



TALLINN AIRPORT

The cosiest airport

Tallinn Airport

November 2016

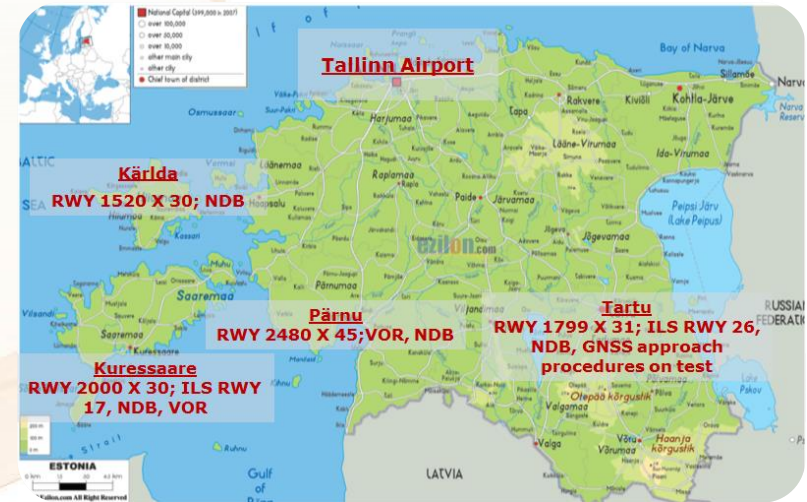
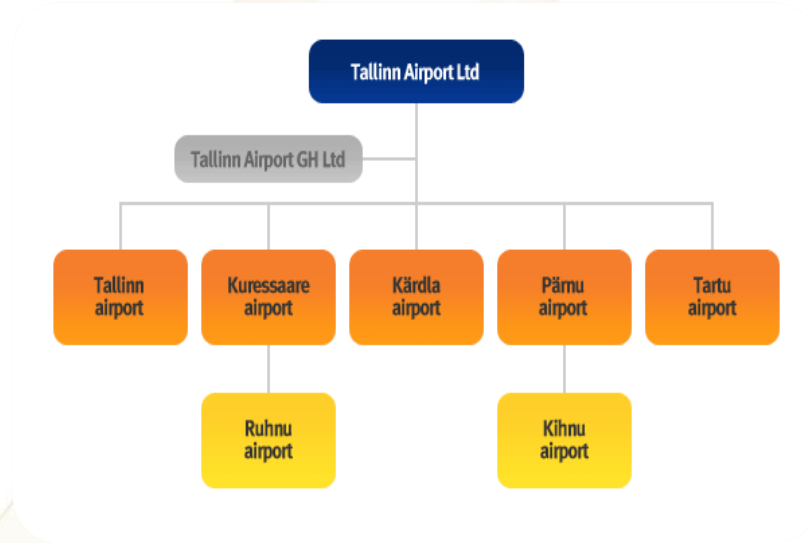
Tallinn Airport Ltd



- Tallinn Airport Ltd is 100% owned by the government of Estonia

- Tallinn Airport Ltd operates 5 Estonian airports and 2 airfields

- Tallinn Airport GH is a daughter company specializing in ground handling services



Tallinn Airport



- Located 4 km from the city centre of Tallinn and in the vicinity of town's drinking water reservoir Lake Ülemiste
- Tallinn Airport plays an important role in Estonian transportation system and in Estonian economy as a whole, as it is the main (essentially only) international airport in Estonia



Airport's current infrastructure



- All services are available 24/7
- ATC
- NAV Cat I/II, ILS, VOR, NDB
- Airfield 4E
- Runway
3070 x 45 m
Sufficient for most aircraft,
incl. B747 and AN124 freighters
PCN 60/F/B/X/T
- Apron area 280 000 m²
- Passenger terminal for
2.5 mio pax/year
- 4 cargo terminals
- Aircraft maintenance hangars

