PORT OF TURKU
FINLAND

Design competition for the Port of Turku's new passenger terminal

FERRY TERMINAL TURKU





Evaluation protocol

FERRY TERMINAL Turku

COURSE OF THE COMPETITION

Evaluation protocol FERRY TERMINAL TURKU

Organiser and purpose of the competition

Port of Turku Ltd organised a two-phase invitational architectural competition for selecting the principal and architectural designer for the Port's new passenger terminal.

The intention is to sign an assignment contract for the principal and architectural design of the passenger terminal and related passenger corridors with the winner of the competition. The actual assignment will possibly also include the designing of an indoor car park to be placed in the vicinity of the passenger terminal.

Port of Turku Ltd is running a project called Ferry Terminal Turku, the key goal of which is to retain the Port as an attractive base for vessel traffic far into the future by developing the port area. That is achieved by building a new passenger terminal as well as modernising the quays and implementing extensive reforms of traffic and parking arrangements. The principal and architectural design of the passenger terminal which is the target of the competition is part of the Ferry Terminal Turku project.

The purpose of the competition is to replace the present terminal buildings of Viking Line and Tallink Silja with a new joint terminal, and to design a high-quality terminal building with excellent functionalities.

Port of Turku Ltd is an enterprise wholly-owned by the City of Turku.

Progress of the competition and the invited agencies

Port of Turku Ltd complies in its operations with the Act on public contracts and concessions of entities operating in the water, energy, transport and postal services sectors (1398/2016). The architectural competition was organised as a design competition in accordance with the above act, and the intention is to sign an assignment contract for the principal and architectural design of the passenger terminal, passenger corridors, and possibly an indoor car park with the winner of the competition (section 43.2, item 9 of the act).

A procurement notice of the competition was published at the address www.hankintailmoitukset.fi on 12 November 2021.

A total of 18 designer teams submitted their application by the due date, 1 December 2021. The selection of the invited designer teams was carried out by compiling a score for their reference in the way described in the Competition Programme.

The following agencies were invited:

- PES-Architects
- HCO&LPR (Helin & Co Architects and LPR-Architects)
- ALA Architects
- Zaha Hadid Architects
- JKMM Architects

A competition seminar was arranged for the invited designer teams in the Port of Turku on 14 December 2021.

Phase 1 of the competition

The due date for submitting proposals in phase 1 was 11 February 2022. All invited agencies submitted their proposals by the due date. The proposals received were named: Aallonharja, ARCTURUS, FOKKA, LINNATERMINAALI, and ORIGAMI.

The jury convened to evaluate the proposals on 14 February 2022 and 2 March 2022.

Proposals named Aallonharja, FOKKA ja ORIGAMI were invited to the next phase.

Phase 2 of the competition

Directions for further planning and the results of cost calculation and passenger flow simulation per candidate were delivered to the three designer teams invited to phase 2 of the competition.

In phase 2 of the competition, the competitors had the opportunity to use the organiser's experts of cost calculation and passenger flow simulation. The anonymity of the competitors was looked after in contacts with the organiser and jury of the competition.

Phase two ended on 22 April 2022. All three competitors submitted a final proposal.

The jury convened to evaluate the proposals on 2 May 2022 and to decide on the winner of the competition on 4 May 2022.

Jury of the competition

The jury of the competition comprised of:

- Erik Söderholm, Managing Director, Port of Turku Ltd (chairman of the jury)
- Antti Pekanheimo, Chief Operating Officer, Port of Turku Ltd
- Jouni Hildén, Construction Manager, Port of Turku Ltd
- Nina Honkaranta, Regional Director, Tallink Silja
- Peter Forsberg, Terminal Manager, Viking Line
- Timo Hintsanen, Architect SAFA, Director of Urban Planning of the City of Turku, City of Turku
- Janne Helin, Architect SAFA, Managing Director, Schauman Architects
- Pirjo Sanaksenaho, Architect SAFA, Professor, Aalto University (jury member elected by the competitors)

Sanna Kronström from Hankintakumppanit Oy acted as the secretary of the competition.

