

01.07.2016
cover letter

to chosen candidates

OFFER REQUEST

Inclining elevator /funicular to TURKU :
request for technical parameters of the offered system,
proposal for realization and total price offer request

City of Turku request from you an offer concerning inclining elevator /funicular system including its production, delivery and built-up in situ as a turn-key contract according to items as mentioned in attached request and in its annexes.

The offer should be prepared in form of a lump-sum (total price) and it should include the final price in Finland, both with and without the VAT (added value tax, currently 24% in Finland). The offer should include also the costs of planning consultations, which are needed for production and building-up the system to its position. The building permit by environmental and cityplan /zoning will be provided by the client, City of Turku.

The offer should not include realization of the top or bottom landing platforms, nor building of the machine room, which all will be designed by the client's own planners and consultants and built by client's contractor, according to technical instructions and specification as given by the elected elevator company.

On the basis of received offers, the client has prepared to negotiate with the candidate companies about precise determinations for this purchase, according to items as mentioned in the attached documents.

The offer has to be delivered in a closed envelope with a title "funicular offer" to the address:

Registrar's Office

City of Turku
Linnankatu 90 E
20101 Turku
Finland

time not later than on Monday, 4th of January 2012, at 13:00 PM

Jouko Turto
Director
The Property Management Division
City of Turku

ANNEXES

offer request document with A series annexes
project information (B and C series annexes)

21 pages + 10 pages
18 pages + xx pages



TURKU FUNICULAR

OFFER REQUEST
technical parameters

06.06.2016

REQUESTS : TECHNICAL PARAMETERS
PROPOSAL FOR REALIZATION
TOTAL PRICE OFFER, "LUMP-SUM"

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<i>B series</i>	<i>Annexes</i>	<i>project information</i>
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subject : inclining elevator / funicular system :
offer request and technical parameters

references announcement in EU Official Journal, dd.mm.yyyy

INCLINING ELEVATOR / FUNICULAR TO TURKU

REQUESTS : TECHNICAL PARAMETERS
PROPOSAL FOR REALIZATION
TOTAL PRICE OFFER, "LUMP-SUM"

Dear Sir / Madam,

At the beginning we like to thank you for your interest to our elevator project and your reply to our request of company introduction.

Right now we are proceeding to a stage, when it is actual to determine more precisely the form and conditions to the machinery purchase and form, how to build needed structures in situ and finally install the main system and adopt it to the environment.

For this purpose and to allow us to compare different alternatives among candidate systems, we like to give you some additional information about the site etc. In addition, we will be pleased to receive your information to the items - and further-on your offer - as follows :

1 PROJECT BASIS

TURKU location 60°27'05"N, 022°16'00"E

Turku is a town in south-west of Finland, located in the north-east coast of Baltic Sea. It is very vital in commerce, culture, education, industry and tourism and has now-a-days some 180.000 inhabitants, stated therefore as the fifth largest city in Finland. The free-time activities in Turku are numerous, typically sailing is popular due to location close to beautiful archipelago. In Larger Turku, including it's close surroundings, there are more than 300.000 inhabitants, creating Turku as the third largest region in Finland, together with Helsinki and Tampere regions. Turku is the oldest town in Finland and founded in late 1200's. Until 1812 Turku was the capitol of Finland, before Helsinki. Turku has been elected one of the Cultural Capitols of Europe for the year 2011, the other one is Tallinn in Estonia. Turku is officially a bilingual city, some 5,2 % of the population are Swedish spoken, the most of the rest speak Finnish as their mother tongue. The name of the city comes from the ancient Russian word "turgu", meaning *market square*.

LOCATION

The funicular system will be built in the city centre of Turku, in the middle of the old historical town, surrounded with magnificent collection of old buildings and parks. The funicular system has been considered as a solution for transporting passengers between the bottom level as located close to shore-line of Aura river (from Linnankatu, "Castle Street") up to the hill-top called "Kakolanmäki", widely known of it's previous use as a prison area. The prison has recently been abandoned from it's previous use and the old prison will be modified to office and research use in the future. The prison premises have been considered to be important by their historical values and they will be refurbished under supervision of authorities of antiquities. In addition, the City of Turku has plans to develop Kakolanmäki -hill with multi-storey apartment buildings and has recently arranged architectural competition when seeking options. The development targets will increase dwelling and working places at the hill top area, creating needs to improve transportation (including this funicular system as a new building project).

The funicular system will be located near to both existing and planned apartment buildings, causing special needs to environmental adoption and operational conditions, like silent functions. The funicular will be part of district transportation system of Turku and should therefore be easy-accessible and automatically functioning all times when required (scheduled transport times). In addition, the system should follow those targets as settled in the Sustainable Development Program of Turku, in which the energy and water consumption should be decreased, cut-down working traffic and improving public transportation.

2 CONDITIONS AT THE SITE

The climate in Turku could be considered mild within Finland in general. The average annual temperature is some + 6°C and the annual rainfall is typically some 700mm. The snow cover will normally exceed up to 400mm, and more in slopes and occasionally more in case of snow storms. The months with temperature below 0°C are December - March, in general. The permanent snow comes around New Year and lasts till February - March. Aura river will freeze almost annually and the ice will smelt in March / April, with some variations (1875 = in May, 1990 = in February). In 2008, the river did not get frozen at all. The main wind direction is from south-west. (More wind conditions in Turku on web-site www.fi.windfinder.com/windstatistic_turku.htm).

3 PROJECT AND REPRESENTATIVES

The inclining elevator is a part of public transportation and environment works, in which the exterior facilities close-by will be modified according to demands of the new buildings, and instructions for planning the surrounding areas. The projects are municipal works and the funds will be allocated by the City of Turku.

client	City of Turku	
landscape architecture	to be nominated later	park and surroundings
executive project architect	to be nominated later	landing stations
project management consultant	to be nominated later	

In order to clarify roles and attendees of the elevator factory (as turn-key contractor) and the client (City of Turku), a preliminary project organogramme included to this offer request, ANNEXE B1.

4 LIMITATIONS, REQUIREMENTS

Referring the targets to the funicular / inclining elevator, the main limitations and requirements to this turn-key contract are as follows :

the system shall ...

- 4.1 fulfil capacity and functional requirements by the client
- 4.2 have ensured functions and guaranteed durability in use
- 4.3 fulfil current safety norms and standards (both EU and Finnish) *)
- 4.4 be accepted by the Finnish safety instructors and authorities
- 4.5 have schooled service company in the region for maintenance and repairs
- 4.6 have ensured spare part delivery from the factory and reserve pack at the spot
- 4.7 have minimum adoption points and extent of impact to the ground (rail)
- 4.8 have minimum needs to effect surrounding environment
- 4.9 the machinery and rail / cabin should be very silent due to housing close-by
- 4.10 the outlooks (all visible parts) should appear in high quality industrial design
- 4.11 the security and safety features and needs of functions will be obeyed strictly
- 4.12 the accessibility and demands of handicapped passengers have been considered
- 4.13 be economical in consumptions and follow principles of Sustainable Development
- 4.14 have possibility to re-use the energy as generated when cabin is travelling "empty"

*) Directive 2000/9/EC Cableway Installations for Passangers

*) EN 12929-1:2015 General Requirements for Safety

*) all partial systems and safety components to be officially approved

5 DESIGN PARAMETERS

5.1 Type of system, functions

The elevator machinery in question will include one sheltered cabin, moving between two landing stations (bottom landing in Linnankatu -street and top landing at the end of Michailowinkatu -street) on a monorail profile or twin-rail. The functions will be totally automatic, as like in ordinary person elevator with push-buttons "up - down", operated by a passenger himself, no operational personnel required. The elevator will be in use daily and around the year, allowing operations also 24hours/day stand-by and ready to move. Temporary switch-on-off with a key by an authorized person. The system has to be equipped with emergency functions (panic handles connected to brakes, alarms, automatically / manually openable doors, ladders and glass hammer(s) etc. safety tools, instruction signs etc.) according to the current safety instructions and requirements (ref. O.I.T.A.F regulations for safety).