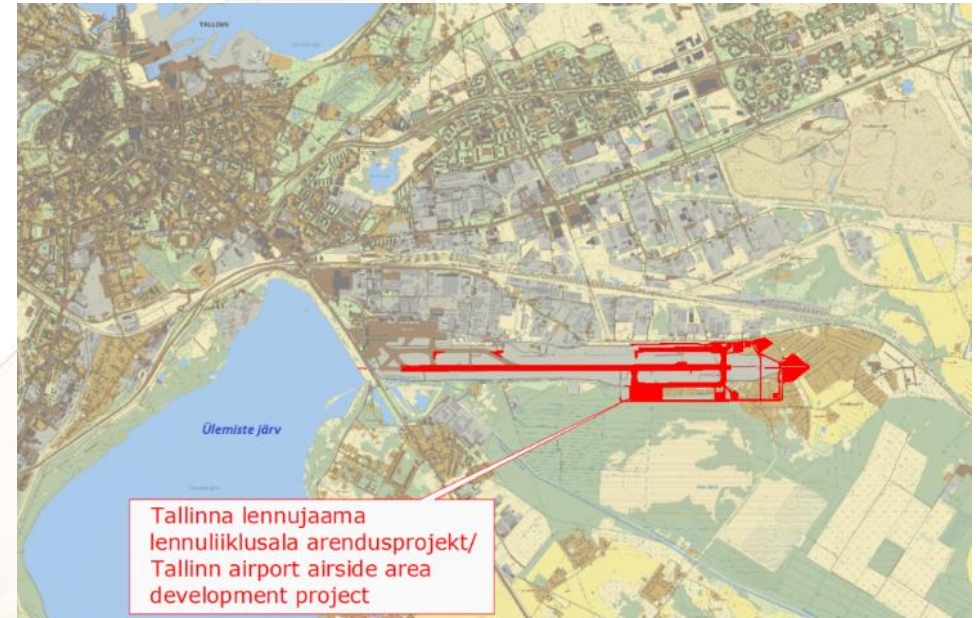


Airside area development project

Airside Area Development Project 2016-2020

Project objectives:

- improve environmental conditions and airport infrastructure
- advance sustainable, environmental friendly, safe and efficient operations of Tallinn Airport
- alleviate negative environmental impact of the airport infrastructure to the surrounding areas
- mitigate the adverse impact on the environment



Current layout of the airport:



Airside Area Development Project - final layout 2020:



Aviation safety and security measures

➤ Displacement of runway and extending current TWY A:

- Displacement of the runway and extension of the existing taxiway until the new threshold of the displaced runway will allow directing of flight operations (take-offs and landings) farther from the border of the Lake Ülemiste
- It will increase the altitude of approaching aircraft above the Tallinn city and Lake Ülemiste; subsequently reducing noise and air pollution

➤ Navigation system upgrading to CAT II:

- Currently CAT II from both runway directions is not attained. All competitive airports operate as a minimum in CAT II conditions.
- Higher category of airport's navigation system allows carrying out aircraft operations in low visibility weather conditions and emergency situations.
- It will reduce accident risks and number of flight operations cancelled due to weather conditions. This is also essential for the environmental safety of the Lake Ülemiste as the aircraft accident risk that may cause considerable environmental contamination is reduced.



➤ Replacement of runway and taxiway lighting system:

- Current light sources of runway and taxiways are depreciated and require lots of energy for operations, maintenance costs are high

• Reconstruction of the existing runway pavement:

- Existing runway was reconstructed in 1994/1995. No major improvement Works have been carried out during last 20 years
- The pavement is depreciated and needs rehabilitation

➤ Construction of a manoeuvring and stand-by area for airfield maintenance equipment:

- Runway maintenance and cleaning possibilities will be improved, as the maintenance equipment's access to runway and the airside area will be faster, and subsequently, fuel-burning emissions and noise will be reduced.

➤ Building patrol roads and perimeter fence systems to meet the security requirements



Environmental protection measures - need for investment

- Extension of runway for **displacement of runway threshold** farther from the drinking water reservoir Lake Ülemiste reservoir Lake Ülemiste
- Replacement of runway and taxiway lighting system to more **energy efficient system**
- Construction of **dedicated snow collection areas** and a new de-icing pad
- Construction of the **new de-icing pad** to the eastern side of the territory
- Reconstruction of **storm and drainage** water system at the eastern and southern areas of the airport territory, etc. airport territory, etc.
- Construction of an aircraft run-up area

