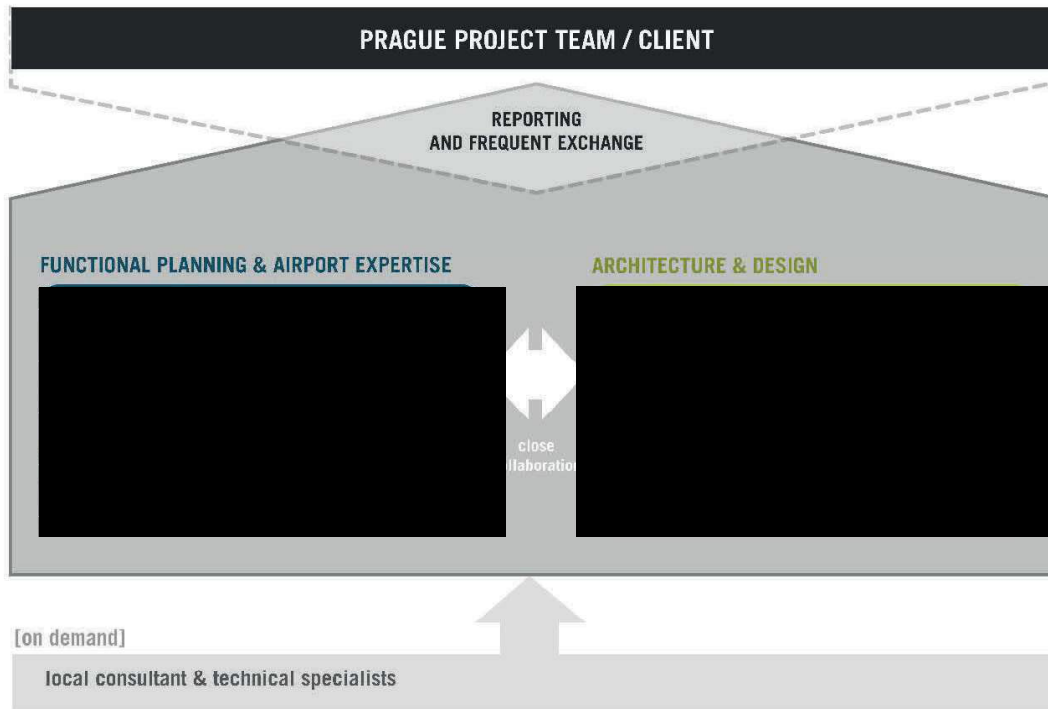


3. APPROACH AND PROJECT ORGANISATION

3. QUALIFICATION OF THE PROJECT TEAM

3.1 Project Organization



3.2 Project Team and key functions of team members

plane ground airport consulting

Planeground is a professional team of specialist planners and consultants for the aviation industry, driven by passion and a commitment to excellence. Planeground’s core competence is an integral approach to airport development from a functional, operational and commercial perspective. The assigned senior project team members have more than 56 accumulated years of experience in the field of Airport Planning and Terminal Design.

Key functions of team members:

→ **Project Team Leader:** [REDACTED]

Position: Managing director of plane ground / Airport master planner with 17 years experience in strategic airport planning and consulting i.a. at airports CGN, FRA, AMS, MUC, LUX, HAM, VNO, HEL, CUR, HHN

Most relevant project experience:

- **Munich Airport, Germany (2016-2017)**
Planning and consulting services to develop new terminal 1 expansion (Non-Schengen pier).
Cost: 300 Million €
- **Amsterdam Airport Schiphol, The Netherlands (2017 – 2019)**
First price EU tender for integrated terminal design.
Cost: 350 Million €
- **Cologne-Bonn-Airport, Germany (2014 – 2017)**
Continuous planning and consultancy services for strategic airport and terminal development.
Cost: 5 – 300 Million €
(further references attached in CV, see Addendum)

The Project Team Manager leads a multi-disciplined team, coordinates many concurrent activities and promotes an effective interaction of the project team. Apart from the leadership he provides to the team, he also acts as the primary interface with the client. The Team Leader develops effective relationships by constantly exchanging concepts with the client and frequently reporting the project status. The Project Manager effectively manages risk and opportunities and schedules to achieve timely completion of the contract.



Senior Terminal Architect: [REDACTED]

Senior Airport Architect at planeground with 27 years of international experience in Terminal and Airport Facility Planning i.a. at airports CGN, FRA, MUC, AMS, LUX, VNO, MAD, ABZ, VVO, JED.