5.2 Capacity

Requested capacity is some 480 persons / hour. Alternatives to this requirement will be considered in difference of + / - 15%. Balancing can be done by variations of the cabin size and operational speed. Other measures concerning requested capacity are as follows :

5.2.1	cabin	30	persons
5.2.2	operational travel speed max.	2	m / sec
5.2.3	acceleration, average, approx.	0,2	m / sec ²
5.2.4	retardation, max.	2,0	m / sec ²

5.3 Rail and it's route

“single- or twin-track”

The rail will be of steel, protected against rust and corrosion. The rail structure (monorail or twin-rail) and the amount of supporting columns with their structure and principle for needed foundations according to factory standards. The rail should have variable rising angle (span-form), following the forms of hill slope. The design of the rail and columns should consider surrounding nature and the park by it's form, extent, colours etc. as well as the maintenance, weather, fallen leaves and snow conditions in the area. All moving parts of the machinery and drives will be covered with suitable protections in order to avoid accidents of any foreseen kind.

The route for the rail / track is shown in the annexe as a draft. The route and it's safety zone(s) should be limited into the practical minimum by it's dimensions; existing trees, soil and flora in general should remain in their current form, conditions and extent.

The vertical rise is some 40 metres and horizontal distance between landing stations is some 100 metres. The way between landing stations is straight, no curves. The client will provide soil research and detailed level data for the basis of further technical negotiations.

5.4 Cabin

The cabin should have capacity for **30 passengers**, as mentioned in 5.2.1. The frame of the cabin has to be strong enough to manage in the existing weather conditions, in described operating times and allow sheltered and convenient travel to lift users. Thermal insulation, ventilation, humidity balancing and structural sealing are required (needing factory's description as merged to the offer).

The cabin will have doors with automatic function(s) open / close, controls on both landing stations. The width of the doors should allow use of handicapped passengers with wheelchairs (free opening width absolute minimum 1500 mm). The cabin will be equipped with a loudspeaker system for announcements from outside (control point obviously from public transport centre). The windows and doors glazing should be impact resistant, hardened glass (or laminated tempered glass). The cabin should have steplessly adjustable levelling system = the floor of the cabin will be continuously balanced to remain in horizontal position, in all times and circumstances.

The cabin should have sufficient lighting, which will be operated automatically (switched-on during dim and dark times of a day, all times when elevator is in function. Indirect lighting system and LED -technology will be preferred, direct strong general lighting system to be avoided due to problems with weak sight passengers. Emergency lights (battery operated, for possible black-out) according to special safety instructions and norms.

The cabin should be equipped with those safety equipment and tools, which are required in current safety norms, standards and instructions. All there equipment will be installed to the lift cabin in practical and designed way, to their planned positions, regarding also possible outrage and vandalism (public transportation).

The views eastwards from the cabin, down to the river, all the way from bottom landing to the top level, are magnificent. The river banks and the landscape over the old city opens widely for passengers to admire. Therefore a special attention should be paid to the need of large windows or even panoramic glass walls when designing the cabin.

The funicular project is located in a city centre with a comprehensive amount of inhabitants and plenty of tourists. Turku, as a Cultural Capital 2011, requires that all public projects, like structures and buildings should be of top quality design and engineering; therefore a special attention will be paid to the outlooks of the funicular system, and to the cabin as most visible part of the project completion. This requirement of high quality concerns also the architecture of the landing stations, which should adopt to their positions in a harmonized and skilful manner, regarding both the historical, old buildings and the new architecture in the multi-storey apartment buildings (as to be built in the future at the top of the hill. The design of elevator cabin and involved machinery should have the same aesthetical targets; it should reflect high quality of industrial design and high-tech know-how of today.

Some special fittings for the cabin (to be included to the offer)

5.4.1 Heating / cooling

The heating to the cabin with necessary structural modifications according to the factory standards (proposal). The sufficient internal temperature in the cabin should be between 14°C...18°C. The heating system to be designed to consider eliminating possible condensing water / steam from surfaces and allowing sufficient air-flow in the cabin.

During summertime and with larger groups of passengers, it will be obvious that cooling / AC -function will be needed. The lift factory should include this cooling function to the offer.

5.4.2 Intercom (view / voice -telephone)

The cabin will be connected into intercom system, with connection to public transportation centre. This intercom should have both voice and picture abilities, and mostly reserved for emergency use only. The lift factory should reserve a proper place for this device inside of the cabin and make routes for needed wiring inside of the cabin's structures.

5.4.3 CCTV -system

The both landing stations will have CCTV -surveillance and the views will be merged into greater observation system by the client. The cabin should be equipped with an option for one camera and the lift company should make routes for needed wiring inside of the cabin's structures.

5.4.4 Cabin door functions

The cabin should have automatic sliding doors on both sides of the cabin body and these doors should operate in co-ordination together with similar doors on both of the landing stations. All these doors and their installation and automation belongs to the responsibilities of the lift factory. The principle of way-down / way-up is shown in an annexed drawing, ANNEXE B4.

5.4.5 Emergency hatch / sun roof

The lift cabin will be most obviously equipped with an emergency hatch on the roof; openable in case of accidents and evacuation. If the lift factory has an option to enlarge this hatch into a larger roof window / sun roof, this option can be merged into the offer with a special additional item, with an optional price. The sun roof should be thermally insulated and perform similarly as the other window (glazings) as elsewhere in the cabin.

5.4.6 Materials

The floor of the cabin should have an anti-slippery, rough and "darkest surface" carpeting, that is easy to maintain and keep clean. The ceiling should be the lightest surface in the cabin. All the surfaces and their materials and colours will be designed in co-operation with the client's architect.

5.4.7 Furniture

The cabin should have a bench for elderly / handicapped / pregnant passengers and for children. This bench should be removable / lift-up for cabin cleaning. The design, materials and height of the bench should be designed together with client's architect, due to reason this design will be used also in the landing stations and in their furniture (= same system / same design).

5.4.8 Voice synthesizer

The cabin should have an internal location (locker) for a voice synthesizer and its wiring, in case the client considers to merge synthesizers to this project. The target is to inform blind passengers / passengers with limited sight about “coming cabin” / “closing doors” etc. The signals will be the same as those in use in landing stations.

5.4.9 Miscellaneous items

A Push-buttons

The push-button(s) “up-down” and “door-open” (in case of failed automatic opening) should have LED -lights as in “ring form” around the button(s) due to needs of handicapped passengers with sight problems. The button(s) should be big enough for also those passengers wearing gloves. The buttons should have sound signal informing of “accepted call”.

B Signs

The cabin should have clear and designed sign with information how to deal in case of emergency and/or accident, according to safety / security instructions (including limitation of passenger amount (30 persons), emergency numbers, and minimum age of a single passenger). This sign should be visible and printed on a fluorescent (self-lighted) base board. Same type of signs will be installed to both of the landing stations on the behalf of the client. The most obvious languages are Finnish, Swedish and English. This is a subject as to be agreed together with partners.

No smoking -sign should be installed to a planned position inside of the cabin.

C Handle bars and grip loops

The ceiling of the cabin should have internal railing(s) and/or handle loops ensuring safe travel for those standing in a crowded cabin. These railings and handle loops should be installed in a safe and practical way, avoiding possible injuries.

The end wall of the cabin (without seat) should have a handle bar underneath of the window (facing to river / east). This bar should be as wide as the window.

