

The present invention concerns a method of implementing an installation for transporting electrical or like energy between a technical facility and locations dispersed on a platform, and also an installation
5 implemented by this method.

Generally speaking, the term "electrical energy" is to be understood as meaning both electrical current and electrical signals and the term "transport" is to be understood as meaning both distribution from the
10 technical facility to the dispersed locations and transmission to the technical facility from the dispersed locations; for the purposes of the present invention, it is to be understood that the expression "electrical or like energy" means electrical energy and any form of
15 energy transportable by cable, duct or generally flexible tube, such as for example light energy in the visible or invisible spectrum, notably but not exclusively in the form of modulated signals for telephone or data processing use, transported by optical fibre or cable,
20 mechanical energy transported by funicular transmission in a sheath (Bowden cables, for example) and pneumatic or hydraulic energy transported by flexible hoses; for the purposes of this invention, the term "cable or the like" is to be understood as meaning a cable, fibre, duct or
25 tube used to transport these various forms of energy. The present invention is therefore equally applicable to supplying regulated or unregulated electrical power to the various locations, to providing a telephone or data processing service to them, and to transmitting to the
30 technical facility from the various locations instructions for controlling devices located in or controlled from the technical facility, for example air conditioning, lighting and blind opening and closing mechanisms, these examples being in no way limiting and
35 being given merely to demonstrate the extensive field of

application of the invention.

The term "platform" is to be understood as meaning the entire floor of one storey of a building, usually constructed without partition walls and intended to be
5 divided by partition walls subsequently according to requirements with the possibility of modifying the arrangement of partition walls; by extension, the term "platform" is to be understood as also meaning the walls, curtain walls and partition walls of this storey of the
10 building which are in principle not removable.

Providing an installation for transporting electrical or like energy in a platform of this kind during construction of the building raises specific problems related to the fact that during construction it
15 is not generally known where the socket outlets, switches, telephone and computer jacks and the like will be located; because of this, the installation for transporting electrical or like energy implemented simultaneously with construction of the building must
20 offer great flexibility of connection to suit the eventual arrangement of partition walls, which arrangement is also subject to subsequent modification.

Given this requirement, use is currently made of various methods for implementing installations for
25 transporting electrical or like energy, generally limited to supplying the platform with electric power.

One known technique entails providing in the ceiling or under a false floor a fixed electrical power supply network incorporating numerous junction boxes so
30 that connections may be made and unmade according to requirements; this technique, as described for example in German patent application DE-A-2 211 061 in the case of a ceiling installation, is costly because of the length of the electrical cable required for installing a
35 sufficiently dense network to meet all requirements, and

because of the number of junction boxes that it is therefore necessary to provide; further, in the specific case of an installation under a false floor, the need to provide the false floor means that each storey has to be made taller leading to increased construction costs, to increased heating and air conditioning energy consumption because of the increase in losses through the walls, since the surface area of the walls is increased, and to a reduction in the number of storeys that can be provided in a building for a maximum permissible height; also, access to the junction boxes can be difficult.

In another known technique service is provided to the platform by providing an electrical power supply baseboard on the walls to which connections may be made at will; this technique offers great flexibility of connection for locations situated directly adjacent the wall, but its use is necessarily limited to this level; also, it is costly in that the electric power supply network accommodated in the baseboard necessarily follows the longest perimeter of the platform, which requires long cable runs.

Use is also made of a technique whereby the platform incorporates socket outlets at judiciously chosen locations to meet any subsequent requirement, together with ducts protecting the cables connecting these socket outlets to the technical facility; in the frequent case where the platform is manufactured from a case material such as concrete the socket outlets and the ducts are embedded in the concrete, and the ducts can be located under the ceiling of the floor immediately below; this systematic technique has the disadvantage of being particularly costly because of the length of the cable runs that it requires, together with the need to protect the floor-mounted socket outlets for reasons of safety; the aesthetic results of this technique are also mediocre

because of the visible nature of the floor-mounted socket outlets.