In the evaluation phase, a cost calculation (person responsible Tiina Mäkynen) and passenger flow simulations (person responsible Sami Iikkanen), both from Ramboll Oy, were commissioned on the proposals.

Evaluation criteria of the competition

The evaluation criteria presented in the Competition Programme were:

- Presence of high architectural quality standard
- Long-term durability
  - Durable and risk-free structures, solutions, and choice of materials (the building calls for preparing for increasing wind, rain and dampness)
  - Zero maintenance
  - Materials repairs and replacements are natural and financially feasible
- Functional premises and successful passenger experience
  - Smooth flow of passengers within the time window provided
  - Clarity of indoor space, easy orientation and perception of premises
  - Flexibility of premises
- Overall economic and technical eligibility for implementation
- Attention to location important in terms of cityscape and surrounding land use.

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EVALUATION OF THE COMPETITION PROPOSALS

General evaluation of the competition proposals

The competition entries offered five different architectural and functional views on the harbour terminal. The harbour terminal building is the gateway to Finland and Turku. As the Port of Turku and the Linnanniemi district are developing, the terminal building is hoped to be an attractive public building that gives a distinctive character to the city and the district and where the ferry passenger traffic is concentrated. The competition showed that the terminal building can be implemented with high quality in the way required by the competition and in the selected location.

In all proposals the terminal was placed in the location presented in the documents, although Arcturus exceeded the construction area considerably by building the waiting lobby over the loading quays. The Port considered that an unfeasible solution. Origami also exceeded the border of the construction area slightly in the northwest corner, but it was possible to move the building by the required distance as it is or with minor modifications.

The competition also shows that the traffic inside the terminal and transfer to the ships can be integrated easily and in a number of different ways in the external traffic solutions provided as base information for the competition. The solutions of principle in the best proposals also enable flexibility in more detailed further planning on the whole.

The placement of the indoor car park varied from a car park closely linked to the terminal to a car park located further along the street. Because the route of the port railway connection is still unclear at the time the competition winner is chosen, the location of the car park was not decisive in evaluating the proposals. Solutions in which a square or other organised outdoor space was formed in front of the terminal entrance and exit for both arriving and departing passengers were considered successful. On the other hand, it was considered worth striving for that the traffic and vacant areas are not too large or field-like, but such in which spatial qualities and experience of urban environment are present.

In terms of architectural appearance, the proposals varied from expressive and sculptural to a more restrained approach that does not stand out much from its surroundings. All designs were of high quality and professionally prepared, but each of them required further development. The smooth flow and clarity of passenger traffic were important evaluation criteria which had to be improved further in the proposals selected for the next phase. Excessive turnings in entering or exiting the ship caused congested places.

The proposals take into account the role of the terminal and passengers in enlivening the evolving nearby district of Linnannniemi to a reasonable extent. The castle itself is taken into account in the proposals in a commendable way, but in some cases the incoming and outgoing traffic is guided or directed indifferently in the direction of Linnanniemi, turning its back.

In cityscape evaluation the terminals were assessed from several points of view. The relation of the terminal to the historically valuable Turku Castle, the public urban spaces in the evolving Linnanniemi or the sea view, for example, were considered important. In the direction of the sea, the visibility of the terminal is somewhat difficult to manage due to the large ships berthed in front of it and the dominant role of the corridors leading to the ships. Hence the cityscape role of the seaside facades differs from the cityscape on the land side, and is more challenging to manage with the terminal building.

The oblique aerial photos presented in the proposals tell a lot about the solutions on the whole, but their significance in cityscape evaluation is not essential, because the terminal is not experienced from an oblique aerial view but from a public urban space at eye level or from the highest deck and corridor levels of ships and routes.

