

POTENTIAL OF UNIVERSITY- INDUSTRY COOPERATION SLOVAK PERSPECTIVE

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Conference Horizon 2020 Connections
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OUTLINE

- Slovak Universities
- Previous Period 2007-2013
- Cooperation Examples
- Period Ahead
- Science City Concept

SLOVAK UNIVERSITIES

SLOVAK SCIENTIFIC INSTITUTIONS

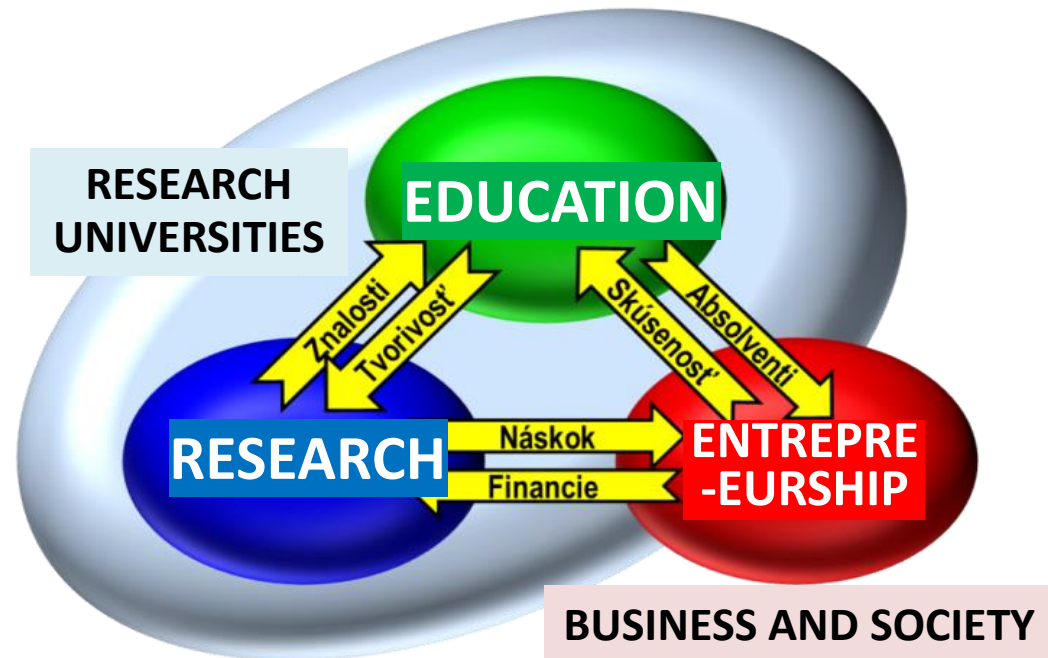
SCIMAGO Institutional Ranking

Rank	SK	Institution	Output	NI	Q1	Exc	Lead
429	1	Slovak Academy of Sciences	7705	0,9	38,5	8,2	4468
792	2	Comenius University Bratislava	4164	0,8	33,1	7,6	2250
1059	3	Slovak Univ. of Technol. Bratisl.	3017	0,7	25,4	6,2	1920
2101	4	UPJŠ Kosice	1174	0,8	30,9	6,1	631
2117	5	TU Košice	1156	0,7	12,2	5,7	837
3075	6	University of Žilina	541	0,7	12,4	4,9	390

- Good output in volume from Bratislava
- Good quality Q1 (>30% papers in the first quartile)
- Impact below average (NI < 1)
- Les world-top-papers (Exc < 10)

EIT KIC COLLOCATION CONCEPT ADOPTED

University – Industry
cooperation concept
adopted by research
universities



Students involved in R&D
oriented to industrial and societal needs
enhancing competitiveness and employment

STU INCUBATOR START-UPS (SINCE 2005)

foretaster, s.r.o.

ANV, s.r.o.

Infinit



MICHAL KRÁTKY ARCHITEKTI s.r.o.