A variation of this technique, as described in American patent US-A-3 166 631, consists not in fitting the socket outlets during the manufacture of the platform but rather in embedding in the latter, made from concrete, rigid profiled members which accommodate cables in the same way as the aforementioned ducts; these rigid profiled members incorporate, regularly spaced along their length, attached appendices in the form of boxes that can be opened up through the platform for making electrical connections as and when required; the aesthetic result of this technique is better than that of the technique previously referred to since only the connections actually made are visible; however, because of its systematic character, accentuated by the rigidity of the profiled members that have to be provided in large numbers to serve the platform as a whole, it has the disadvantage of requiring long cable runs, resulting in high costs; this disadvantage is all the more severe in that the connection of rigid profiled members to the technical facility entails complex cable paths, which has the further disadvantage of considerably complicating wiring operations.

However, the above document must be considered to disclose a method of implementing an installation for transporting electrical energy between a technical facility and locations dispersed on a platform using centralised electrical energy transmit and/or receive means which are accommodated in the technical facility and consisting in:

- incorporating into the platform, during its manufacture, a predetermined number of closed boxes distributed according to a predetermined plan and ducts for inserting at least one electrical connection cable,

said ducts connecting said boxes to the technical facility,

- then, as requirements for connection between a specific location on the platform and specific centralised electrical energy transmit and/or receive means appear, determining and opening through the platform that of said boxes nearest said specific location to make a connection.

Sections 17.1 (page 252) and 17.4 (page 254) of "Elektro-Installation in Wohngebäuden - Handbuch für die Installationspraxis" by D. Vogt, VDE-Verlag, Berlin 1984, disclose a method of implementing an electrical energy transport installation consisting in distributing closed boxes in a predetermined arrangement in the floor, ceiling and walls of premises, connected by respective ducts, initially empty, to a central distribution unit, before electrically wiring the latter. When electrical connection requirements differing from the initial requirements then appear, the connections are modified at the central distribution unit. This naturally implies that appropriate wiring has been performed initially, as in the case of an installation as disclosed in US-A-3 166 631, with the same drawbacks.

An object of the present invention is to remedy these disadvantages of the known techniques.

To this end, the present invention proposes a method for implementing an installation for transporting electrical or like energy, namely any energy transportable by cable, fibre, sheath or generally flexible tube, between a technical facility and locations dispersed on a platform, said platform being regarded as the entire floor or ground of one storey of a building and by extension the walls, curtain walls and partition walls of this storey of the building which are in principle not removable, said method using centralised

transmit and/or receive means for said electrical or like energy which are accommodated in said technical facility, and comprising the succession of steps consisting in:

5 a) incorporating into said platform, during its manufacture, a predetermined number of independent closed boxes distributed according to a specific plan chosen at will and respective ducts for inserting at least one electrical connection cable or the like, namely at least one cable, fibre, sheath or generally flexible tube,
10 respectively where each duct connects a respective one of said boxes to the technical facility independently of the other ducts, which correspond to the other boxes, respectively whilst making each duct emerge from the platform into the technical facility,

15 b) then, as requirements for connection between a specific location on said platform and specific centralised electrical or like energy transmit and/or receive means appear, determining and opening through said platform, which box of said boxes is nearest said
20 specific location, inserting into the associated duct at least one electrical connection cable or the like and connecting said one cable or the like to said specific centralised electrical or like energy transmit and/or receive means, for achieving a connection whilst keeping
25 each duct and each box empty of the electrical connection cable or the like corresponding to a need for connection between the specific associated location on the platform and specific centralised electrical or like energy transmit and/or receive means as long as this need has
30 not appeared, in order to implement an installation that can be adapted to respective needs, variable with time, for connection between locations on the platform and specific centralised electrical or like energy transmit and/or receive means.