TALLINN AIRPORT Situation



Flooded areas at the southern part of the airport territory

Collected snow piles

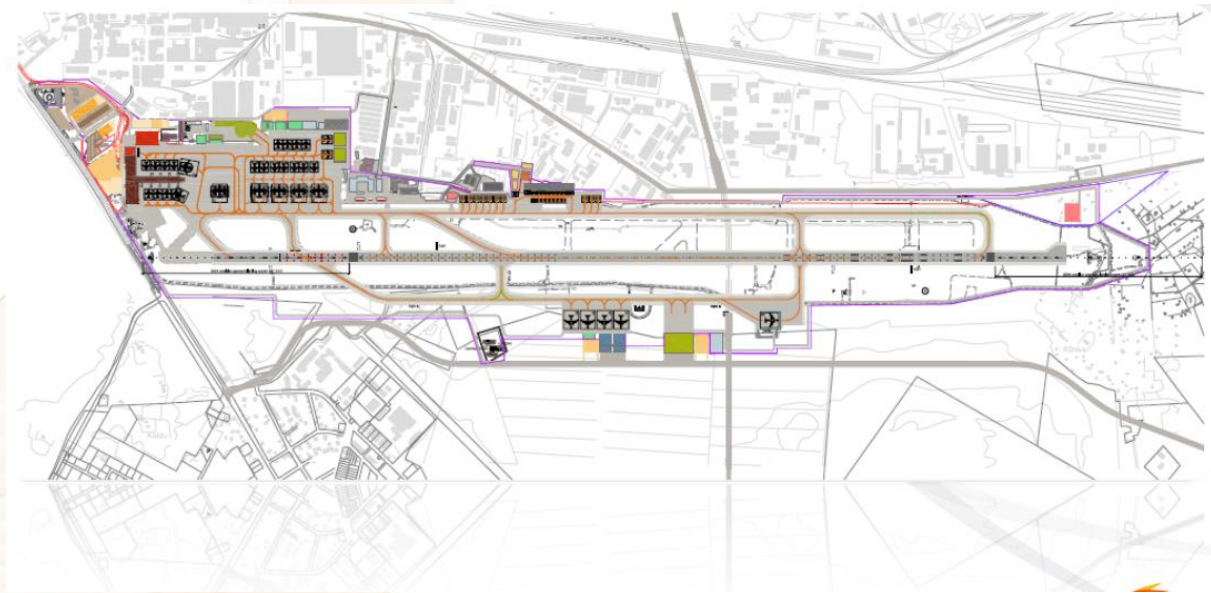
De-icing and snow removal

Upgrading airside capacity

- Building additional apron stands in the southern area:
 - There is need to expand the aircraft parking area as the existing apron capacity will set restrictions to the number of future flight operations
 - Currently there is occasional shortage of aircraft parking positions
- Upgrading taxiway system:
 - Extended TWY A provides aircraft access to the new de-icing and run-up area
 - New taxiway will provide access to the new southern apron area
 - Basis for future infrastructure developments at the southern side of the territory
 - Basis for increasing RWY capacity from current 12 FOP/ hr to 20 FOP/hr
- **Acquiring maintenance equipment and machinery for runway and airport territory**



Aircraft parking at TWY



Possible future extensions of the southern area



Airside area construction works

The construction works will be carried out in two phases:

- 2016-2017
- 2019-2020

First phase Construction Works' Main Contractor is Lemminkäinen Eesti AS

The Works started in April 2016 and will be completed by November 2017

The Airport is operational during the construction Works with some restrictions to night time operations

