

Craiova Airport Feasibility Study and 3D Modelling

Craiova is the principal city of the Dolj County region in south-west Romania. In a two-stage project, Halcrow Romania was commissioned to provide masterplanning and feasibility studies for the development of the airport and its surrounding area. The previous issue of onAir included an article on Craiova Airport's Master Plan. Halcrow has now finalised the second phase of the project, the airport feasibility study, which was based on the findings and recommendations of the master plan.

The feasibility study included the concept design of the airport operational buildings and facilities including a new terminal, snow base, maintenance facilities etc as well as landside and airside pavements. Halcrow's international airports skills were complemented by capability from elsewhere within the Group including structural, MEP and utilities support. The scope also included a high level environmental impact review and mitigation study, together with a strategic cash flow and CAPEX plan.

As an addition to the feasibility study, Halcrow's Airports Team completed an animated 3D model of the new airport envisaged in the Master Plan. This powerful tool will help our client to market the airport and its surrounding development zone with a view to attracting investment to the airport and the City.



Stills from the Craiova 3D model

Burgas and Varna

Halcrow has been appointed by Fraport Twin Star Management for the design of

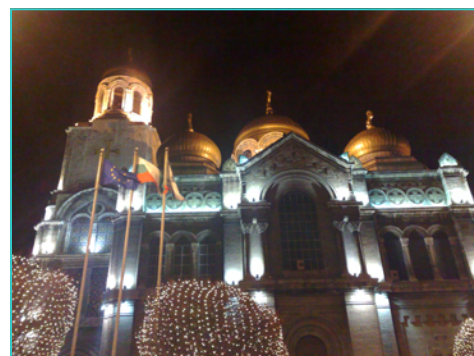
two new international passenger terminals at Burgas and Varna Airports in Bulgaria.

Halcrow has been appointed as the design team leader, and our works include Architecture, Airport Planning, Civil Engineering, Structural Engineering, Building Services Engineering, Security, Information Technology Systems, Baggage Handling and Cost Management services.

The two airport terminals total approximately 55,000m.sq and will handle

approximately 5.5million passengers during a 5 month tourist season. The new terminals are to be operational for the tourist season in 2012

Halcrow will be working with our chosen partners Pascall and Watson Architects, Davis Langdon, cost management services and Savant ElBul will be our local partner in Bulgaria. Fraport are a client well known to Halcrow and these projects further cement the relationship between the two companies.



Dormition of the Theotokos Cathedral—Varna

Halcrow Group Ltd
Vineyard House, 44 Brook Green
London W6 7BY UK
Tel +44(0)20 7602 7282
Fax +44(0)20 7603 0095

If you would like further information, contact:
Bill Millington
Development Director, Airports and Air Transport
millingtonwr@halcrow.com
+44(0)20 7348 3163



halcrow.com/airports

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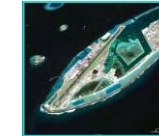


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St Petersburg Airport Privatisation

On 30 October 2009, the successful Northern Capital Gateway Consortium (NCG), comprising Fraport AG, VTB and the Copelouzos Group, signed a public-private partnership agreement for developing and operating St. Petersburg's Pulkovo International Airport, the fourth largest airport in Russia.

A total investment of US\$2.0 billion is planned under a 30-year agreement that



Existing Pulkovo Terminal Towers

passenger terminal building, airside and landside works valued at US\$ 1 billion. Halcrow will perform the role of technical adviser, managing the design and construction processes, general environmental work and EPC contract closure.

During the pre-bid stage from October 2008 to May 2009, Halcrow was commissioned as Technical Adviser responsible for; assessment of capacity against forecast demand, proposing airport infrastructure development requirements, capital and operational expenditure, and environmental impacts due diligence associated with the 30 year concession. Halcrow also conducted an EPC contractor selection process and was actively involved in advising on and producing sections of the business plan.

provides for the construction of a new passenger terminal, the development of adjacent real estate, and modernisation of existing infrastructure. NCG won the concession bid in early June 2009 and will be taking over operation of Pulkovo Airport in April 2010.

The consortium has appointed Halcrow as technical adviser upon commencement of the financial closure period of the 30 year airport concession. The airport's planned expansion, from around seven to approximately 30 million passengers a year, supports the city's aspirations to be a major tourist destination. The first phase of works will involve a new



Proposed New Pulkovo Terminal



Matt Cartoon / The Daily Telegraph © Telegraph Media Group Limited 2010;

Best Wishes from our Editor

Bill Millington

Bill Millington

Maldives Airport Privatisation

Malé International Airport (MIA) is the main international gateway to the island nation of the Maldives. The airport is critical to the future development of the Republic's tourism industry, its principal economic activity. It is centrally located amongst the picturesque atolls and is adjacent to the island of Malé, the capital city of the Maldives.

As well as the capital, the airport serves the numerous resort islands which are connected to the airport by boat and the largest seaplane operation in the world. The airport currently handles 2.4 million

passengers per year, including land plane and seaplane operations.

The Government of the Maldives (GoM) intends to privatise the Maldives Airport Company Ltd (MACL). The International Finance Corporation (IFC) has been appointed by GoM to manage the transaction process and has engaged Halcrow to provide full technical and financial support. Halcrow has appointed Ernst & Young to advise on transaction structure options and to undertake the financial modelling element of the contract.