Most relevant project experience:

- **Munich Airport, Germany (2016-2017)**
Planning and consulting services to develop new terminal 1 expansion (Non-Schengen pier).
Cost: 300 Million €
- **Amsterdam Airport Schiphol, The Netherlands (2017 – 2019)**
First price EU tender for integrated terminal design.
Cost: 350 Million €
- **Vilnius Airport, Lithuania (2017)**
Study on passenger short- to midterm terminal capacity and developments; Investigation of future requirements (low-cost growth) and analysis of constraints, potential and adaptability of the existing facilities and elaboration of “quick-win” development options and mid-term solutions.
Concept design of interim terminal 2025 to bridge capacity gap 2025.
Cost: 30 Million €
(further references attached in CV, see Addendum)

The Airport Architect focuses on supervising the functionality of the Terminal as an integral part of the existing infrastructure. In close coordination with technical experts, architects and local specialists he monitors to optimally integrate regional, technical, functional and operational aspects into the terminal design.

→ **Senior Airport Planner:** [REDACTED]

Senior airport planner with 22 years of experience in international projects, involved in airport Planning and asset management i.a. at airports AMS, FRA, LUX, LEY, BKK, SZX, VIE
Most relevant project experience:

- **Amsterdam Airport Schiphol, The Netherlands (2006-2014)**
As asset manager for terminal and airside infrastructure involved in all stages (from initial stage to hand-over) of several projects:
Extension of terminal building 1 in southern direction (approx. 25 million);
Realization of 25 new shops at Schiphol Plaza (approx. 20 million);
As aviation consultant, involved in the implementation of a project called “One-XS”, which means implementation of a central security system for the Non-Schengen area. Total amount > 500 million, project handover in 2015.
(further references attached in CV, see Addendum)

The Senior Airport Planner focuses on a balanced air- and landside solution. He ensures competent service- and operational flows and prioritizes optimal landside connections and an efficient apron utilization.

In close collaboration with the regional partners Techniserv and Chybik & Kristof an interdisciplinary team with local expertise is formed, delivering the most suitable terminal design in close exchange with the clients strategic and operational demands. With Chybik + Krisof as the creative team, Techniserv as the local engineering company and further local partner’s airport expertise, high-quality spatial design and engineering is combined with regional competence.

4. QUALIFICATION OF THE LOCAL PROJECT TEAM (CZECH TEAM)

Techniserv: Technical Consulting & Engineering Partner

Techniserv was established in 1991 and is in 100% Czech private ownership. The company is mainly focused on engineering, supply, installation, maintenance activities, system administration and supervision. The local project team is familiar with and accustomed to working in a standardized documentation section at Prague Airport. Techniserv has the qualification to prove technical, structural and mechanical & electrical feasibility. As experts in baggage handling, Techniserv can also survey the feasibility of an integrated baggage system.

- **Project Team Coordinator:** [REDACTED]
Mechanical Engineer with specialization in technological equipment of buildings with 20 years of experience in various projects at Prague and Bratislava Airport. (Please find further references attached in CV, see Addendum)

The Local Project Team Manager manages multiple tasks and projects and supervises the local project team. He preserves the integrated system design to meet the system performance and technical specification requirements.

Chybik + Kristof: Architecture & urban design studio

Chybik + Kristof is a young and dynamic architectural firm with Czech offices in Prague and Brno. Next to extensive experience in the Czech Republic, [REDACTED] can exhibit accredited projects worldwide. The team will form a key partner to incorporate a creative and international approach into the terminal design. [REDACTED] do not provide or advocate generic solutions - instead, they always strive to propose a unique, innovative, sustainable, site- and client-specific project. In close collaboration with the project team, [REDACTED] are qualified to deliver a locally assimilated and at the same time worldwide resonating terminal design. (Please find references of [REDACTED] and [REDACTED] attached in separate Portfolio and CV, see Addendum)

External consultants: On demand

As extension to the multi-disciplinary core team, further external consultants will be readily available on demand. Specialists in transport infrastructure buildings with experience in planning at Prague Airport such as Tomas Janecek (please find references attached in CV, see Addendum) will be available for consultation during the entire process to evaluate the overall building compatibility. Furthermore local specialists such as fire-safety experts who are familiar with local regulations and requirements are closely involved in the progress.

5. FINANCIAL PROPOSAL

The works for the Prague Airport Passenger Terminal – Design Study, as described above (see: 2.1. Scope of Works) and under the condition of the supposed course of project with the underlying staff allocation (see: 2.2. Project Schedule and 2.3. Staff allocation), can be accomplished for the amount of:

→ **Total Project Costs / Indicative Tender** → **EUR 549.254,-**

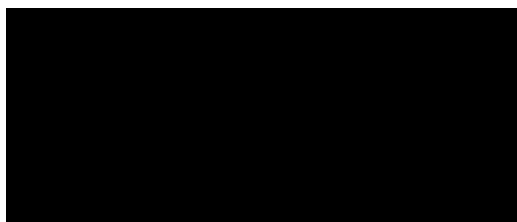
This includes following costs (see also detailed cost summary attached to this doc)

- Staff honorarium
- Office and coordination cost (Cologne&Amsterdam / Prague)
- Travel and accommodation costs as stipulated in the respective schedule.

