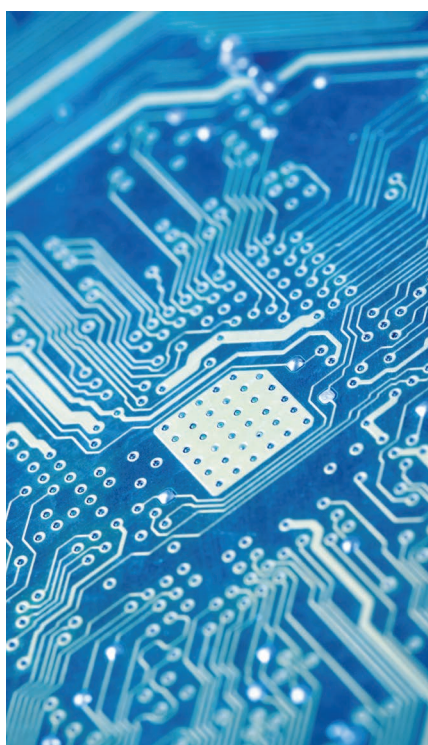


# Information & Communications Technology Sector in **SLOVAKIA**



# Information & Communications Technology (ICT) Sector in Slovakia

The purpose of this publication is to introduce Slovakia's dynamically expanding ICT sector, which includes activities especially related to telecommunication, computer programming or internet services. Publication presents main reasons why Slovakia is an ideal location for setting up new ICT centres and finding outsourcing partners.

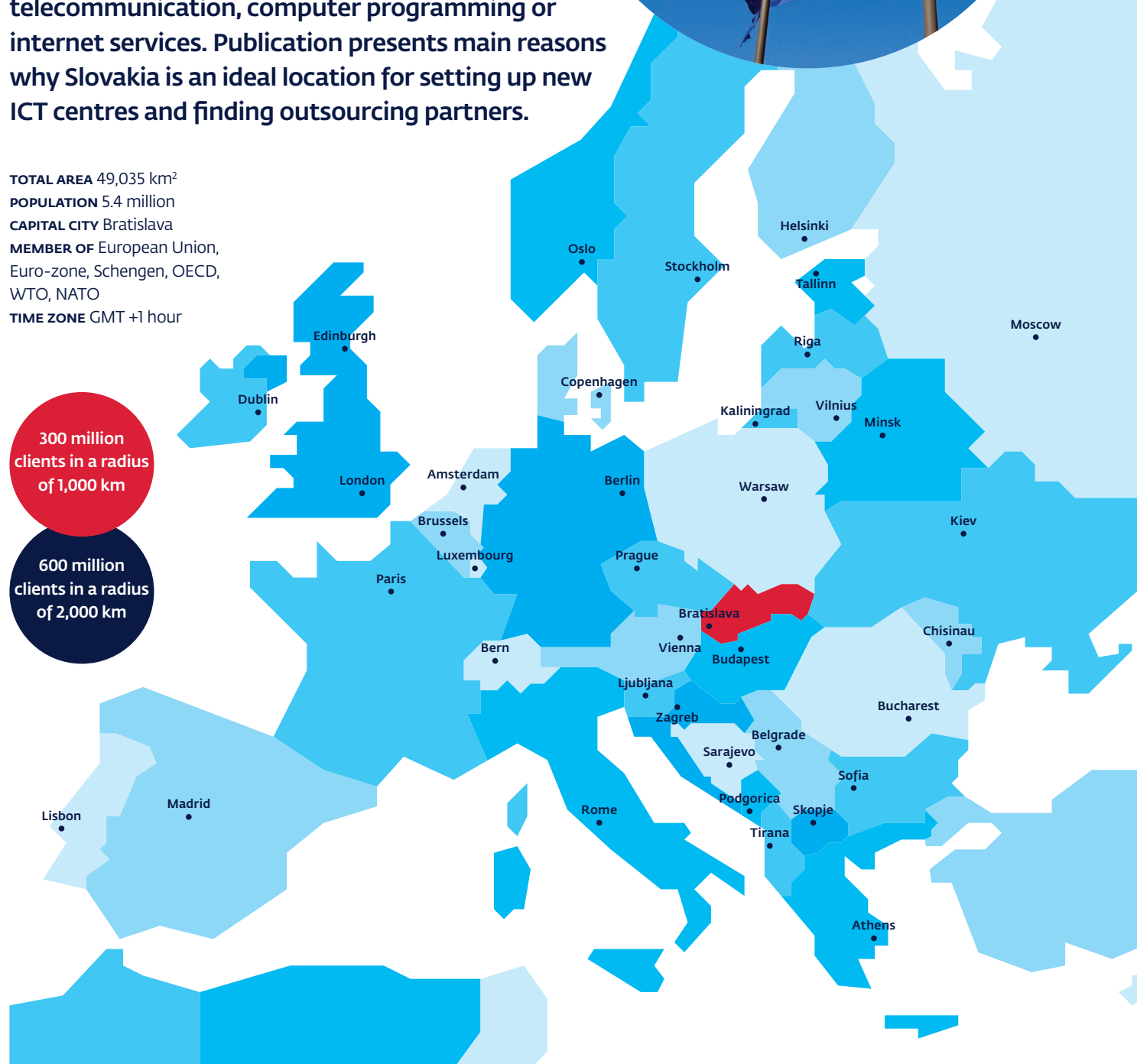
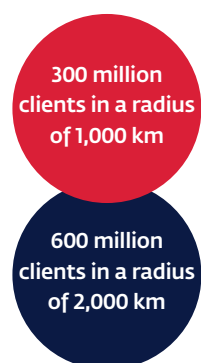
**TOTAL AREA** 49,035 km<sup>2</sup>

