

# Investor

FACTSHEET



**ICT**

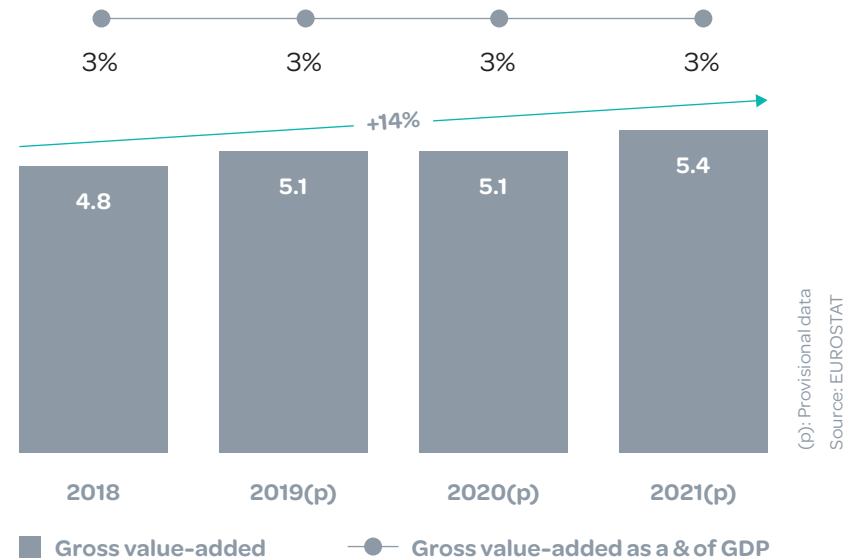
in Greece

As a result of the heightened automation and digitalization demand, both within the private and public sectors, the ICT sector now stands as one of the most critical industries of the Greek economy, following what has become a global movement boosted by the pandemic. Overcoming its previous stagnation, Greece has recently made significant gains towards digital transformation. The public and financial services sectors underwent the most radical digital transformation, while investment in these sectors has attracted the greatest interest of the Greek ICT companies, with sectors of wholesale and retail trade, education, tourism, health services, supply chain and energy supplementing the list of sectors that were severely digitally disrupted.

Exploiting this momentum, Greece has built the “Digital Transformation Bible”, a robust plan to achieve the country’s full digitalization by 2025, which includes transformative projects related to the 5G and fiber optic infrastructure, the digitization of the Greek state, from digitization of public administration services to development of smart cities and upskilling of the workforce. Leveraging this digital revolution, the field of ICT in Greece possesses all the maturity characteristics of know-how, human resources, and geostrategic position between the East and the West to become one of the intangible comparative advantages of the country, attracting significant investments going forward.

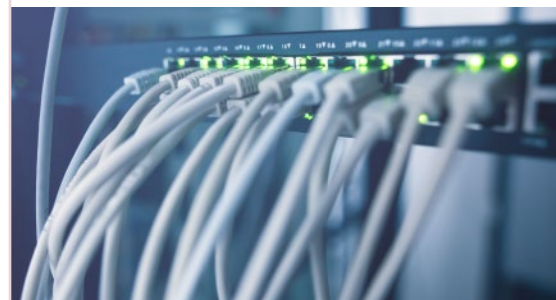
## State of Play

### ICT Industry Gross Value-Added (in € bn. and as a % of GDP)



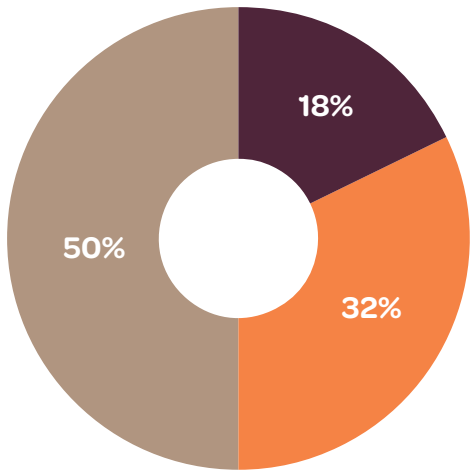
The Greek ICT Sector is considered a strategic national contributor for the economy, as the industry’s Gross Value Added (GVA) approximated €5.4 bn. in 2021 (3% of total GDP).