35 The cost of an installation of this kind is lower

than that of an installation used by the aforementioned known techniques in that, for a given use of the platform, only the ducts associated with the boxes nearest the locations at which connections are required to be made are wired, and this exclusively depends on the requirements specific to those locations, that is to say, for example, to provide only a telephone or data processing service if only this type of service is needed, or only an electrical power supply service if only this service is needed, or only the capability to remote control equipment situated in or controlled from the technical facility where such is the specific requirement, the same duct corresponding to the same box being able to accommodate cables or the like corresponding to different requirements; the installation implemented in accordance with the present invention offers all the required flexibility with regard to adaptation to different requirements, since it is possible to extract one or more cables or the like from a duct if the corresponding requirements no longer apply, to close the corresponding box if no longer used and to open up another box to insert cables or the like into the corresponding duct, according to new requirements; the identification of a box so that it can be opened can be effected in a secure way if, as in a preferred embodiment of the present invention, each box has dimensions larger than positional tolerances for the platform; if the platform is manufactured from a cast material such as concrete and the closed boxes and the ducts are incorporated into the platforms by embedding them into this material during casting, it has been found that the use in the platform of cylindrical boxes with their axis vertical and with a diameter of 18 cm makes it possible to detect each box shown on a plan with certainty, despite possible inaccuracies in positioning and possible

movements during casting of the concrete or like material.

It will be noted that when the present invention is used not only is the position of each box on the platform known, to a certain tolerance, but also the length of each duct between the corresponding box and the technical facility is known, to a certain tolerance; because of this, before an electrical connection cable or the like is inserted into a specific duct it is possible, according to a preferred embodiment of the present invention, to prefabricate the cable or the like to a length exceeding by a specific amount the specific length of the duct and to fit the cable or the like with means for connecting it to the corresponding electrical or like energy transmit and/or receive means, before inserting the cable or the like into the duct; the cable or the like can be prefabricated in a manufacturing plant, under optimal conditions of cost and safety; by appropriately choosing the aforementioned specific amount of excess length, it is possible to avoid the wastage of cable or the like that necessarily results with traditional techniques of wiring ducts, whereby a long excess length of cable or the like is provided as a safety precaution and cut off when wiring is complete, which wastage can be considerable; the cable or the like is, of course, preferably prefitted with connection means at both ends.

It will be noted that as each duct can connect the corresponding box to the technical facility by the shortest path, generally meaning a straight line path, each duct is of the minimal length and so therefore is each cable or the like, representing a further saving.

Because of the facility to choose at will the plan according to which the boxes are distributed on the platform, by virtue of their mutual independence, it is possible to allow, in making this choice, for greater or

lesser probabilities of requirements for connection according to the locations on the platform and, for example, to provide a greater density of boxes in certain areas of the platform, intended after manufacture of the latter to constitute working areas, than in other areas of the platform, intended to constitute entrance lobbies or relaxation areas, for example.

An additional advantage of an installation in accordance with the present invention is that it is possible to identify unambiguously in the technical facility the respective emergences of the ducts associated with the various boxes; in a preferred embodiment of the present invention the emergences of the ducts into the technical facility are arranged in a line in a specific direction and the electrical or like energy transmit and/or receive means are arranged in a line in the specific direction and juxtaposed to the emergences of the ducts transversely to the specific direction; this facilitates identifying the cables or the like associated with each duct, in other words identifying each connection when making or removing connections.

Other characteristics and advantages of the method of the invention will emerge from the following description given by way of non-limiting example only with reference to the appended drawings which constitute an integral part of the description.

- Figure 1 is a schematic view in perspective of an installation in accordance with the present invention.

- Figure 2 shows the platform, in practice a concrete floor slab, in cross-section on the vertical plane denoted II-II in figure 1 passing through two of said boxes of which one is wired and the other is not wired.

- Figure 3 is a view analogous to that of figure 1 showing a detail of the technical facility.

- Figure 4 shows in cross-section on the vertical planes denoted IV-IV in figure 1 the wiring possibilities between a room and the technical facility as provided by the present invention.

