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The project is supported by the European Union
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ANALYSIS THE ECONOMIC IMPACT OF THE BUDAPEST AIRPORT ON THE LOCAL ECONOMY

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The framework of the presentation

- The background of the research
- The BUD Airport – in general
- Theoretical/methodological background of the research
- Result of the empirical analysis
 - Direct impact
 - Indirect impact
 - Visitors spending impact
 - Induced impact



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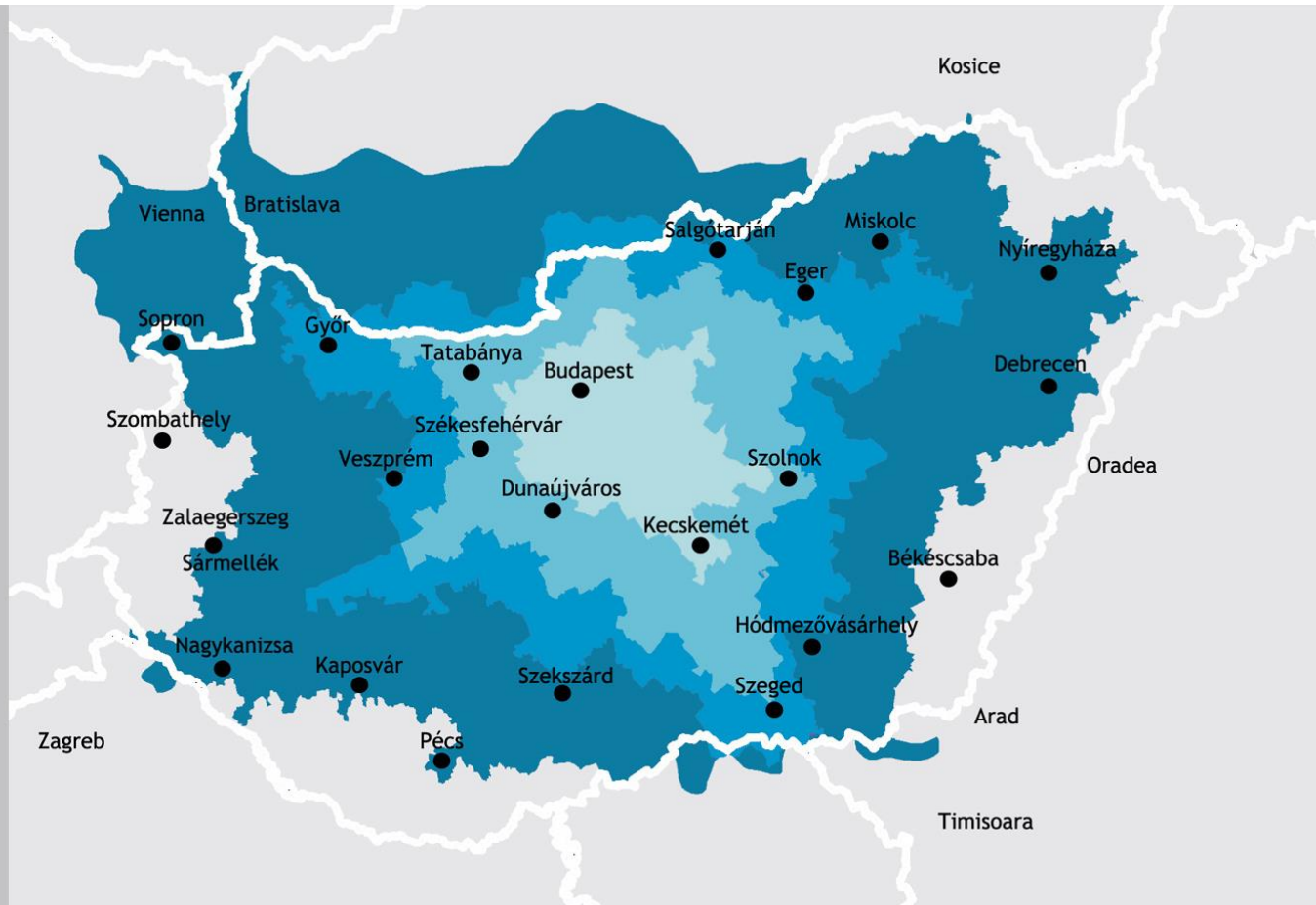
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Brief introduction of the research project