- E** Manufacturer's labels and signs (lift company)
- The lift company has right to install a small sign to the cabin with factory's name and address details, as well as installation year to this certain funicular. In case the security authorities may require, the inspection details should be merged into this sign ("pocket" for certificates).
- The lift company is allowed to install this kind of "product sign of the Turku funicular" to both of the landing stations, but the outlooks, size and positions have to be agreed by the client and his architect.
- F** Fire extinguisher(s)
- The cabin should be equipped with fire extinguisher(s) by the lift factory in case required by the safety instructions and/or authorities. These device should be located into a proper and practical place in the cabin (easy-to-reach), but regarding also vandalism and possible miss-use.
- G** Waste basket(s)
- The cabin should have 1 ... 2 pc. of metallic waste baskets / boxes for litter, easy-to-empty and re-fix. These boxes / baskets should not create risks for blind / handicapped passengers.

5.4.10 Exterior / internal colours

The cabin (and the landing stations) will be parts of public transportation in Turku and the official graphic instructions will be considered when making decisions of the colours. The final definitions of colours will need co-operation between partners (and their designers / architects).

5.4.11 Exterior cleaning

The cabin will be cleaned from outside by using a high-pressure washer at the site (service area in front of the top level landing). The cabin should be water tight enough for this treatment (including openings like doors and windows and their sealings (including also roof hatch / sun roof).

5.5 Main drive

Continuing belt with (an automatic) tightening system; according to factory standards and needs for this certain individual elevator.

5.6 Landing stations

Both of the landing stations will be designed by an experienced architect as appointed by the client, City of Turku, and these stations will follow those technical instruction and dimensions as given by the elevator company (among others the machine room, rail adoption to stations, rail cave at the bottom landing, automatic door positions etc.). The stations will be canopy - like, light construction buildings with sheltering partitions; no heated waiting rooms.

5.7 Safety zones

The rail - along all the way - and landing platform areas will be equipped with such structures (fences, gates, coverings, guiding railings, warning signs etc.), which are required in the safety instructions. The factory is required to inform the client about the current need of these, concerning the proposed and offered elevator systems. The lift company is in responsible to build these safety structures, as accepted by the client.

5.8 Brakes

The lift company is required to make a detailed description of the braking systems, which will be installed to the cabin / rail (drive brake for retardation ?, mechanical emergency grapper ?) and to the machine room (main wheel disc brake ?) or other possible braking systems.

5.9 Levelling system for the cabin

Due to reason the track / rail has a variable angle on it's way up to the hill top, the cabin has to be equipped with a levelling system, which can be created by using hydraulic / pneumatic / mechanical / or other system. The lift factory is required to make an description of this system and ensure it's function in all situations (automatic levelling).

5.10 Electrical connections and power supply

The lift company will provide a set of instructions and specification to the client about the needed conditions concerning electrical installations and capacity. On basis of these documents the client will inform the lift company about the available solutions in the site. The detailed questions will be negotiated in technical meetings between the client and the lift company.

The total need of power supply (in kW's) for elevator system in question will be forwarded to the client at first phase. The estimated motor power will be approximately 100 kW.

6 TIMETABLE

This request for offers will guide client's further needs for negotiations with the candidates and on the basis of precise final contract price. The decision of purchase will be done immediately after these negotiations. The preliminary proposal for funicular project's schedule is as follows (and should be commented and/or approved by the lift factory candidate) :

1	purchase announcement in EU's Official Journal	on	01.07.2016
2	tender time for offers (approx. 2 months)	end on	15.09.2016
3	offer comparison, negotiations	end on	30.10.2016
4	final purchase decision by City of Turku		15.11.2016
5	signing the agreement	including period of claims at	15.12.2016
6	production time in the factory	according to production schedule	
7	transports to Turku, deliveries	according to production schedule	
8	preparation works in Turku	end on	01.05.2017
9	installation works in Turku	according to delivery timetable	
10	tests and completion works, inspections	end on	15.08.2017
11	schooling client's personnel	end on	05.09.2017
12	funicular handing-over to the client	on	20.09.2017
13	opening of the new funicular	on	06.10.2017

7 CONDITIONS FOR PURCHASE

before signing the agreement

The general terms and conditions for the lift factory are mentioned in the announcement in Official Journal. The form of this purchase is a **turn-key contract**, and the client expects to have the funicular system ready for acceptance and for use at the time mentioned in the timetable, item nr. 6. While defining basis for the agreement concerning the funicular system purchase, the items to be considered and settled are as follows :

- 1 The offer and it's conditions have been accepted by both agreement partners
- 2 Factory's quality programme has been accepted by the client
- 3 Client has provided needed environment permits for the project (or proofs of this)
- 4 Factory has provided all needed permits concerning the system (safety etc.)
- 5 Negotiated timetable has been approved by both agreement partners
- 6 Responsibilities between the partners have been agreed
- 7 Warranty time for the project is agreed (2 years from the moment of accepted completion)
- 8 The amount of performance bond and warranty time bond have been agreed

references :	performance bond (building time)	= 5,0 % *
	warranty bond, 1 st warranty year	= 5,0 % *
	warranty bond, 2 nd warranty year	= 2,5 % *

*) = % -share of the total contract price (lump-sum)

- 9 Procedure for service and spare parts' availability have been clarified
- 10 Payment posts (instalments) / timetable for payments agreed
- 11 Tax procedure has been clarified
- 12 Project organogramme / organization diagram has been approved by the client
- 13 Connections and responsibilities between contractors agreed (building works)

- 14 Technical adoptions to the existing systems and networks solved
- 15 Environment instructions / site and transportation arrangements agreed

REMINDER : See also annexe C1 “Project Conditions”, contract information

8 FORM OF REALIZATION

Realization of the project needs a combination of contractors on the factory’s side. At the preliminary phase the factory should study the attached draft for an organogramme, ANNEXE B1, how the works will possibly handled and what kind of sub-contractors, suppliers and purchases might be needed, also in Finland, locally. These contract partners will be introduced to the client in the final offer phase, for approval. The conditions, how to approve or reject one certain sub-contractor, will be informed to candidate lift company along the technical negotiations.

The lift company is required to fill a table of sub-contractors and merge it to his offer, the table in annexes, ANNEXE A1 “*project team*”.

As for the team introduction, the lift company is requested to nominate those sub-contractors, consultants and suppliers, which will take care of needed works and responsibilities. The list of these partners is most obviously as follows:

A1	Funicular factory	turn-key contractor of the funicular project	
A2	Lift machinery manufacturer	if other than A1	name and address
A3	Lift cabin manufacturer	if other than A1	name and address
A4	Lift rail manufacturer	if other than A1	name and address
A5	Structural engineering	consulting office	name and address
A6	Electrical engineering	consulting office	name and address
A7	Rail foundations	local sub-contractor ?	name and address
A8	Rail installation	local sub-contractor ?	name and address
A9	Cabin installation	local sub-contractor ?	name and address
A10	Maintenance & service	local partner ?	name and address
A11	Permits & tests	local partner ?	name and address
A12	Electrical connections	local partner ?	name and address
A x	Other sub-contractors and consultants in extent of needs ...		