Ongoing construction Works, June 2016





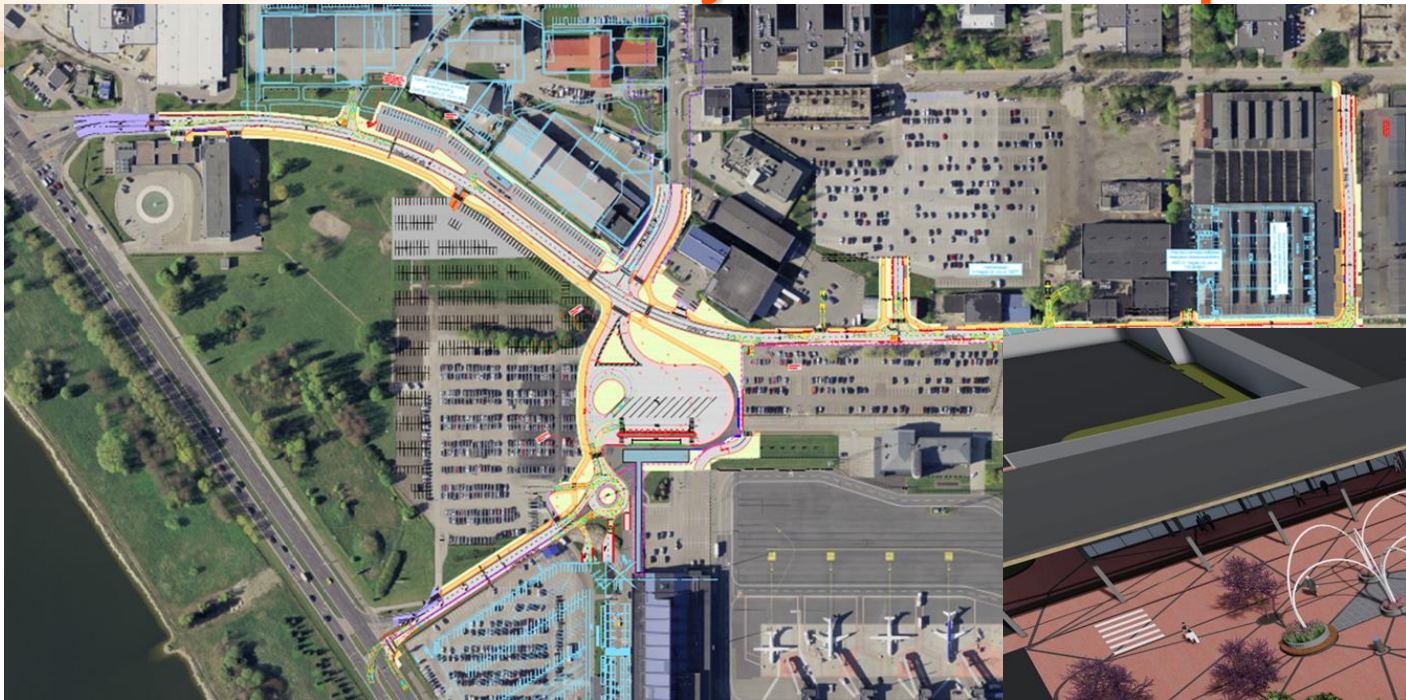
Ongoing construction Works,
August and October 2016