- The study is the result of the research and development titled “*Analysis of the Local Economic Development Effects of the Development Projects Connected to Airports*” implemented with the contribution of the DEAK Zrt. and the University of Szeged, charged on the innovation contribution of Budapest Airport Zrt
- 18 researchers.
 - Senior researchers
 - PhD-students
 - Students
- 520 pages final study + 13 annexes (approx 1000 pages)



Budapest Airport serves 13 million people



Population:

- 90 mins drive: 4.3 m
- 120 mins drive: 6.0 m
- 180 mins drive: 13.0 m



Budapest Airport located at the Economic center

Half of the countries GDP is generated close to Budapest Airport

Largest variations of GDP per capita



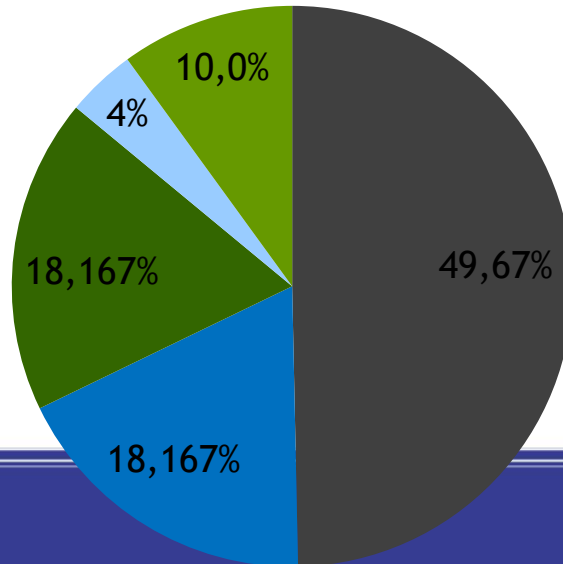
	Share of total GDP	GDP per inhabitant, EUR
Central Hungary	48%	17 600
Central Transdanubia	10%	9 500
Western Transdanubia	10%	10 300
Southern Transdanubia	7%	7 300
Northern Hungary	8%	6 500
Northern Great Plain	9%	6 600
Southern Great Plain	9%	7 100

Budapest Airport - fast facts



- Size: 1,515 hectares
- Managed by Hochtief Airport, owned by consortium
- 1255 employees
- 260m investment committed

Shareholders at Budapest Airport Zrt.