5 Referring to all the figures, above a platform 1 in the form of a horizontal floor slab 2 of concrete, for example, is a horizontal ceiling slab 3, also of concrete, for example. The floor slab 2 has a plane horizontal upper surface 4 delimited at the outside 5 of
10 the building by a periphery 6 which is polygonal, for example. The upper surface 4 of the floor slab 2 defines the floor of the platform 1.

On the platform is a technical facility 7 of which are shown the contour 8 on the surface 4 (figure 1) and
15 two walls or partition walls 9, 10 separating it from the remainder of the platform. An electrical power supply cable 11 terminates in the technical facility 7, advantageously incorporating metering means and a circuit-breaker (not shown) inside the technical facility
20 7, as do a telephone cable 12 connected to a telephone switchboard (not shown) situated on the platform 1, outside the technical facility 7 or on another platform, and a cable 13 connected to a computer (not shown) also located on the platform 1 outside the technical facility
25 7 or on another platform. In this preferred embodiment of the present invention, the cables 11, 12, 13 are respectively connected inside the technical facility 7 to a straight horizontal electrical power distribution busbar 48 enabling connections to be made and removed at
30 will along its length (for example, a busbar of the kind distributed under the tradename "CANALISATIONS CANALIS KJ" by the French company "LA TELEMECANIQUE" of 33bis avenue du Maréchal Joffre - 92002 NANTERRE CEDEX, France), a straight horizontal telephone distribution
35 busbar 49 and a straight horizontal computer distribution

busbar 50, all parallel to each other and fixed to the partition wall 9 of the technical facility 7 in the example shown. The technical facility 7 may also enclose a set of air conditioning modules as described in French patent application n° 87 09630 in the name of the Applicant filed 7 July 1987.

To provide for numerous possibilities of connection between one or more of the cables 11, 12, 13 terminating in the technical facility 7, on the one hand, and the dispersed locations on the platform 1, on the other hand, as requirements change after the construction of the building of which the platform forms part, a predetermined number of mutually independent closed boxes 14 through 21 distributed according to a predetermined plan based on estimated future requirements, are incorporated into the platform 1, to be more precise embedded in the floor slab 2 in the example shown; as shown in figure 2 in particular, with regard to boxes 14 and 15, each box has for example a respective peripheral wall 22, 23 that is a cylinder of revolution about a vertical axis 24, 25, a respective flat horizontal bottom wall 26, 27 and a respective flat horizontal top wall 28, 29; the height h of each box as measured between its top and bottom walls is less than the thickness E of the floor slab 2, so that the top and bottom walls of each box are entirely covered and concealed by a layer of the material from which the floor slab 2 is made, namely concrete in this example. The various boxes 14 and 21 are therefore concealed, but they are nevertheless easy to locate in that they are disposed according to a predetermined plan and in that their horizontal dimensions are greater than the tolerances governing their location in the platform 1; in the example shown the boxes 14 through 21 are therefore aligned parallel to the peripheral edge 6 of the upper surface 4 of the floor

slab 2, at the same distance d from the latter and spaced from each other in pairs by this distance d , which may be 1.30 m, for example; other arrangements may equally well be chosen without departing from the scope of the present invention provided that they correspond to a predetermined plan that is known after construction of the platform 1; also, in the example shown the outside peripheral wall 23 of each box 15 has a diameter D in the order of 18 cm, it being understood that a different diameter can be chosen provided that it is compatible with the tolerances for positioning of the boxes 14 through 21 in the floor slab 2 of the platform 1; it will be noted that a shape different than that described may be adopted for each of the boxes 14 through 21 provided that it enables each box 14 through 21 to be located with certainty, from the plan, through the floor slab 2.