The sector’s GVA demonstrated an upward trend within the 2018-2021 period, while its contribution to GDP remained constant during the COVID-19 pandemic, proving its resilience and importance for the Greek economy.

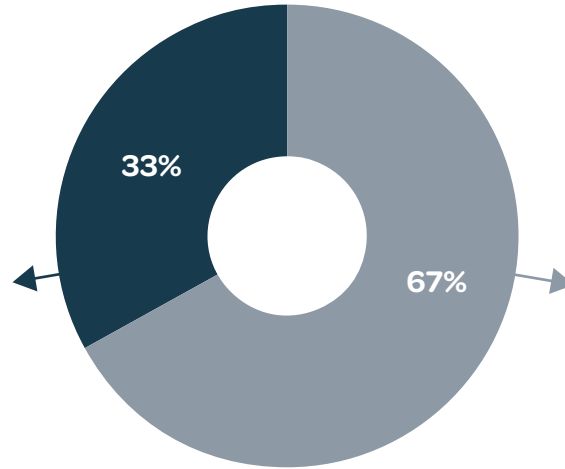


## ICT Sector Value Breakdown by Industry (2021, %)

### Information & Communication Industry Breakdown

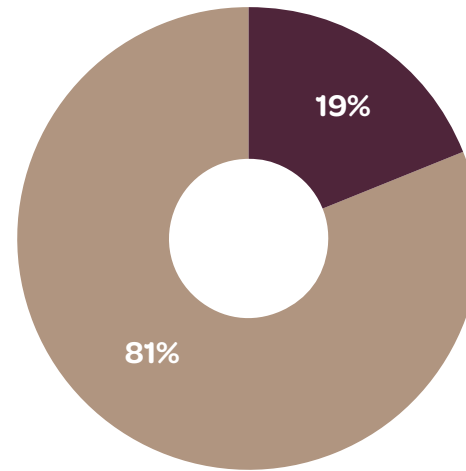


- Equipment
- Services
- Software



- Information & Communication
- Telecommunications

### Telecommunications Industry Breakdown

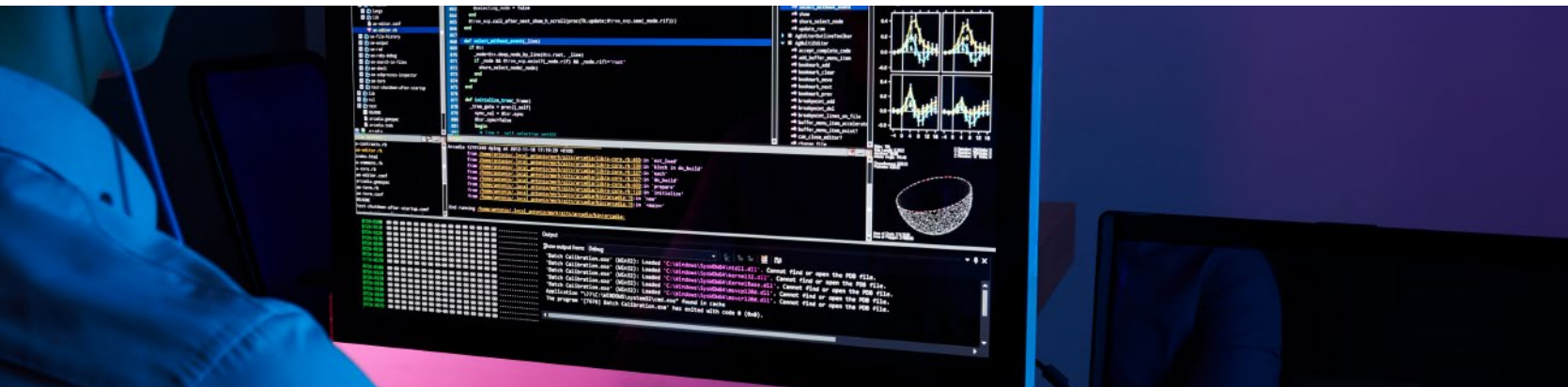


- Equipment
- Services

The Telecommunications sub-sector historically accounts for 2/3 of the total ICT market value in Greece, mainly driven by services (~81% in 2021). On the other side, Information & Communication sub-sector, accounting for 1/3 of total value, is mainly represented by ICT services (~50% in 2021).