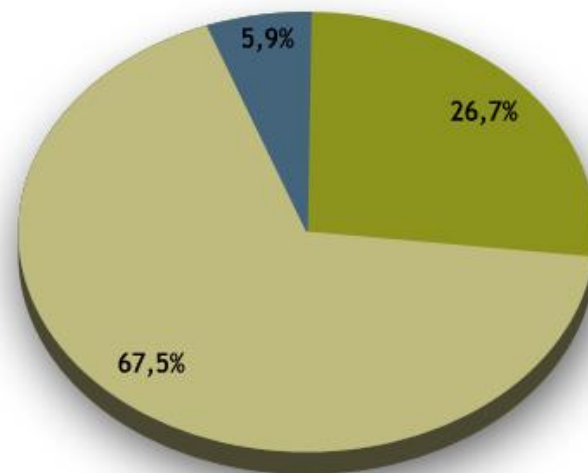
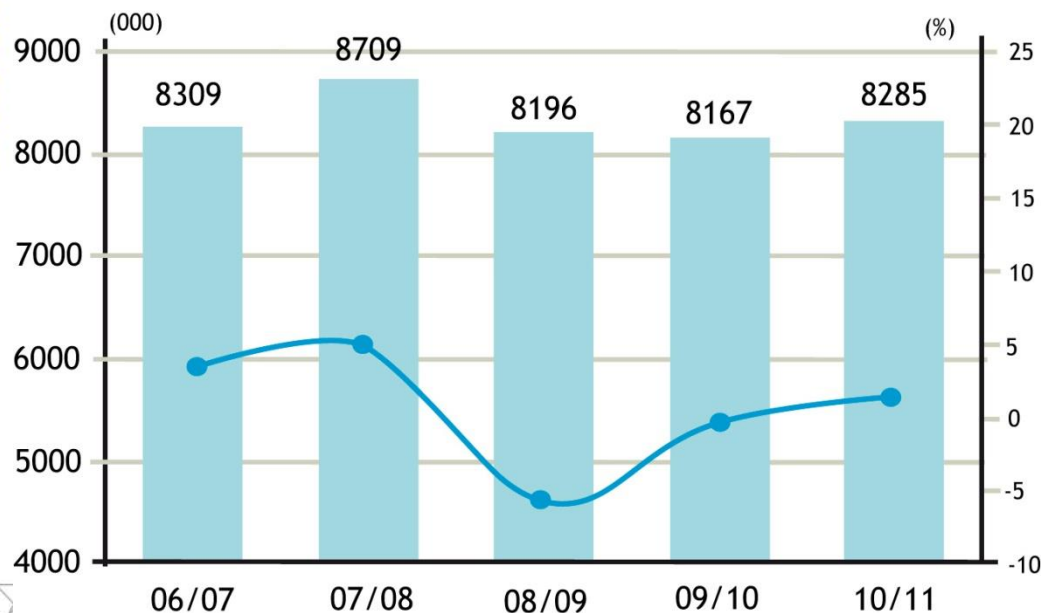


- Hochtief Airport GmbH
- Caisse de Dépôt et placement du Québec
- Malton Investment Pte Ltd.
- KfW IPEX-Bank GmbH
- Aero Investment S.á.r.l.



On track to carry 8,7m passengers in 2011

Passengers at Budapest Airport
Rolling year Apr-March (2006-2011)



- T1 low cost
- T2 sched.
- T2 charter

92 scheduled destinations by 33 airlines in Summer 2011



New Sky Court : More space and choice of retail offers



- 4 300 sq m new retail and catering area with well-known international brands
- Panoramic view of the apron area

