

NO 10 | DEC 2022

POLICY BRIEFING ARMENIA

Policy measures to tap the potential of relocations of foreign IT companies and talent to Armenia

By Dmitry Chervyakov and Björn Vogler

Executive Summary (1/2)

- In principle, the findings from the research and interviews carried out indicate a promising potential to accelerate the development of Armenia as an IT location in the context of the inflow of foreign talent and companies
- The relocation of operations and projects can make an important contribution towards skills development and innovation dynamics
- Senerating spillovers requires a closer integration of the relocated companies.
 While the interaction between the relocated and local IT community seems to be stronger than in other countries, overall, linkages are still rather weak
- Putting the inflow into context, it should be noted that from the perspective of the IT companies, the appreciation of the dram currently plays a more important role as a factor affecting the industry's competitiveness
- Thus, the relocation of IT companies and talent from Russia, Belarus and Ukraine should not be addressed in isolation
- There is a need for a more comprehensive strategic initiative in terms of geographic focus and scope of policy areas / tools – to improve and promote Armenia's value proposition as location for IT talent and companies

Executive Summary (2/2)

- The strategic initiative should be developed in close collaboration with the IT industry and ecosystem actors (e.g. UATE)
- Considering the results from the interviews and the review of international experience, the following measures could form part of the strategic initiative:
 - Needs-oriented aftercare and facilitation services comprising a key account management for IT investors, extended onboarding and matchmaking services (e.g. in the context of the Digitec) and complementary promotional measures
 - Tailored IT visa programme to attract talent from further regions and countries (e.g. Iran) covering both employed IT specialists and freelancers
 - Collaborative skills development measures and educational programmes
 tapping the potential of involving investors in upgrading the skills base and
 including an alignment of incentive programmes
 - Development of specialised tech parks for the IT and related industries with a target-group-oriented infrastructure and service portfolio using the potential of involving private developers based on thorough feasibility studies

Outline

- Introduction
- 2. Review of relevant international experience
 - A. Dedicated visa programmes
 - B. Tailored incentive programmes
 - C. Virtual IT parks
 - D. Aftercare programmes
 - E. Investment facilitation services
 - F. Linkages between start-ups and business/science
 - G. Free economic zones
- 3. Current situation in Armenia and potential for the IT industry
 - 1) GET survey: influx of high-skilled IT talent
 - 2) Overview of potential benefits
 - 3) Relocations, (re)investments and related spillovers
 - 4) Start-ups, entrepreneurship and employment
 - 5) Further factors affecting the competitiveness
- 4. Conclusions and recommendations

1. Introduction

1. Introduction

Background

- Talent availability plays a critical role for the development of the IT industry. It has become the most important factor driving investment decisions
- » A survey conducted by CRRC on behalf of the German Economic Team (PS 2022/03) indicates a substantial inflow of foreign IT specialists – in particular from Russia – into Armenia in the context of the war in Ukraine

Purpose of this Policy Briefing

- Against this background, this Policy Briefing assesses the potential to accelerate the development of Armenia as an IT location in light of the inflow of IT talent and companies in the country
- » It identifies suitable policy measures based on:
 - A review of international experience focusing on recent initiatives to attract, retain and integrate digital talent, start-ups and investment
 - Interviews with Armenian IT companies and industry experts to discuss the current situation and emerging trends as well as key opportunities and challenges from the local perspective

2. Review of international experience

2. Review of international experience: overview

Overview of policy measures targeting IT talent, start-ups and investment

- Several countries have recently intensified their efforts to attract and retain IT talent, start-ups and investment and to increase the impact on the local economy
- The table below provides an overview of relevant policy measures, which will be explained in further detail on the subsequent pages

Overview of relevant policy measures

Visa and incentive programmes Soft infrastructure (Information, matchmaking and support services)	A. Introducing dedicated visa programmes (digital nomad, freelance and IT visa)
	B. Designing tailored incentive programmes to attract and retain talent
	C. Combining different incentives and policy tools with virtual IT parks
	D. Using structured and target group oriented aftercare programmes to retain investment, attract (re)investment and enhance the impact
	E. Widening the scope of facilitation services to secure both investment and talent
	F. Promoting linkages between start-ups and the business and science community
Hard infrastructure	G. Developing specialised free economic zones (FEZs), industrial and technology parks