All amounts are net values and do not comprise statutory VAT amounts.

We are convinced that this proposal meets your expectations; it would be a pleasure to commence the joint and fruitful collaboration with you and support you in making this project a success. We would be very eager to add PRG Airport to our growing community of satisfied customers.

With kind regards
Yours faithfully



Cologne / Amsterdam, April 19th, 2018

3. APPROACH AND PROJECT ORGANISATION

INDICATIVE TENDER COST CALCULATION

Indicative Tender Calculation (v.2)			
Project: "Prague Airport Passenger Terminal - Design Study"			
planegroud / Techniserv / (...)			
I. PROFESSIONAL FEE			
A) planegroud airport consulting	Rate (Euro/day)	Time days (8hr)	Total (Euro)
Sr. Airport Master Planner	1.160,00 €	52,0	60.320,00 €
Sr. Terminal Architect	1.160,00 €	78,0	90.480,00 €
Terminal Architect	760,00 €	104,0	79.040,00 €
Sr. Airport Planner	1.160,00 €	39,0	45.240,00 €
Simulation Analyst	960,00 €	30,0	28.800,00 €
Subtotal planegroud	in Staff days	303,0	303.880,00 €
	staff months	13,9	
B) Techniserv	Rate (Euro/day)	Time days (8hr)	Total (Euro)
Local Project Manager / Engineers (HVAC, Bag-Sys, Constr., M&E)	640,00 €	113,0	72.320,00 €
Local Consultant / Engineer	640,00 €	13,0	8.320,00 €
Subtotal Techniserv	in Staff days	126,0	80.640,00 €
	staff months	5,8	
C) Chybik & Kristof Architects	Rate (Euro/day)	Time days (8hr)	Total (Euro)
Chief Architect	1.060,00 €	26,0	27.560,00 €
Lead Architect	435,00 €	130,0	56.550,00 €
Architect	325,00 €	66,0	21.450,00 €
Support	90,00 €	110,0	9.900,00 €
Subtotal Chybik + Kristof	in Staff days	332,0	115.460,00 €
	staff months	15,3	
II) ADDITIONAL COST			
Office Cost		5%	15.194,00 €
Travel Expenses *)	320,00 €	48	15.360,00 €
Hotel / night *)	120,00 €	96	11.520,00 €
Allowance / day *)	50,00 €	144	7.200,00 €
Subtotal II) Additional Cost (Indicative Tender Phase)			49.274,00 €
*) Basis:			
TOTAL PROJECT SUM (excl. VAT) / INDICATIVE TENDER PHASE			549.254,00 €

**UPDATED COMPARED TO
TENDER DATED 7th of FEB 2018**

3. APPROACH AND PROJECT ORGANISATION

APPENDIX 4 - PROJECT SCHEDULE

Project schedule

Month Week Project Week	January				February				March				April				May				June				July				August				September											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39					
PRAGUE AIRPORT PASSENGER TERMINAL - DESIGN STUDY Meetings & Milestones																																												
Part I - ANALYTICAL PART																																												
1. Inception / Compilation and Sighting of Project Information																																												
2. Review/Analysis on ADPI Study Conclusions (2nd opinion)																																												
3. Evaluation of conditions & capabilities incl. capacity / demand analysis (existing Terminal)																																												
4. Critical Impact Analysis of ADPI study pertaining to existing Terminal Infrastructure																																												
5. Report of Analysis Part																																												
Part II - DESIGN PART																																												
A) <i>Conceptual elaboration (sketch design level - in variants)</i>																																												
1. Design Proposals: Layout arrangements (i.e. Floor Plans)																																												
2. Design Proposals: Functional schemes (i.e. Flows & Processes)																																												
3. Design Proposals: Exterior / Interior Design (i.e. Studies on building appearance)																																												
4. Workshop and Evaluation of options / Selection of preferred options																																												
B) <i>Further elaboration of selected proposal</i>																																												
1. Elaboration on terminal functionality (calculations, plans, schemes)																																												
- Calculation of functional area dimensions & processor quantities (indicative PoR)																																												
- Functional Schemes (CAD-planning / diagrammes)																																												
- Review of ADPI Apron Concept (related to T2 development)																																												
- Construction Phasing Concept																																												
2. Architectural Design Concept (CAD & 3D Models)																																												
- Elaboration of floor plans, sections and elevations																																												
- Exterior design / Facade concept (material, finishes etc)																																												
- Interior Design Concept																																												
- Preparation of Cost Estimation																																												
- Preparation of 3D render models																																												
3. Technical operability studies ('feasibility' level)																																												
- Structural principles (feasibility level)																																												
- HVAC principles (feasibility level)																																												
- Mechanical & Electrical principles (feasibility level)																																												
- Fire-protection principles (feasibility level)																																												
- Baggage System concept (feasibility-level)																																												
5. Preparation of photo-realistic 3D-renders (high-res)																																												
C) <i>Verification of structure capabilities</i>																																												
1. Dynamic PAX-Flow Simulations																																												
- Definition of basic assumptions & input parameters																																												
- Simulation of 7 terminal processes (Check-in; Security, Passport, Bag reclaim etc.)																																												
2. Report of Design Part																																												
Part III - ADVISORY & SUPERVISION SERVICES (excluded from proposal)																																												