Also, the floor slab 2 contains and conceals ducts 30 through 37 which in this example are provided in equal numbers to the boxes 14 through 21 and each of which connects a respective box to the technical facility 7 where it emerges from the floor slab 2 through the upper surface 4 thereof and through the intermediary of a respective box 38 through 45, identical to the boxes 14 through 21 and partially embedded in the floor, in positions where the axes of the various boxes 38 through 45 are horizontal and aligned relative to each other; the boxes 38 through 45 through which the ducts 30 through 37 emerge into the technical facility 7 are therefore mutually juxtaposed in a horizontal alignment 47 which is that of their axes and in an ordered arrangement enabling each of them to be identified with certainty, as well as the box 14 through 21 to which it corresponds; this alignment 47 is parallel to the electrical power busbar 48 and to the busbars 49 and 50 which are superposed vertically and to the boxes 38 through 45, in the

preferred embodiment shown; where the floor slab 2 is made from concrete, as in this example, the ducts 30 through 37 and the boxes 38 through 45 are embedded in the concrete at the same time as the boxes 14 through 21 during casting of the slab 2.

With each of the boxes 14 through 21 distributed over the platform 1 there is therefore associated a respective box 38 through 45 in a precisely determined position in the technical facility 7 and the two boxes associated in this way are connected to each other by a duct 30 through 37 which is empty, that is to say which does not contain any cables or the like, during the manufacture of the floor slab 2; it will be noted that each of the ducts 30 through 37 can be placed independently of any requirement for future partitioning of the platform 1, that is to say in practice according to an arrangement as close as possible to a straight line arrangement, as shown in figure 1, that is to say with the minimal length, which is known with relative accuracy.

The boxes 14 through 21, the ducts 30 through 37, the boxes 38 through 45, the electrical busbar 48 and the busbars 49 and 50 together with the corresponding cables 11, 12, 13 constitute the permanent infrastructure of an electrical or like energy transport installation according to the present invention, that is to say the infrastructure usually implemented integrally with handover of the platform 1 to a user who then, according to his own connection requirements and according to partitioning 54 on the platform 1 to subdivide it into rooms 51, 52, 53, completes this infrastructure in the way now to be described.

This description will concentrate exclusively and by way of non-limiting example on the room 51 to which correspond the boxes 14 and 15 and which is shown in

figures 1, 2 and 4 in particular, it being understood that the rooms 52 and 53 to which respectively correspond the boxes 17 and 18 and the boxes 19 through 21 may be equipped in a similar way.

5 It will be assumed by way of non-limiting example that in this room 51 an electrical power supply, a telephone connection and a computer connection are needed at a location 55, where a desk is situated, for example, and which from examination of the plan of the platform 1
10 is found to be between the line joining the boxes 14 and 15 and the outside 5 of the building, nearer the box 14 than the box 15.

 Given these conditions, the box 15 is left closed and embedded in the material of the floor slab 2, in
15 practice concrete, and the corresponding duct 31 is left without any cables in it, as shown in figure 2; however, the box 14 nearest the location 55 is located as accurately as possible on the surface 4 of the slab 2 and the layer of the material of the floor slab 2 between the
20 wall 28 of the box 14 and the upper surface 4 of the floor slab 2 and then the wall 28 itself are drilled through to open the box 14 upwardly through the material of the floor slab 2 and so gain access to the corresponding duct 30 through the box 14 and through the
25 hole 56 formed in this way in the material of the floor slab 2 and in the upper wall 28 of the box 14; likewise, the box 38 corresponding to the emergence of the duct 30 into the floor of the technical facility 7 is opened upwardly.

30 Then, after determining with a certain tolerance the length of the duct 30 by reading the plan of the platform 1, three cables are prefabricated, preferably in a manufacturing plant, to a length corresponding to the length of the duct 30 as shown on the plan increased by a
35 specific amount; these three cables are an electrical

power supply cable 57, a telephone cable 58 and a computer cable 59, both ends of each of these cables preferably being fitted during its prefabrication with appropriate connection means, namely a respective female connector 60, 61, 62 at one end of each cable intended to exit the duct 30 through the hole 56 in the room 51 and respective means for connecting to the electrical power busbar 48, the busbar 49 and the busbar 50 at the other end, designed to emerge from the duct 30 into the technical facility 7 through the associated box 38.