**POPULATION** 5.4 million

**CAPITAL CITY** Bratislava

**MEMBER OF** European Union,  
Euro-zone, Schengen, OECD,  
WTO, NATO

**TIME ZONE** GMT +1 hour



# ICT in Slovakia at a Glance

The ICT sector plays an important role in the Slovak economy and has significant potential for the growth. Due to a favorable combination of business advantages Slovakia has become an attractive destination for ICT investors.

1<sup>st</sup>

## Digital/Technological skills

Based on the IMD World Digital Competitiveness Ranking, Slovakia ranks 1<sup>st</sup> in the Digital/Technological skills among Visegrad group countries (Poland, Czechia, Hungary, Slovakia)

80 THS.  
EUR

## Value added per employee

The value added per employee of TOP 200 IT companies ranked by revenue over 80 ths. EUR

4%

## ICT share on the total employment

The sector creates more than 100,000 job opportunities

58%

## Growing employment in the ICT sector

The total number of employees in the sector grew by 58% between 2017 and 2022

5%

## ICT's contribution to Slovakia's GDP

Significant footprint in the Slovak economy



## Top Reasons to Establish an ICT Company in Slovakia

1

Adaptable, educated and cost-effective workforce

2

The highest labour productivity in the region

3

Well-developed ICT institutional network

4

High quality data & network coverage

5

Strategic geographical location from the perspective of time zonation

6

Political & economic stability

7

Euro currency as one of the few in CEE

8

Additional tax deduction for R&D expenses up to 100%

9

Attractive investment incentives for the ICT sector

10

Special tax regime for intellectual property revenues (patent box)

Source: Statistical Office of the Slovak Republic, 2021, IMD World Digital Competitiveness Ranking 2021, SARIO Calculations based on Finstat, 2021

# Qualified Labour Force

Slovak labour force is perceived by foreign investors as educated, motivated, adaptable to culturally different management styles with great multilingual competences and very positive attitude to work habits.



## LANGUAGE COMPETENCES

88% of Slovaks speak at least one other language besides their mother tongue. Multilingualism is rising also among young generation. Students learn at least one foreign language already at primary school and continue these studies at higher levels.

### The Most Common Foreign Languages Taught at Slovak Secondary Schools % of all students learning foreign languages



Source: Eurostat, 2020

## ICT COMPETENCES OF SLOVAK LABOUR FORCE

ICT technologies became an integrated part of the daily life in Slovakia. Their role continues to grow which is reflected by steadily raising adaptability of the Slovak population to ICT technologies.

### 4G Coverage



4G coverage of households increased from 82% to 98.4% within last 5 years

### Readiness for 5G Coverage



Assigned spectrum as a % of total harmonised 5G spectrum

### Households with very high capacity network coverage



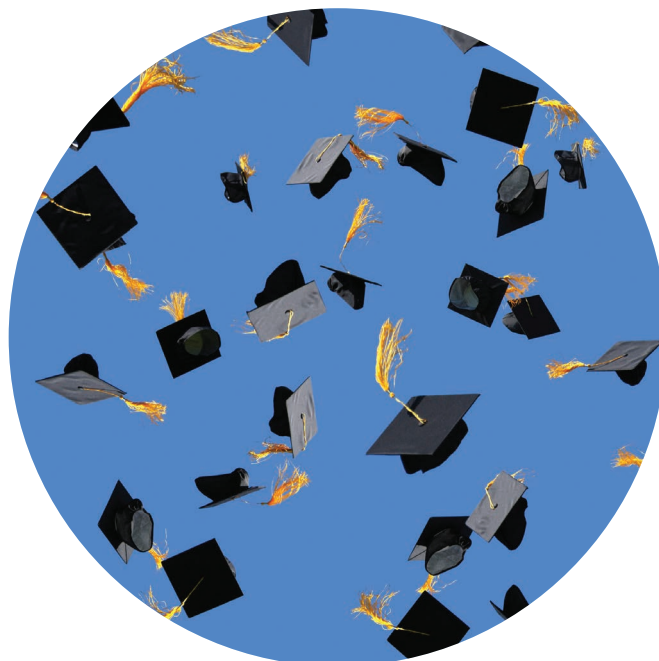
Approx. 2/3 of all households have access to VHCN coverage



Source: Digital Economy and Society Index Report, 2022

# ICT Related Education in Slovakia

Almost half of secondary school graduates keep on studying at universities, thus creating qualified and skilled labour force. Programs including ICT studies are becoming more and more popular & sought after by young generation.