3. APPROACH AND PROJECT ORGANISATION

APPENDIX 4 - STAFF ALLOCATION

PRG - Prague Airport
Project: "Prague Airport Passenger Terminal - Design Study"
planeground / Techniserv / (...)

Staff allocation

Year Month Week Project Week	2018																									8 hr																				
	January					February					March					April					May						June					July					August					September				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25		26	27	28	29	30	31	32	33	34	35	36	37	38	39						
Planeground	[REDACTED]																																													
	1. <u>Project Team Leader</u>	[REDACTED]																									52,0																			
	2. <u>Architect</u>	[REDACTED]																									78,0																			
	Terminal Architect	[REDACTED]																									104,0																			
Techniserv	3. <u>Airport Project Manager</u>	[REDACTED]																									39,0																			
	Simulation Analyst	[REDACTED]																									30,0																			
	Local Project Manager / Engineers (HVAC, Bag-Sys, Constr., M&E)	[REDACTED]																									113,0																			
	Local Consultant / Engineer	[REDACTED]																									13,0																			
Chybik + Kristof	Chief Architect	[REDACTED]																									26,0																			
	Lead Architect	[REDACTED]																									130,0																			
	Architect	[REDACTED]																									66,0																			
	Support	[REDACTED]																									110,0																			
Total																										761,0																				

**UPDATED COMPARED TO
 TENDER DATED 7th of FEB 2018**

3. APPROACH AND PROJECT ORGANISATION

APPENDIX 1 - SCOPE OF SERVICES

SCOPE OF SERVICES (v.1.0)

No.:	Tasks	lead_party	support	duration	workdays
PART 0 - GENERAL PART					
GP	1. Project management and steering (content-related) - Correspondence and information exchange between client and consultant team - Communication and Organization of regular workshops / meetings between client and consultant team - Supervision of team and tasks (according to project master schedule) - Attendance at project meetings / management meetings (incl. Minutes of Meeting)	planeground/Techniserv		26 wk	
GP	2. Project administration (formal) - Billing and reporting to client - Sub-consultant contracting and internal financial management - Travel and accomodation bookings (visit to PRG)	planeground	Techniserv	26 wk	
PART 1 - ANALYTICAL PART					
AP	1. Inception / Compilation and Sighting of Project Information - Set-up of project organization / administration - Organization & Execution of Kick-off session (PRG strategy; project goal; project frame; communication lines; meeting schedule) & sight visit in PRG - Kick-off session incl. a) Clarification of the client's intention / overarching strategic goalsetting b) Description and interpretation of territorial / zoning limits - Catalogue of required information / Questionnaire (submit to client + follow-up) - Reading & Studying of basic material - Preparation of a workable CAD planning basis of existing terminal infra (incl. adjacent infrastructure)	all	all	1 wk	
AP	2. Review / Analysis on ADPI Study Conclusions with respect to Passengert Terminal Developments (--> 2nd opinion - Organization and execution of Workshop with Client (and relevant Users!) to gather feed-back from OPS- & Commercial perspective - Review of a) Development concept (Masterplan level) b) Terminal floor plans 2040 (Terminal Planning Level) - Review and evaluation of other relevant information and/or studies with relevance to the project - Summary of findings & Discussion with client --> presentation and documentation	planeground	Techniserv	4 wks	
AP	3. Evaluation of conditions & capabilities of existing terminal infrastructure incl. capacity / demand analysis - Computation of all relevant PAX/BAX-Peak hour figures (from 2017 flight schedule) --> existing PAX/BAX-Flow demand - Computation of PAX aircraft handling peak (from 2017 flight schedule) --> existing demand of aircraft positions / gates - Workshops with PRG ops / terminal management department for identification of insufficiencies / inefficiencies of current infrastructure - Analysis of current processing / area capacity 2017 (existing terminal) IATA Methodology --> Check-In; Security; Emigration, Immigration; Bag-Reclaim; Bag Sorting; Gates (Bus and Contact). - Analysis of 2040 PAX/BAX demand (based on flight schedule 2040 or assumptions on 2040 projection) - Identification of current and future capacity constraints of existing PRG terminal infrastructure - related to PAX/BAX areas - Analysis and evaluation of: a) Suitability of existing terminal security concept --> Preparation of thematic floor plans + descriptive analysis	planeground	-	4 wks	