9 RESPONSIBILITIES OF PARTNERS

9A The lift company is responsible over works, tasks and functions as follows:

- actions and responsibilities of a general contractor in this turn-key contract
- provide all needed structural and electrical drawings and specification for delivery
- collect and control works and duties of his own project team according to item 8
- produce/provide machinery, motor, drives, rail and cabin for the funicular delivery
- arrange all transports and custom procedures for the cargo (to the site in Turku)
- arrange building site for the works at the site in Turku (fences, guarding, lights etc.)
- build foundations for the rail and install rail and drives to their positions
- install machinery, motor and other system equipment to the machine room
- purchase and install automatic doors to both of the landing stations
- purchase and install call buttons to both of the landing stations

- take care of duties concerning Health & Safety aspects at the site
- furnish the cabin with materials and equipment as chosen by the client, see 5.4
- arrange all tests and authority inspections for the funicular system
- complete the whole funicular system totally and ready for client's approval

other tasks for the lift company :

- > provide all needed building permits for the rail and funicular machinery
- > provide all needed tests and inspections for the whole funicular system
- > provide all security and safety tests & certificates for the whole funicular system
- > give instruction and measures to the client for the needs in machine room
- > give instructions and measures to the client for the needs on both landing stations
- > keep the rail building site clean and tidy, all times
- > hand-over all registration and certificates as required by the authorities *)
- > arrange schooling for the client's executive personnel
- > make and collect 4 sets of as-built -drawings + user's manuals to the client
- > arrange and pay insurance for the building site (works by lift company in Finland) **)
- > perform good co-operation together with client's consultants and contractors

*) from the lift factory and all sub-contractors :

- company registration certificate (officially rec.)
- certificate of paid taxes and social fees
- certificate of fulfilled responsibilities concerning pension fees and other possible government fees

**) content and coverage of the insurance to be agreed
(typical *building site insurance* is requested)

9B The client is responsible over works, tasks and functions as follows:

- build both landing stations according to received measures from the lift factory
- provide building permits to both of the landing stations and for landscaping
- provide soil research for lift factory's needs (rail foundations etc.)
- design and build the fences around the rail route according to safety instructions
- provide main electric feeding cable to the machine room according to instructions and capacity information from the lift company

- > give instructions to the lift factory how to arrange building site in Turku
- > assist the lift factory in getting needed permits for the rail and electricity
- > support the lift factory by providing needed energy and water for the site ***)
- > perform good co-operation together with lift company's consultants and contractors

***) site energy and water paid by the client

9C Works together with the lift company and the client

- make the main electric connection in the machine room
- adjust electrical systems to function in coordination (lighting, signals, call buttons etc.)

10 ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

The client requires that the environment aspects and principles of sustainable development will be obeyed and the bidder should follow sustainable development's principles in this project.

11 OFFER

11.1 Lump-sum

The offer will be done according to the instructions, conditions and determinations as written in this document and agreed in the offer meeting(s). The offer will content the total lump-sum of the described project including all necessary and foreseen supplementary works, both in the origin country and in Finland. The lump-sum will include all involved costs and fees as well. Open prices and possible reservations for unforeseen works, if any, has to be shown clearly in the offer. The offered lump-sum should be shown both with out the VAT -tax and with the VAT tax included. The current VAT rate in Finland is now 24 %.

VALIDITY : The given offer has to be valid three months after the final date of delivery (till 15th of December 2016).

11.2 Partial or unit prices

In addition, the offer will be divided into partial work prices (break-down); obviously following the principle as shown in the item 8. The table of unit prices is annexed, ANNEXE A3. Eventhough the offer prices will be not absolute final because of optional items, the calculations will be made on client's choice of fixed lump-sum and considered options and their prices.

11.3 Technical data

The offer shall include lift factory's proposal of the elevator as a lump-sum, as for basis of the offer comparison and criteria. This introduction will include technical data and specifications; in English or in Finnish. The lift company should point out the matters, which may deviate from the requested parameters, as shown elsewhere in this document. The reply shall include filled-up table of design parameters, ANNEXE A4.

11.4 Options

The offer should include prices of requested additional extras, as shown in the items 5.4.1 ... 5.4.11. In case the lift factory likes to introduce other extra options to the client for consideration, these items can be attached to the offer as an independent chapter. A precise specification of these possible options is required; showing clearly the content, technical data and total costs of a certain option.

11.5 Comparison

The process of offer comparison has described in the item nr. 12 in this document. The (general) conditions and terms of the offer are also announced in the Official Journal.

11.6 Form of Offer

The offer has to be done on the annexed offer table, ANNEXE A2. The lift company should fulfil all current cells in the table, which are needed for a complete delivery and to fulfil duties. The offer table has to be signed and dated by the authorized person of the candidate factory.

11.7 Regulations

The lift company is required to inform immediately the client about all possible differences, which might be found by him concerning items as follows:

- 11.7.1 current instructions (by EU, safety associations, other official and / or unofficial requirements for funiculars of this type, as to be built in Finland etc.)
- 11.7.2 requirements as said in this offer request
- 11.7.3 qualities and performance of the proposed elevator system

The elevator company has to merge the costs of possible, necessary modifications due to differences between item(s) above to the offer with a brief re- port about the changes in question.

11.8 Site check(s)

The factory's person(s)-in-charge as well as the proposed local sub-contractor(s) are required to visit the site during the tender period (= bidding time). Costs of these visits will be paid by the elevator company. The visit(s) will be mentioned in the minutes of offer negotiation. The existing conditions (such as topography, transportation, type of soil, flora, weather and snow conditions, existing technical installations etc.) will be checked by the partners, and will not create an item for additional cost claims to the client.

11.9 Annexed information

This application document includes a set of annexes (B series). This information is preliminary by it's nature and does not cause any kind of responsibilities to the client during tender time or later.

11.10 Additional information

Obvious additional information (during bidding period) as well as answers to candidates questions, will be sent to all candidate factories equally and at the same time. The address for requests of additional information: see item 14.

11.12 Candidate factory's own research

The candidate lift company is allowed to make his own researches in the rail route, if the scale and content of this research has been introduced first and in advance to the client and the client has approved this need of add research.

11.13 Languages in use

The offer and it's annexes can be given in English or in Finnish.

11.14 Sending an offer

The offer will be delivered to the client in a closed envelope

not later than on **thursday, the 15th of September 2016, at 13:00** o'clock

The client will confirm the moment of receiving the offer and may give a certificate about this on request. Offer as sent by telefax requires an authorized receiving person on client's side during transmission; this procedure has to be agreed in advance between the candidate factory and the client. The address for offers: please see item nr. 14 in this document.

12 OFFER EVALUATION / CRITERIA

Offer negotiations will be kept with those candidates as chosen by the Client. All candidates may not be contacted for negotiations by the client after receiving the offers. All candidates, who have delivered a proper offer fulfilling the requested extent, content and conditions for an offer in the offer request, will receive a report of the offer evaluation and the ranking of his own offer. A company, who's offer will be found incomplete in minor issues, will be contacted for this and requested by the client to sent missing information within 1 (one) week from the date of this additional request. A company, who's offer will be found incomplete in major issues or concerning a system which may not suit to client's purposes or definitions, will not be contacted because of this and the offer will be ejected from further phases of evaluation.

12.1 OFFER HANDLING

The handling and evaluation of the offers will follow phases as follows:

- 1) arriving time of the offer checked stated
- 2) kept in a safe till the opening event
- 3) opened at the same event with other offers stated
- 4) inspected the content and requested information
- 5) candidate company contacted if minor issues missing
- 6) possible negotiations between the client and certain candidates
- 7) ranking of offers on the basis of evaluation criteria (see below)
- 8) electing one candidate with best offer for funicular contractor

12.2 EVALUATION CRITERIA

The offers will be checked and evaluated by comparing received offer information, as divided into factors as follows. The factor's contents as to be evaluated are described here :

1 Offer price (offer page ANNEXE A2) *“max 30 points”*

Range of the evaluation points will follow principle, in which the lowest offer price will get maximum points of 30 and the most highest price receives only 1 (one) point. All other offer prices will receive points as calculated according their relations to these maximum and minimum sums.