© 2022 Berlin Economics | All rights reserve

A) Dedicated visa programmes (1/4)

Digital nomad & freelance visa

- » Digital nomad visa programmes are increasingly used to attract and retain remote workers with a focus on IT specialists (e.g. software engineers, web developers, UX / UI designers)
- Clarifying rules and streamlining administrative procedures, digital nomad visa allow foreign nationals to enter a country, stay and work remotely for a defined period of time
- Estonia was the first country introducing a digital nomad visa programme in 2019. Since then, more than 30 programmes were launched around the globe (see table on the right)
- In addition, several countries have announced plans to offer such programmes including Albania, Italy, Montenegro, North Macedonia, Serbia, Spain, South Africa and Colombia

States and territories offering digital nomad visa programmes

	<u> </u>	
Africa	Cabo Verde, Namibia, Seychelles	
Asia	Indonesia, Malaysia, Sri Lanka, United Arab Emirates	
Europe	Croatia, Cyprus, Estonia, Greece, Hungary, Iceland, Latvia, Malta, Portugal, Romania	
Latin America and the Caribbean	Anguilla, Antigua and Barbuda, Argentina, Aruba, Barbados, Belize, Bermuda, Brazil, Cayman Islands, Costa Rica, Curaçao, Dominica, Ecuador, Montserrat, Panama, Saint Lucia	

Sources: Migration Policy Institute, own research

A) Dedicated visa programmes (2/4)

Digital nomad & freelance visa

- > Typical features and conditions of digital nomad visa include:
 - Permission to reside and work remotely for an employer based outside the country
 - Minimum income requirements / proof of sufficient funds to cover expenses
 - Ban on working for or engaging in local companies
 - Allowing accompanying family members
- » Beyond these common features, the design of digital nomad visa programmes varies considerably. In light of intensifying competition, governments are trying to find ways to stand out with their programmes, e.g. by:
 - Granting exemptions from income taxes
 - Providing online and / or fast-tracked application processes
 - Create temporary-to-permanent pathways offering remote workers on nomad visas to transition to more permanent residence
- Some programmes are also limiting the eligibility to remote workers from specific (groups of) countries

A) Dedicated visa programmes (3/4)

Digital nomad & freelance visa

- As already mentioned, digital nomad visa typically focus on remote workers employed by a company outside the country
- » Only few digital nomad visa include freelancers (e.g. Estonia, Malta), who work for several clients (based abroad) and play an important role in the IT industry
- In addition, some countries (e.g. Germany, Czech Republic) have introduced dedicated visa programmes for freelancers – with a focus on work for local clients and beyond the IT industry

Exemplary visa programmes covering freelancers

Country	Eligibility	Duration	Income requirements	Further incentives
Estonia – Digital Nomad Visa	Foreign nationals, who can perform their work remotely and are • employed by a company abroad or • freelancers with clients based abroad or • partners / shareholders of a company registered abroad	Up to one year	Monthly gross income of 3,500 EUR	 Some local work permitted provided that remote work remains main purpose Visa holders can be accompanied by family
Malta – Nomad Residence Permit		Up to one year, with option to renew	Monthly gross income of 2,700 EUR	Exemption from income taxesVisa holders can be accompanied by familyOnline application
Germany – Freelance Visa	 Freelancers in certain professions (e.g. artists, engineers) Applicants have to submit a financing plan and letters of intent from local clients 	Up to three years, with option to renew and apply for permanent residency	No predefined thresholds, but need to demonstrate the viability of the business case and resources for the initial period	Visa holders can be accompanied by family
Czech Republic – "Zivnostenske Opravneni" Programme	 Freelancers and self-employed with relevant professional qualifications and local clients 	Up to one year, with option to renew	Proof of savings of at least 5,600 ERU	Visa holders can be accompanied by family

© 2022 Berlin Economics | All rights reservec

A) Dedicated visa programmes (4/4)