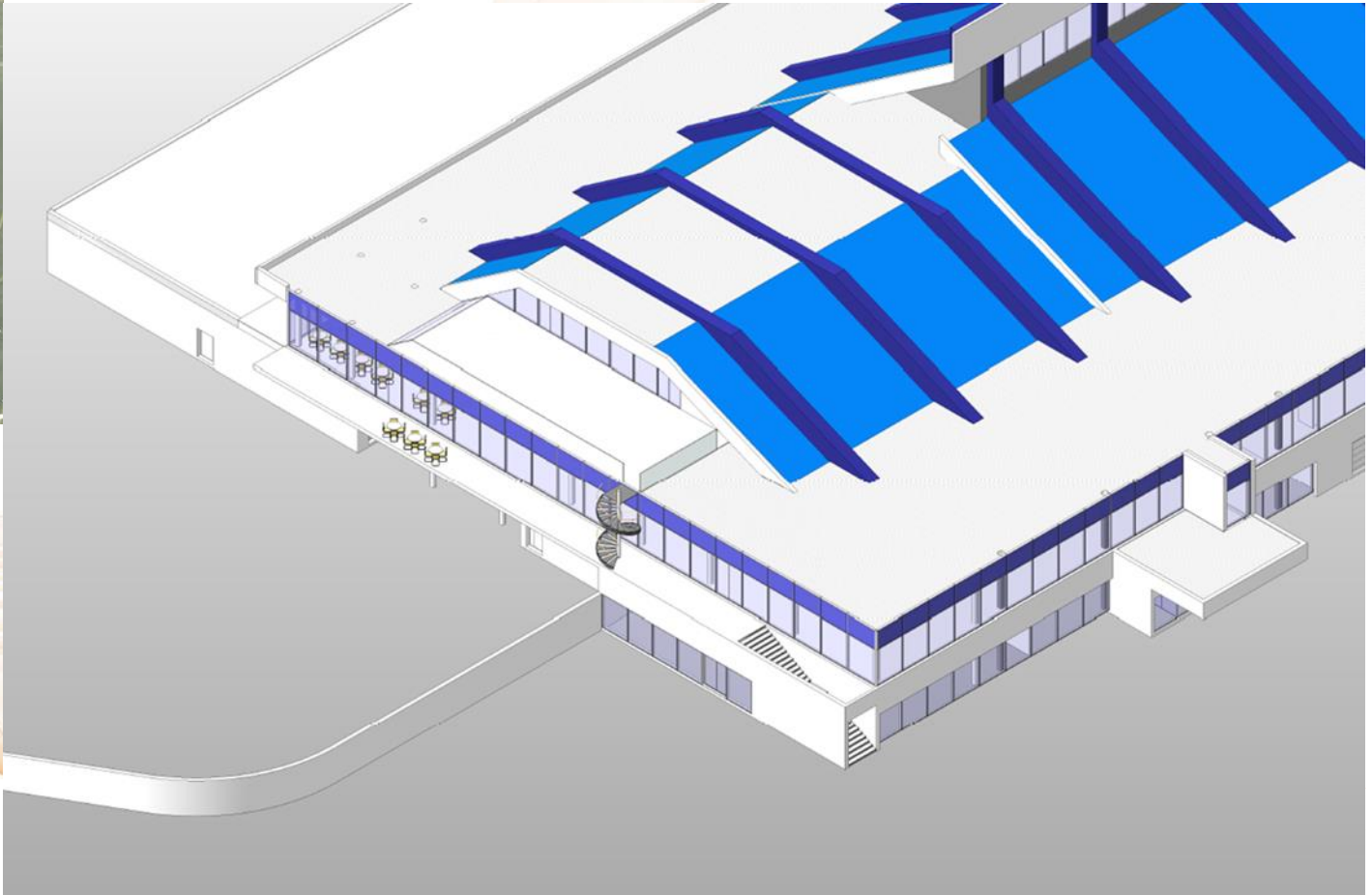
Other projects



Tramway to the airport



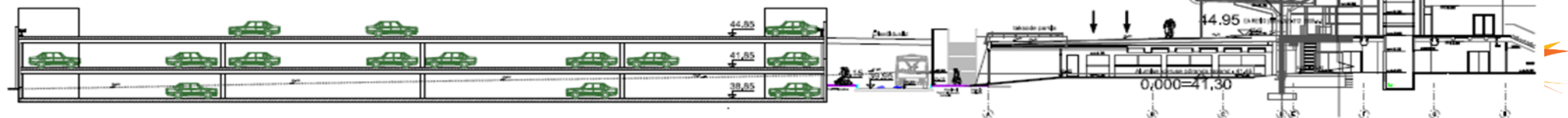
The extension of the Terminal building



Parking building



UUS PARKLAHOONE



Environmental Indicator tool for Airport



Environmental indicator tool

- For internal use only – making the reporting to the management board easier
- Takes in all the aspects of environment, including noise, water quality, soil and runoff water quality and other usual eco-footprint tools do (energy, water usage, chemical usage and so on)
- Has built in yearly objectives and it measures the environmental aspects against their objective
- Gives out a number from 1-3 to indicate the yearly goal. The indicator number is one of the objectives in the management level. Any fluctuations in the indicator number will be investigated thoroughly