## 8 ICT Faculties at 6 Slovak Universities

7,476

students enrolled in ICT study fields

1,946

graduates of ICT study fields per year

## 6 Arts Faculties Relevant for Game Development Industry

Besides solely ICT programs there are also other study fields relevant for game development industry, such as animation, visual effects, production, distribution, game design sound production and others. This education is provided by **6 arts faculties**.

1,639

students enrolled in arts faculties relevant for game development industry

506

graduates of arts faculties relevant for game development industry

## ACCADEMIC PARTNERSHIPS

### Success Stories of T-Systems In Košice

#### DUAL EDUCATION\*

As a pioneer in this field, since the academic year 2013/2014 T-Systems has implemented ICT dual education initiative where students receive 70% of practical education.

#### INDIVIDUAL PROGRAMS

T-Systems Slovakia, in cooperation with the Faculty of Business Economics of the University of Economics in Bratislava, launched the Honoris PM Program with the focus on project management.

#### SKILLS FOR SUCCESS — FROM UNIVERSITY TO WORKPLACE

At the Faculty of Economics of the Technical University in Košice, experts from T-Systems are involved in teaching the subject of SAP, used by most of the centres.

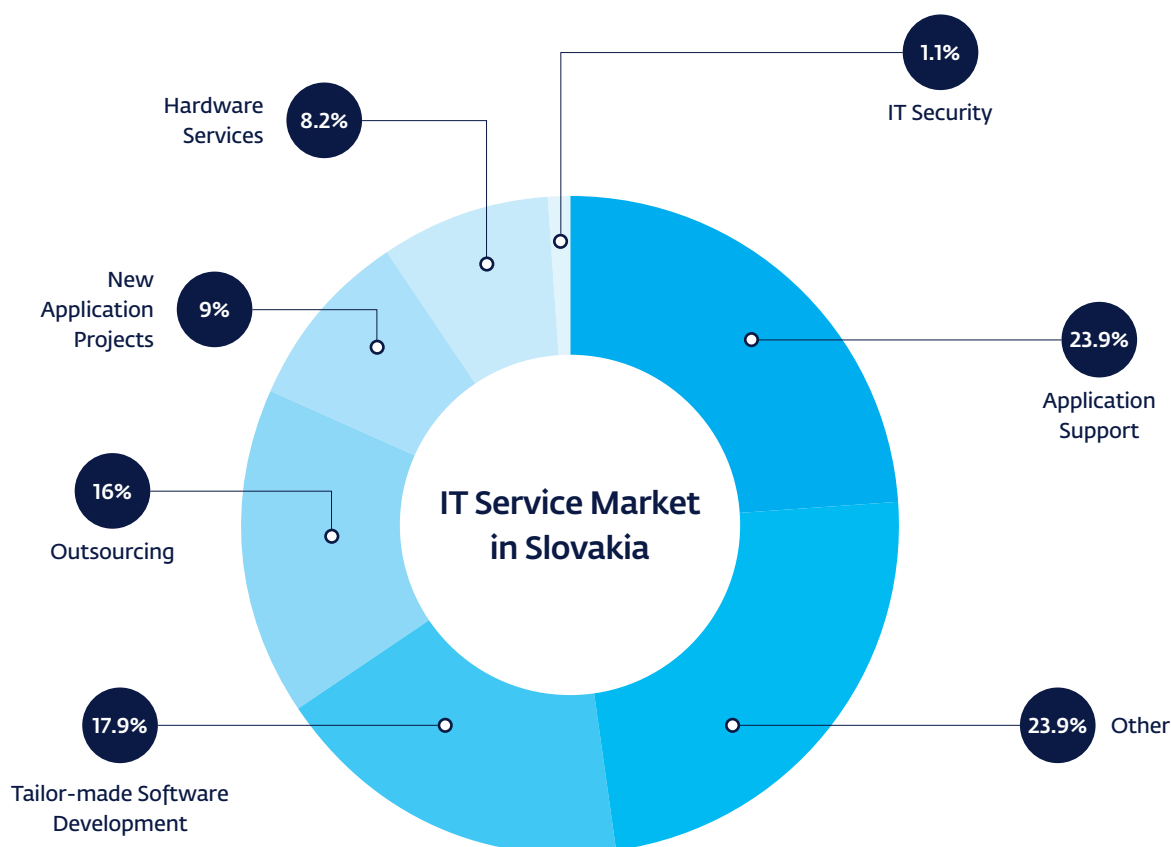
\*Note: Education and training adapted to the employer's requirements at secondary grammar schools.

