative	Alpha Grissin	Tel. 2310 456855-7
Internal/External Unit Model	S8 OA 0001 V 5000	HCA 14
Serial Number	1815920001	H 9900631
Year of manufacture	05/1999	05/1999
Coolant/Humidifier	R 422 (new)	Steam

UPS Room: 2 Units

Manufacturer	EMERSON- LIEBERT	Italy
Representative	Alpha Grissin	Tel. 2310 456855-7
Internal/External Unit Model	HPM/S13DA000O300020F0	HCE29(LH) CU/AL
Serial Number	9778680001	217518/2011
Year of manufacture	02/2011	02/2011
Coolant/Humidifier	R 407 C	
Manufacturer	PANASONIC	
Representative	Alpha Grissin	Tel. 2310 456855-7
Internal/External Unit Model	CS-W24DKE	CU-W24DKE
Serial Number	0778003299R	2.8 KW
Year of manufacture/Coolant	10/2007	R 410 A

Telephone main exchange room (OTE room): 1 Unit

Manufacturer	TOSHIBA CARRIER	
Representative	Inverter	
Model	Trane Hellas	Tel. 210 8112200
Serial Number	RAS 22SKV 2-E	RAS 22SAV-E
Year of manufacture / Coolant	2700069	2500405
	10/2010	R 410 A

Telephone secondary exchange room (Voice room): 2 Units

Manufacturer	PANASONIC	
Representative	Alpha Grissin	Tel. 2310 456855-7
Model	CS-PW 12GKE	CS-PW 12GKE
Serial Number	74459108994R	7528418197
Year of manufacture/Coolant	10/2007	R 410 A

Manufacturer	Hitachi	
Representative		
Model	Rac 60PPA	Rac 60WPA
Serial Number	12C3475206	12C2649909
Year of manufacture/Coolant	07/2013	R 410 A

New General Archives: 1 Unit

Manufacturer	EMERSON-LIEBERT	Italy
Representative	Alpha Grissin	Tel. 2310 456855-7
Internal/External Unit Model	HPM/S20KA001BBG0020FX	HCE 042
Serial Number	8551610001	BI200900603
Year of manufacture	06/2009	06/2009
Coolant/Humidifier	R 407 C	Steam

Staff Committee room: 1 Unit

Manufacturer	Daikin	www.klimamichaniki.gr
Representative	Klimamichaniki	Tel. 2310 440 844
Model	RY45DA721	
Serial Number	1805094	1.93/2.17 KW
Year of manufacture	1998	R 22

Computer and foreign language training room (GETEM room): 2 Units

Manufacturer	DAIKIN	www.klimamichaniki.gr
Representative	Klimamichaniki	Tel. 2310 440 844
Model	RY 35 DA 7V1	RY 71 B 7W1
Serial Number	2219360	1203832
Year of manufacture	2002	R 22

Library archives: 2 Units

Manufacturer	General Electric	Pop. Rep. of China
Representative	Kotsovolos	Tel.
Model	AE 0 AH 12 IWO	AE 0 AH 09 IWO
Serial Number	FG 004095	FG 002831
Year of manufacture	2003	R 407 C

Guard post: 1 Units

Manufacturer	Hitachi	
Representative		
Model	RAS 35PPB	RAC 35WPB
Serial Number	04912	002750
Year of manufacture	10/2014	R 410 A

Director's office

Manufacturer	Hitachi	
Representative		
Model	RAC 35PPA	RAC 35WPA
Serial Number	009294	008636
Year of manufacture	11/2013	R 410 A

2.3.7 Local Ventilation Units

- Computer and foreign language training room (GETEM):2X DAIKIN unit, HRV type
- Generator and Transformer rooms: 2X motorised ventilation units

NOTE: Maintenance of all of the above mentioned EMERSON-LIEBERT and HIRROSS equipment must be performed in cooperation with the manufacturer or an authorised representative. The Contractor must submit to Cedefop every six months the inspection and maintenance sheets by the installer - representative; Cedefop shall view these sheets as a certificate of proper operation