Some proposals also show nice urban greenery near the terminal in the form of trees, bushes and other plants, which makes the area more pleasant. In addition, it is important for the handling of run-off water.

In the evaluation of interiors, attention was paid to the lightness, spaciousness and orientation of the waiting lobbies and the views towards the sea and the castle. Some proposals included terraces which are pleasant extensions to the interiors in the summer, but whose technical implementation, supervision and general safety require special attention.

In phase 1, all proposals exceeded the cost estimate, but the proposals selected for the next phase managed to cut costs, although the proposals in phase 2 also exceeded the target cost presented in the competition programme. Regarding the proposal to be selected, the costs will still need to be cut in the further development phase to make it viable. As for materials, zero maintenance choices that endure maritime climate were appreciated.

Overall economy and technical feasibility were also emphasised as evaluation criteria. The terminal is located in an extremely demanding environment in terms of implementation, so further planning shall pay special attention to the stages of construction and their management. Taking port operations and especially Tallink Silja's old operating terminal into account will play a key role when the implementation plan is started in conjunction with the surrounding FTT modules.

The optimisation of technical building systems and structural solutions shall also be started as soon as implementation planning commences, to be able to minimise both cost and functionality risks.

EVALUATION BY PROPOSAL

”Aallonharja” (phase 2)

The proposal is impressive and has a maritime feel and would add attractiveness and character to the Port of Turku. The pictures published after phase 1 gathered admiration from the inhabitants of the city. The figure of the building can be identified as a terminal and station building from its clear triangular glass gable with the main entrance for passengers. Glued laminated timber structures resemble boat structures, and the use of wood is an ecological choice and a positive message. The staging of construction was laudably thought about already in phase 1 of the competition. The indoor car park has a good location so that it does not cover the terminal building when approached from the direction of the Turku Castle.

The proposal takes well into account the division of passengers to arriving and departing and the joining of corridors to the terminal on two levels. The movement of the crowds has a clear direction in the plan, but in phase 2, as the proposal was made smaller, the flow of traffic is at times congested and there are back-and-forth transfers, for example when entering Tallink Silja ships. Flexibility and modifiability in the long and narrow frame is not ideal.

In phase 2 of the competition, flamboyance remained in the form of mass, as did the metaphor of a wave, although the mass was decreased to achieve the cost targets, and the building was placed within the cost framework. The entrance end of the building and the castle speak the same language. In the perspective view the cutting of the glue laminated timber beams before the ridge is a distraction. The enclosed concrete base combined with wooden structures makes the building seem a bit harsh from the outside in the scale of a pedestrian.

The proposal was developed in accordance with the instructions for further planning, but at the same time it seems that something essential of the proposal’s leading ideas has been lost. As a building, the proposal is still impressive on the outside. It is not possible to mistake from the main entrance, and the proposal creates a certain Wow effect. The building has a clear direction, and when disembarking the ship the exit is towards Linnanniemi which is considered a good solution.

In further planning, the supporting frame structure of the interior has changed. The span of glued laminated timber beams has been shortened with steel pillars which appear to be covered with wood. This has broken the impressive flamboyance of the interior. The service points placed on the edges of the entrance lobby hamper the perception of the form of the structure and space, and as presented, the service points do not describe the future need. The direction is clearly forward, although orientation slightly disappears indoors. How does transferring to the second floor work when a large passenger volume starts moving simultaneously? The roof terrace is interesting, but as it is, it only serves specifically the upper deck passengers of the other shipping company; the passage away from the terrace to lower levels in the terminal is somewhat unclear.

Evaluated on the whole, the jury commends the proposal’s maritime, characteristic architecture which is well suited to the Turku cityscape. The architectural quality standard of the proposal is high, and long-term durability is well taken into account from the point of view of e.g. choice of materials and zero maintenance. The proposal respects the location which is important for the cityscape.

In the further planning of the proposal, however, essential elements of functioning spatial solutions and successful passenger experience have been lost. Orientation and perception of the interior fall behind to some extent compared to the other proposals in phase 2. The cost estimate of the proposal is nearly the most expensive even after further planning.

