Everest Group®
RESEARCH

Thematic Report | Locations Insider™, Engineering Services

Leading European Locations for Global Delivery of Engineering Services

October 2020: Complimentary Abstract / Table of Contents

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- Accelerators™
- Analyst access
- Data cuts
- Pinnacle Model® reports
- PriceBook
- Virtual Roundtables
- Workshops

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- Benchmarking | Pricing, delivery model, skill portfolio
- Peer analysis | Scope, sourcing models, locations
- Locations | Cost, skills, sustainability, portfolio – plus a tracking tool
- Tracking services | Service providers, locations, risk
- Other | Market intelligence, service provider capabilities, technologies, contract assessment

Membership information

- This report is included in the following research program(s)
  – Locations Insider™, Engineering Services
- If you want to learn whether your organization has a membership agreement or request information on pricing and membership options, please contact us at **info@everestgrp.com**

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Background and objective

Background

In recent years, engineering services has experienced steady growth across enterprise spend as well as global sourcing. Enterprises continue to invest in emerging technologies (such as AI, blockchain, nanotechnology, and 5G) to combine them with traditional engineering areas, in order to create connected and intelligent products and new enhanced services/operations. Hence, it is imperative for GBS organizations and service providers to augment enterprises in this journey and continue introducing new avenues in the services delivery construct in a sustained manner.

In order to remain competitive, both GBS organizations and service providers need to continually review their location strategies and develop a delivery portfolio that aligns with the blueprint of their present day "go-to-market" agenda. Engineering services (especially product and next-generation engineering) delivery requires a more regional approach, owing to the need for products to be more personalized and "local." Offshoring is gradually shifting toward nearshoring owing to rising demand for customer, geographical, and cultural proximity. Europe provides a strong multi-lingual workforce, comfortable time zones (similar to buyer geography), skilled next-generation professionals, favorable operating and business environment, and all that in a nice package of affordable pricing policy.

This report provides a comprehensive view of leading locations across Europe that are the "hotspots" for supporting global delivery of engineering services.

Objective

This report by Everest Group aims to support market players in their quest to identify the right locations in Europe for supporting their engineering services delivery and thereby answer some of the key questions such as:

- Does the location offer a sizable talent pool to drive engineering services delivery?
- What is the market maturity and competitive intensity offered by the location?
- Will the location fit the global sourcing budget without significantly impacting the total cost of operations?
- Does the location offer favorable business and operating environment to function effectively?
- Based on current talent-cost-risk dynamics, what are the potential locations that can be further assessed?

This report focuses exclusively on the engineering services global sourcing industry (which includes Global Business Services (GBS) organizations and service providers); the analysis excludes assessment of enterprises and all domestic (in-country) operations. However, for Western European countries (Ireland, Portugal, Scotland, and Spain), we have also included global engineering services enterprises (excluding any domestic operation), since these locations offer higher concentration of enterprises as compared with GBS organizations and service providers.

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Scope and coverage

The report focuses on delivery of engineering services

Three clusters with specific functional focus areas have been chosen for this assessment. These clusters represent different competency areas and skill families within the engineering services domain

Cluster	Competency areas / skills family
Software	• Software development – includes software products and application development, mobile applications, database programming, API management, microservices, and DevOps/Agile enablement • Quality assurance – includes functional and unit testing, security testing, performance testing, enterprise application testing, and test data management
Embedded	• Semiconductor – includes Hardware Description Languages (HDLs) and IC design/simulation/testing • Embedded hardware – includes PCB schematics/simulation/design and V&V • Embedded software – includes programming, operating systems, Digital Signal Processing (DSP), model-based design, and software testing
Mechanical	• Plant engineering • Product design (CAD) • Material modeling • Computer Aided Manufacturing (CAM) • Multi-Body Dynamics (MBD) • Computational Fluid Dynamics (CFD) • Mechanical V&V • Finite Element Analysis (FEA)

13 delivery locations in nearshore Europe have been prioritized for assessment (based on market maturity for global delivery of engineering services)

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Key implications for market players

Market insights	Traditional principles of location selection need to be revised	Talent availability is gradually becoming the differentiating factor given increasing demand for niche skills	Increasing cost and margin pressures will lead to increase in nearshoring and offshoring
Implications for players	• Companies need to assess both the traditional and the next-generation (such as AI, blockchain, nanotechnology, and 5G) engineering demand while identifying the best-fit location for augmenting their engineering services delivery portfolio • The right location should offer depth and breadth of maturity across multiple engineering segments, a vibrant start-up ecosystem, agile academic institutions, tech-savvy government, modern technology infrastructure, and friendly regulatory environment	• Institutionalize upskilling and reskilling initiatives as new technologies (e.g., self-driving cars, connected vehicles, and unified communication) have started impacting the traditional engineering segments • As demand for engineering talent scales up, companies will need to shape their talent ecosystem such as engage with academia to mold education systems, collaborate with start-ups and niche service providers to diversify access to talent, and drive collaboration with R&D labs and institutes to promote innovation	• Enterprises can optimize the engineering spend by leveraging global sourcing construct, especially in areas where GBS organizations and service providers have built specific capabilities (e.g., product lifecycle management, digital innovation) • GBS organizations and service providers can leverage their offshore/nearshore presence to develop cost-effective specialized capabilities across ER&D segments, thereby helping enterprises to channelize the cost savings to generate greater avenues for driving next-generation and niche product engineering