Source: Slovak Centre of Scientific & Technical Information, 2021/2022, SARIO, T-Systems

## Inside the Slovak ICT Market



The majority of IT services in Slovakia are composed by application support and other tailor-made services (such as helpdesk, network administration, cloud storage, remote support, etc.) followed by tailor-made software development and outsourcing.



Source: Trend, 2019, (last available data)

# Competitive Salaries in Slovak ICT Sector

Although salaries in the ICT sector are above the Slovak average, in comparison with the Western EU countries remain significantly lower and still competitive in the CEE region.

Differences in salaries occur also on the regional level in Slovakia allowing the investors to explore regions outside the main hubs.

AVERAGE GROSS MONTHLY SALARY IN EUR (SELECTED POSITIONS)

AREA	POSITION	BRATISLAVA		KOŠICE		OTHER REGIONS	
		MIN	MAX	MIN	MAX	MIN	MAX
Technical Support	Technical Support Team Leader	2,300	2,800	2,300	2,800	2,200	2,700
	Technical Support Level 1	1,400	1,600	1,300	1,500	1,300	1,500
SW Development	SW Technical Lead	3,000	3,800	3,000	3,700	2,900	3,600
	SW Engineer (C++, .Net, Java, Javascript), 1—3 years experience	2,000	3,300	2,000	3,300	2,000	3,100
	SW Engineer (C++, .Net, Java, Javascript), 3 and more years experience	3,300	4,000	3,300	4,000	2,900	3,800
IT Consulting	Business Analyst (more than 3 years of experience)	2,500	3,300	2,200	3,000	2,100	3,000
	BI Consultant	1,900	3,500	1,800	3,000	1,800	3,000
	ERP Consultant	2,000	3,500	1,800	3,000	2,000	3,200
	ERP Developer	2,400	3,200	2,200	3,000	2,300	3,200
Other	Network Engineer (3—5 years experience)	2,300	3,500	2,000	3,200	1,900	3,100
	Linux System Administrator	2,000	3,000	1,800	2,800	1,800	2,700
	Window Administrator	1,800	2,700	1,600	2,500	1,600	2,400

Source: Grafton Slovakia, 2022

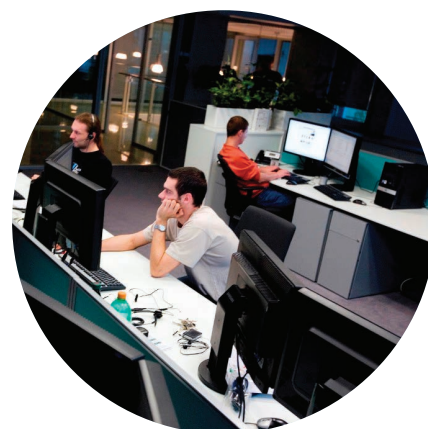
# ICT Companies in Slovakia

The ICT sector has a solid position in the Slovak economy, what is demonstrated by the presence of foreign-owned companies as well as strongly growing domestic companies.

## TOP ICT EMPLOYERS — IT & Telecommunication Service (TS) Providers in Slovakia

COMPANY NAME	COUNTRY ORIGIN	FIELD	LOCATION	EMPLOYEES
Slovak Telekom	Germany	TS	Bratislava	2,717
Deutsche Telekom IT & Telecommunications Slovakia	Germany	IT	Košice	1,703
DXC Technology Slovakia	United States	IT	Bratislava	1,264
Orange Slovensko	France	TS	Bratislava	1,163
Accenture Technology Solutions	Ireland	IT	Bratislava, Košice	1,046
Eset	Slovakia	IT	Bratislava	1,004
IBM Slovensko	USA	IT	Bratislava, Banská Bystrica, Košice	798
Scheidt & Bachmann	Germany	IT	Žilina, Bratislava, Bytča	719
UNIQA Group Service Center Slovakia	Austria	IT	Nitra	670
Siemens Mobility	Germany	IT	Bratislava	558
Asseco Central Europe	Poland	IT	Bratislava, Žilina, Trenčín, Banská Bystrica, Lučenec, Košice, Ružomberok, Snina	461
PosAm	Slovakia	IT	Bratislava, Banská Bystrica, Košice, Žilina, Levice	340
GlobalLogic	USA	IT	Košice, Žilina, Banská Bystrica	334
Tempest	Slovakia	IT	Bratislava	279
Slovanet	Slovakia	TS	Bratislava	256
Soitron	Slovakia	IT	Bratislava, Košice, Banská Bystrica	252
Atos IT Solutions & Services	France	IT	Bratislava, Žilina, Košice, Prievidza	240
Softec	Slovakia	IT	Bratislava	246
Datalan	Slovakia	IT	Bratislava, Banská Bystrica, Košice, Žilina	199
Digi Slovakia	Germany	TS	Bratislava	162

Source: Register of Financial Statements (2021); Trend (2021); SARIO, IMD World Digital Competitiveness Ranking (2021)



## Diversification of Telecommunication Segment

Traditional activities of telecommunication operators are gradually expanding beyond mere provision of telecommunication services. Building a diversified portfolio enriched by internet sales or IT services, data centers or software houses, is becoming an integrated part of their business.