The three cables 57, 58, 59 are then inserted into the duct 30, separately or together, and respectively connected to the busbar 48, the busbar 49 and the busbar 50, at a location on each of these preferably situated vertically above or approximately vertically above the box 38; the user of room 51 can then plug into the respective connectors 60, 61, 62 any electrically powered device, a telephone and a computer terminal; the length of each of the cables 57, 58 and 59 is preferably computed so that after their respective connection to the busbar 48, the busbar 49 and the busbar 50 each of the three cables has a section situated outside the box 14 and the hole 56 inside the room 51.

If the user of room 51 does not use a computer terminal, for example, the cable 59 is naturally not inserted into the duct 30; likewise, if the user of room 51 ceases to use the computer terminal after having used one the corresponding cable 59 can be removed from the duct 30 after unplugging it from the busbar 50 and this cable 59 may be subsequently re-used, either in another duct of approximately the same length as the duct 30 or in the duct 30 again.

Generally speaking, once a box like the box 14 is opened it is possible to insert into the corresponding duct like the duct 30 or to remove therefrom any type of

cable designed to transport any kind of electrical energy between the facility of the box 14 and the technical facility 7.

5 The cables inserted in this way into a duct like
the duct 30 can be intended not only to supply electrical
power, to transmit telephone signals and to transmit data
signals, as described, but also to transmit currents or
signals corresponding to other functions; specifically,
10 figure 2 shows the case where there is advantageously
inserted into the duct 30 an auxiliary cable 63 provided
in the room 51 with an appropriate connector 64 and
designed to enable, from a box 65 that may be mobile, for
example, adapted to be placed on a desk near the location
55 and appropriately connected to the cable 63, remote
15 control of a number of devices such as an air
conditioning unit associated with the room 51 and
situated in the technical facility 7, as described in the
aforementioned French patent application in the name of
the Applicant, or the lighting of the room 51, as
20 schematically represented at 66 in figure 4, and the
operation of a motor 67 operating a blind (not shown) of
the room 51, placed on the outside 5 of the building; to
this end the auxiliary cable 63 is connected in the
technical facility 7, at the level of the telephone
25 busbar 49, in a way that is within the normal competence
of those skilled in the art, to a cable 74 for remote
control of an air conditioning unit (not shown)
associated with the room 51 and supplied with electric
power by a cable 69 connected to the electrical power
30 busbar 48 by the same connection means 68 as the cable
57, and to a cable 70 which, returning from the room 51
between the ceiling slab 3 and a false ceiling 71, is
connected inside the room 51, between the false ceiling
71 and the ceiling slab 3, to a unit 72 for controlling
35 the lighting 66 and to the blind motor 67, also supplied

with electric power by a cable 70 connected to the busbar 48 of the connection means 68 which therefore alone serves to supply electrical power to the room 51 and advantageously comprise corresponding protection means such as a differential circuit-breaker, in a way readily understandable to those skilled in the art; these examples are naturally not of any limiting kind.

If the use of the room 51 changes subsequently or if the partitioning 54 is replaced by an alternative arrangement, it is possible that there may be no further requirement for supply of electric power to the location 55 and that a requirement for supply of electrical power may arise with regard to another location 73, situated nearer the box 15.

The cables 57, 58, 59, 63 associated with the duct 30 are then removed from it and the hole 56 is closed up (because of its small size it can then readily be hidden, for example under a join in the floor covering); conversely, after locating the box 15 on the plan the layer of material constituting the floor slab 2 situated between the top wall 29 of the box 15 and the upper surface 4 of the floor slab 2 and the wall 29 itself are drilled and, after the necessary cables are prefabricated, they may be inserted into the duct 31 so that they emerge into the room 51 through the open box 15 and into the technical facility 7 through the box 39, before making the necessary connections; the same operations can be carried out in respect of all the boxes 14 through 21 distributed over the platform 1 and therefore at any time only those of the ducts 30 through 37 which correspond to a box 14 through 21 situated near a location where there is a requirement for transportation of electrical energy are wired, and this with only the cables needed to meet this requirement, which cables are as short as possible; an installation in

accordance with the invention is therefore much more economic to implement than any of the known type installations mentioned in the preamble, while offering great flexibility, meaning that they are very easy to adapt to user requirements at any time.

