

# 18 steps for more ICT professionals in Slovenia

#### The Facts

By the year 2030 Slovenia will need **5,000** new ICT\* professionals each year

Currently there are only **1,100** students graduating with information and communication technology degrees each year, and the enrolment places are growing at around 5% annually.

By the year 2030 the European Union will need **20 million** ICT professionals, which is around twice the number today.



\*Information and Communications Technologies

#### **Ambitious Target**

Slovenia should rise to be among the best countries according to the Digital Economy and Society Index (DESI) – specifically among the top five by 2024 and among the top three by 2030.

#### ICT Professionals in Numbers

- A mere 4.4% of Slovenia's labor force comprises ICT experts, which is just above the EU average.
- Just 17% of companies in Slovenia employ ICT professionals, which is below the EU average (19%), and the trend is negative.
- In Slovenia 96% of ICT graduates are already employed.
- A full 69% of companies are experiencing problems employing ICT professionals.
- Women account for only 17 percent of ICT sector employees, and there are no indications of growth in advanced ICT competences among women.
- Among ICT professionals, those over 35 account for a 45% share, and this share is diminishing slowly, more slowly than in comparable countries.
- In 2018 the Slovenian ICT sector employed just 2.72% of all employed persons, while in successful countries the share is twice that.

#### Where Are The Challenges?

- The excessively slow trend of growth in these areas is reflected in the problem of a lack of HR in the ICT sector.
- The number of ICT profession graduates is too low.
- Demand for HR in the ICT sector is growing rapidly.
- The share of ICT professionals among all employed persons is too low.
- The share of companies in the ICT sector is too low.
- Low share of women in the ICT sector.



Introduce the mandatory stand-alone **subject of computer and information science** in elementary and secondary schools. At the same time a decisive **overhaul of study programs** to make digital skills become a component part of the content in all subjects.

Implement a promotional campaign for ICT careers across Slovenia, to generate greater enthusiasm among young people about ICT skills, especially among girls.





Increase the number of enrollment places for ICT university programs. An increase of 5% annually is not enough. Simultaneous promotion of ICT programs starting at elementary school, with special emphasis on promoting ICT professions among girls. An understanding of the opportunities would increase the flow of high-quality candidates to study this field.

Design of **new specialized** (artificial intelligence, robotics, mass data analytics, cybersecurity, etc.) **and multidisciplinary study programs.**Combinations of social science and natural science knowledge and skills would contribute to greater success in tackling complex challenges in society.





Increase the range of education programs offered in English, to attract international students to Slovenia, and boost the hosting of international lecturers. We need the inflow of young and superlative knowledge to come into Slovenia from abroad.

Abolish the requirement of EUR 5,000 in current accounts for the acceptance of international students to study in Slovenia, which was put in place by the amendment of the Aliens Act in March 2021. In order to attract international students to Slovenia, we need to create an environment with the least possible obstacles and to offer them an outstanding user experience.





Implementation of an immediate comprehensive analysis of HR needs in the business sector for ICT professionals in terms of specific personnel requirements (e.g. database administrators, specific technology developers, cybersecurity experts and more), which will serve as the basis for easier and better targeted planning of steps to increase the number of these professionals.



Faster procedures for employing foreign persons with the necessary ICT knowledge and skills required by Slovenian companies. We propose the establishing of **talent visas** (following the example of the United Kingdom, France, Australia, New Zealand and so on), which will encourage positive migration to Slovenia.

Design a system of vouchers for companies for prequalification and additional qualification of employees using the model of existing vouchers for digital competences, which will offer more comprehensive and greater financial support, resulting in the planned prequalification or additional qualification of the employee. We propose building on this through the stimulus of a six-month co-financing of employee wages on the part of the Slovenian Employment Service, for the duration of the pre- or additional qualification program.





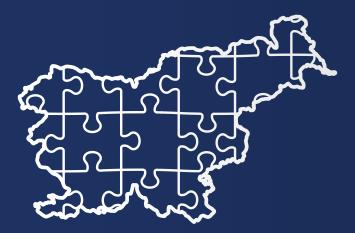
Implement a **national professional qualification** for software developers and design **additional certified programs** (e.g. data processing, artificial intelligence, cybersecurity) to be provided by companies that have obtained accreditation.

Establish a **national platform for announcing competences** in view of business sector needs in real time and a projection for the future. This will be the basis for planning steps to reduce the shortfall in the labor market.



**Establish a nationwide mentor platform** for 'soft' acquisition of new competences by existing HR in the area of ICT.





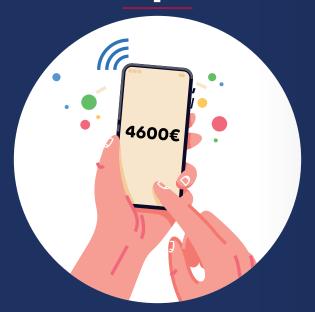
Strengthen the communication component of the national brand 'Digital. Creative. Smart.' and launch an integrated international promotion campaign for attracting ICT professionals (including students) to Slovenia.

Create a manual or guidelines for companies using ICT knowledge and competences about current EU programs and calls, aimed at supporting companies in the area of HR education and training.





Establish high-quality overarching coordination for implementing the adopted Strategy for Digital Transformation of the Economy, with the aim of effective and coordinated preparation of public calls, with clearly defined aims and effects and with an established single point for company applications.



Introduce a social - development welfare cap at 2.5 times the average gross wage, i.e. 4,600 euros gross. This would cover key professions that are drivers of development – engineers, scientists, development specialists, professors and so forth. This represents an important advance toward establishing a better business environment, and in this way toward the greater competitiveness of Slovenia.

Boost economic diplomacy in the area of attracting multinationals and other large international companies to open local branches in Slovenia, which would serve on the one hand to provide formal employment in the home environment for talented Slovenians working for these companies, and on the other hand would raise the general attractiveness of the business environment in Slovenia.



Restrict unfair competition enabled by apparent self-employment. The status of sole proprietor (s.p. in Slovenia) offers favorable tax treatment, even when it involves effectively an employment relationship. This puts companies in Slovenia at a competitive disadvantage. We support the proper practices and forms of work involving sole proprietors, as used for project work, and not to substitute for work that is effectively employment.





#### Partnerstvo za spremembe

\*18 steps were formed within AmCham's Ready 4D Future Committee, the project is part of the Partnership for Change activities. They were presented to the business public for the first time at the AmCham Business Breakfast on March 18, 2022.



Knowledge and Support

⊚abelium ∞Meta Google siemens



August 2022