2 System, machinery (offer page ANNEXE A5) *“max 20 points”*

- references of similar systems
- main power and controls
- structural issues
- technical issues
- durability and experiences
- safety aspects, braking systems, alarms
- maintenance and failure sensors
- general suitability to client's purposes
- sound level / neighboring buildings

3 Cabin (offer page ANNEXE A6) *“max 15 points”*

- structural and technical issues
- solution of the inclining floor / variable rail angle
- durability and experiences
- accessories and options
- safety aspects, brakes
- cleaning and maintenance
- suitability for handicapped & children
- design and customizing items
- general suitability to client's purposes
- general suitability to the location (site)
- general suitability to the weather conditions

4 Rail solution (offer page ANNEXE A7) *“max 5 points”*

- structural and technical issues
- general solution, number of (pair)feet to ground
- engineering & design
- fencing solution and maintenance aspects
- adaption to the surrounding park and environment

5 Project team (offer page ANNEXE A1) *“max 10 points”*

- organization for the project
- companies references and histories
- professionals and their experiences
- evidences of tested co-operation in similar projects

6 Environment issues (offer page ANNEXE A8) *“max 10 points”*

- sound level, both rail/cabin and machinery
- energy saving solutions, squeezed consumption(s)
- recycling aspects, life-span study of whole delivery
- ways to avoid chemical leaks to the ground soil
- treatments and materials : “environment friendly”
- possibly fulfilled environment standards or levels
- possibly received environment certificates
- factory’s own environment innovations

7 Warranty and spare parts (offer page ANNEXE A9) *“max 10 points”*

- warranty coverage and duration
- spare part pack (at site)
- other spare parts : availability, delivery
- organization for warranty time (repairs)
- evidence of durability in other projects

12.3 EVALUATION IN POINTS

The offers will be evaluated on the basis of division between *price* “1” (30%) and *quality* “2 ... 7” (70%), following internal break-down and sum of evaluation points as follows :

nr	factor	share	evaluation points min. - max.	max.points
1	offer price	30%	1 ... 30	30
2	system, machinery	20%	1 ... 20	20
3	cabin	15%	1 ... 15	15
4	rail solution	5%	1 ... 5	5
5	project team	10%	1 ... 10	10
6	environment issues	10%	1 ... 10	10
7	warranty, spare parts	10%	1 ... 10	10
	total	100%	max points in total	100

The offers will be ranked according to received individual score of points. This evaluation and scoring will be done by the authorized project personnel as appointed by the Executive Board of the Client. The Client’s project personnel will introduce this scoring to the Executive Board for election of the lift company.

However, the client keeps right not to elect any of the received bid, when found the project / offers too expensive or in case of other internal aspects within the City of Turku and municipal decision making. (see also item 6 *timetable* : phase nr. 5 – decision -).

13 OFFER REQUEST MATERIAL AND DOCUMENTS

The client has merged some additional information as annexes to this offer request (*B Series Annexes*). These documents are preliminary by their nature and will act as general guidelines and background information for bidding. The client doesn't have legal responsibility over these documents.

14 INFORMATION AND SENDING THE OFFER

In case needing more information, the connection addresses and numbers are as follows:

Additional information / Client's representative

project manager, Mr Janne Laine

City of Turku, Turku Municipal Property Corporation, Infrastructure services

Street address : Linnankatu 90 E, 20100 Turku, Finland

P.O. Box 11, FI - 20101 Turku, Finland

tel.	+358 - 2 - 262 4390
fax.	+358 - 2 - 262 4599
mobile	+358 - 50 - 4648 681
Email	janne.laine@turku.fi

Additional information / Client's consultant

to be nominated later

In case there are questions asked by the bidders during bidding time, the client's representatives as mentioned above, will deliver both this questions and client's answer to all bidders, at the same time, equally. The questions and related answers will be merged to the contract agreement as definition to original offer request documents.

The final day to ask questions or information is on Monday , 15th of August 2016.

Delivery address of the offer

(officially in English)

**Registrar's Office
City of Turku
Linnankatu 90 E
20101 TURKU
Finland**

1st REMINDER :

To be written in the front side of offer envelope : **FUNICULAR OFFER**

2nd REMINDER :

There should not be any texts, signs, labels or logos of the offering company in the closed envelope, identifying the sender. The offer envelopes should remain "in cognito" till the moment of official opening.

3rd REMINDER :

According to the cover letter of this offer request and the item nr. 11.14, the latest moment of receiving for offer letters is on Monday, 9th January at 13:00 o'clock. This time/date is strickly required by the client as municipal authority and those offer envelopes, which are coming too late will be left unopen.

A SERIES ANNEXES required offer documents

A1	project team	(according to organogramme B1)	1 page
A2	offer table	(lump-sum offer and break-down)	1 page
A3	unit prices, options		1 page
A4	technical sheet		1 page
A5	system, machinery	description	1 page
A6	cabin	description	1 page
A7	rail solution	description	1 page
A8	environment issues	description	1 page
A9	warranty and spare parts	description	1 page
A10	certificates of company's financial status, economical performance and valid insurance(s) etc. statements		1 page (received in introduction, up-dated current documents needed if elected)

B SERIES ANNEXES project information documents

B1	project organogramme	1 page
B2 a+b	situation plan and zoning map	1 + 2 pages
B3 a+b	section of the rail route	1 + 1 pages
B4	landing stations : passenger routes up - down	1 page
B5	district heating system near the rail route	1 page
B6	collection of photographs and maps	9 pages

C SERIES ANNEXE contract conditions as information

C1	Project Conditions	x pages
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TURKU FUNICULAR

PROJECT CONDITIONS

*Offer request document
ANNEXE SERIES C1*

06.06.2016

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1 General information

1.1 The Site

The funicular system will be built in the city centre of Turku, in the middle of the old historical town in south-west Finland. The location is called "Kakolanmäki", the site previously served as prison, but under development at the moment. The site and location have been described in the offer request document; technical parameters, in it's item nr. 1, "*Location*".

1.2 Client and consultants

The participants for the project will follow the organogramme, as merged to the offer request documents. The general contractor (here : funicular factory with his own consultants and sub-contractors) will nominate appointed team in his offer.

Client: Project manager, Mr Janne Laine contact person

City of Turku, Turku Municipal Property Corporation,
Infrastructure services
Street address : Linnankatu 90 E, 20100 Turku, Finland
P.O.Box 355, FI- 20101 Turku, Finland

Client's architectural consultant (landing stations etc.)

to be nominated later

Client's structural engineering:

to be nominated later

Client's mechanical engineering:

to be nominated later

Client's electrical engineering:

to be nominated later

Research experts by the client :

to be nominated later

Site introduction

The client and the acceptable bid require that the contractors have visited and inspected the site before submitting their offers. The timings for inspections, which need access to built premises, have to be agreed separately and fairly in advance together with the client's contact person, Mr Janne Laine, address details : see above. (mobile phone +358 50 4648681, Email janne.laine@turku.fi)

2 Contract form

2.1 Extent

The contract form is a full general contract; the general contractor takes full responsibility for the civil works for the rail system and employs and includes in his tender the works of his own sub-contractors for electrical and other related works according to the extent of the tender documents. The general contractor acts as a general realizer of the works according to valid laws and instructions (responsibilities).

The client's own contracts and purchases have been listed in item 3.3. These works are independent and will not be connected to the general contractors duties.

2.2 Payment

The principle for the contract payment is a lump-sum, as given in the tender.

2.3 Relationships

Bidders sub-contracts (with structural, electrical and other engineering branches) are parts of the general contractors duties and works in the contract. The general contractor is required to make agreements with his sub-contractors and include these sub-contractors in his contractor team. The general contractor is responsible for his sub-contractors works towards the client and controlling their timetable in full responsibility, as like in his own works.

3 Contracts

3.1 General contract

The general contract includes site administration tasks, the civil and electrical works according to the tender documents and to complete the system totally and provide approvals for all of the works as well as the site services. The general contractor is in responsible for arranging and agreeing the duties of his subcontractors.

3.2 Sub contracts

The structural and mechanical works are part of the general contract and they have to be totally completed within the completion date(s) in the timetable and approved by the client according to the tender documents.

3.3 Client's own purchases and contracts

The client is allowed and will make his own contracts and purchases in the building during the contract time as follows:

- landscaping works close to rail zone
- building the top and lower level landing stations, including machine room
- protecting natural surfaces and trees in the park area, outside the site area
- making fences around the building site in the station areas

The general contractor has to consider the works above while making his site timetable for approval. The possible disruption resulting from these works will not allow the general contractor to introduce any requests for additional costs or over-time. The general contractor is required to notify the clients representative's advice (site supervisor) and give at least 12 weeks notice when the clients purchases and con- tracts can commence on site.