”Aallonharja”

”Aallonharja”

”FOKKA” (phase 2)

The proposal is compact and functionally straightforward. The architectural look is created with white, wavy, overhanging canopies and yellow bricks. The materials bring back memories of the architecture of old port terminals.

The indoor car park is conveniently linked to the terminal with a canopy and creates a border for the parking area in terms of cityscape. The outdoor space between the terminal and the car park has been put to use in further planning. In the curved glass exterior of the building the entrance and exit doors are clearly separated. The routes of cleaners to the ship and back are excellently designed.

The building is flexible and modifiable, and provides quick and clear routes for the passenger flows. The placement of the entrance to the building is natural when approached along Linnankatu street. The main door forms an “entrance lap” due to the curved shaped of the building. On the other hand, the lack of a square easily leads the flow of people to the vehicle traffic area and, for example, in rainy weather the people may also stay indoors which will in the worst case form a congestion on moving walkways.

On the inside the building is functional and beautiful, the idea of a foresail (“fokka”) is maybe more pronounced than on the outside. Glass as a material divides opinions and the visibility of lighting, sunlight and signs in particular presents questions. Luggage storage has been moved in further planning, and the jury commends the successful change. The proposal is functionally excellent and also enables the increasing registration needs of different passengers in the future. The interior is efficient in terms of maintenance. The proposal nicely pays attention to the fresco and relief located in the port.

Upstairs, orientation is easy and the departure gates of both shipping companies are clearly visible to the passengers. The feeding corridors become congested when transferring from one level to another.

The proposal is plain and simple. On one hand that is good, but the jury misses attractiveness, as people go on a cruise to take a break from the daily grind. The building is perhaps somewhat unnecessarily simple in the cityscape and the evolving Linnanniemi district.

Evaluated on the whole, the jury commends the proposal’s clear and functional spatial solutions. The architectural quality standard of the proposal is high, and the proposal takes into account long-term durability from the point of view of e.g. structures and zero maintenance. The plastered surface in outdoor canopies would, however, require maintenance. The spatial solutions of the proposal are functional, the interiors are clear and orientation is easy. The interior is airy, light and very rational. Spatial solutions are flexible, and the passenger flow within the time window given is smooth.

The cost estimate of the proposal is the most inexpensive in the competition, and the proposal is technically viable. In taking into account the important location in terms of cityscape and the land use around it the proposal, however, falls slightly behind compared to the other proposals and in the overall evaluation of the jury this is what separates the proposal from the winner.

"FOKKA"

"FOKKA"

"ORIGAMI" (phase 2)

The proposal has flamboyance and movement. The architecture is based on oblique triangular surfaces; play with steel, glass and aluminium. The shape has maritime symbolism associated with the side of salmon, steel ship, although ORIGAMI as a name refers to a different world, but the metaphor of a Japanese paper sculpture is charming. Balancing between excessive aggression and a pleasant experience calls for precision.

Arriving in the area is successful and the indoor car park supports the architecture. Separating short-term parking and escort traffic works particularly well, and the square fits in naturally. The corner of the building on the quay side extends outside the competition area, but the jury looked into it and stated that the site of the building can be moved by a few metres without compromising its functionality.

The proposal was developed excellently in the further planning phase e.g. by transferring the arriving traffic to the city side. The flow of passenger traffic has improved considerably, and so has the experience aspect when arriving in the city. In the entrance lobby the flow of arriving passengers can be seen through the glass wall, which the shipping companies think is a good idea. The views from the departure lobby towards the Turku Castle and the city have improved.

The building is flexible and modifiable, and the interior is airy. The wooden wall in the entrance lobby adds warmth to the world of glass, steel and aluminium. The mood in the building becomes more peaceful when moving up, and there is a nice view to the sea. The terraces in conjunction with the lobby offer seats with a great view toward LInnanniemi. Some congestions are still formed in the feeding corridors when moving from one level to another, which needs to be developed in further planning.