2.3.8 Dining room and kitchen equipment

The following appliances are installed and operating in the kitchens:

	Machinery	Power supply	Power in KW	Water supply	Soft water supply	Manufacturer	Type/ Serial No	Supplier	service	Spare parts
1	Espresso machine	X	6.2 KW	X	X	Faema	118925	eurogatt	eurogatt	eurogatt
2	Espresso coffee grinding machine	X	320W			Faema	20	eurogatt	eurogatt	eurogatt
3	Filter coffee machine*	X	3.2KW	X	X	Dagma/Douwe Egberts	080111 211101	BINIKO S.A.	BINIKO S.A.	BINIKO S.A.
4	Frappé coffee machine	X	100W			Hammilton Beach	27889	Heinami Hellas	Not important	Various
5	Heated display (pies)	X						Heinami Hellas	Not important	Heinami Hellas
6	Bain Marie	X	8.1KW	X	X	Alouminox	591	Alouminox	Alouminox/other specialised	Alouminox
7	Benches, neutral cabinets, work surface, scullery, etc.					Alouminox		Alouminox	Alouminox/other specialised	Alouminox
8	Winderhalter dishwasher for pots and pans	X	10KW	X	X	winderhalter	398566	Alouminox	NETKO S.A.	NETKO S.A.
9	Winderhalter dishwasher for glasses	X	6KW	X	X	winderhalter	563	Alouminox	NETKO S.A.	NETKO S.A.

	Machinery	Power supply	Power in KW	Water supply	Soft water supply	Manufacturer	Type/ Serial No	Supplier	service	Spare parts
10	Miele dishwasher for glasses	X	9.7KW	X	X	Miele	40/95341467	NETKO S.A.	NETKO S.A.	NETKO S.A.
11	Vegetable washer	X		X		Zanussi		Zanussi	Zanussi	Zanussi
12	6-ring stove	X	23 KW			Alouminox		Alouminox	Alouminox/other specialised	Alouminox
13	Tilting bratt pan	X	12KW			Alouminox	HAT 8 DL / 367	Alouminox	Alouminox/other specialised	Alouminox
14	Floor-mounted fryers (2 pcs)	X	24 KW			Alouminox	FRE 820	Alouminox	Alouminox/other specialised	Alouminox
15	Convection oven	X	14KW	X	X	Eloma	EDB 10-11/132250-984	Alouminox	Alouminox	Alouminox
16	Water softening machine	X		X	X			Alouminox		
17	Water softening machine	X		X	X	eurogatt		eurogatt	eurogatt	eurogatt
18	Automatic juice extractor	X	0.28			Zumex	225754	Fresh way com	Fresh way com	Fresh way com
19	Classic juice extractor	X				Santos		Kariotis	Not important	Various
20	Robot-coupe food cutter	X				robot-coupe	98/3323	EMKO Koutelas	EMKO Koutelas	EMKO Koutelas
21	Robot-coupe mixer	X				robot-coupe		EMKO Koutelas	EMKO Koutelas	EMKO Koutelas
22	Microwave oven		900W			Siemens			Siemens	Siemens

	Machinery	Power supply	Power in KW	Water supply	Soft water supply	Manufacturer	Type/ Serial No	Supplier	service	Spare parts
23	Salad bar refrigerator	X				Alouminox		Alouminox	Alouminox/other specialised	Alouminox
24	Bench refrigerator with doors (3 pieces)	X				INOMAK		Alouminox	Alouminox/other specialised	Alouminox
25	Bench refrigerator with drawers	X				INOMAK		Alouminox	Alouminox/other specialised	Alouminox
26	Refrigerator – soft drinks display, 2 doors	X				Alouminox		Alouminox	Alouminox/other specialised	Alouminox
27	Refrigerator – soft drinks display, Perrier*	X						BINIKO S.A.	Various specialised	
28	Refrigerator – soft drinks display, coca cola*	X	585W				GR650776564	3E	3E	3E
29	Refrigerator, cooling compartment	X	1 HP			Alouminox			Various specialised	
30	Refrigerator, freezer compartment	X	1,5 HP				06405 inventory	TEPSE BE	Various specialised	TEPSE BE
31	Refrigerator - freezer	X				INOMAK		Alouminox	Alouminox/other specialised	Alouminox