In addition, the general contractor is required to allow for additional client's contracts and purchases not mentioned in the list above.

4 Realization and co-operations

4.1 Instructions for co-operation

The general contractor is responsible for phasing and arranging all the works and working phases at the building site including Health & Safety requirements. The programme and a plan of site arrangements have to be given to the client's representative not later than two weeks after signing the contract agreement.

4.2 Timetable

The general contractor is required to produce a timetable together with his sub-contractors and include the client's own contracts and purchases into this timetable. The progress of the programme will be monitored at the site meetings and other contractor meetings. The programme will be mutually agreed and it can be altered only by approval of all parties at the site meeting(s).

4.3 Inspection of the architect's and engineering documents

The inspection of plans has to be done before signing the contract agreement.

4.4 Schedule of Conditions

A Schedule of conditions has to be done on site, prior to the site being handed-over to the contractor for his works.

5 Tasks for the client (project management)

5.1 Permits

General contractor's works needs approvals, which will need authorities acceptance as follows:

- structural approvals by the municipal building control
- safety inspections by the authorized testing company
- building permits in general (ref. landscaping in the park)
- approvals concerning electrical connections to networks
- announcement to Environment Office of Turku (site noise)
- announcement of starting contract works (Labour authority)
- other approvals; depending on proposed funicular type

The client will obtain the necessary permits for building before starting the contract works. The contractor and his contractor team have to obey limitations as stated in article 5.3. The protection work has to be done under supervision of the client's representative (site supervisor) and requires his approval.

All permits connected to site performance and site actions are at the general contractors responsibility. Client's contact people will assist the general contractor in these duties, but have no responsibility for them.

5.2 Delivery of the architect's and engineering documents

The client will submit a certain amount of architect's and engineering document copies to the contractor in extent as agreed in the site meeting(s) and document inspection according to mutually agreed timetable. The additional sets of copies for sub- contractors and suppliers are at contractor's expense.

5.3 Limitations for building

Unless otherwise stated in the tender documents, the funicular works must be carried out in accordance with the standards and methods specified in this project condition. This is to ensure consistency and high standards of sensitive environment, and to ensure that the value of the property is maintained.

The contractor has to consider and obey the local limitations for working hours due to reason that the site is in the middle of the city; commonly used park. The working hours are as follows:

Mondays- Fridays	8:00 AM - 5:00 PM
Saturdays	9:00AM- 12:00 AM (no excavation or drilling)
Sundays	no working {unless agreed separately}

In case contractors have to extend their weekly working time, the issue has to be negotiated and agreed case by case together with the site supervisor.

There are some certain national holidays (bank holidays), during which building works are not allowed. The list of these days will be introduced to the contractor in the bid negotiations.

6 Quality and environment

6.1 Quality program

The general contractor has to provide a special quality program for the works not later than two weeks from signing the contract agreement for the clients approval. The sub contractors' assurance for quality of the works have to be merged into this document. The general contractor will prepare himself for making samples and models in limited extent for client's approval.

6.2 Contractor's quality control

The general contractor has to control both his own and his sub-contractor's site managements acts and their quality of works at the site. Special attention has to be paid by the general contractor to the client's own contracts and purchases, including top and bottom landing stations and their installations. In addition the general contractor has to coordinate site cooperation between contractors in order to ensure the final quality of the works.

6.3 Taking care of the environment

The contractors must minimize risks to the environment working carefully when carrying out demolition, choosing practical ways how to arrange their work, keeping the site clean and tidy, taking a serious concern about the dangerous materials and waste, schooling, controlling and advising their staff about environmentally important issues and behaving actively to decrease risks for environment.

6.4 Alternative products, options

Should the contractor wish to introduce alternative products to use in the project instead of those specified in the tender documents, the contractor must obtain approval for these products from the client at least 6 weeks in advance of installation. When introducing an alternative product, the contractor is required to provide all technical, material and aesthetical facts of this product to the client, including cost information and delivery time. Anyway, the client keeps right not to approve alternative product or materials, which may differ from those included to the bid.

7 Documents

7.1 Tender documents

Tender documents will be given to the contractor candidates in one complete set of copies without cost. Should more documents be needed for his tendering, the contractor has to pay the copier company costs for this additional material to be ordered from the planners.

The tender documents are listed in a content document (list of documents), merged in the tender documents, branch-by-branch.

7.2 Contract agreement documents

The contract agreement will be produced in written form as cover agreement page(s) as to be signed by both agreement partners. The documents listed below will be merged to the agreement. The order of documents follows the same list.

In case anything else has been mentioned in the documents, listed below, the contract obeys "the General Conditions for Contracts YSE 1998".

The contract agreement will be merged with documents as follows:

- 1) minutes of tender negotiation
- 2) other possible additional letters sent to bidders during bidding time
- 3) offer request documents with annexes (A-, B- and C -series annexes)
- 4) bid (tender), series A offer pages with possible annexes
- 5) other possible bid (tender) documents according to lists of contents

In addition, the general standards, instructions and specifications mentioned in the listed document above, will be obeyed.

7.3 Order of the documents

As shown in the item 7.2

7.4 Confidentiality

The contractors have to consider the project is a public project and the amount of documents of this work should be kept as minimum level as possible. All the official information concerning this project will pass the appointed contact people, who are the only project participants giving information to the media etc. The contractors participating the tendering are obliged to return the tender documents back to the client's representative (here: to project manager) after tender period.

8 Contract time

8.1 Starting the works

The works can be started at the moment the chosen contractor has received information of the approved tender in written. This will happen after client's approval process. The timetable is shown in the document "technical parametres", in item 6 1 timetable.

8.2 Duration

The effective contract time for this project will follow timelines regarding start (see above 8.1) and targeted completion on 06.10.2017 (see document "technical parameters, item 6, timetable). The construction time duration is basically scheduled to be 10 months in total. An appropriate amount of change orders is included into this contract time.

8.3 Milestones

The proceeding is controlled and followed according to mutually approved site timetable, see article 4.2.). The general contractor is required to accept the critical path's milestones (approximately one per every third month, four in total) will be picked up from this timetable by the client and the penalties of delay will be settled as a % -share of the related payment posts' value including the sales tax, as follows

- penalty is 5 % /day, maximum 10 days

The paid milestone's penalty / penalties does not deduct general contractor's responsibilities or claimed amount of penalty of delay concerning the final completion / handing-over, see item 8.4, delay.

8.4 Delay

In case the completion of the works will delay from the final completion/handling - over date, the contractor will pay penalty of delay as follows:

- 0,25 % of contract lump-sum each delayed day
max. penalty 30 days

9 Contractor's responsibilities

9.1 Warranty time

The warranty time in all works is **2 (two) years** starting from the date of approved handing-over, except foundation works (rail etc.), which have a special warranty time of **10 (ten) years**, insured warranty on contractors name. The warranty certificate has to be given to the client by the contractor at the time of handing-over.

Machines and device have their factory warranties, duration at least 2 (two) years. All warranty certificates will be given to the client by the contractor at the time of handing-over.

In the middle of the warranty period (after first warranty year) an inspection will be held in order to check current condition of the contract's works, installations, materials and total functional condition of the system. The possible failures, faults and defects will be eliminated by the contractor as soon as possible according to a timetable given by the client.

In case the system may have such failures or damages, belonging to lift company's responsibilities, works and duties), which may cause stopping the run of the system (system not in public use), the contractor is required to repair the system without delay, with threat that the client will order this repair in question from other companies and by using warranty bond (securities) to these expenses.

The warranty period inspection will be held after 1 (one) year from the handing-over. The possible faults and defects will be eliminated by the contractor as soon as possible according to a timetable given by the client.