| Keskkonnaparameter | AS Tallinna Lennujaama 100% kasutuses olevad hooned | | | | | | | | | | | | | | | | | Osaliselt AS Tallinna Lennujaama kasutuses olevad hooned | | | | | AS Tallinna Lennujaama kasutuses olevad välialad | | | | | | | Maagas | Kokku | Keskikonnap | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--|--------------------|--------------------|--------------------|--------------------|--|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | Alumise korruse hooned | 1. korruse hooned | 2. korruse hooned | 3. korruse hooned | 4. korruse hooned | 5. korruse hooned | 6. korruse hooned | 7. korruse hooned | 8. korruse hooned | 9. korruse hooned | 10. korruse hooned | 11. korruse hooned | 12. korruse hooned | 13. korruse hooned | 14. korruse hooned | 15. korruse hooned | 16. korruse hooned | 17. korruse hooned | 18. korruse hooned | 19. korruse hooned | 20. korruse hooned | 21. korruse hooned | 22. korruse hooned | 23. korruse hooned | 24. korruse hooned | 25. korruse hooned | 26. korruse hooned | 27. korruse hooned | 28. korruse hooned | 29. korruse hooned | 30. korruse hooned | 31. korruse hooned | 32. korruse hooned | 33. korruse hooned | 34. korruse hooned | 35. korruse hooned | 36. korruse hooned | 37. korruse hooned | 38. korruse hooned | 39. korruse hooned | 40. korruse hooned | 41. korruse hooned | 42. korruse hooned | 43. korruse hooned | 44. korruse hooned | 45. korruse hooned | 46. korruse hooned | 47. korruse hooned | 48. korruse hooned | 49. korruse hooned | 50. korruse hooned | 51. korruse hooned | 52. korruse hooned | 53. korruse hooned | 54. korruse hooned | 55. korruse hooned | 56. korruse hooned | 57. korruse hooned | 58. korruse hooned | 59. korruse hooned | 60. korruse hooned | 61. korruse hooned | 62. korruse hooned | 63. korruse hooned | 64. korruse hooned | 65. korruse hooned | 66. korruse hooned | 67. korruse hooned | 68. korruse hooned | 69. korruse hooned | 70. korruse hooned | 71. korruse hooned | 72. korruse hooned | 73. korruse hooned | 74. korruse hooned | 75. korruse hooned | 76. korruse hooned | 77. korruse hooned | 78. korruse hooned | 79. korruse hooned | 80. korruse hooned | 81. korruse hooned | 82. korruse hooned | 83. korruse hooned | 84. korruse hooned | 85. korruse hooned | 86. korruse hooned | 87. korruse hooned | 88. korruse hooned | 89. korruse hooned | 90. korruse hooned | 91. korruse hooned | 92. korruse hooned | 93. korruse hooned | 94. korruse hooned | 95. korruse hooned | 96. korruse hooned | 97. korruse hooned | 98. korruse hooned | 99. korruse hooned |

| | | | | | | | | | | | | | | | |
|------------------------|---------|--------|--------|---------|---------|--------|--------|---------|--------|--------|-----------|---------|--------|---------|---------|
| Alumise korruse hooned | 13,484 | 113 | 0,995 | 1,638 | 19,514 | 0 | | | 1,796 | 8,523 | 0 | 3,827 | 41,636 | | |
| 1. korruse hooned | | 7,481 | | | | | | | | | | | | | |
| 2. korruse hooned | 2,549 | 55,879 | 0,628 | 2,115 | 5,242 | 0 | | 0 | 0,805 | 0 | 0,319 | 0,628 | | | |
| 3. korruse hooned | | | | | | | | | | | | | | | |
| 4. korruse hooned | | | | | | | | | | | | | | | |
| 5. korruse hooned | | | | | | | | | | | | | | | |
| 6. korruse hooned | | | | | | | | | | | | | | | |
| 7. korruse hooned | | | | | | | | | | | | | | | |
| 8. korruse hooned | | | | | | | | | | | | | | | |
| 9. korruse hooned | 471 | 12,349 | 218 | 399 | 930 | 0 | 0 | 0 | 0 | 0 | 93 | 6 | 0 | 417 | 60 |
| 10. korruse hooned | 387 695 | | 87 660 | 391 371 | 305 802 | 12 955 | 59 595 | 316 844 | 73 207 | 23 521 | 5 127 235 | 282 607 | 49 010 | 207 878 | 178 557 |