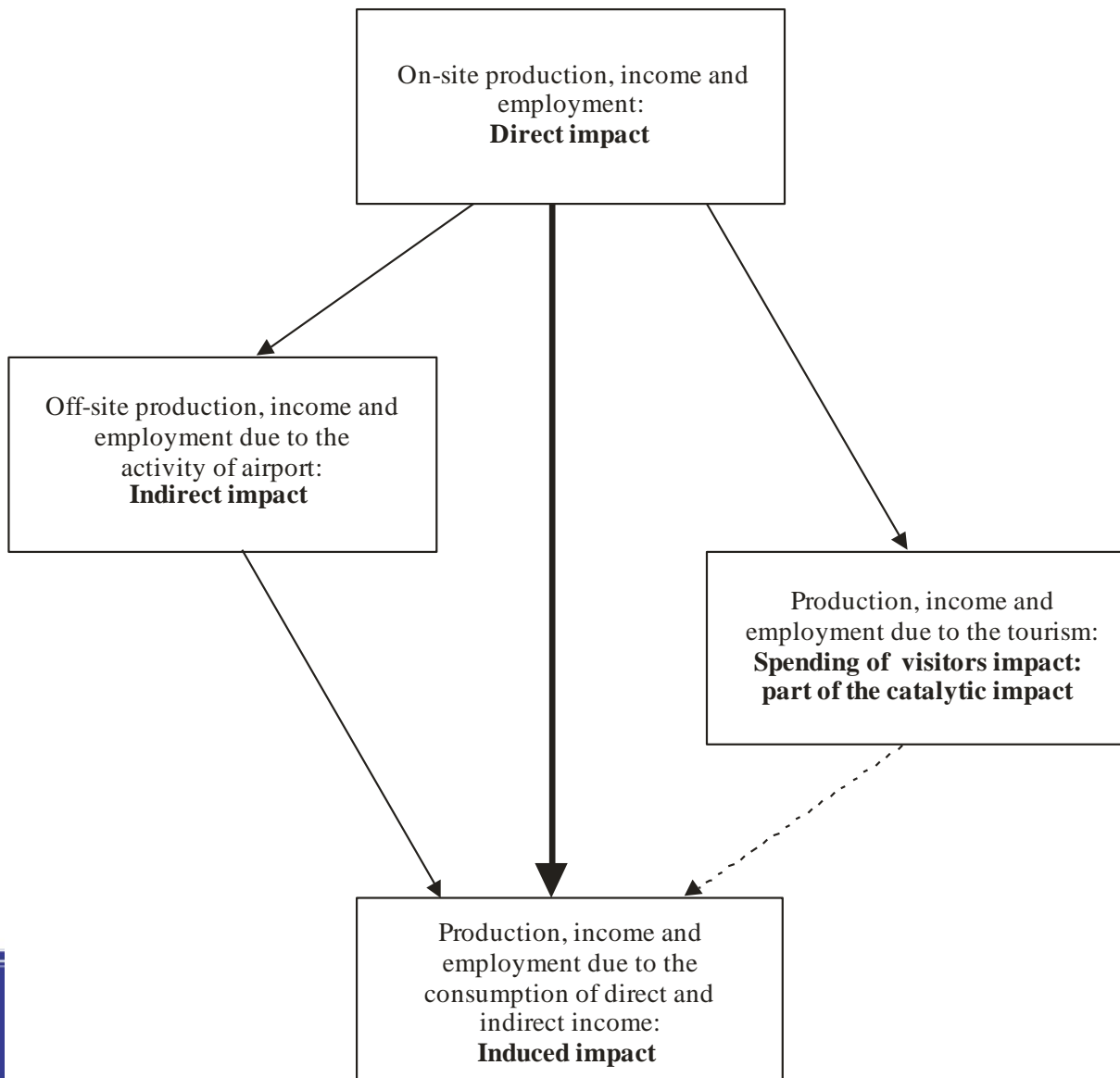
Theoretical background

- Fourfold classification:
 - direct impact: output, income and workplaces created on-site owing to the investments and operation of the airport,
 - indirect impact: income and employment generated in the companies providing inputs for the airport,
 - induced impact: income and employment generated with the multiplier impact owing to spending the incomes,
 - catalytic impacts: productivity growth achieved through the operation of the airport, the income and employment created through the companies settling because of the airport and the spending of the tourists arriving because of the airport.





Economic impacts of the airports measurable in money and in the number of employees



Direct impact of the airport

1. General operation of the airport:

- Administration
- Management
- Maintenance
- Security service
- Air traffic control

2. Government and public services:

- Border guard
- Police
- National Transport Authority
- Transportation Safety Bureau
- National Public Health and Medical Officer Service
- BTH Tourism Office of Budapest KHT
- Weather Service

3. Serving airlines:

- Offices of airlines
- Aircraft maintenance
- Fuel service

The activities are carried out by 120 companies and offices in the area of the Airport

and ground handling
ing

catering, parking:

Duty-free shops
Restaurants
Car rental
Car parking
Currency exchange
Tourist offices
Other shops

The largest companies of Budapest Ferihegy International Airport (2009)