Visa for IT professionals

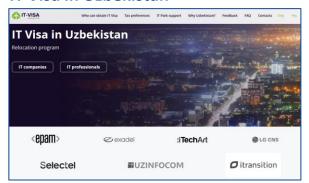
- While the visa programmes mentioned so far have a broader focus in terms of industries / professions, some countries have recently launched dedicated schemes to attract and retain IT professionals
- » Germany is offering work visa (for up to four years) for IT professionals, who have:
 - A specific job offer in the German IT industry with a gross annual salary of at least 50,760 EUR
 - At least three years of professional experience in IT
 - Proof of relevant theoretical knowledge
 - Level B1 German skills (exemptions possible)
- Uzbekistan has introduced a visa programme for IT professionals, investors and founders of IT Park resident companies covering up to four years

Visa for IT professionals in Germany



Source: Make it in Germany

IT Visa in Uzbekistan



Source: IT Park Uzbekistan

B) Tailored incentive programmes

Designing tailored incentive programmes to attract and retain talent

- The schemes used at the international level differ considerably with respect to the policy objectives, target group focus and type of incentive
- The examples below illustrate the spectrum of design options clearly indicating the need to align incentive schemes to the specific local context and existing policy framework

Exemplary incentive schemes to attract and retain talent

Country	Policy objectives	Target group focus	Type and key features of incentives
Romania - Tax exemptions for software development activities	 Stimulate the development of the IT industry Support companies to attract and retain highly qualified employees Improve attractiveness of Romania as IT investment location 	 IT professionals employed by companies specialised in software development (registered under defined NACE codes) 	 IT specialists benefit from a full personal income tax exemption – still paying social security contributions Beneficiaries need to demonstrate an adequate academic qualification Tax exemption can be used without confirmation / approval by tax authority
Cyprus – Tax exemptions for non-domicile employees	 Attract and retain foreign talent Improve attractiveness of Cyprus as investment location 	 Non-domicile highly-skilled and high-earning employees of companies registered in Cyprus or abroad (incl. digital nomads) No specific industry focus 	 50% of the salary is exempt from income tax for a period of 17 years provided that: The salary exceeds 55,000 EUR p.a. The employee was not resident of the Republic of Cyprus for a period of 10 consecutive years
Germany (Federal State of Brandenburg) – Wage subsidies for talented graduates in innovation projects	 Retain talent Stimulate innovation activities of SMEs 	 (Foreign) graduates from local universities employed by SMEs for innovation projects Focus on defined clusters (incl. ICT) 	 Wage subsidy covers up to 50% of the gross salary and related expenses (e.g. training) for a period of up to 18 months Graduates need to be hired for the first time and must not replace an existing position

Sources: InvestRomania, Ministry of Finance of the Republic of Cyprus, Ministry for Economic Affairs, Labour and Energy of the Federal State of Brandenburg (Germany)

© 2022 Berlin Economics | All rights reserved

C) Virtual IT parks

Combining different incentives and policy tools with virtual IT parks

- As illustrated by the example from Moldova, virtual IT parks combine different incentives and policy tools – e.g. tax incentives and visa programmes
- The Moldova IT Park was established in 2018 to improve the country's competitiveness, retain talent and avoid relocations
- » Based on a virtual presence, residents can be located anywhere in Moldova, benefitting from:
 - Single 7% revenue tax
 - Special visa regime (work permits for up to 4 years)
 - Community platforms and networking services
- So far, 1,250 residents have been registered with:
 - More than 15,300 employees
 - Revenues of close to 400 million EUR

Moldova IT Park



Computer training.

Source: Moldova IT Park

Management and operation of computer syste

© 2022 Berlin Economics | All rights reserved.

D) Aftercare programmes

Using structured and target group oriented aftercare programmes to retain investment, attract (re)investment and enhance the impact

- The role and focus of aftercare programmes is significantly changing around the globe
- Considering aftercare a cost-effective way to retain investment, secure (re)investment and enhance the impact, recent reforms...
 - Prioritise specific targets groups such as investors in the ICT industry
 - Emphasise recruitment and matchmaking services connecting new investors with the business community
 - Follow a systematic and pro-active approach
- Insights gained as part of aftercare activities are translated into advocacy efforts and policy advice for investment climate reforms

Aftercare programme of the investment promotion agency (IPA) Berlin Partner (Germany)

