

Annex 1 Services (Scope of Work)

I. Final Requirements and Scope of the Study

- An analysis of the influence of rubber deposits and of amount of water on the runway surface on the coefficient of friction.
- The analysis, a proposal of potential solutions and a recommendation of a specific variant to ensure effective drainage of water from the runway to prevent aquaplaning/hydroplaning over the whole length and width of the runway and ensuring a continual course of coefficients of friction (runway surface characteristics) over the whole length and width of the runway.
- The proposed solution should suppose adjusted coefficients of friction as close as possible to the level of "Design objective for new surface" (see Table 1 in Appendix D1 to Appendix D of TD); however, they should not be lower than 0,72 for the measuring speed of 65 kmph or 0,64 for the measuring speed of 95 kmph (measured by the "Surface Friction Tester Vehicle" according to the Table 1 in the Appendix D1 to Appendix D of TD)"
- A comparison between the design and at least five foreign airports with comparable weather conditions – optional, in case the Consultant can propose such information.
- A calculation of costs of the recommended variant – optional, in case the Consultant can propose such information.

II. Method of elaboration of the study in the respective parts:

Analytical Part - Analysis of the materials

- o personal visit
- o assessment of the sufficiency of the source documents
- o recommendation on measurement of properties and elaboration of documents necessary for further work needed – the testing will be secured by the Client, in case the Consultant would secure such testing, the price will be reimbursable – subject of price confirmation in advance
- o verification measurement of the coefficient of friction at the distances of 3 and 6 m from the runway centreline to both sides using a device allowed and calibrated according to the EASA – optional, in case the Consultant can propose such service.
- o evaluation of the ability of the runway to drain rainwater
- o evaluation of assessment/statistics of reaching the coefficient of friction for new runway at new runways around the world – optional, in case the Consultant can propose such service
- o creation of an overview of the typical development of the coefficient of braking action at world's airports at the time after individual years of the runway operation – optional, in case the Consultant can propose such service
- o drawing up a complete overview of materials for further works

Evaluation Part - Evaluation of the runway condition

- o evaluation of the documents checked and completed in the Analytical part
- o description of the existing state and cause of defects
- o experience from other airports

- comments on the condition of the runway by the Consultant
- recommendation of short-term operative steps for the next 12 months
- personal presentation of the results

Solution Part - Proposed design

- potential variants of the design including their advantages/disadvantages and economic demands of the investment/maintenance
- experience from other airports
- proposal of specific technical measures and renovations along the whole surface of the runway – drawings, tables, and texts (situation, sample cross-sections of the renovations, joints, sealing filler, calculations, etc., everything in an open format with the possibility to make changes and also in the pdf format)
- proposed procedure for maintenance and renovation of the runway surface friction characteristics
- economic demands or recommendation of the most effective approach
- personal presentation of the results

III. Required outputs

A study elaborated for each part (see Item II of Annex 1 hereof)

- All required documents will be issued as a draft to be commented, in electronic form. Once the comments have been incorporated, a final version will be issued.
- The original written report will be submitted in 5 hard-copies and 1 electronic copy in the pdf format. At the same time, all parts of the report which include texts, tables, drawings, databases, etc. provided by the consultants shall be submitted in an open editable form in an electronic way.

Annex 2

Detailed project plan including all project deliverables schedule (Proposal of the winner company).

The Detailed project plan timeschedule included in this Annex 2 will respect bellow mentioned requirements:

Milestone 1 - Completion of Analytical Part in draft till 16 weeks after contract conclusion

Milestone 2 - Completion of Evaluation Part in draft till 6 weeks after Analytical Part report is finalized

Milestone 3 - Completion of Solution Part in draft till 6 weeks after Evaluation Part is finalized

Comments of the Client are expected to be issued within 3 weeks after draft of the report in each part is handed over by the Consultant with his personal presentation to the Client (if delay occurred the further deadlines are postponed)

Final report in each part to be issued by the Consultant within 2 weeks after receiving the Clients comments