	Machinery	Power supply	Power in KW	Water supply	Soft water supply	Manufacturer	Type/ Serial No	Supplier	service	Spare parts
32	Refrigerator - freezer (trunk)	X	440W				EB7197031		Various specialised	
33	Grill	X	1340			NORTH EQUIPMENT	CHIOS//SN 12454	NORTH		NORTH
34	Blast Chiller - freezer	X	3KW			IRINOX	120600055	NETKO S.A.	NETKO S.A.	NETKO S.A.
35	Coffee mill		350W				SAN MARCO			
36	Ice cream fridge *		460W							
37	Cash machine						POS SYSTEM ICG, HTOPOS PLUS/E11C8714			
38	Oven 'RATIONAL'		19KW				E115G08122167 690		NETKO S.A	NETKO S.A

(*) The said devices have been obtained through a gratuitous loan for use: The provision of service and spare parts is performed by the provider.

IMPORTANT NOTE: Maintenance and fault repair of kitchen equipment must be performed by the contractor using exclusively crews of the official representatives for the appliances, if they are available in Thessaloniki. Otherwise, the contractor may alternatively use independent specialised technicians active in the same sector.

The maintenance and inspection of the kitchen and dining room machines are defined according to the needs but at least once every six months and they concern inspection of the machines to ensure proper operation, but also routine maintenance tasks which are required during inspection and whose application does not disrupt the smooth workflow of the restaurant staff. Maintenance works which can be scheduled in advance should be performed in the summer during the week when the restaurant is usually closed for maintenance (August) and, in the winter, following an agreement with the restaurant manager. Urgent tasks are performed immediately, also in agreement with the restaurant manager.

Especially for the equipment included in the above table and due to its criticality regarding conformity to the rules of food hygiene and safety, it is defined that if the Contractor, in case of fault, does not respond within the repair time deadlines (as defined in Section 1§2.4.3), Cedefop maintains the right to arrange any required repair works, after a written notification to the Contractor. In this case, the expenditure for the resolution of the problem shall be at the expense of the Contractor.

2.3.9 Lifts

According to the Greek legislation, the applicants are obliged to submit an official Maintenance Technician's Licence with a Registration Number of the relevant Chamber, according to which it will be certified that they possess the technical competence to responsibly take over maintenance and guarantee the proper operation of the lifts.

Manufacturer	Kleemann	pclift@pclift.gr
Installer	E. Kehagias	Tel. 2310 818443
Model I	Passengers	Duplex 5 levels/stops
Type	Hydraulic	Autom. PLC Moeller
Year of manufacture	10 / 1998	600 kg
Model II	Freight	3 levels/stops
Type	Hydraulic	Open software electronic panel
Year of manufacture	10 / 1998	900 Kg
Model III	Freight	5 levels/stops
Type	Hydraulic	Open software electronic panel
Year of manufacture	10 / 1998	2000 kg

NOTE: The passenger elevator electrical panel is connected to APV brand UPS unit of 3 KVA capacity.

There is also another cargo platform elevator for transporting loads up to 500 Kg from the basement of the main building to the basement of the Conferences rooms. The electronic Panels of Model II and Model III are under warranty till 30-10-2024 and till 22-9-2025 accordingly, under the condition the Company Valsamidis SA will be in charge of the maintenance.

Manufacturer	Lift-Der	liftder@yahoo.gr
Installer	DER	Tel. 23940 52972
Type	Hydraulic (ISO 46)	S-500/ SN 1660
Year of manufacture	06 / 2009	500 Kg

2.3.10 Power operated doors

Outer door of the plot, powered by 2 9HP electrical motors, manufactured by the KATEE company, Tel. 2310 796666.