3. APPROACH AND PROJECT ORGANISATION

APPENDIX 1 - SCOPE OF SERVICES

SCOPE OF SERVICES (v.1.0)

No.:	Tasks	lead party	support	duration	workdays
	- Analysis and evaluation of: b) Suitability of existing terminal commercial area concept --> Preparation of thematic floor plans + descriptive analysis				
	- Analysis and evaluation of: c) Suitability of existing functional terminal area configuration -> Preparation of thematic floor plans + descriptive analysis				
	- Appraisal and co-ordination of interaction of terminal development with respect to a) existing public area facilities --> Descriptive Appraisal with graphics				
	- Appraisal and co-ordination of interaction of terminal development with respect to b) transportation services --> Descriptive Appraisal with graphics				
	- Appraisal and co-ordination of interaction of terminal development with respect to c) ongoing and future development plans --> Descriptive Appraisal with graphics				
	- not included: Airtraffic forecast 2040 (to be provided by client)				
	- not included: Capacity / Demand analysis of infrastructure for airside and landside access				
	- not included: Capacity / Demand analysis of technical system capabilities (HVAC; M&E Systems; Fire Protection etc)				
AP	4. Critical Impact Analysis of ADPI Study recommendations pertaining to existing Terminal Infrastructure	plane-ground	Techniserv	3 wks	
	- Area and flow-analysis of ADPI development concept with focus on future changes for existing terminal --> Comparative diagrams (e.g. heat maps)				
	- Identification of functions and areas (in existing terminal) with considerable future shifts in utilization; Analysis of capacity and serviceability of these areas				
	- Assessment of effects on general applicability of ADPI conclusions. --> Presentation and Discussion with Client				
	- List of observations and recommended in-depth studies to be projected				
	- not included: detailed survey of existing conditions of building structure and technical installations incl. their adequacy with current regulations				
AP	5. Report of Analysis Part	plane-ground	all	1 wk	
	- Preparation of summary document of findings of AP2 - AP4				
	- Preparation and organization of endpresentation of Part 1				
PART 2 - DESIGN PART *					
A) CONCEPTUAL ELABORATION - (SKETCH DESIGN LEVEL / IN VARIANTS;					
DPIA	1. Design Proposals: Layout arrangements (i.e. Floor Plans)	plane-ground	C+K	7 wks	
	- Compilation of Design Base for Phase I and II --> PAX/BAX-Flow quantities; processes; area requirements; quality and technical standards etc. --> A4 doc				
	- Sketch Development Options (all possible variants) - depicting layer concept / processor allocation / approx. dimensions / main functional areas (for Phase II)				
	- Evaluation of sketches on main criteria as e.g. functionality, flexibility, cost effectiveness; phaseability etc.				
	- Workshop with client; Selection of preferred principle layout (layer concept, main processor allocation; functional areas) to further elaborate				
	- Elaboration and study on sub-variants at designated areas based on selected principle layout, Preparation of "model kit"				
	- Indication of functional / operational impact of selected concept to facilities outside of project frame (e.g. Terminal 1)				
	- not included: Elaboration of concepts to solve potential effects on facilities outside of project frame / zoning (see Annex C2)				
DPIA	2. Design Proposals: Functional schemes (i.e. Flows & Processes)	plane-ground	C+K	7 wks	
	- PAX/BAX-Flows Sketch Diagrams for most relevant options (Phase I and Phase II)				
	- Security concept diagrams (also indication of Schengen/Non-Schengen; clean; unclean, public area)				
	- Principles on commercial concept e.g. thematic sketch of high-quality dwell area vs "lower-cost" processing & circulation area				
	- Study on phasing of developments for flexibel adaptation of terminal infrastructure according to demand (in presentation form)				

3. APPROACH AND PROJECT ORGANISATION

APPENDIX 1 - SCOPE OF SERVICES

SCOPE OF SERVICES (v.1.0)