SAIV
Slovenská akadémia
inžinierskych vied

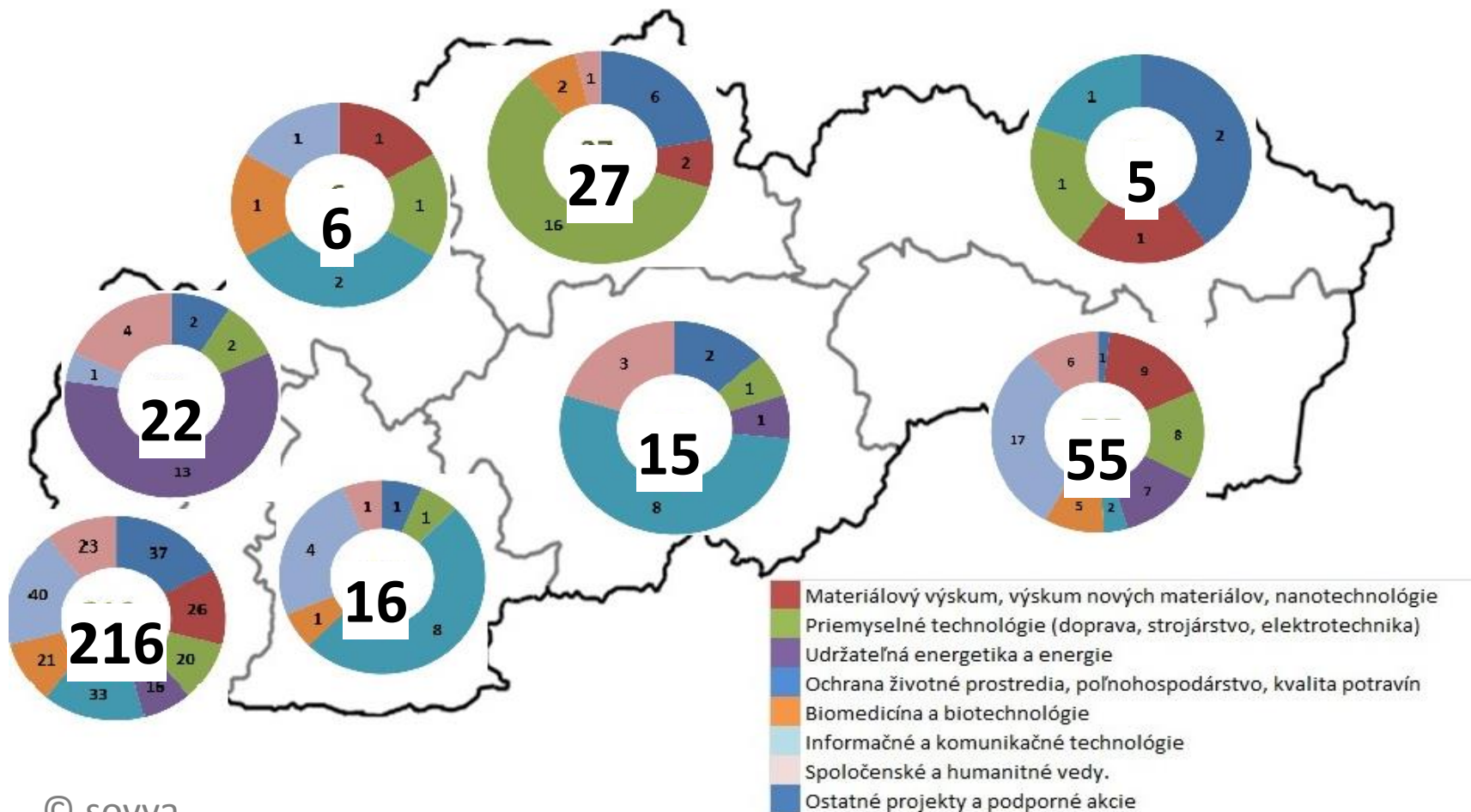


IURA CAPITAL, s.r.o.