Vehicle access control bars, hydraulic type, manufactured by the CAME company, installed by Alpha Grissin.

Door for the underground car parking area, manufactured by the COMFORT company, Tel. 2310 542842.

A G-U motorised glass sliding door gives access from the restaurant to the courtyard, installed by Ioannidis Theodoros & Cie,

2.3.11 Electric blinds – Awnings – Sunshades

The building façade at the office areas is covered by electrically powered blinds manufactured by the German factory ERWILO which has ceased activity.

External awnings are located in the library area, on the restaurant courtyard as well as the balcony of the 4th level, at the Kitchen yard and at the yard in front of the Rousseau conference room. They are equipped with Somfy motors and vibration devices.

Internal awnings and curtains are located in reception areas, meeting rooms and conference rooms.

2.3.12 Plumbing Installations – Networks

2.3.12.1 Water Circulation Pumps

Pressure pumps for the drinking water supply network: 2 manufactured by WILO

Circulation pumps for cooling-heating networks: 30 manufactured by WILO

Circulation and cascade pumps for the water fountain: 2 manufactured by ASTRAL

2.3.12.2 Supply Network

It is located outside the building, at the back gardens, near the enclosure, and passes through the basement, level 0, towards the drinking water tank which has a capacity of 8 m³. It includes:

- 1 2" pressure regulator
- pressure gauges
- 2" ball stopcocks
- 1 (one) 2" float

2.3.12.3 Network pressurizing pumps

- WILO pumps (installed in the area of the water supply and sewerage network, in the basement)
- 1 electrical box (installed on the base of the pumps)
- block valves with crank 1 1/2"
- 1 pressure gauge
- pressostats
- 1 pressure tank, 300 l / 10 bar

2.3.12.4 Water distribution system for home use

- 1 distribution collector
- 1 6-filter tap
- 12 pressure gauges
- ball stopcocks 2 1/2"
- 9 ball stopcocks 1 1/2"
- 24 ball stopcocks 3/4"
- ball stopcocks 1/2"

2.3.12.5 Water processing system

It is installed at the edge of the distribution system. It covers the needs of the kitchen and the heating and air conditioning circuits, and consists of:

1 main water-softening unit

brand: Osmonics/Autotrol

type: 255/1

resin: IR-100 Na type, 15 litres

salt: 100 litres

1 small water softening unit for the coffee maker

brand: Osmonics/Autotrol

type: 255/440

salt: 20 litres

2.3.12.6 One reverse osmosis potable water treatment system is located in the basement. It consists of:

-water tank (1500ltrs capacity)

-1 DAB water pump

-1 UV filter

-3 pro filters

1 main reverse osmosis device

-1 Water tank (3000 litres capacity)

1 EBARA water pump

1 UV filter

2.3.13 Sanitary installations

Sanitary facilities are located across all levels of the building and include:

- 38 toilet bowls (normal size) with a piston-type flusher
- toilet bowls (small size) with a piston-type flusher
- urinals with a flow meter and a photoelectric cell
- 33 porcelain washing basins with a mixer tap, a siphon with a drain nozzle and 2 vertical chrome-plated taps.
- height-adjusted porcelain washing basins with a tap, a siphon with a drain nozzle and 1 vertical chrome-plated tap.
- 1 shower with a mixer tap and a siphon, with a shower hose and shower head and with a water distributor
- 800x800 showers with a mixer tap and a siphon, with a shower hose and shower head and with a water distributor
- 80-litre electric ELCO water heaters

- 20 mirrors, 2 of which adjustable for use in disabled toilets
- 20 dual-use taps within the building
- dual-use taps outside the building
- 22 paper towel dispensers
- 22 liquid soap dispensers
- 37 toilet paper holders
- 18 Siemens hand driers

2.3.14 Sewerage network

It collects the effluents from the sanitary areas, the concentrate collection basins of the cooling-heating units, the washing basins, the kitchen, the basement drainage wells, and routes them to