Berlin Partner, the IPA of the Federal State of Berlin, has introduced a structured aftercare programme with a focus on the ICT industry:

- A dedicated key account manager was recruited, who is in charge of maintaining close contact to approximately 100 ICT investors that were selected based on defined criteria
- As part of a systematic key account management, regular meetings are organised with each investor to discuss previous and planned projects, challenges and support needed
- The aftercare services were defined in close cooperation with strategic partners, incl. local administrations, chambers and associations, the employment agency and cluster initiatives
- The support offered integrates the agency's own as well as the services of the strategic partners
- The joined service portfolio focuses on the areas sites & real estate, recruitment & training, finance & incentives, permits & administrative processes, clusters & networks (e.g. connecting investors with local companies and innovation partners)

Source: Berlin Partner for Business and Technology GmbH

© 2022 Berlin Economics | All rights reserved

E) Investment facilitation services

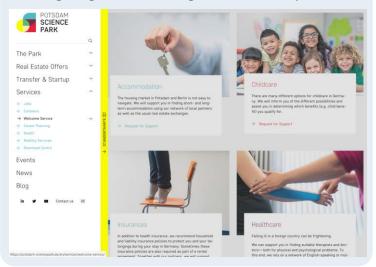
Widening the scope of investment facilitation services to secure both investment and talent

- » Many IPAs and management organisations of industrial and technology parks have recently extended their facilitation services
- The aim is to fast-track the implementation and integration of investment projects
- » For the communication, so-called service packages are commonly used. A typical "Talent Service Package" comprises:
 - Visa and immigration services (e.g. assistance in applying for work and residence permits)
 - Welcome services (e.g. support in finding apartments, schools etc.)
 - Recruitment services (e.g. job portals, preselection of suitable candidates)

Welcome services of the Potsdam Science Park (Germany)

With a team of three dedicated staff members, the management of the Potsdam Science Park is offering a broad range of welcome services for companies and research institutions as well as their employees, incl.:

- Language school
- (Dual) career planning services
- Short-term accommodation (Guest House in park)
- Assistance in finding apartments, schools, childcare and healthcare services
- Navigating & fast-tracking administrative processes



Source: Potsdam Science Park

© 2022 Berlin Economics | All rights reserved

F) Linkages between start-ups and business/science

Promoting linkages between start-ups and the business & science community

- » Similar to the approach taken towards investors, various governments are trying to integrate startups more closely in the local economy recognising:
 - Contribution of start-ups to innovation ecosystem
 - Increasing mobility of start-ups and competition between countries and regions
- » Next to personal business partner mediation services and training / mentorship programmes, matchmaking events are commonly used
 - Focusing on specific industries or fields of technology,
 e.g. HealthTech, EdTech or Smart Infrastructure
 - Connecting start-ups with established companies with pitching and reverse pitching formats
 - Providing start-ups with an overview of available support services and instruments

"Science & Startups meet Industry" initiative (Germany)





Source: Science & Startups Berlin

"Rising UP in Spain" programme



Source: ICEX Trade and Investment

2022 Berlin Economics | All rights reserve

G) Specialised zones and parks

Developing specialised free economic zones (FEZs), industrial and tech parks

- » Traditionally, FEZs aim at stimulating industrial investment with a value proposition focusing on corporate tax incentives and industrial infrastructure
- Some countries have started to reposition their zone / park programmes. A different zone type is emerging targeting digital talent, start-ups and tech-driven and asset-light investments
- The value proposition has been shifted towards:
 - Personal income tax incentives
 - "Plug & play models" including co-working space and office buildings for rent
 - Incubator and accelerator programmes
 - Attractive residential areas and social amenities
 - Streamlined administrative services

Zones targeting digital talents, start-ups and investment







Sources: Cayman Enterprise City (Cayman Islands) and Prospera Special Economic Zone (Honduras)

3. Current situation and potential for the IT industry

© 2022 Berlin Economics | All rights reserved

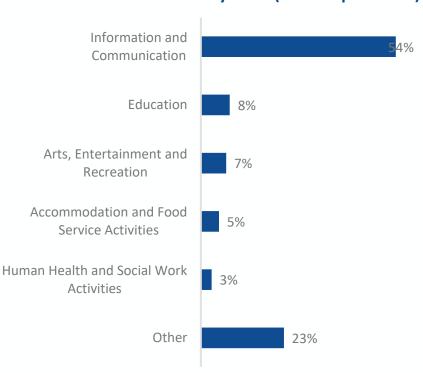
3.1 GET survey: influx of high-skilled IT talent