No.:	Tasks	lead party	support	duration	workdays
	- not included: <i>Functional schemes of Flows & Processes etc. outside of project frame / zoning (see Annex C2)</i>				
DPIA	<p>3. Design Proposals: Architectural Design (i.e. exterior & interior spatial design)</p> <ul style="list-style-type: none"> - Study on urban and architectural context of terminal (incl. consideration of future plans of landside plaza / station etc) --> presentation - Study on existing airport architecture design (exterior & interior); general configuration and historic development - Elaboration of aspiration, principles, elements, style & form language that should characterize future PRG terminal architecture - Study on sustainability concept (e.g. energy efficiency; CO2 neutrality; materials and life-cycle usability etc) - Sketches of exterior shapes of terminal expansion; embedded in existing building formation --> hand sketches (also isometric) - Sketches of interior space & design concepts / ideas --> preparation of hand sketches (also isometric) - Study on colours & materials for interior & exterior design - Preparation of a design guideline for exterior and interior design (under consideration of its architectural and urban context) --> presentation for decision workshop <p>- not included: <i>Exterior and interior design outside of project frame / zoning (see Annex C2)</i></p>	C+K	plane ground	7 wks	
DPIA	<p>4. Workshop and Evaluation of options / Selection of preferred options</p> <ul style="list-style-type: none"> - Organization and execution of Workshop and final selection of basic concept 2040 for further elaboration - Preparation of presentation as decision basis document 	plane ground	all	1 wk	
B)	FURTHER ELABORATION OF SELECTED PROPOSAL - CAD-LEVEL / PRINCIPLE DETAILS				
DPIB	<p>1. Elaboration on terminal functionality (calculations, plans, schemes)</p> <p>Calculation of functional area dimensions & processor quantities (indicative programme of requirements)</p> <ul style="list-style-type: none"> - Definition of parameters for PAX/BAX-Flow demand calculations (in consultation with client / workshop) - e.g. ratio self-service check-in; number bags/Non-EU PAX; etc. - Calculation of PAX/BAX-Flows in design peak-hour for Phase I (20??) and Phase II (2040) at main processors and functional areas of Terminal 2 extension - Facility sizing computation to determine number of: Check-in counters (conventional, kiosk, Self-service); Security control lanes (for dep. and transf. PAX), emigration & immigration booths incl. easy-pass (for dep. and transf. PAX); US-departure screening; gates (contact- and busgates); number and length of baggage reclaim belts (inbound) and baggage make up carroussels (outbound). - Facility sizing computation to determine area demand for: Check-in hall incl. queuing; Security control incl. queuing area; Emigration & immigration incl. queuing; Transfer control; customs control; Gates; Baggage reclaim hall; Baggage handling area, - Revision of additional requirements provided by client to be considered in design - Coordination and consideration of requirements at interface with adjacent facilities in public area / dedicated for transportation services - Summarization of set of requirements as basis for design study (= indicative programme of requirements) --> approved A4 doc <p>- not included: <i>Stakeholder interviews; collection of comprehensive set of user demand requirements</i></p> <p>- not included: <i>compilation of comprehensive programme of requirements for the project design</i></p>	plane ground	all	9 wks	
	<p>Review of ADPI Airside / Apron Concept (related to Terminal 2 developments)</p> <ul style="list-style-type: none"> - Evaluation and commenting on ADPI apron concept (layout of aircraft positioning and adjacent manoeuvring area) - Study on compatibility of ADPI apron concept in relation to proposed terminal concept <p>- not included: <i>new apron design configuration and concept planning adjusted to T2 design</i></p>	plane ground	C+K		

3. APPROACH AND PROJECT ORGANISATION

APPENDIX 1 - SCOPE OF SERVICES

SCOPE OF SERVICES (v.1.0)

No.:	Tasks	lead party	support	duration	workdays
	- not included: <i>evaluation of ADPi level concept; dewatering concept; direct aircraft supply and handling installations</i>				
	Functional Schemes (CAD planning / diagrammes):	plane-ground	C+K		
	- Plans showing Flows of PAX & Bag, Goods and Staff --> set of plans of all levels				
	- Security concept plans indicating areas relevant to security, border control, customs control				
	- Elaboration of service and supply concept				
	- Elaboration of commercial concept (Retail, Food & Beverage, BC-Lounges)				
	- not included: <i>preparation of schematic plans and diagramms for areas outside of project frame / zoning</i>				
	Construction phasing concept	plane-ground	Techniserv		
	- Identification of possible access and available area for building site (input from client because focus area is "out of project frame / zoning") - both Phases I & II				
	- Preparation of graphics showing consecutive progress of building works with closed-off areas and interim operational concept - both Phases I & II				
	- not included: <i>construction phasing of airside and landside works incl. alignment with terminal construction</i>				
	- not included: <i>elaboration on building site logistics; any concept related to "outside the project frame / zoning"</i>				
DPI/B	2. Architectural Design Concept (CAD & 3D model)	C+K	plane-ground	12 wks	
	Elaboration of Floor Plans; Sections and Elevations	C+K	plane-ground		
	- Determination of structural grid and floor level heights				
	- Elaboration of Floor Plans (all levels and 2 phases) --> A0 CAD Plans				
	- Execution of workshops to discuss floor plan concepts				
	- Elaboration of typical sections and elevations (2 per phase = in total 4 sections and 4 elevations) --> A0 CAD Plans				
	- Development of 3D modell as basis for quick isometric views and 3D renderings				
	- not included: <i>reciprocal "cost cap driven" design iterations</i>				
	Exterior design / Facade concept (material, finishes, principle details)	C+K	plane-ground		
	- Study on Facade concept (in variants) with materials colours, finishes - exemplary details, sections				
	- Preparation of presentation for decision making by client on facade principles and exemplary details				
	- Execution of workshops to discuss exterior design concepts				
	- not included: <i>detailed calculations and planning on sunprotection, cleaning system, climatization, glare, radar reflection etc</i>				
	Interior Design Concept (e.g. exemplary details, materials and furniture)	C+K	plane-ground		
	- Determination of typical materials, colours finishes and furniture in gate area				
	- Determination of typical materials, colours, finishes, furniture and shop facade in retail area				
	- Interim presentation incl. "mood-boards" and typical interior 3D renders (= in medium quality resolution) for decision making by client.				
	- Execution of workshops to discuss interior design concepts				
	- not included: <i>detailed commercial concept & shop design (subject to type of concessionaire)</i>				
	- not included: <i>Lounge interior design (subject to concessionaire)</i>				
	Preparation of Cost Estimation	C+K	plane-ground		
	- Floor area calculations (for 2 phases); Determination of the unit cost / sqm terminal (assumed in consultation with client)				