Malé International Airport

The airport is situated on a small island with limited land available for expansion, and much of the existing development has taken place on reclaimed land. The project requires the build-up of future development scenarios for the airport over a 25 year period. These scenarios must consider the physical limitations and other considerations to ensure the airport is compliant, whilst minimising capital expenditure where



Malé Airport seaplane operations—the busiest in the world

possible, to ensure the airport's attractiveness to potential future owners. Establishing much-improved infrastructure and facilities in keeping with the niche market served, together with sustainable, energy-efficient solutions, will be an important prerequisite of any plan.

We have prepared detailed traffic forecasts for Malé, which gave consideration to the future development of tourism across the islands and potential competition from the proposed development of international operations at Gan and Hanimaadhoo airports, to the south and north of the capital.

In the near future, and subject the GoM approval, tenders will be invited from pre-qualified operators for the airport business and its future expansion.

Sharjah Airport Expansion

Halcrow is proud of its strong relationship with Sharjah Airport Authority (SAA) dating back to the early 1970's when we planned, designed and supervised construction of the Emirate of Sharjah's International Airport.

Halcrow has been SAA's principal planning and design Consultant for the majority of airport expansions since then, with the most recent growth at Sharjah being spurred by Air Arabia the Middle East's first and largest low cost airline, establishing its first hub at the airport in 2003.

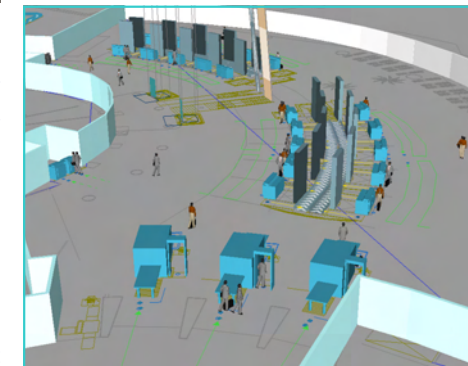


New Apron

Halcrow has recently completed a major expansion at the airport involving 18 new A320 stands on the main apron, complete with an extension of the existing fuel hydrant system and other associated infrastructure. A complex reconfiguration and expansion of the cargo apron also enabled streamlined, ICAO-compliant handling of Code D, E and F aircraft, ensuring aircraft are parked within range of existing fuel hydrant pits wherever possible.

An additional maintenance apron was constructed to accommodate a combination of 5 Code D, E and F aircraft, plus an entry taxilane to serve both the new apron and a new maintenance hangar.

Halcrow is currently undertaking masterplanning for the area adjacent to the existing terminal, including planning for the airport's second passenger terminal. Halcrow highways consultants are supporting this with traffic impact assessments, and planning for new roads and interchanges, as well as improvements to the existing road network to cope with increased demand at peak times. Construction of the first new roads commenced in November 2009.



Halcrow's terminal planning involvement has included simulation modelling



Main Terminal

We are also at an advanced stage of planning and design of improvements to the existing terminal, which include additional toilet facilities and a further gate lounge and airbridge. The first stage of construction commenced in December 2009.

In 2009 Halcrow also began the planning and design of a new 4060m runway, parallel to the existing strip, complete with phased construction of link and rapid exit taxiways to accommodate projected growth.

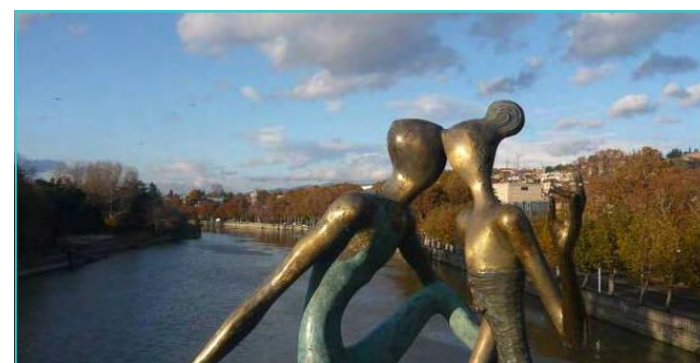
Award of the first construction package is anticipated in 2010, with Halcrow providing construction supervision services and overall project management. Halcrow will also manage the Operational Readiness Activation and Transfer (ORAT) process on behalf of SAA, coordinating the inputs of other consultants and airport stakeholders.

Tbilisi Airport Airside Infrastructure

In November 2009, Halcrow was appointed by the European Investment Bank to undertake an independent appraisal of the need to upgrade and develop the airside infrastructure at Tbilisi Airport in the Republic of Georgia.

The Georgian Government wishes to safeguard and develop the air cargo business at Tbilisi, and proposes the rehabilitation and extension of one of the runways to provide an effective length of 3,500m to allow unrestricted Boeing 747 cargo operations. The promoters of the proposed upgrading, the Georgian Ministries of Finance and Regional Development and Infrastructure have approached the EIB for possible funding of the scheme.

The principal task of our commission is to establish whether the proposed airside upgrading works can be both operationally and technically justified.



Tbilisi City

AOA Awards 2009—Halcrow Nomination

Halcrow has been nominated under two categories for the AOA Awards 2009, 'Best Service Provider' and 'Best Consultancy' of 2009.

The nominations have been earned through our ongoing work at Leeds Bradford International Airport for over two years. We have provided engineering consultancy services ranging from the sale of the airport,

advising on surface access strategy, design services for terminal expansion and airside infrastructure development, while also providing in-house programme and project management expertise.

Our work at Leeds has added value to the airport which in turn will encourage future investment.