1<sup>st</sup>

The highest amount of investments in telecommunications sector among the V4 countries in 2021



**SYGIC**  
Developer of GPS navigation software for mobile devices and solutions for businesses. The most downloaded offline navigation in the world.



## Notable Slovak Patents

Did you know that Slovak companies stand behind numerous globally well-known products? Here are some examples of successful Slovak brands.



### ESET

Protects users in  
180 countries

One of the global leaders in security software development including award winning NOD32® Antivirus



### RESCO

One of the global leaders in developing cross-platform mobile software solutions

Resco Cloud solution is the ultimate tool for offline access to data, interactive maps for businesses & more



### SOITRON

Soitron developed a system for intelligent police cars

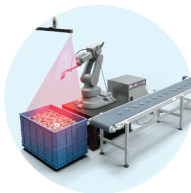
Developer of IT solutions from integrated communication systems to mobile police units



### NG AVIATION

One of a kind software  
for safe & smooth aviation

NG Aviation is an unique platform for digitization of aeronautical data making Aviation digital for Airports, Air Navigation Service Provider and Airlines



### PHOTONEO

A leading provider of  
robotic vision & intelligence

Development of the world's highest resolution and highest accuracy 3D camera solutions



### INNOVATRICS

Wide range of application —  
from attendance system to  
presidential elections

Biometric Software for identity management based on fingerprint & face recognition technology

Source: SARIO, 2022

# Slovak Fastest Growing IT Companies of 2021



Ranking positions in top 50 fastest growing companies in Central Europe based on the Deloitte Technology Fast 50 Central Europe 2021 programme.



## EXPANDECO

The most provided services of Expandeco are website translation as well as extensive online shop localisation.



## SUDO LABS

Technology company developing custom software for the web, building hybrid mobile apps for Android and IOS by using code reviews, automated testing and pair programming.



## KONTENTINO

Slovak company that focuses on social-media management tool for marketing, which enables straightforward and effective collaboration between agencies and their clients.



## ADUS TECHNOLOGIES

Tailor-made SW development focused on automation of company processes, integration of existing systems, DevOps, mobile apps and IT maintenance.