3. APPROACH AND PROJECT ORGANISATION

APPENDIX 1 - SCOPE OF SERVICES

SCOPE OF SERVICES (v.1.0)

No.:	Tasks	lead party	support	duration	workdays
	- Execution of workshop with regards to cost calculations				
	- Cost calculation and presentation --> xls-Format				
	- <i>not included: detailed cost calculation</i>				
	Preparation of 3D model	C+K	-		
	- Establishment of 3D model of Terminal 2 development project (2 phases)				
	- <i>not included: 3D modelling of areas outside of project frame / zoning (see Annex C2)</i>				
DPI/B	3. Technical operability studies ('feasibility' level)				
	Structural principles (feasibility)				
	- Determination of load assumptions	Techniserv	-	6 wks	
	- Execution of workshop to discuss structural principle solutions				
	- Elaboration on construction principles of bearing structure, stiffening concept and foundation at 2 typical cross-section of new T2 building (1 x pier; 1 x core building)				
	- Elaboration on feasible structural connection at junction to existing Terminal 2				
	- Short report on proposal of viable principles for structural system concept for new Terminal 2 buildings				
	- <i>not included: comprehensive calculation of entire structure; detailed calculation on dimensioning (other than "rule of thumb"; "quick-scan dimensioning")</i>				
	- <i>not included: a) Detailed investigation of bearing capacities of existing Terminal 2 structure b) in-depth consideration of soil & ground water engineering</i>				
	- <i>not included: Possibly necessary adaptations on existing terminal structures & technical systems induced by new project developments; The underlying assumption of proposal is: existing building structures & systems can be retained</i>				
	HVAC principles (feasibility)				
	- Determination of heating/cooling demand assumptions for new Terminal 2 developments	Techniserv	C+K		
	- Execution of workshop to discuss HVAC principle solutions				
	- Elaboration on principles of HVAC concept for new T2 developments at typical locations (1 x pier; 1 x core building) / area requirements for new HVAC system				
	- Evaluation of compatibility of new HVAC system at junction existing / new Terminal 2; elaboration of possible constraints and viable principles for solutions.				
	- Short report on proposal of viable principles for HVAC system concept				
	- <i>not included: comprehensive calculation and dimensioning of entire HVAC system (other than "rule of thumb"; "quick-scan dimensioning")</i>				
	- <i>not included: a) Detailed investigation of existing Terminal 2 HVAC system capacity b) consideration of system components outside project frame / zoning</i>				
	- <i>not included: Possibly necessary adaptations on existing terminal structures & technical systems induced by new project developments; The underlying assumption of proposal is: existing building structures & systems can be retained</i>				
	Mechanical & Electrical principles (feasibility)				
	- Determination of M&E demand assumptions for new Terminal 2 developments	Techniserv	C+K		
	- Execution of workshop to discuss M&E principle solutions				
	- Elaboration on principles of M&E systems for new T2 buildings / determination of area requirements for M&E systems				
	- Short report on proposal of viable principles for M&E system concept for new Terminal 2 buildings				
	- <i>not included: comprehensive calculation of entire structure; detailed calculation on dimensioning (other than "rule of thumb"; "quick-scan dimensioning")</i>				
	- <i>not included: Detailed investigation of existing Terminal 2 M&E capabilities</i>				

3. APPROACH AND PROJECT ORGANISATION

APPENDIX 1 - SCOPE OF SERVICES

SCOPE OF SERVICES (v.1.0)