Survey findings confirm a substantial inflow of IT professionals in Armenia

- » Based on Armstat data, GET estimates that 24,400 citizens from Russia, Belarus and Ukraine have relocated to Armenia between 24 Feb and 31 May 2022
- » Russian citizens make up by far the largest group (22,900)
- A survey by CRRC on behalf of GET indicates high employment and skill level
 - The majority of respondents (78%) are employed – performing mostly (91%) high skilled, white-collar activities
 - ICT is the main sector of employment (54% of respondents) followed by education (8%)

Currently, an additional survey is carried out to update and complement the findings

Sector of employment of citizens from Russia, Belarus and Ukraine, who relocated to Armenia between 24 Feb and 31 May 2022 (% of respondents)



Source: CRRC / German Economic Team (GET)

© 2022 Berlin Economics | All rights reserved.

3.2 Overview of potential benefits

In principle, the relocation of IT companies and talent offers the following potentials to accelerate the development of the IT industry

Relocations, (re)investments and related spillovers

- Scaling up relocation projects and attracting (re)investment projects benefiting from an improved value proposition
- Enhancing the contribution of foreign investors towards strengthening the skills base and innovation transfer

Entrepreneurship

- Promoting entrepreneurship and Armenia's start-up ecosystem
- Fostering the development of foreign IT start-ups and freelancers and embedding them in the innovation system

Employment and SME development

- Facilitating the recruitment of foreign IT specialists by Armenian companies
- Retaining talent in the country and strengthening the competitiveness of the local IT industry and SMEs

3.3 Relocations, (re)investments and spillovers

As indicated in the interviews, fast-tracking the implementation and integration of relocation projects in the IT ecosystem offers the most promising potential

- The findings indicate a promising expansion potential in particular related to relocations carried out by US and Western European investors
- The relocated IT companies and specialists can make an important contribution towards skills development and innovation dynamics
 - Highly-qualified specialists with experience at the medium & top management level are strongly represented in the relocated IT community
 - It was pointed out that some companies did not relocate entire operations but rather selected projects looking for local partners for the implementation
- Tapping the potential requires a closer integration of the relocated companies
- While the interaction between the relocated and local community seems to be stronger than in other countries, overall, linkages are still rather weak
- » Further challenges relate to the shortage and high prices of office / residential space. In some cases, relocated IT specialists face difficulties with respect to administrative processes and finding schools and healthcare providers

3.4 Start-ups, entrepreneurship and employment

In comparison, from the perspective of the local IT community, both the entrepreneurial and the recruitment potential related to the inflow of IT talent seem to be limited – at least in the short term

- According to the interviews, the majority of relocated start-ups and aspiring entrepreneurs do not have scalable business models or ideas
- The interviewed IT companies expressed cautious views on the recruitment potential related to the inflow of IT specialists from Russia, Belarus and Ukraine
 - The companies did not report any systematic targeted recruitment efforts
 - The expectation prevails, that a significant part of the IT specialists, in particular those that did not arrive as part of company relocations, might move on to other countries
 such as Turkey, Malta or Serbia or return to the home countries
 - Furthermore, salaries offered by relocated companies tend to be higher
 - Interview partners emphasised the **need for a broader geographic focus** of measures to attract foreign IT talent (including e.g. IT specialists from Iran)
- It was pointed out that the new income tax reimbursements for non-tax residents are used to a greater extent than expected by relocated IT companies

3.5 Further factors affecting the competitiveness

Overall, from the perspective of IT companies, the relocation of talent and operations is currently less relevant than the appreciation of the dram