PREVIOUS PERIOD 2007-2013

NUMBERS OF FP7 PROJECTS



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SLOVAK PARTICIPATION IN FP7



FP7 Number of participants



Bratislava is the knowledge core for Slovak Republic, but it is not eligible for ERDF investment! = RIS3 fatal risk!

ADOPTED STRATEGY

- 2007: Low participation in FPs
- => Invest into obsolete infrastructure
 - use Structural funds 2007-2013
- Participation in FP7 fell down when structural funds projects implementation started due to administration extend
- 2014: Infrastructure partially renewed

R&D INFRASTRUCTURE INVESTMENT

Calls sequence:

- 62 projects of Centres of Excellence - cca 2M€
- 50 cooperation projects Uni-Indu and Indu-Uni
- 15 projects on Competence Centres
- 6 University Science Parks

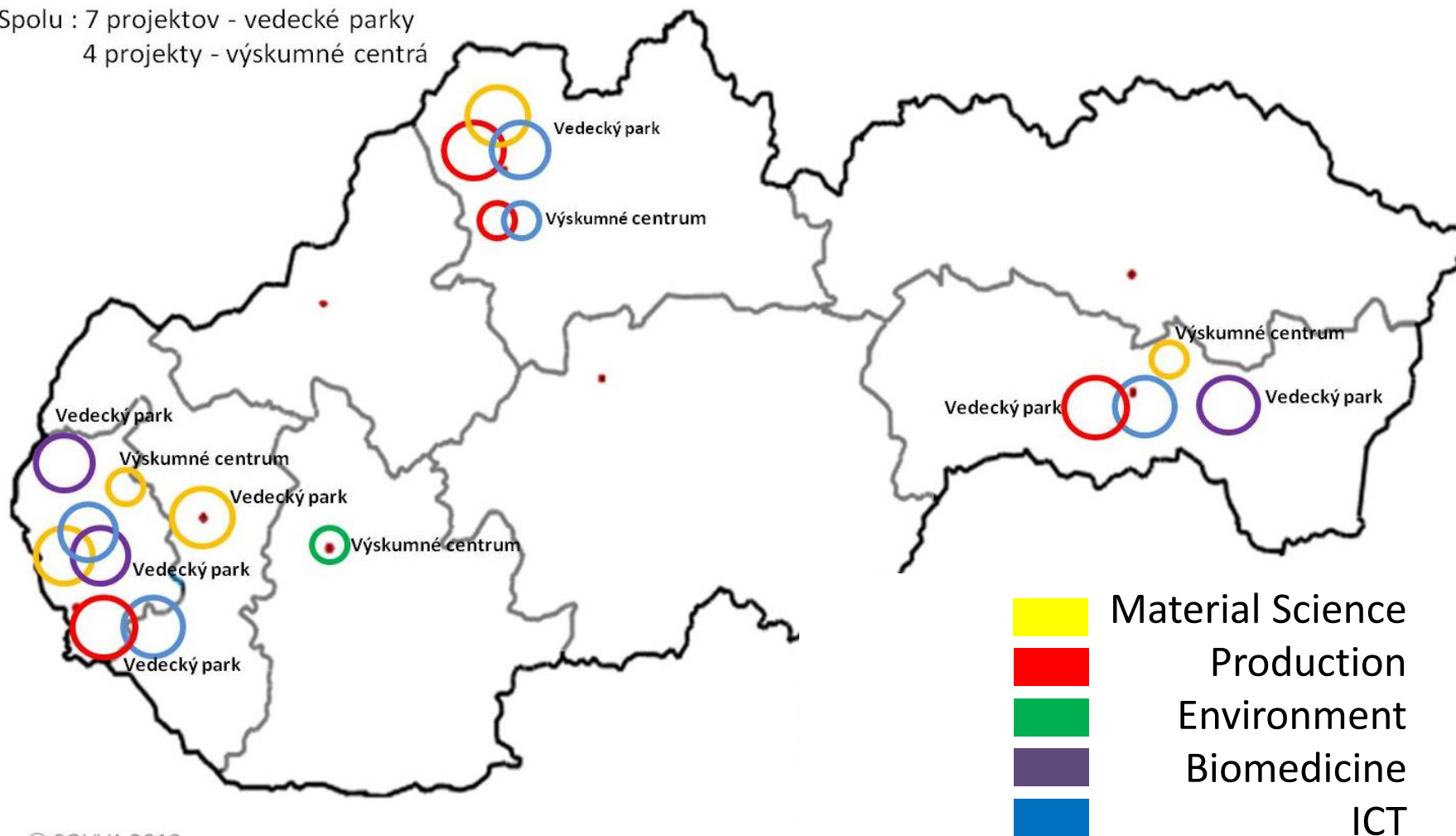


INFRASTRUCTURE IMPROVES PARTICIPATION IN FP7 AND ETP ENIAC

- Invested infrastructure within the structural funds of 2007-2013 period has been secured participation in FP7 projects including ETP ENIAC
- E.g. university team FEI STU participate in 13 projects, including 5 projects ETP ENIAC, without invested infrastructure would not be possible.

THEMATIC CRYSTALLISATION

Spolu : 7 projektov - vedecké parky
4 projekty - výskumné centrá



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SLOVAKIA – *SUCCESS STORY*

NEW TECHNOLOGY TO HELP PROTECT WOOD

DURAWOOD project aims to develop a cost-effective, ecological and durable wood coating system that is free from toxic preservatives and will significantly improve the performance of water-borne coatings.

PROJECT: DURAWOOD

COORDINATOR: Innovacio i Recerca Industrial i Sostenible SL, Castelldefels, Spain

SLOVAK PARTICIPANTS: SLOVAK UNIVERSITY OF TECHNOLOGY (Bratislava), PAM-AK S.R.O. (Chorvatsky Grob);
ING.JAN SESTINA SETA (Ruzomberok)