No.:	Tasks	lead party	support	duration	workdays
	- not included: Possibly necessary adaptations on existing terminal structures & technical systems induced by new project developments; The underlying assumption of proposal is: existing building structures & systems can be retained				
	Fire fighting and rescue principles (feasibility)	Techniserv	C+K		
	- Proposal of fire compartments in new T2 buildings				
	- "Quick-scan study" on principles of fire-extinguishing, smoke outbreak, and rescue concept				
	- Evaluation of fire-fighting & rescue solutions at interface existing / new T2 buildings				
	- Short report on proposal of viable principles for fire fighting & rescue concept in new Terminal 2 buildings				
	- not included: comprehensive concept for entire project; detailed calculation on dimensioning (other than "rule of thumb"; "quick-scan dimensioning")				
	- not included: Possibly necessary adaptations on existing terminal structures & technical systems induced by new project developments; The underlying assumption of proposal is: existing building structures & systems can be retained				
	Baggage System concept (feasibility)	Techniserv	C+K		
	- Determination of System capacity demand T2 (make-up carroussels; break-down belts; sorting capacity; odd-size; early baggage) - depending on client input				
	- Execution of workshop to discuss Baggage Handling concept solutions				
	- Elaboration of area and facility demand / BHS requirements incl. "quick-scan" of extendability of existing BHS				
	- Short report on proposal of viable extension of BHS in T2				
	- not included: comprehensive concept design for entire BHS of T2				
	- not included: Detailed studies on overall functionality and operability of total baggage handling at PRG terminal with respect to possibly split BHS areas (T1 & T2).				
DP/B 4.	Preparation of photo-realistic 2D+3D renders	C+K	-	2 wks	
	- Production of 3 interior & 3 exterior 3D high-resolution renderings (perspective selected in consultation with client)				
C)	VERIFICATION OF STRUCTURE CAPABILITIES				
DP/C 1.	Dynamic PAX-Flow Simulations	planeground	-	5 wks	
	Definition of basic assumptions & input parameters (planning horizon Zone I & Zone II)	planeground	-		
	- Identification of critical areas and planning horizon to be simulated (in consultation with client) / preparation of questionnaire reg. required input parameters				
	- Definition of PAX-Flow and planning horizon scenario (peak-hour) to be simulated - from future flight sceudule (forecast) to be provided by client				
	- Workshop with client to determine all parameters / reported in document of "basis for 7 simulations"				
	Simulation of 7 terminal processes (e.g. Check-in; Security, Passport, Bag reclaim etc.) 2040	planeground	-		
	- Development of 3D modell of relevant areas using Arcport Software by Transoft				
	- Compilation and running of 7 simulations using Arcport Software by Transoft				
	- Interpretation of results and presentation to client				
	- production of max 2 avi streams of simulations scenarios for final project presentation				
DP/C 2.	Report of Design Part	planeground	all	2 wks	
	- Preparation of summary document of findings of DP/A1 - DP/C1				
	- Preparation and organization of endpresentation of Part 2				

3. APPROACH AND PROJECT ORGANISATION

APPENDIX 1 - SCOPE OF SERVICES

SCOPE OF SERVICES (v.1.0)

No.:	Tasks	lead_party	support	duration	workdays
PART 3 - SUPERVISION & ADVISORY SERVICES					
SS 1.	- to be determined -				

*) the offered design works comprise of studies on a "pre-design" level, which is not comparable –neither in extent nor in detailing- with the traditional architectural services of "a schematic design" (or "preliminary design"). The building design works ranging from "schematic (resp. preliminary) design" to "final design" and "detailed design / execution drawings" are assumed to constitute a separate project subsequent to this study.

INDICATIVE TENDER PRICE FORM

ANNEX H to
TENDER DOCUMENTATION (TD)
PRAGUE AIRPORT PASSENGER TERMINAL – DESIGN STUDY

TENDER PRICE

Scope	Man-days	Price (EUR) excl. VAT
Analytical Part*		
Analytical Part	111	93070
Subtotal		93070
Design Part*		
Conceptual elaboration of conclusions reached in the Analytical Part		
1) Zone I + Zone II – Proposal A.1	147	105603
2) Zone I + Zone II – Proposal A.2	49	35201
Further elaboration of the selected proposal	423	284831
Verifications of proposed structure capabilities	28	27235
Subtotal	647	452870
Presentation		
Final presentation of the Design Study to Client	3	3314
Supervision Services (hourly basis)*		
Supervision Services (hour)	1	100
Supervision Services subtotal	1000	100000
Advisory Service (man-day basis) **		
Advisory services (man-day)	1	100
Advisory services subtotal	500	50000
Total price (EUR)		699254
April 19th, 2018		Signature

* The rate will include personnel costs, equipment use costs and also reasonable other/additional costs needed immediately to provide the services.

** The man-day rate for Advisory Services will include personnel costs, equipment use costs and also reasonable other/additional costs needed immediately to provide the services. Direct travel expenses paid extra shall be limited by the price of the two-way Economy Class flight ticket from Contractor's seat to Prague.

UPDATED COMPARED TO
 TENDER DATED 7th of FEB 2018