9.2 Contractor's securities (bonds)

The contractor will give securities for contract time (performance bond) and for warranty time (warranty bond) as follows:

- | | |
|--|-----------|
| 1) performance bond (construction 1 building time) | = 5,0% *) |
| 2) warranty bond, 1 st warranty year | = 2,5% *) |
| 3) warranty bond, 2 nd warranty year | = 2,5% *) |

*) = % -share of the total contract price

1 REMARK : all bonds (1,2,3,) has to be valid 3 months after the scheduled completion of that certain phase.

2 REMARK: the form of bonds (securities) is a financial reservation to the related sum of money and certificated by a bank or other institution, accepted by the client. The bond(s) will be totally free for client's use during whole guarantee period (1,2,3) and the sum(s) may not have any dependence to any other direction or party.

9.3 Client's securities

Securities are not required from the client.

9.4 Insurances

The contractor shall be liable for, and shall indemnify the employer against any expense, liability, loss, claim or proceedings whatsoever for any single occurrence to the value of at least 1,0 million euros. The insurance has to cover also damages happened to the third party. The contractor candidate is required to state his current insurance status before final selection of contractor (client's approval needed).

9.5 Site arrangements

A Supervisor's office

The contractor and the client will arrange – together and in good common understanding – premises for client's supervisor, for his site operations (located in contractor's site office). Ordinary accessories and furniture for client's site supervisor in contractor's site premises is as follows:

- office table, chair, shelves for files
- a cupboard (cabinet) for supervisor's folders (with a lock)
- a printer for laptop working (common use accepted)
- IT -connection (wired or wireless) for Emails and internet
- 1 – 2 electric socket outlets for minor el. device (chargers etc.)
- access to this premises (key or access control patch)

B Existing premises

There are no existing premises or buildings in the immediate building site. The contractor has to pay serious attention to client's installations of the district heating system; the pipelines of this system are very close to the bottom landing area, underneath of the ground surface.

C Electricity construction time

The electrical consumption during construction time is at contractor's expense. The meter will be read at the beginning of the building works and measures written in the minutes of the start inspection. The meter will be read at the end of the works and measures written in the minutes of the handing-over inspection. There-on the consumption will be charged from the general contractor. The client will assist the contractor in arranging site electricity from available source.

D Heating construction time

In case the contractor will arrange heated spaces or areas for his site, the heating consumption (energy) during construction time is at general contractor's expense. The client will assist the contractor to arrange a proper source for heating, if required.

E Water construction time

The water consumption during construction time is at general contractor's expense. The meter will be read at the beginning of the building works and measures written in the minutes of the start inspection. The meter will be read at the end of the works and measures written in the minutes of the handing-over inspection. There-on the consumption will be charged from the general contractor. The client will assist the contractor in arranging water supply to the site operations, from available source.

F Staff facilities

The general contractor is obliged to arrange sufficient dressing 1 change, lunch-break, toilet and shower utilities to his own and also for his sub-contractor's site staff. The contractor is required to introduce a plan of these arrangements to the client, for client's approval.

The general contractor is obliged to arrange guarding to the building site during off-duty times or install a sufficient site surveillance . This guarding can be arranged by using contractor's own personnel or provided from a security company. The client may not have any responsibility concerning the site area in contractor's use, nor contractor's materials, devise, machinery, vehicles, tools, (permanent or temporary) installations at the site or contractor's personnel's welfare or healthy within the site or it's surroundings.

H Deliveries to the site

The site as to be given to contractor's use has common streets on both ends of the rail route. There are pedestrian and vehicle traffic on both of these areas. The client has no responsibility over any kind of disturbance, failures, blockings, mischief, nuisance or other kind of effort, which may affect to the site or it's operations.

1 Waste disposal services

All waste disposal services during the construction time is on the general contractor's responsibility and will be done at his expense. In Turku, the site waste is required to be assorted (detailed information will be given to the contractor).

L Parking

The contractors should accept that parking outside of the property, along the streets are for public use. The amount of car parking places along the streets is quite limited. Site traffic, containers and contractors' vehicles will have their own, accepted routes to the site. In case needing temporary parking for a container etc. along the street, the issue has to be negotiated separately with the local municipal street authority (City of Turku).

M Accesses

The contractors' staff has free access to the site. The contractor's site management is required to control all traffic (pedestrians and vehicles) to and from the site.

9.6 Health and Safety

The contractor is fully responsible for Health & Safety aspects at the site, according to his Health & Safety plan, which will require client's approval. This plan has to be merged into official documents of this project. Health and safety issues will be followed accordingly and booked in site meeting minutes, as well as to site diary. The general contractor is obliged to appoint a person in his staff to be in responsible for health and safety matters at the site. This person has to coordinate Health & Safety aspects at the site and advise / instruct site personnel in these matters.

9.7 Gardening works in the park

The client requires that the general contractor will restore the outdoor areas to the conditions as they were before starting the contract works. The current condition of the garden and close surroundings at the beginning of the contract works will be commonly stated to the minutes of handing-over inspection, as to be held soon after contractor has been elected. The related costs of garden / park rehab have to be included to contractors tender and make a sub-contract agreement with contractor's own or client's own staff (City of Turku, parks and streets) or with a separately ap-pointed gardening company.

The contractor is required to work together and in good co-operation together with the client's gardening staff and follow his instruction how to maintain the garden/ park in proper condition and how to avoid damages to the garden/ park surfaces, trees, bushes, planting etc. The client's gardener has to be heard also when the general contractor prepares the site plan. This plan has to be accepted by the client.

9.8 Requirements for electrical works

The contractor and his electrical sub-contractor are required to get acquainted to local Finnish regulations and to provide necessary authorization to their technicians and/or employ a local authorized consultant at his expense in order to fulfil the terms of the regulation. The client requires that all works, including electrical works, have to be done according to valid building regulations in Finland.

9.9 As-built drawings

The contractor is required to provide as-built drawings at his expense to the client within two weeks latest after handing-over inspection concerning architectural, structural, mechanical and electrical drawings and specifications. The general contractor is required to follow and book all the possible changes to the original drawings and revise them to a set of as-built drawings. The collection of documents & drawings will be given to the client in 3 sets (paper) and in CD -version (CAD)

9.10 Measurements at the site

The contractor's has to accept that the project is a new-building project and client's information like drawings and specifications were done by using approximate measure. The contractors are required to check and correct all the measures at the site, The contractors are in responsible of measuring done by them and possible differences between the drawings and specifications provided by the client and existing situation do not give right to the contractors for introducing any extra costs, extended working time or other kind of claims to the client.

10 Client's responsibilities/payments

10.1 Content of the contract price

The contract price as given in the tender should have both price excluding and including the current Finnish sales tax (24%). The client keeps right to negotiate about taxation processes together with the contractor. The currency as used in this contract in Euro.

10.2 Schedule of payments/payment posts

The general contractor will make and the client will approve a payment schedule for the works and this schedule will be merged into the contract agreement. The schedule will be done by using an Excel-table. Each of the payment posts includes both materials and works concerning this partial task.

10.3 Special payment posts

The tests included into the contract have their own payment post and the amount of this payment is 5% of the total contract price. This payment post is approved and ready for payment when the tests will be completely done and approved by the client.

Contractor's own handing-over inspection (according to the contractor's quality program) has its own payment post. This invoice is ready to be paid, when the inspection minutes has been given to the client and approved by him.

10.4 First payment post (instalment)

The first payment post (payment in advance) is max. 50% of the amount of the performance bond (contract time security). This payment post will be paid to the contractor, when the contract agreement is signed, insurances are valid, performance bond given to the client and the works have been started.

10.5 Final payment post (instalment)

The final payment post is at least 10% of the contract price. This payment post will be paid to the contractor, when the handing-over is approved by the client, securities for warranty period have been given to the client and the handing-over documents (including user and maintenance manuals) have been given to the client. The payments concerning the services during warranty period will be paid to the contractor, when the services will be done and completed.