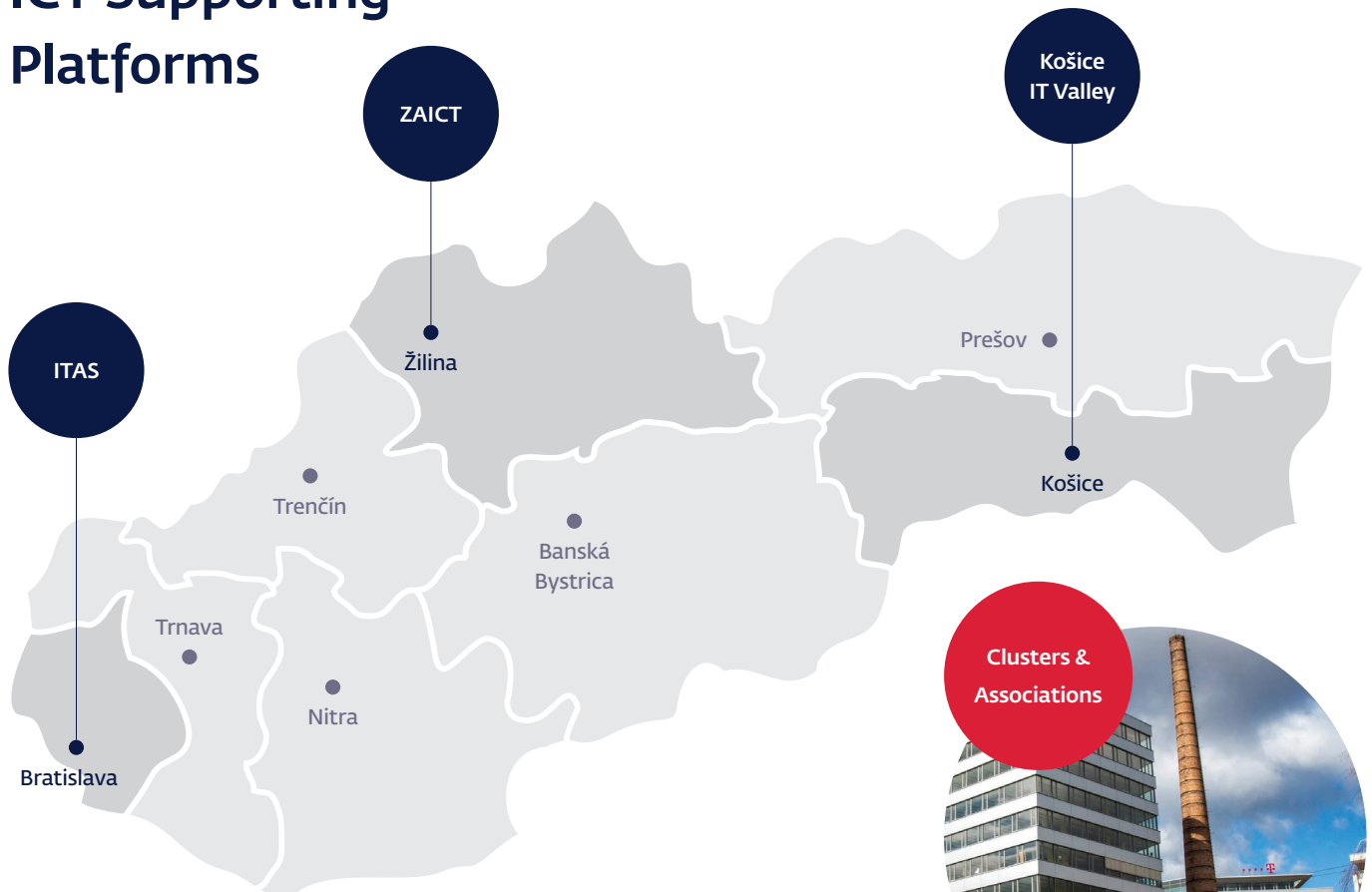


## GENTLEMEN'S

Slovak company providing services in multi-channel user acquisition strategies, soft launch and global launch planning and business advisory.

Source: SARIO, Deloitte, 2021

# ICT Supporting Platforms



## ITAS

- Headquartered in Bratislava
- Established in 1999
- Slovak association of 100+ ICT companies representing about 80% of the Slovak IT market
- Members employ more than 30,000 people

### ITAS runs several projects including:

- Digital transformation of private sector interlinking the ICT sector with other Slovak industries
- Digital transformation of public sector via active cooperation on Digital Coalition project
- Support of educational initiatives at all levels — from academic programs to requalification
- IT Testing — verification of IT skills among population in Slovakia among population in Slovakia



## KOŠICE IT VALLEY

- Headquartered in Košice
- Established in 2007
- Slovak association of 55 members and sympathizers, including the private, public and academic sector
- Cluster Management Excellence Gold Label — in 2015 certificated as the 1<sup>st</sup> in Central Europe

### Activities of Košice IT Valley are carried out in Eastern Slovakia:

- Over the years focus on education stays as one of the priorities, but scope of the cluster itself has gone beyond
- Innovations, research & development, support of collaboration within the cluster and support of investments become an integral part of the cluster



## Clusters & Associations



## ZAICT

- Headquartered in Žilina
- Established in 2008
- Slovak association of 14 members, including the private, public and academic sector
- In 2014 certificated as European Cluster Excellence Initiative Bronze Label