The cost estimate of the proposal has room for savings, but the floor area of the building is bigger compared with the other proposals regarding e.g. technical areas. In further planning the volume and floor area of the building can be examined in a way that reduces the costs. The location of the exit for arriving passengers can also be examined in further planning, to make it distinguishable from the door of departing passengers in the best possible way.

The building technology solutions are reliable and the building's "raincoat" with marine aluminium surface provides a long lifespan. In ORIGAMI, the jury liked its exceptional and expressive architecture. People often go on a cruise to take a break from the daily grind, and the appearance of the terminal building sets the passengers to the right mood for a voyage.

"ORIGAMI"

"ORIGAMI"

”ARCTURUS” (phase 1)

The first impression of the proposal is sleek and elegant. The indoor car park is well placed, and the relationship between the terminal and the Turku Castle is interactive, although there is a fairly long canopy under which the passengers walk, and parking lots.

The terminal building itself reaches nicely towards the ships. The passenger corridors are part of the lobby which makes them shorter; the jury thinks this is a successful solution. The placement of the building above the field area is challenging, however. The construction phase of the proposal is thought to be risky, and challenging in terms of staging, because the proposal includes a number of poles to be placed in the field area.

The premises and the departure lobby of the proposal are beautiful and clear. In the interior the movement is straightforward. Embarkation and disembarkation work well. On the other hand, disembarkation could be made more efficient by adding stairs. The low ceiling of the interior begs to ask whether it is too low. The duality of the concept with landside and seaside sections is clear, and the choice of materials follows the division.

The architecture includes clear ship themes, and the round window towards the castle is great. On the other hand, the building also has symbolism that refers to aviation, the shape of the building resembles the wing of an airplane. The combination of materials with a white roof, standing seam metal and a stone basket in the exterior architecture is fresh. The connection with the light-roofed storage halls in the port field area is obvious, but on the other hand, in the future the surroundings of the Linnanniemi district will change and the city will extend all the way to the port, and the linkage to the built environment will be shown in a different way.

The proposal works well and is clear; ideal for passengers and personnel in terms of functionality. The placement of the building on poles in the field area is, however, considered too big a challenge for the proposal. It will have a significant effect in the construction phase and above all impact the occupational safety of port operations.

"ARCTURUS"