OTHER PARTICIPANTS FROM: CZ, ES, TR, DE

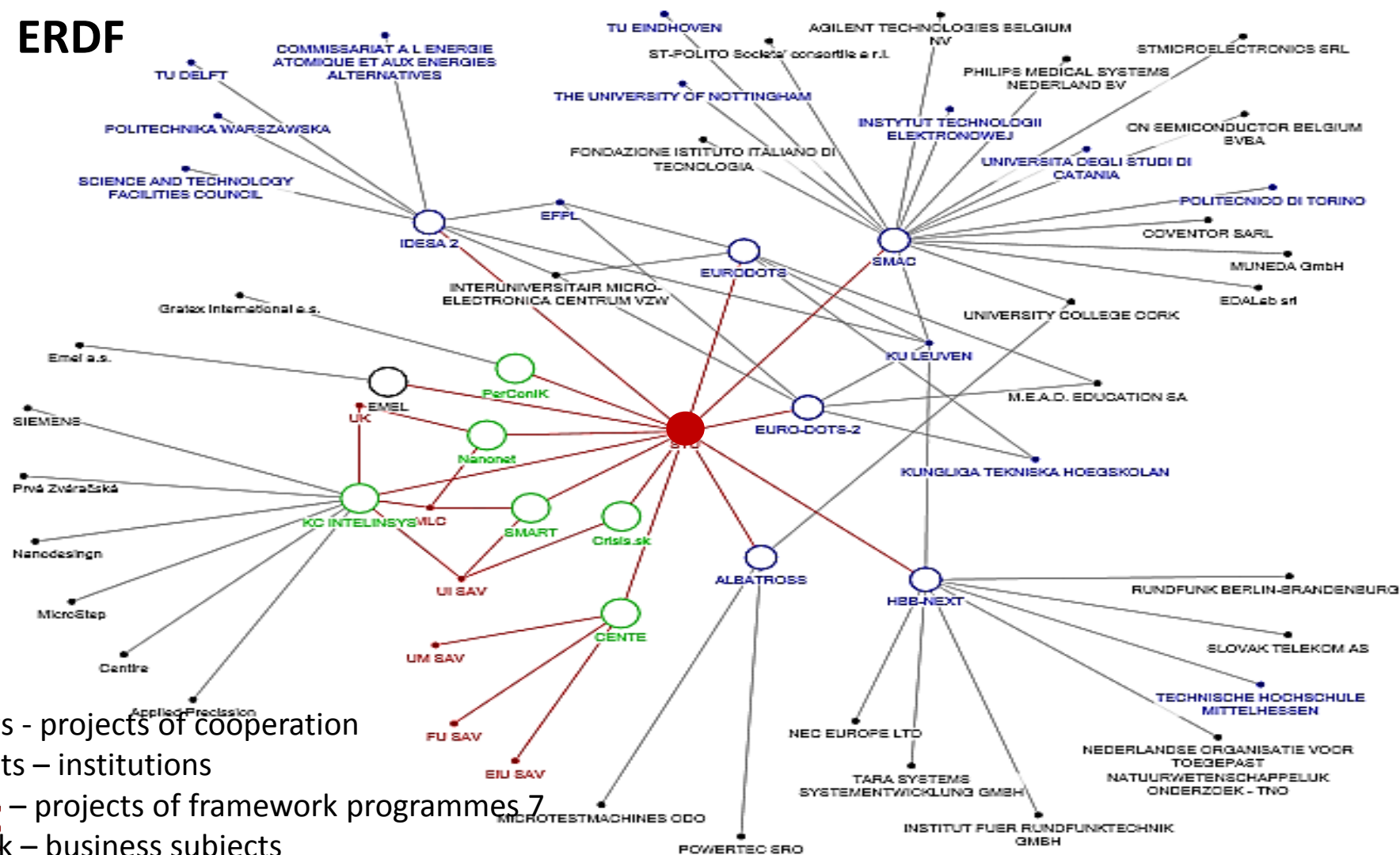
EU FUNDING: 1 Million EUR out of 1.3 Million EUR of total costs



COOPERATION EXAMPLES

INTELLINSYS COMPETENCE CENTRE COOPERATION NETWORK (8M€; 2013-2015)

ERDF



FP7 COOPERATION EXAMPLES: MATERIALS

- **DURAWOOD:** Development of a cost-effective, durable coating system with low fungicide content for wood surfaces using Plasma Discharge; Project ID: 232296; Call: FP7-SME-2008-1; 7 industrial (9 total) partners
Key technology developed in Slovakia
- **BIONEXGEN:** Developing the Next Generation of Biocatalysts for Industrial Chemical Synthesis; Project ID 266025; Call: FP7-KBBE-2010-4; 7 industrial (17 total)
- **MORGAN:** Materials for Robust Gallium Nitride; Project ID 214610; Call: FP7-NMP-2007-LARGE-1; 9 industrial (24 total) partners

FP7 COOPERATION EXAMPLES: ICT

- **SMAC** – (ETP ENIAC) SMARt systems Co-design;
Project ID: 288827 Call: FP7-ICT-2011-7; Rdg: CNECT
7 industrial (17 total) partners
- **HBB-NEXT**: Next-Generation Hybrid Broadcast
Broadband; Project ID: 287848 ; Call: FP7-ICT-2011-7
5 industrial (9 total) partners
- **ALBATROSS**: Assembling Langmuir-Blodgett
Architectures Through the use of Roll-to-roll Systems
Project ID: 324449; Call: FP7-PEOPLE-2012-IAPP;
2 industrial (4 total) partners;

INDUSTRY/UNIVERSITY RESEARCH CENTRES UNDER PREPARATION

- ENEL - Centrum pre vedu a výskum, sro.
- ATOS IT Solutions and Services, sro.
- MOL - Slovnaft montáže a opravy a.s.
- NOVARTIS sro.
- IBM International Services Centre, sro.
- ON Semiconductor Slovakia a.s.
- AXXENCE Slovakia sro.