### ZAICT activities that are mainly in the Žilina region at:

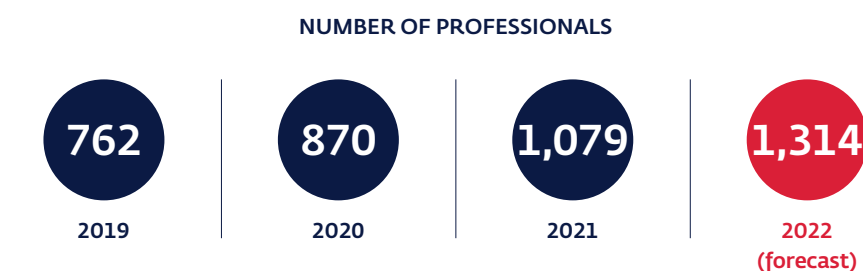
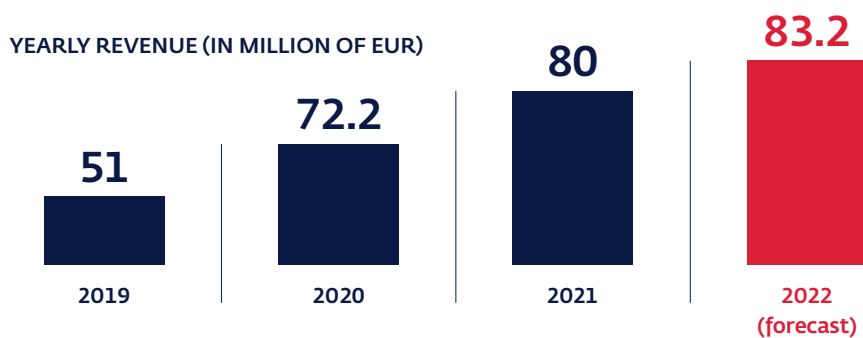
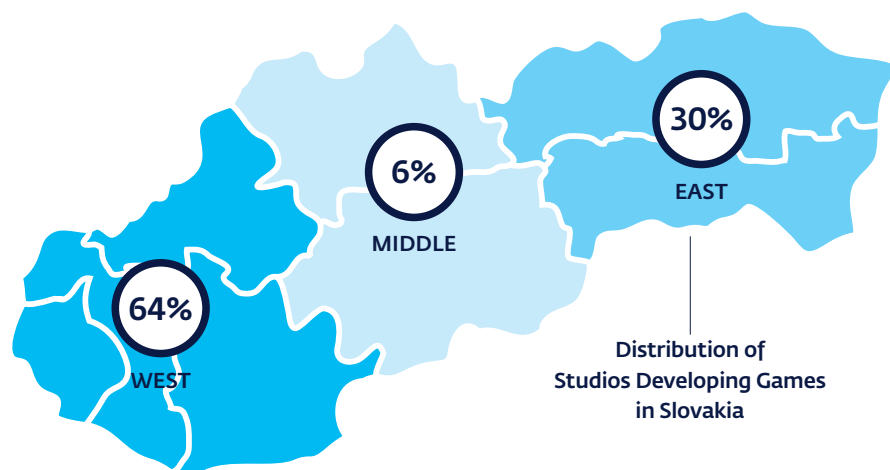
- Interconnection of private sector and R&D institutions
- Supporting lectures of ICT companies at secondary schools
- Offering educational programs and organizing school camps for raising IT skills

Source: ITAS, Košice IT Valley, ZAICT

# Emerging Slovak Game Development Industry



The game development industry in Slovakia has been gaining pace by uniting a wide range of studios. This rapidly growing market with nearly doubled revenues in the past two years is a result of the world's top industry professionals presence and together with relevant educational programs are shaping new generations of game developers.



Source: Slovak Game Developers Association, 2022, SkillValue, 2019

1<sup>st</sup>

Slovakia as a country with the best developers in the world based on the World Ranking of Countries by IT Skills

70

Number of game development companies & studios in Slovakia

81

Number of fully-released Slovak games

209

New working positions opened by game development studios in 2021

## Top Game Studios in Slovakia — Based on Turnover in 2021

STUDIO	EMPLOYEES/ PROFESSIONALS	YEAR OF ESTABLISHMENT	HQ	TURNOVER
Pixel Federation	>250	2007	Bratislava	50,963,000
PowerPlay Studio	>60	2007	Bratislava	5,688,000
SuperScale	>60	2016	Bratislava	3,871,000
Inlogic Software	>60	2005	Košice	3,151,000
Nine Rocks Games	>50	2020	Bratislava	2,456,000
Studio 727	<30	1997	Bratislava	1,642,000
Games Farm	>50	2001	Košice	1,419,000
Blue Brain Games	<5	2015	Bratislava	1,008,000
Greens	<5	2013	Poprad	930,000

## Game Development Platform in Slovakia



As a civic association supports digital game development as well as game developers and start-ups in Slovakia. The association helps new talents to improve their artistic, technological and business skills, and promotes education of professionals and general public in the field of digital games.

## Game Events in Slovakia

### UNICON TRNAVA

#### TRNAVA

University event consisting of discussions, e-sports, table games, cosplays and others.

### BRATISLAVA GAME JAM

#### BRATISLAVA (ANNUALLY)

A contest for individuals and teams of programmers, script writers, graphics, philosophers and illustrators whose main aim is to make a video game prototype in just 40 hours and to experiment with bold game design.



### GAME DAYS

#### KOŠICE (ANNUALLY)

The only international videogame festival in Slovakia providing opportunities for leading figures of the sector to present their experience with progressive video game creation. The event combines digital games with artistic qualities.