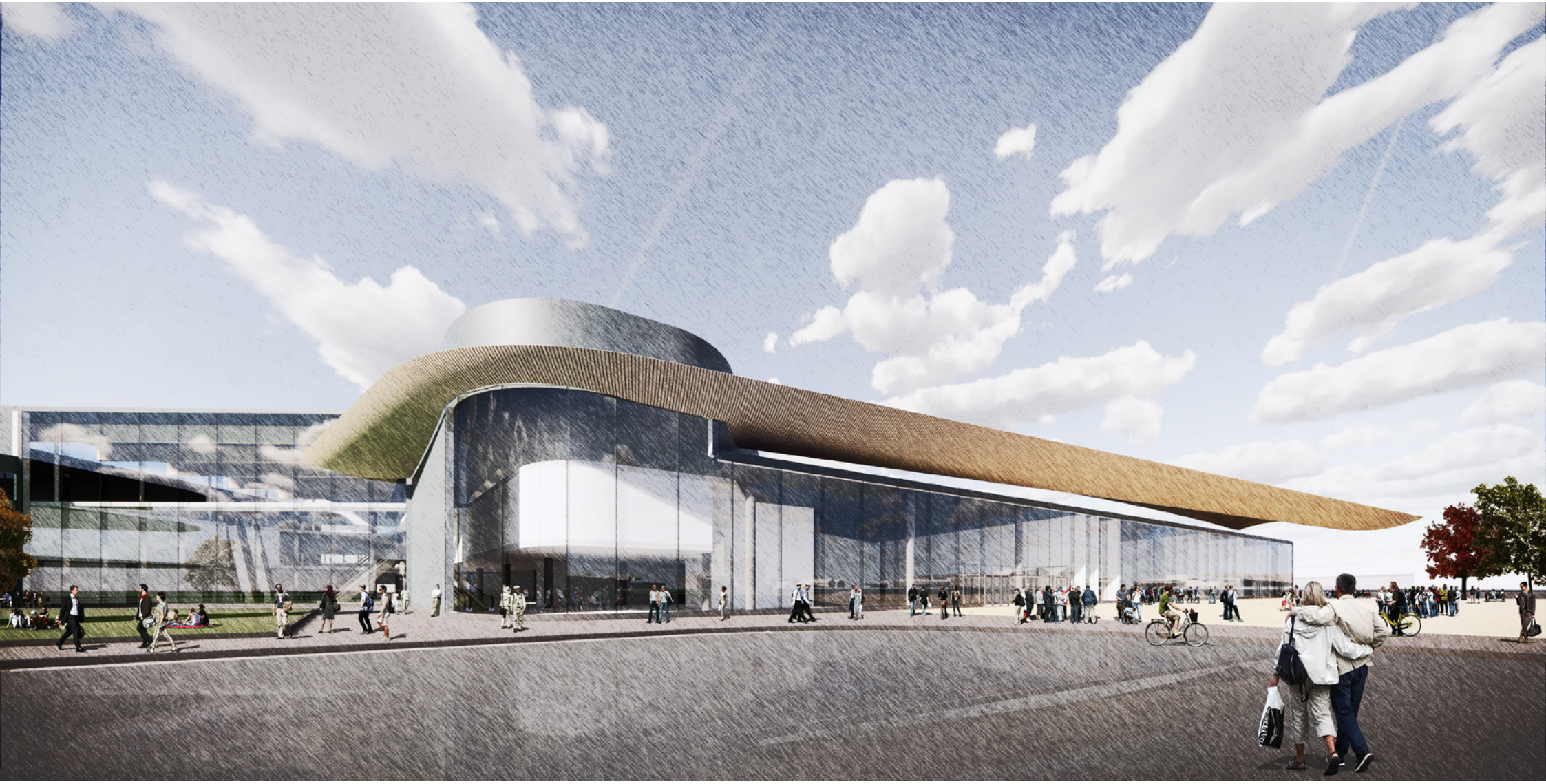
”LINNATERMINAALI” (phase 1)

The proposal is rational, but slightly cautious, and the indoor car park is dominant to some extent. In massing a lower part in the middle of the building with a view towards the Turku Castle divides the volume into two, and the lap-like space gives a false indication on the location of the main entrance. The overhanging canopy around the rounded corner surely refers to a terminal building and entrance.

The entrance of the building is meandering, and no flowing movement that guides the passengers towards the ship is generated. The lobby is also somewhat divided between the shipping companies, although the leading idea of the joint terminal is shared premises. The arriving passengers are directed to the same lobby. The flow of arriving passengers in particular is non-functional. Escalator in the exit route is not as good as a moving walkway, because arriving passengers carry lots of goods shopped on board the ship in addition to luggage. The explanation text mentions moving walkways, but in the plans their steep inclination refers to escalator.

Evaluated on the whole, the proposal leaves an anonymous impression. It has plenty of motifs, ranging from wooden elements and a curved atrium to the entrance canopy, but the red thread and architectural idea of the proposal do not come through. Structurally the building frame is clear and viable, but fresh and unique aspects of architecture are missing.

"LINNATERMINALI"



COMPETITION SOLUTION

Jury presentation

The jury of the competition unanimously chose proposal “ORIGAMI” as the winner.

According to the jury’s view, the proposal best fulfils the evaluation criteria set in the Competition Programme. The proposal will be developed further in co-operation with the Port of Turku.

Turku, 4 May 2022

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