Those skilled in the art will naturally understand that although only boxes embedded in the platform floor slab have been described the scope of the present invention would not be exceeded by embedding concealed boxes of this kind also in the walls, curtain walls and partition walls of the platform, according to a predetermined plan so that they can be located and opened according to requirements; the corresponding ducts, for the most part accommodated in the floor slab as described, would also rise appropriately to the boxes in the walls, curtain walls and partition walls, being embedded in the material of the latter; likewise, those skilled in the art will understand that although the invention has been described with reference to the transport of electrical power, it would be equally possible, without departing from the scope of the present invention, to run generally flexible cables, fibres, ducts, tubes or the like of any type appropriate to transportation of energy.

CLAIMS

1. Method for implementing an installation for transporting electrical or like energy, namely any energy transportable by cable, fibre, sheath or generally flexible tube, between a technical facility (7) and locations (55, 73) dispersed on a platform (1), said platform being regarded as the entire floor or ground of one storey of a building and by extension the walls, curtain walls and partition walls of this storey of the building which are in principle not removable, said method using centralised transmit and/or receive means (48-50) for said electrical or like energy which are accommodated in said technical facility, and comprising the succession of steps consisting in:
- a) incorporating into said platform (1), during its manufacture, a predetermined number of independent closed boxes (14-21) distributed according to a specific plan chosen at will and respective ducts (30-37) for inserting at least one electrical connection cable or the like (57-59, 63), namely at least one cable, fibre, sheath or generally flexible tube, respectively where each duct (30-37) connects a respective one of said boxes (14-21) to the technical facility independently of the other ducts (30-37), which correspond to the other boxes (14-21), respectively whilst making each duct (30-37) emerge from the platform (1) into the technical facility (7),
- b) then, as requirements for connection between a specific location (55) on said platform (1) and specific centralised electrical or like energy transmit and/or receive means (48-50) appear, determining and opening through said platform (1), which box (14) of said boxes (14-21) is nearest said specific location (55), inserting into the associated duct (30) at least one electrical connection cable (57-59, 63) or the like and connecting



said one cable (57-59, 63) or the like to said specific centralised electrical or like energy transmit and/or receive means (48-50), for achieving a connection whilst keeping each duct (30-37) and each box (14-21) empty of the electrical connection cable or the like (57-59, 63) corresponding to a need for connection between the specific associated location (55) on the platform (1) and specific centralised electrical or like energy transmit and/or receive means (48-50) as long as this need has not appeared, in order to implement an installation that can be adapted to respective needs, variable with time, for connection between locations (55) on the platform (1) and specific centralised electrical or like energy transmit and/or receive means (48-50).

2. Method according to claim 1, characterised in that the dimensions (D) of each box are greater than positional tolerances on the platform (1).

3. Method according to claim 1 or claim 2, wherein the platform (1) is manufactured in a cast material, characterised in that said closed boxes (14-21) are incorporated into the floor (2) of the platform (1) by embedding them, as well as said ducts (30-37), in said material during casting thereof.

4. Method according to any one of claims 1 to 3, wherein each duct (30-37) has a specific length, characterised in that said cable (57-59, 63) or the like is prefabricated to a length exceeding by a specific amount the length of the duct (30) corresponding to said box (14) nearest said specific location (55) whilst fitting said cable (57-59, 63) or the like with means (60-62, 64, 68) for connecting it in particular to said electrical or like energy transmit and/or receive means (48-50) before said cable (57-59, 63) or the like is inserted in said duct (30).

5. Method according to any one of claims 1 to 4



characterised in that, during step a), said ducts (30-37) are made to emerge from the platform (1) into said technical facility (7) whilst aligning their emergences (38-45) along a specific direction (47) and in that said
5 electrical or like energy transmit and/or receive means (48-50) are arranged in a line in said specific direction (47) and juxtaposed to said emergences (38-45) transversely to said specific direction.