The need of Greek businesses to keep up with their European and international competitors in terms of digital maturity through investments in IT Services has clearly not been reversed from the pandemic. Instead, it has become even more intense under the current conditions created by COVID-19.

Source: EITO, SEPE International ICT Market Report 2020/2021



## Why Greece

Greece has become an appealing destination for investors around the globe, who wish to invest in ICT-related opportunities in Greece, mainly thanks to:

- Developed ICT infrastructure
- Established ground for ICT investments
- Skilled human capital and high research capabilities
- Flourishing start-up ecosystem
- Strategic location
- Export potential of ICT services
- Government reforms and incentives
- Favorable tax rates

### Developed ICT infrastructure

Greece possesses developed ICT network and infrastructure, which can facilitate smooth and **reliable ICT operations**, as demonstrated by the below indices:



**ICT Access Index:** According to Global Innovation Index 2021, Greece ranked 21st in ICT access out of a total of 132 countries. ICT access is assessed in terms of fixed telephone subscriptions, mobile cellular telephone subscriptions, international internet bandwidth, percentage of households with computer and percentage of households with internet access.



**ICT Use Index:** According to Global Innovation Index 2021, Greece ranked 35th in ICT use out of a total of 132 countries. The index covers percentage of individuals using internet, fixed broadband internet subscriptions and active mobile broadband subscriptions.



### Software spending (% GDP):

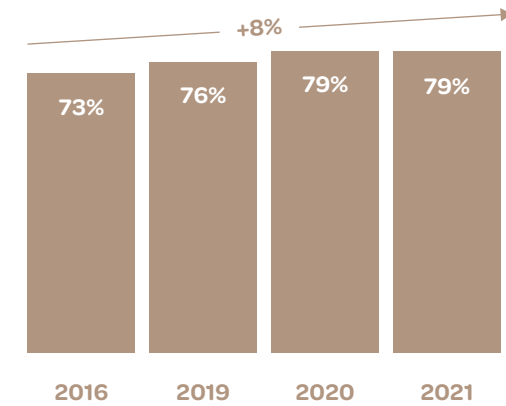
According to Global Innovation Index 2021, Greece ranked 10th in computer software spending out of a total of 132 countries. This includes total value of purchased or leased packaged software, such as operating systems, database systems, programming tools, utilities, and applications, excluding expenditure for internal and outsourced custom software development.



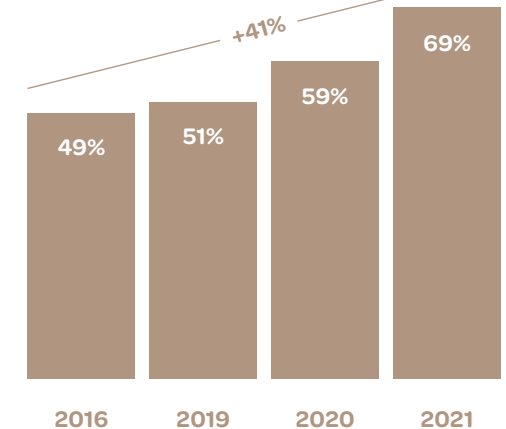
**5G Access:** Greece aims for its 5G networks to reach at least 60% of the population by 2023, and 94% by 2026. Greece was one of the first three countries of the EU to complete the auction process of frequencies for the operation of 5G.

Driven by enhanced infrastructure, there is significant potential for **further penetration** of ICT services **into the local market**, as increased demand for internet and electronic transactions by consumers can in turn trigger increased demand for ICT service providers.