| Tulemus põhineb erinevalt seatud kriteeriumidel | | | | Iga keskkonnaparametri on vajalik määrata selle osakaal vastavale valdkonnale | | | | Tulemus põhineb erinevalt seatud kriteeriumidel ning keskkonnaparametreid osakaalul | | | | Iga keskkonnavaldkonnale on vajalik määrata selle osakaal keskkonnamarkeri koostindis | | | | Tulemus põhineb keskkonnavaldkondade koostindiselt ning nende osakaalul keskkonna markeri koostindisse | | | |
|---|----------|------|------|---|-----|----------|---|---|------|-----|----------|---|-----|------|--|--|--|--|--|
| 1836 | halb | 20% | 100% | 1 | 1,7 | halb | MÜRA | 10% | 100% | 2,5 | halb | | 2,5 | halb | | | | | |
| 9% | keskmine | 10% | | 2 | | | | | | | | | | | | | | | |
| 54,35 | hea | 10% | | 3 | | | | | | | | | | | | | | | |
| 49,45 | hea | 10% | | 3 | | | | | | | | | | | | | | | |
| 95,2 | halb | 10% | | 1 | | | | | | | | | | | | | | | |
| 89,9 | halb | 10% | 1 | | | | | | | | | | | | | | | | |
| 204,486 | hea | 20% | 100% | 3 | 2,0 | keskmine | JÄÄTME TEKE/ MAAKASUTUS JA EHTUSTE GEVUS | 10% | 100% | 2,1 | keskmine | KEMIKAALIDE KASUTAMINE/ ENERGIA JA LOODUSVARADE KASUTAMINE/ HEITMED VÄLISÕHKU | 25% | 100% | | | | | |
| 7,481 | keskmine | 20% | | 2 | | | | | | | | | | | | | | | |
| 48,159 | hea | 20% | | 3 | | | | | | | | | | | | | | | |
| 195,52 | halb | 20% | | 1 | | | | | | | | | | | | | | | |
| 11,41 | halb | 20% | | 1 | | | | | | | | | | | | | | | |
| 14944,3578 | hea | 100% | 100% | 3 | 3,0 | hea | ENERGIA JA LOODUSVARADE KASUTAMINE/ HEITMED VÄLISÕHKU | 10% | 100% | 2,1 | keskmine | KEMIKAALIDE KASUTAMINE/ ENERGIA JA LOODUSVARADE KASUTAMINE/ HEITMED VÄLISÕHKU | 25% | 100% | | | | | |
| 10538587 | hea | 100% | | 3 | | | | | | | | | | | | | | | |
| 1344,786 | hea | 60% | | 3 | | | | | | | | | | | | | | | |
| 2,711088576 | hea | 5% | | 3 | | | | | | | | | | | | | | | |
| 2,711088576 | hea | 5% | | 3 | | | | | | | | | | | | | | | |
| 0,180739238 | hea | 5% | 3 | | | | | | | | | | | | | | | | |
| 2522,216072 | hea | 25% | 100% | 3 | 2,1 | keskmine | KEMIKAALIDE KASUTAMINE/ ENERGIA JA LOODUSVARADE KASUTAMINE/ HEITMED VÄLISÕHKU | 25% | 100% | 2,1 | keskmine | KEMIKAALIDE KASUTAMINE/ ENERGIA JA LOODUSVARADE KASUTAMINE/ HEITMED VÄLISÕHKU | 25% | 100% | | | | | |
| 9,95763054 | hea | 10% | | 3 | | | | | | | | | | | | | | | |
| 140,14152 | hea | 10% | | 3 | | | | | | | | | | | | | | | |
| 3,385 | hea | 5% | | 3 | | | | | | | | | | | | | | | |
| 0 | hea | 5% | | 3 | | | | | | | | | | | | | | | |
| 3145,92 | hea | 5% | 3 | | | | | | | | | | | | | | | | |
| 27 | halb | 30% | 1 | | | | | | | | | | | | | | | | |
| 145,362 | hea | 10% | 3 | | | | | | | | | | | | | | | | |
| 345 | hea | 10% | 3 | | | | | | | | | | | | | | | | |
| 0 | hea | 5% | 3 | | | | | | | | | | | | | | | | |
| FALSE | keskmine | 20% | 100% | 2 | 2,1 | keskmine | KEMIKAALIDE KASUTAMINE/ ENERGIA JA LOODUSVARADE KASUTAMINE/ HEITMED VÄLISÕHKU | 25% | 100% | 2,1 | keskmine | KEMIKAALIDE KASUTAMINE/ ENERGIA JA LOODUSVARADE KASUTAMINE/ HEITMED VÄLISÕHKU | 25% | 100% | | | | | |
| 369 | hea | 10% | | 3 | | | | | | | | | | | | | | | |
| 1 | hea | 10% | | 3 | | | | | | | | | | | | | | | |
| 7,3 | hea | 10% | | 3 | | | | | | | | | | | | | | | |
| 7,3 | hea | 10% | | 3 | | | | | | | | | | | | | | | |

| | | | | | | | |
|------|-----|------|-----|------|-----|------|-----|
| 100% | 2,1 | 100% | 2,5 | 100% | 2,5 | 100% | 2,5 |
|------|-----|------|-----|------|-----|------|-----|

Tallinn Airport – Cosiest airport





- Tallinn Airport just celebrated it's 80th birthday
- We got presented with Corporate Social Responsibility award by the City of Tallinn
- Website „Sleeping in Airports“ voted Tallinn third in Europe and 9th in the world, so we are one of the cosiest airports in the world