10.6 Sub-contract payments

The general contractor includes all invoicing to his own subcontractors within his payment schedule. The client will not pay any instalments directly to the general contractors own sub-contractors.

10.7 Payment time and interest of delayed payment

The invoices based to the contract will be paid, when the invoice is introduced to the site supervisor and the work in question is totally completed and approved by the supervisor or approved other way, and found ready for payment. The supervisor approves the introduced invoice by his signature before sending it to the client.

In case the client has not paid the approved invoice **within 30 days** counted from the date of supervisor's approval, the client is obliged to pay 4 % annual interest for delayed payment sum.

In case of delayed payment caused of incorrect invoice, the contractor is in responsible for this.

10.8 Fixed pricing

The contract price is fixed without any connection to indexes.

10.9 Change orders

In case of additional works of other kind of change orders, the contractor is required to introduce this issue to the client's representative(s) in the nearest site meeting as a title. If the change order is considered necessary or otherwise important to be done, client's representative(s) will request an offer concerning this work from the contractor.

In case of urgent additional works not included to the contract, the site supervisor has right to order works to be done at the moment in order not to disturb the timetable or other site arrangements. The issue has to be checked and documented in the following site meeting.

10.10 Change order offers and pricing

In case of change order (additional work), the contractor is obliged to give a specified offer or detailed calculation about the change of this work to the contract price.

The pricing of possible deductions (works included to contract, but left undo) has to be shown in every proposal for a change order. This means that the offer of change order offer (additional work) should have both + and – sums in break-downs.

The partial payment of contractor's general costs and overhead is **12% in change order works**, covering related additional costs like administration and other office works, site management, cleaning, maintenance, guarding etc. site arrangements. This % -share has to be mentioned in the contract's change order offer.

10.11 Unit prices

Lists of unit prices will be merged into the contract agreement (required A series document in the offer request). The unit prices will act as basis to determine the prices for possible change orders, both + and- factors (see item 10.10).

11 Ownership

11.1 Demolition waste

The demolition waste and specified removable materials (except those to be re-used in the building; some of the kitchen machines etc.) belong to the contractor.

11.2 Hazardous waste

In case finding hazardous components or stuff at the site, the contractor is required to inform client's site supervisor about this. The contractor is obliged to forward this material to a hazardous waste disposal plant and obeying instructions as given by the client.

12 Supervision

12.1 Client's organization and his consultant's allowances

The client will nominate his project team not later than at the moment of signing the contract agreement, latest. This team will be introduced to the general contractor in the first site meeting, latest.

Project manager and the site supervisor(s) have NOT right to order additional works and change orders independently. The only party having rights to order any kind of additional works or change orders is the client, City of Turku.

12.2 Project manager's supervision and site meetings

Client's project manager will control and supervise quality control of the contract works. This quality control does not reduce the contractor's responsibilities of his works.

The client has his own site supervisor controlling the site. The proceeding of the contract works will be followed and observed by this supervisor and actual matters will be handled in site meetings, which will be held monthly (approximately in 4 weeks frequency).

12.3 Monitoring quality control

The planners (client's architects and engineers) are also supervising the works at the site (connected to landing stations). Their task is to ensure these works to be done according to the drawings and other contract documents. However, they cannot order or agree any kind of changes to the contract by themselves; all change even without financial meaning will be approved by the client.

13 Site administration and deliveries

13.1 Contractors organization and allowances

The general contractor is obliged to have a responsible site manager-in-charge and the side contractors have their foremen, responsible for their works in the project.

The general contractor is obliged to inform about general contractor's working safety organization and the person-in-charge in safety matters to the sub-contractors and to the client.

13.2 Book keeping

The general contractor is obliged to keep site diary and book all site operations and events to this document. The site diary will be kept in two copies, one for the client and one for the contractor. Client's site supervisor will check and approve this site diary frequently, approximately once per week.

13.3 Contractors' mutual deliveries

The general contractor's duty is to supervise and control the co-operation at the site. Therefore the contractors will have their mutual meetings (general contractor + his sub-contractors and client's contractors for landing station works) in which the questions concerning co-operation and actual site matters will be handled. In case there are questions needing client's participation, the representative of the project management will be invited fairly in advance to the meeting.

13.4 Inspections of the authorities

The general contractor takes care of all official inspections and looks after that they have been held. The site supervisor will assist the general contractor in these arrangements. The general contractor is obliged to inform the client fairly in advance about these inspections, in order the client or his representative can participate in the inspection.

13.5 Costs of inspections

Both contract parties take care of the inspection costs according to the contract terms. In case there are needs for additional, unforeseen inspections because of contractor's faults, defects or incomplete works, the client is allowed to charge the additional costs from the contractor as follows:

- | | |
|----------------------------------|---------------------------------|
| - first additional inspection | without extra payment |
| - second additional inspection | 2.000 euros excl. the sales tax |
| - third additional inspection | 2.000 euros excl. the sales tax |
| - fourth or more, per inspection | 3.500 euros excl. the sales tax |

These charges are additional re-funds to the client; they do not deduct contractor's penalties of delay, see item 8.4..

13.6 Working safety

The general contractor and his sub-contractors are obliged to follow and obey that the safety instructions as agreed together with the partners.

The general contractor is obliged to make a safety plan for the building works. The safety issues will be handled in contractors' weekly meetings.

14 Manpower

14.1 Employers duties and keeping the register

The contractor's are obliged to merge certificates to the tender as follows:

- certificate of paid taxes
- certificate or announcement of retirement pension insurance payments

The certificates should not be older than 2 (two) months. In addition, the contractor should prepare to send up-dated certificates to the client before signing the contract agreement.

The general contractor is obliged to require similar certificates of taxes and paid employer payments from his sub-contractors as required from the general contractor himself. This requirement has to be included to the offer requests for the sub- contractors.

The client has right to reject a contractor, who has not sent the required documents, certificates or clarification.

14.2 Site passports

The client requires that all members of contractors' site staff (including sub-contractor's staff) have an approved site passport. In a passport there has to be the name and photograph of the worker as well as the name of the company, to which he is appointed. In addition there should be a mention of the validity period of this passport (due date). These passports will be visible during working hours at the site. In case there are people at the site without relevant passports, general contractor's site manager or site supervisor is obliged to remove these people immediately from the site.

The client requires that the listed names of the workers will be given to client (to contact person-in-charge) fairly in advance starting the works in question.

14.3 Official language

The official language of the project is English or Finnish (as to be agreed). All official correspondence and documents will be written in English or in Finnish (as to be agreed). The site meetings and inspections will be held in English (or in Finnish). All contractors (general and sub's) are obliged to ensure that at least the foremen and site manager(s) have basic operational skills in English.

14.4 Requirements for local sub-contractors and suppliers

When choosing his local sub-contractors and suppliers the general contractor is required to ask their certificates concerning paid taxes, legislation and authorization of the staff, paid retirement pension insurance payments etc. other related certificates and hand-over these documents to the client for approval. The general contract is required to introduce his suppliers to the client for approval in the site meetings. The clients keeps right to reject an introduced supplier in case the needed certificates are incomplete or if the requirements are not fulfilled.

15 Handing-over

15.1 Handing-over inspections

Handing-over inspection will be held according to commonly agreed agenda.

General contractor's own handing-over inspection will be held 2 (two) weeks before handing-over the contract work to the client.

15.2 Tests

The tests of mechanical and electrical systems and device will be carried out **4 (four) weeks** before handing-over the contract work to the client (special payment post : see also item 10.3).

15.3 User and maintenance manuals

The contractor is obliged to give all user and maintenance manuals to the client during the handing-over inspection, latest.

15.4 Schooling

The contractors are obliged to arrange training of the systems for the client's personnel. This schooling is described more closely in the technical specifications.

16 Disagreements

16.1 Solving disagreements

In case of such disagreements, which cannot be solve directly between the agreement partners, the case will be processed in district court sessions in Turku, Finland.