### Internet Users (% of total population)



### E-shoppers (% of internet users that bought goods or services online)



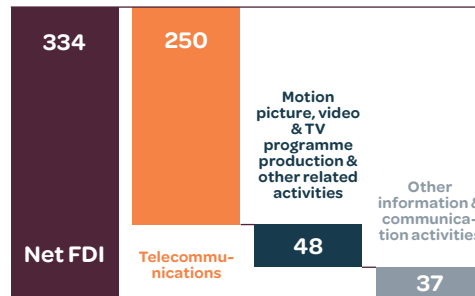
Source: SEPE – European E-commerce Report, 2022, EUROSTAT

## Established ground for ICT investments

In 2021, the ICT sector in Greece ranked 6th out of 19 economic sectors in terms of FDI attractiveness (7% of total net FDI), with telecommunications capturing most of the investment interest (75% of sector's net FDI flows).

In the 2019-2021 period, the sector's net FDI more than tripled, from €93 mn. in 2019 to €334 mn. in 2021 (at a CAGR of +89%).

### ICT Net Foreign Direct Investment in Greece (2021(p), in € mn.)



Source: ELSTAT

The past few years, multinational firms are offering a vote of confidence in the Greek ecosystem, with international top tech- and other- players heavily investing in data centers and R&D activities in Greece. Building on this momentum, Greece is slowly becoming a European data and R&D hub.

Some indicative examples of key players having already penetrated the Greek market with heavy investments in the aforementioned areas are:

Following the acquisition of Lamda Hellix, **Digital Realty** launched the construction of the Athens 3 data center in Koropi.

**Microsoft** announced its "GR for Growth" initiative, which includes the development of 3 data centers in Attica region and a plan to skill approximately 100K Greek people in digital technologies by 2025.

**Pfizer** announced the development of a second digital hub in Thessaloniki in December 2020.

**Amazon** launched a Web Services center in Greece.

Other names indicatively include CISCO and SAP. Besides, several international consulting firms, such as Deloitte and Accenture, have set up competence / excellence centers in Greece to serve as hubs for the development of next generation innovation services and talent.

Furthermore, major M&A deals have taken place within the ICT sector in Greece with the recent acquisition of **WIND Hellas Telecommunications** by **United Group BV**, shaking the status quo in the sub-sector. Another significant deal within the ICT sector was the acquisition of **INTRASOFT International** by **Netcompany Group** that took place in 2021. All these major deals prove the continuous interest of foreign investors towards the Greek ICT market.

### Key Investment and M&A Opportunities



Data centers



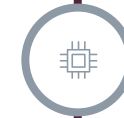
R&D activities



B2B Cloud Services



Call Centers / Service Centers



Assembly and distribution of ICT devices



Smart cities



Information Security Services



Software Development

## Why Greece

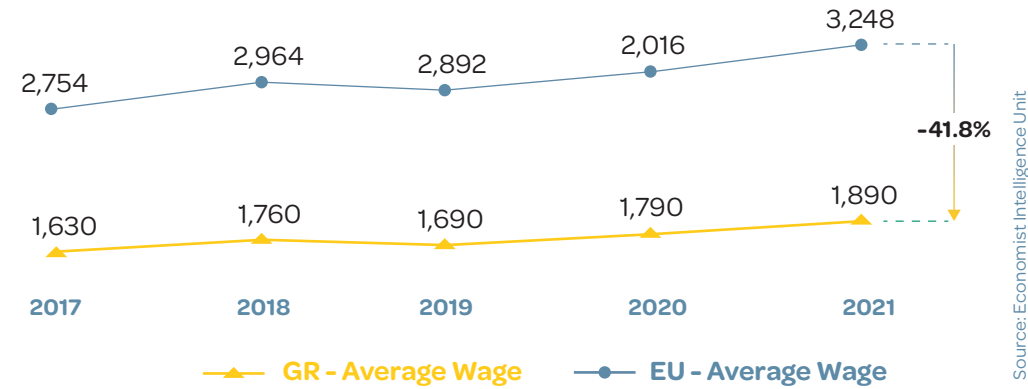
### Skilled human capital and high research capabilities

Overall, Greece is scoring in the **16th** place (out of 132 countries) in Human Capital & Research dimension of the Global Innovation Index for 2021, which consists of three key elements: a) education (13th place), b) tertiary education (1st place) and c) R&D (34th place).