Name of company	Number of employees	Net sales revenue (million HUF)	Personnel expense (million HUF)
Budapest Airport Zrt.	1666	43 511	9 562
MALÉV Zrt.	1272	95 398	16 227
Malév GH Földi Kiszolgáló Zrt.	733	10 560	4 026
HUNGAROCONTROL Magyar Légiforg. Szolg. Zrt.	673	23 973	11 589
Celebi Ground Handling Kft	514	6 645	2 308
LUFTHANSA TECHNIK KFT.	409	8 745	3 130
WIZZ AIR KFT	221	134 858	2 908
SSP KFT	165	1 522	396
MAGYAR DUTY-FREE KER.KFT.	130	10 341	723
AIRPORT SECURITY KFT.	105	2 446	324
AEROSERVICE KFT.	90	1 463	151
CITYLINE KFT.	85	1 613	177

Total number of employees: 6822

- In the course of determining the impact of employment, production, income and tax revenue we took the data on company level as a starting point.
- We had information about 67 companies on the average staff number of full-time workers in 2009, which was a total of 6649 people.
- we estimated the number of employees at 173 persons in total in the case of those companies and offices for which we did not have data.
- So the number of employees in the area of the airport is 6822 collectively, only less than 3% of this data is based on estimation and the remaining over 97% is based on exact statistics.
- This means that Budapest Airport would be the second largest one-location company in Hungary (after Danube Ironworks) if the 120 companies and offices operating in its area formed one organisational unit

Components of the value added at factor cost of the 33 largest companies of the airport (thousand HUF)

These companies have 6510 employees on the airport, which is 96,3% of employees working in the corporate sector of the airport (of proof data).

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Gross wage income					
Net wage of employees	Tax person				
21 658 952	19 733 664	12 476 326			
Net personal income		Total taxes and other fees on personal income			
Depreciation and amortisation	Earnings before taxes				Local taxes
	Earnings after taxes				
	Reinvested profit into company	Profit paid as dividend		Corporate tax	
		Net dividend	Taxes charged on dividend		
19 962 285	-32 086 396	579 795	370 689	497 316	4 921 540
Net capital income			Taxes, contributions charged on capital incomes		

Components of the value added at factor cost of the 33 largest companies of the airport (thousand HUF)

	Income owners			Total
	Employees	Capital owners	State	
GDP at factor cost of 33 companies	21659	-11544	49279	59394
GDP at factor cost of all companies	22491	-11988	51172	61676
GDP at market price of all companies	22491	-11988	62274	72777
GDP at market price of government sector (offices authorities)	153	40	179	372
GDP at market price in total	22644	-11948	62453	73149

Source: Own calculation based on company reports

Indirect impact of the airport

- Budapest Airport uses different inputs during its activity.
 - Out of these, work inputs result in personal incomes.
 - Material inputs, which are directed towards the local economic actors, increase the local production and income,
- The value added growth originating from the growth of demand created for the local economy can be estimated in the following steps.
 - In the first step we have to exclude transactions between companies of the airport. This is necessary because the value added from these transactions has already been taken into account as direct impacts.
 - In the second step we estimated the ratios of value added originating from the local economic actors within the particular categories



Review of calculating

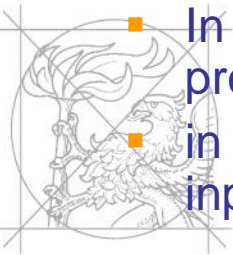
Based on the material-type expenditures of the companies (based on the company reports),

Input					
Source	Ratio (%)	Value (billion HUF)	Local share(%)	At factor cost (billion HUF)	At market price (billion HUF)
Local product purchased by local economic actors	60	31.2	50	15.6	18.41
Imported product purchased by local economic actors	30	15.6	15	2.34	2.76
Not purchased by local economic actors	10	5.2	0	0	0
Total	100	52	34.5	17.94	21.17