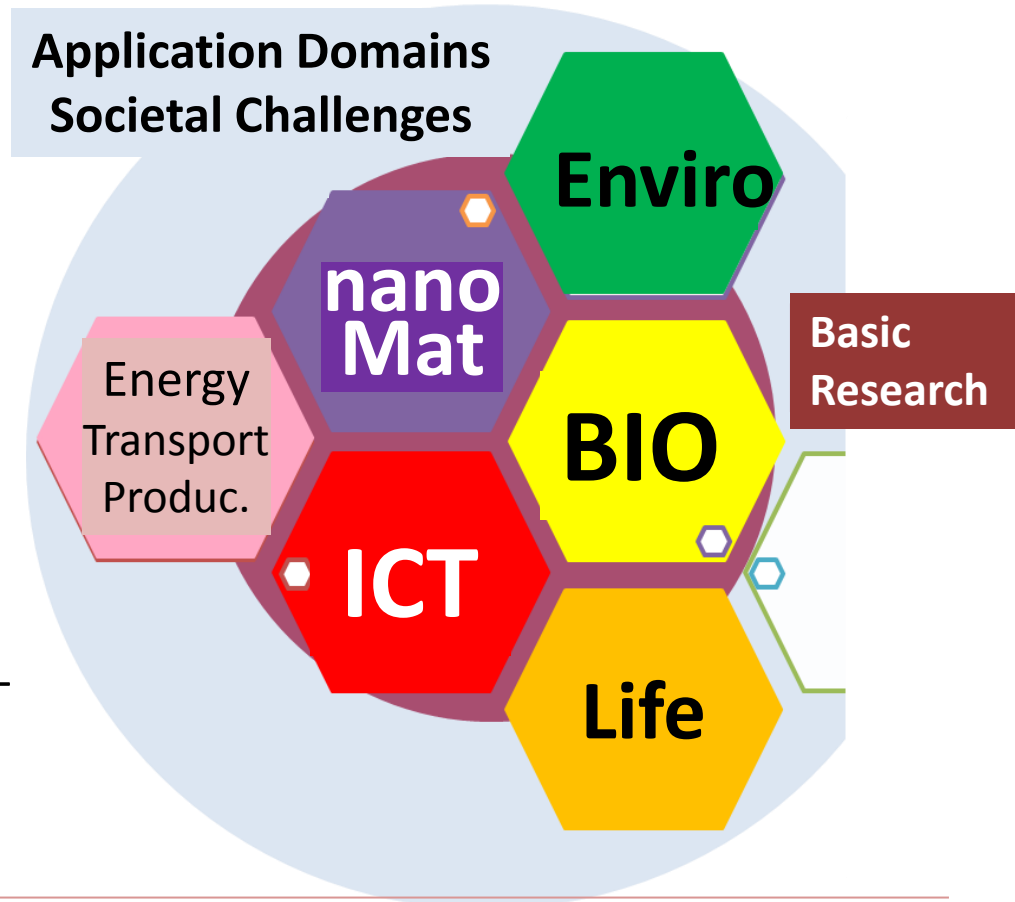
PERIOD AHEAD

INDUSTRIAL LEADERSHIP THEME MATCHING

Horizon 2020

- Information and Communication Technologies (ICT)
- Nanotechnologies, Advanced Materials, Biotechnology and Production
- Space
- Access to Risk Finance
- Innovation in small and medium-sized enterprises
- SME Instrument