- Putting the relocation dynamics into context, it should be noted that from the perspective of the IT companies, the appreciation of the dram currently plays a more important role as a factor affecting the industry's competitiveness
 - Obviously, the impact of the two developments differs in terms of time
 - However, the strong focus on the appreciation in industry discussions **influences the expectations regarding policy priorities** and the willingness to participate in activities addressing other topics
- In the recent past, a rapid appreciation of the Armenian dram against the US dollar took place (18.3% by the end Oct-22 compared to pre-war period)
- Due to its strong export-orientation and focus on US and Western European markets, the Armenian IT industry is currently under considerable pressure
- The inflow of Russian citizens, which has led to a significant net inflow of transfers, has most likely contributed to the appreciation (for further details see PS 2022/08)

4. Conclusions and recommendations

4. Conclusions and recommendations (1/3)

The potential related to the relocation of IT operations and talent should not be addressed in isolation – but as part of a comprehensive strategic initiative

- In principle, the findings indicate a promising potential to accelerate the development of Armenia as an IT location in the context of the relocation of talent and operations from Russia, Belarus and Ukraine
- » It also became clear that this potential should not be addressed in isolation
- There is a need for a more comprehensive strategic initiative in terms of geographic focus and scope of policy areas / tools – to improve and promote Armenia's value proposition as a hub for IT talent and companies
 - Fully unlocking the opportunities to attract and retain IT talent and investment at the international level (e.g. Iran, India, US) including the diaspora-related potential
 - Addressing the entire spectrum of opportunities & challenges (e.g. dram appreciation) using synergies at the interface to related policy areas (e.g. education, innovation)
- The strategic initiative should be developed in close collaboration with the IT industry and ecosystem actors (e.g. UATE). The need to intensify communication between the industry and Government was emphasised in the interviews

4. Conclusions and recommendations (2/3)

Considering the results from the interviews and the review of international experience, the following measures could form part of the strategic initiative:

- » Needs-oriented aftercare and facilitation services for IT investors and talent building upon recent initiatives by Enterprise Armenia
 - Establishing a **key account management for IT investors** focusing on direct engagements to identify challenges, (re)investment potentials and support needed
 - Taking up insights gained as part of aftercare activities in consultations between Government and the IT community to refine the strategic initiative
 - Extending **onboarding services** (e.g. assistance in finding apartments, schools, healthcare services) with partners (e.g. UATE)
 - Widening the scope of matchmaking services and platforms to connect relocated companies and new investors with the local IT community (e.g. in the context of the Digitec)
 - Using the facilitation services and tools for promotional measures to attract more IT investment and talent to the country

Digitec Expo and Summit in Yerevan



Source: Digitec

4. Conclusions and recommendations (3/3)

The following measures could form part of the strategic initiative (cont.):

- Tailored IT visa programme to attract talent from further regions and countries (e.g. Iran) covering both employed IT specialists and freelancers
- » Collaborative skills development measures and educational programmes
 - Tapping the potential of involving investors in upgrading the skills base
 - Building on international experience (e.g. training alliances in Germany, PPP training centres in Malaysia) and existing initiatives in the country (e.g. Synopsis scholarships)
 - Aligning incentives accordingly shifting the focus towards collaborative projects
- Development of specialised tech parks for the IT and related industries
 - With a value proposition placing emphasis on target-group-oriented infrastructure and services (e.g. training, business development services) – and not on incentives
 - Assessing the potential of **involving the private sector** in the development and operation **with a clear division of roles** (e.g. state developing the off-site infrastructure, private sector providing the on-site infrastructure, facilities, services)
 - Based on **thorough feasibility studies** considering also location alternatives outside Yerevan to foster regional development

© 2022 Berlin Economics | All rights reservec

About the German Economic Team

Financed by the Federal Ministry for Economic Affairs and Climate Action, the German Economic Team (GET) advises the governments of Ukraine, Belarus*, Moldova, Kosovo, Armenia, Georgia and Uzbekistan on economic policy matters. Berlin Economics has been commissioned with the implementation of the consultancy.

*Advisory activities in Belarus are currently suspended.

CONTACT

Dmitry Chervyakov, Project Manager Armenia chervyakov@berlin-economics.com

German Economic Team

c/o BE Berlin Economics GmbH Schillerstraße 59 | 10627 Berlin Tel: +49 30 / 20 61 34 64 0 info@german-economic-team.com www.german-economic-team.com

Our publications are available under https://www.german-economic-team.com/

Implemented by