A multitude of universities offering disciplines related to computer science, engineering, mathematics, or statistics allow the local ICT sector to source talent efficiently.

- 74 BSc degrees specializing in computer science, engineering, mathematics, or statistics
- 49,373 actively enrolled students (4-7 years) and 5,710 graduates from BSc degrees specializing in computer science, engineering, mathematics, or statistics in 2019/20
- 10,262 enrolled students in MSc degrees specializing in computer science, engineering, mathematics, or statistics.

### Monthly Average Gross Wage, in \$



The abundance of **highly educated human capital** is aligned with the existence of high-quality universities in the country. Human talent can furthermore be attracted at **competitive labor rates** in relation to EU peers, as a result of the adverse effects of the debt crisis of the past decade. Specifically, minimum monthly wage in Greece is at €832, which is 17% less than EU average (€1,003). At the same time, the difference in average wage between Greece and the EU is constantly growing. Forecasts are indicating a similar future trend, which is expected to slow down due to the late effect of unemployment reduction.

Besides, recent legislation has transformed the labor market, by

adding flexibility, expanding allowed overtime, and governing teleworking (introduction of digital card) amongst others.

In addition to its competitive human capital, Greece possesses well-reputed **research institutions**, such as the National Centre of Scientific Research "Democritus" and the Center of Research and Technology Hellas (CERTH) among others, as well as an extensive network of **science and technology parks** that can foster **research activities** in various sectors of the economy.

Thus, Greece offers a **unique combination of highly skilled, cost-effective workforce with established research capabilities** that makes the country attractive to potential ICT investors.

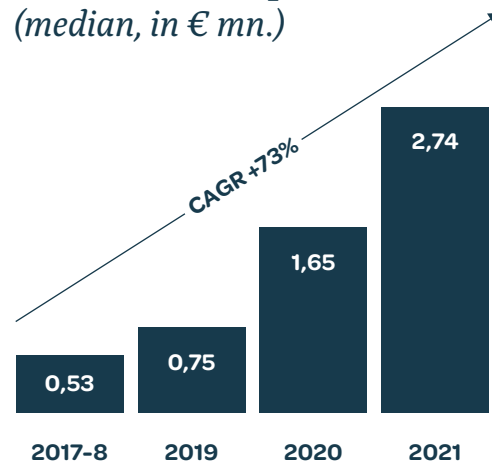
## Flourishing start-up ecosystem

The startup ecosystem in Greece, which is mainly comprised of companies that facilitate digital transformation through the use of innovative technological solutions, is **growing** and has been recently **attracting higher investments**.

In 2021, Greek startups received increasing European attention, with the funding exceeding €500 mn. in total. Furthermore, participation of non-Greek investors rose remarkably to 84.9%, validating the development of the local ecosystem and creating the ground for more extroversion.

In parallel, the Greek state has put into implementation multiple **initiatives** to support further expansion of the Greek start-up ecosystem, ranging from the creation of a National Start-up Registry (Elevate Greece) to the provision of tax incentives and funding opportunities.

### Total investment per round (median, in € mn.)



Source: FOUND.ATION, EIT Digital

### Funding Opportunities

- **EquiFund** initiative has helped in the creation of new Venture Capital funds in Greece with over €210 mn. to invest in startups that fall under the Innovation and Early-Stage windows (€136 mn. and €82 mn. respectively). Approximately 80% of the initial capital available for the Innovation and Early-Stage windows has been invested so far. Besides, three funds were selected to handle investments of over €230 mil. in the Growth Stage window.



### Collaboration Opportunities

The expansion of the Greek start-up ecosystem is also supported by potential collaboration with research & academia as well as numerous **incubators** that provide support to early-stage startups, helping them to grow and receive their first seed funding and **accelerators** that provide mentoring, pitching events, or even access to capital and markets to more mature start-ups.

- Furthermore, the Greek start-up ecosystem has captured the attention of **international investment** funds, such as Index Ventures, Andreessen Horowitz, CVC Capital Partners, etc., while during the past few years multiple industry global leaders have proceeded with the acquisition of Greek scale-ups (e.g., JP Morgan acquired 49% of Viva Wallet's shares in 2022 for more than \$1 bn., Microsoft acquired Softomotive in 2020, etc.).