Science City Bratislava



BUILDING CAPACITIES: SCIENCE CITY

50 % for infrastructure: Project of Science City Bratislava

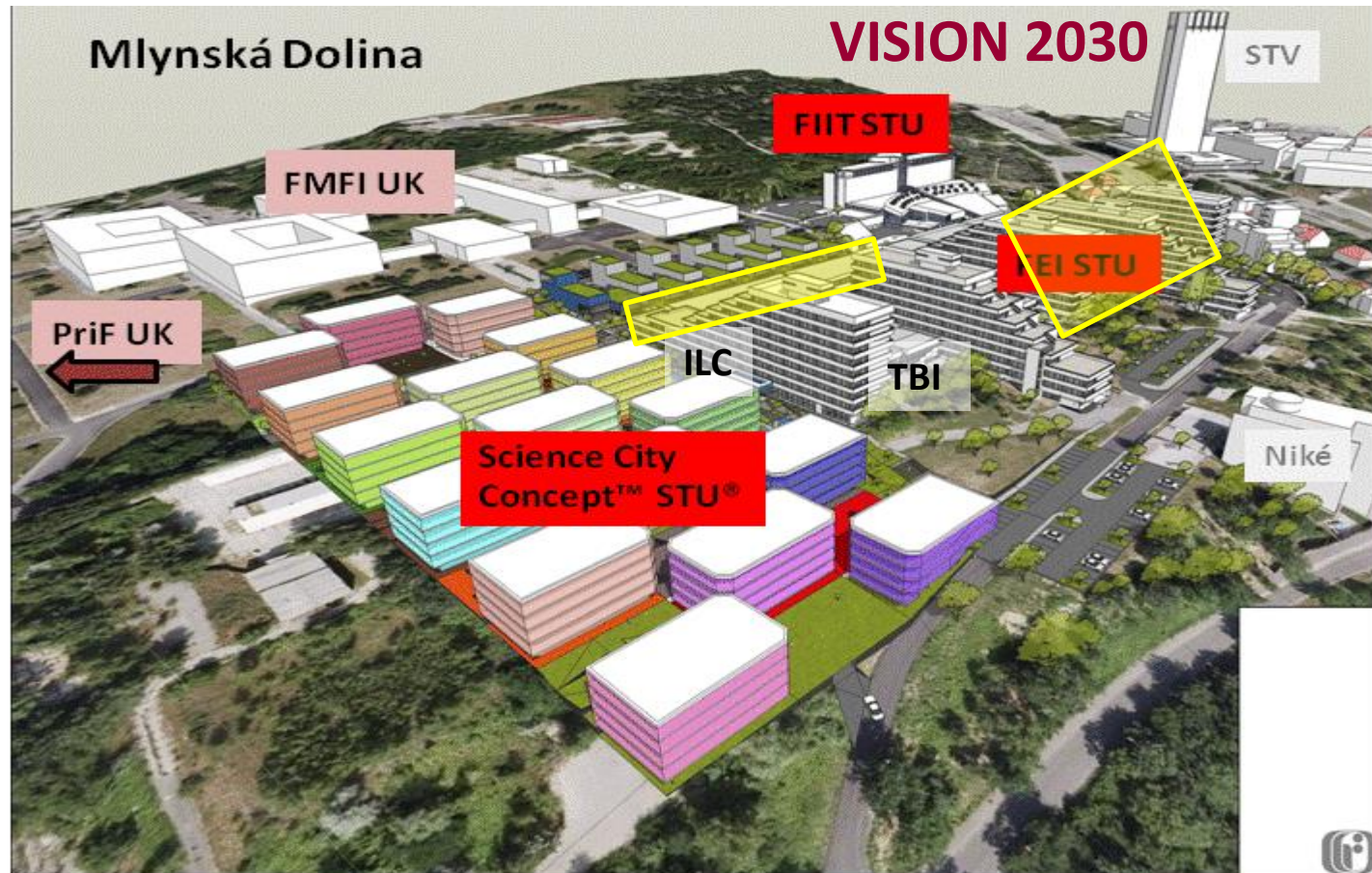
FMFI UK:
Mathematics, Physics
and Informatics UK

PriF UK: Natural
Sciences UK

FEI STU: Electrical
Engineering and
Information
Technology STU

FIIT STU:
Informatics STU

ILC: International
Laser Center



TBI: Technology business
incubator II. phase STU

Science City STU – 2. phase

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