Source: Own calculation based on company reports

The impact of visitor spending

- The data source in relation to the visitor spending is the survey of the Hungarian Central Statistical Office: In 2009, 11,715 people were asked at Budapest Airport and 53,143 people of foreigners arriving by road
- First we estimated the entire amount of local expenses, which is spending of all the visitors arriving by air minus the amount spent by foreigners in retail trade units (shops and restaurants) at the airport (as this was already accounted in the direct impact), multiplied by the rate of region from the total of the visitors, namely by 0.9.
- After this we estimated the contribution of expenses to the growth of the local value added in two steps
 - In the first place we estimated the value added occurring in the direct provider of the good or service (for example hotel),
 - in the second place the value added appearing in the local companies giving inputs for the provider of the good or service.



Local impact of visitor spending

	Expenses		direct surplus value		indirect surplus value		
Item of spending	Distribution, %	Amount, billion HUF	Ratio, %	Amount, billion HUF	Ratio, %	Amount, billion HUF	Direct and indirect, billion HUF
Accommodation and meal	20.1	83.2	40	33.3	40	33.3	66.5
Accommodation without meal	14.7	60.8	40	24.3	40	24.3	48.7
Dining in catering place	12	49.7	40	19.9	40	19.9	39.7
Purchased food, drink	6.6	27.3	20	5.5	20	5.5	10.9
International transport	16	66.2	0	0.0	0	0.0	0.0
Inland long-distance transport	4.1	17.0	2	0.3	10	1.7	2.0
Car rent	0.6	2.5	30	0.7	10	0.2	1.0
Fuel	0.7	2.9	20	0.6	10	0.3	0.9
Cultural programmes	2.6	10.8	80	8.6	10	1.1	9.7
One-day trip paid in	0.5	2.1	60	1.2	20	0.4	1.7
Health promotion	0.8	3.3	50	1.7	10	0.3	2.0
Medicine	1	4.1	50	2.1	10	0.4	2.5
Entertainment	2.2	9.1	60	5.5	10	0.9	6.4
Sport, fitness	0.2	0.8	50	0.4	10	0.1	0.5
Other buying souvenirs	12.3	50.9	50	25.4	10	5.1	30.5
learning	0.9	3.7	30	1.1	10	0.4	1.5
Other	4.7	19.4	30	5.8	10	1.9	7.8
Total	100	413.8	652	136.4		95.8	232.2

Source: HCSO (distribution of expenses), own calculation

The induced impact of the airport

- The owners of the earned incomes produced with the previous three impacts generate demand for the products of the local economy
- The demand for the products of the local economy generates further, secondary demand, which leads to tertiary demand, which leads to further demand and so on.
- The incomes are multiplied formally similarly to the principle of the Keynesian multiplier, differing in one important aspect, in the presentation of the regional rate of consume.
- The result for the entire multiplied income is:
 $179.6 \times 2.04 = 366.3$ billion HUF, and its net part is 186.7 billion HUF. This amount contains not only the personal income but also taxes and contributions and their multiplied part, to the same extent as the original rates



The measurable economic benefits of the operation at Budapest Airport

	Employment (person)	GDP production (billion HUF)	Tax and contribution incomes of state (billion HUF)
Direct impact	6822	73,1	60,5
Indirect impact	2100	21,2	8,5
Visitor spending impact	23000	232,2	92,9
Three impacts together	31922	326,5	161,9
In percentage of the region	2,58%	2,60%	-
Induced impact	18500	186,7	74,7
Four impacts together	50422	513,2	236,6

Extreme Light Infrastructure (ELI)