- Another source of funding for the Greek start-ups derives from the **European resources**, such as Recovery and Resilience Facility (RRF) and Horizon Europe, which are gradually flowing in the system.
- Furthermore, in 2020, the Greek government unveiled the creation of **Phaistos Investment Fund**, a mega fund that operates under public-private partnership scheme. The fund had an initial capital of €93 mn., derived from 25% of proceeds from the auction of the country's 5G licenses. Its exclusive objective is to invest in startups and businesses engaged in the development of 5G-related solutions.

## Why Greece

### Strategic location

Greece is strategically located as it is part of Europe and can act as the connection point with both Asia and Africa.

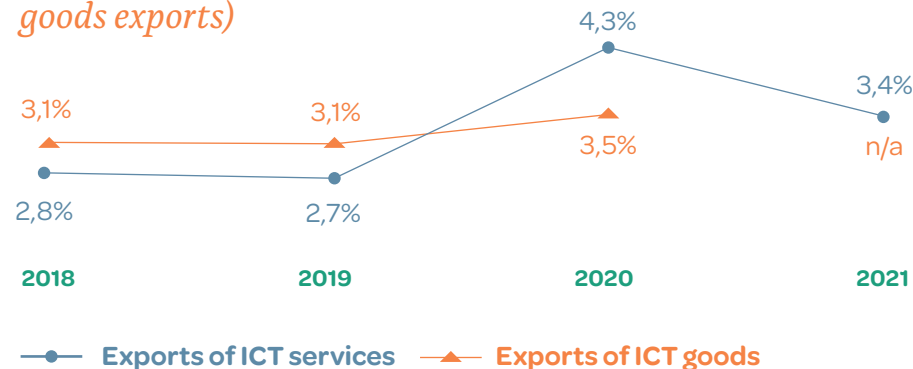
Its location constitutes a potential competitive advantage that can support the **establishment of central ICT-related operations** of various purposes in the country, ranging from data centers and innovation hubs, as already mentioned, to distribution- and/or assembly- facilities for ICT services and equipment.

### Export potential of ICT services

Driven by skilled human capital, in combination with the geostrategic position of the country, the Greek sector has demonstrated an overall **steady upward trend** in terms of exports of ICT services and goods (as % of total exports of services and goods) within the 2018-2021 period.

As skilled workforce can be attracted at relatively low cost, **ICT services providers** are particularly **well-positioned** to offer quality services at competitive prices to B2B clients abroad, with focus on Western and eastern European countries.

### ICT Services / Goods Exports (2018-2021, as a % of total services / goods exports)



### Government reforms and incentives

Through the Recovery and Resilience Fund (RRF), Greece has secured a significant amount of funding to implement the proposed investments and reforms of the National Recovery and Resilience Plan (**RRP – Greece 2.0**) in selected sectors.

The Greek RRP is constituted by ~€18.4 bn. in grants, to be invested in upgrading public infrastructure and reforming the Greek economy, as well as ~€12.7 bn. in loans, to be invested in the private sector. Overall, the Greek RRP is expected to grow the Greek GDP by 7% by 2026, create 180,000 new jobs and increase private investments by 20%.

Alongside Green Transition, **Digital Transformation** is one of the two main pillars of Greece's RRP, including Components 2.1 Connect, 2.2 Modernize, and 2.3 Digitalization of businesses. Resources allocated to this Pillar reach a total grants budget of ~€ 2.2 bn., excluding loans and mobilized investments.

Furthermore, a series of **innovation incentives and mechanisms** have been introduced in the past few years to elevate the attractiveness of Greece as an investing destination, such as Development Law, Strategic Investments, R&D Tax Superdeduction and Patent Box.

Source: Greece 2.0.

### Favorable tax rates

Finally, a tendency towards tax rationalization is demonstrated by the recent reduction of the **corporate income tax** rate from 24% to **22%** (effective as of 2021), while social security contributions were also reduced by 3% and are expected to decrease further.