### SLOVAK GAME DEVELOPERS ASSOCIATION

#### BRATISLAVA, KOŠICE (MONTHLY)

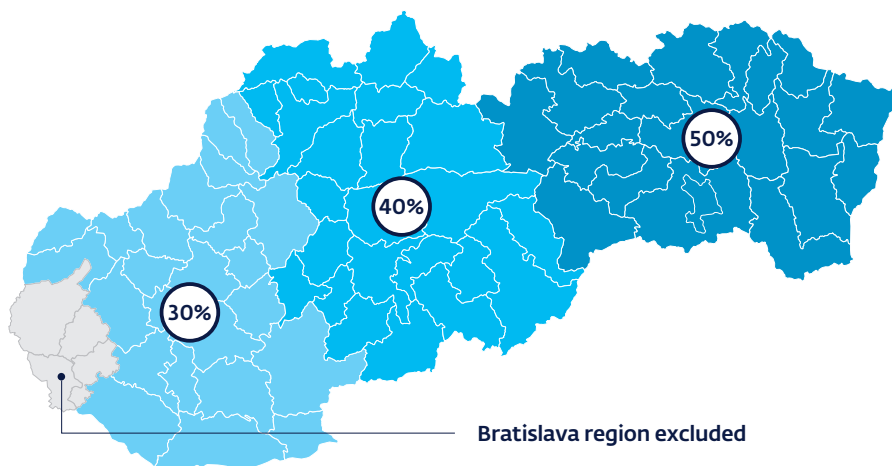
Community meetings of digital game developers to present their work, to exchange know-how and to encourage networking among them, creating a compact and collaborative meetup platform.

Source: FinStat, Slovak Game Developers Association, 2022

# Investment Incentives

The primary role of the investment incentives is to motivate investors to place their new projects in regions with higher unemployment and to attract projects with higher added value.

## MAXIMUM REGIONAL INTENSITIES OF INVESTMENT INCENTIVES IN SLOVAKIA



- Additional 10% for medium-sized enterprises
- Additional 20% for small and micro-sized enterprises
- Additional 10% for investment projects carried out in regions included in Just Transition Plan

### TECHNOLOGY CENTERS

- Minimum investment of 100 ths. EUR on fixed assets in all regions
- Minimum of 10 newly created jobs
- Minimum 1.7 fold of average salary in the district paid to new employees

### SHARED SERVICES CENTERS

- Minimum of 25 newly created jobs
- Min 1.5 fold of average salary in the district paid to new employees

### ELIGIBLE PROJECTS

The Act on Investment Incentives divides the projects, which may be supported, into four categories:

- Industrial production
- Technology Centers
- Combined Projects of Industrial Production and Technology Center
- Shared Services Centers

### ELIGIBLE COSTS

- Costs of land acquisition
- Costs of buildings acquisition & construction
- Costs of new technological equipment and machinery acquisition
- Intangible long-term assets — licences, patents, etc.
- Rent of new land/building

### OR

- Total wage costs of all new employees calculated over a period of 2 years

### FORMS OF INVESTMENT INCENTIVES

- Corporate income tax relief
- Cash grant
- Contributions for the newly created jobs
- Rent/Sale of real estate for a discounted price



### SUPERDEDUCTION — SPECIAL R&D TAX REGIME

Companies with the R&D activities can benefit from the special tax regime. By the calculation of the income tax, the additional 100% of the R&D expenses can be deducted from the tax base. As a result, for every 100 EUR spent on the R&D activities, company can save 21 EUR (respecting the current income tax rate 21%).

### SUPERDEDUCTION

- is automatically claimable in tax return form
- is not subject to any application procedures nor subject to an approval by any state authority
- all sectors are eligible
- is applicable throughout Slovakia
- if the claim cannot be applied in the given tax period, it is transferable to up to 5 consecutive tax periods

\*Conditions differ for projects from 'Priority areas'. Please contact us at [invest@sario.sk](mailto:invest@sario.sk) for more information.



## AIM INVESTMENT AWARDS DUBAI 2022

CEE & TURKEY REGION  
Best Investment Promotion  
Agency in 2022



# SARIO Profile

Slovak Investment & Trade Development Agency (SARIO) is a governmental investment and trade promotion agency of the Slovak Republic. The agency was established in 2001 and it operates under the Slovak Ministry of Economy.

## 01 INVESTMENT SERVICES

### FOR POTENTIAL INVESTORS

- investment environment overview
- assistance with investment projects implementation
- starting a business consultancy
- sector and regional analyses
- investment incentives consultancy
- site location & suitable real estate consultancy

### FOR ESTABLISHED INVESTORS

- identification of local suppliers, service providers
- assistance with expansion preparation and execution
- assistance with Industry 4.0 solutions and R&D implementation

## 02 FOREIGN TRADE SERVICES

### IF YOU ARE LOOKING FOR

- Slovak supplier or sub-contractor
- information about Slovak export/trade environment
- sourcing opportunities
- forming a joint venture, production cooperation or other forms of partnership with a Slovak partner

### SERVICES FOR EXPORTERS

- information on foreign territories
- customized search for foreign partners
- on-line database of business opportunities
- export Training Centre
- subcontracting assistance


## 03 INNOVATION SOURCING

- matching local tech companies with the operations of large companies that plan to implement innovative solutions to streamline and optimize their processes
- focused mostly on Industry 4.0 solutions such as digitalization, intelligent automation, and robotics as well as advanced and complex IT solutions for various industries
- based on a database of more than 300 local tech companies which is constantly updated and expanded

**SARIO IS YOUR ONE STOP SHOP FOR INVESTMENT & TRADE IN SLOVAKIA.  
TALK TO US TODAY!**

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