Strategic EU scientific infrastructure project

750 M€ investment at 3 sites (completion date: 2015)

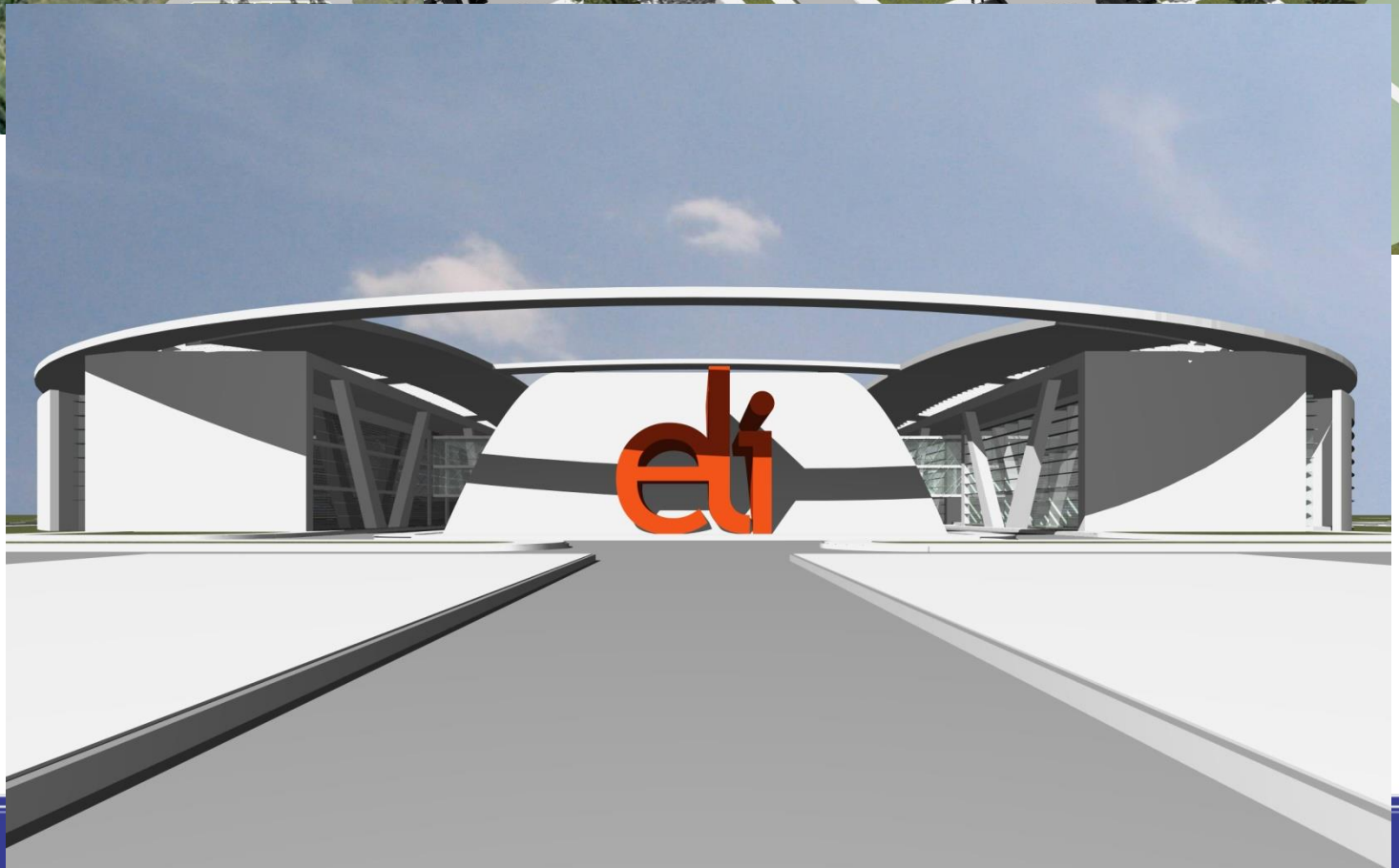
Prague: ELI Beamline

Bucharest: ELI Photonuclear

Szeged: ELI Attosecond Light Pulse Source (ELI-ALPS)



ELI-ALPS: world class user facility for attoscience with applications in biomedicine, materials and nanoscience, etc



- **THANK YOU FOR YOUR ATTENTION!**

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