Source: Everest Group (2020)

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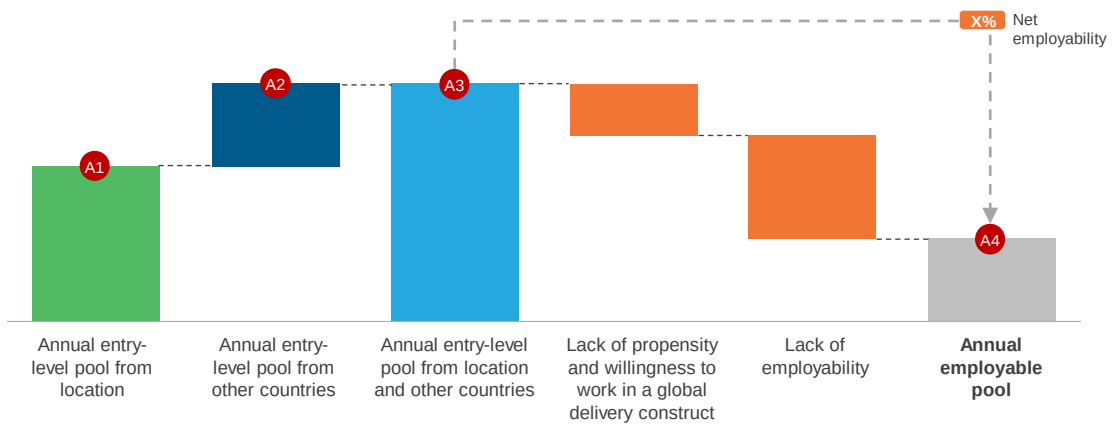
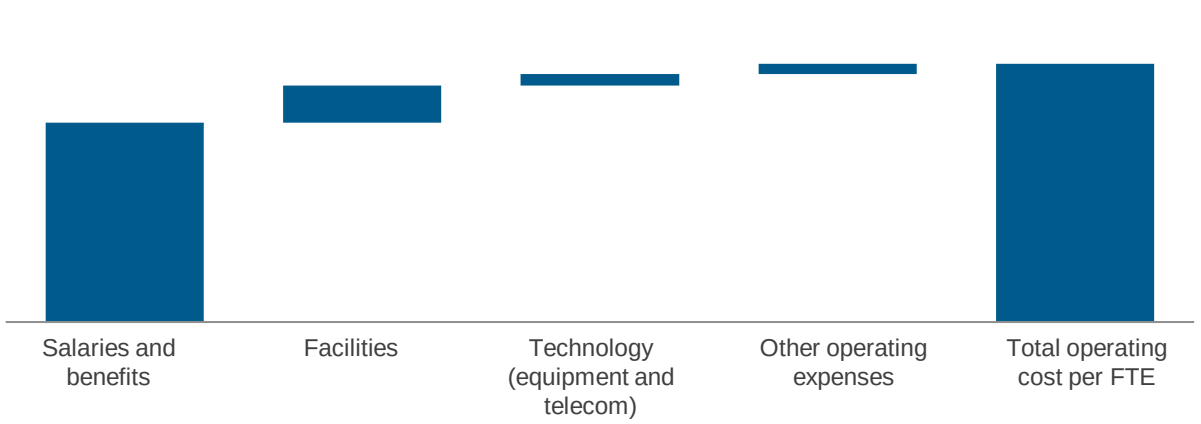
This study offers a deep dive into key aspects of leading European locations for engineering services market; below are four charts to illustrate the depth of the report

Annual employable entry-level talent pool



Fully loaded annual operating cost per FTE



Operating and business environment

Highly favorable | Favorable, some concerns | Least favorable

Country	Fundamental enablers for engineering services delivery (overall) 2020; Rating	Risk assessment (overall) 2020; Rating	Operating and business environment (overall) 2020; Rating
Bulgaria			
Czech Republic			
Estonia			
Hungary			
Ireland			
Lithuania			
Poland			
Portugal			
Romania			
Scotland			
Slovakia			
Spain			
Ukraine			

Parameters used to evaluate overall risk

General infrastructure quality	Safety and security	Geopolitical stability	Macroeconomic stability	Regulations and ease of doing business	Digital readiness	Quality of life
Availability of general infrastructure	Security risk	Risk of political instability	Macroeconomic indicators	Legal and regulatory frameworks	Cybersecurity risk	Nutrition levels and life expectancy
Quality of telecom infrastructure	Threat of disruption from natural disasters	Threat of external intervention	Financial risk	Strength of IP protection laws	Data security risk	Access to essential & quality medical care
Availability of IT/BP real estate	Business costs of crime and violence	State of democracy	Country debt risk	Ease of doing business	Adoption of digital services	Literacy rates and school enrollments
Quality of power infrastructure		Corruption levels		Stringency of labor laws	Quality of technology infrastructure	Access to advanced education
					Level of innovation	Environment quality and air pollution

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Research calendar – Locations Insider™

Published | Planned | Current release

Flagship Locations Insider™ reports	Release date
Location Spotlight – Romania	October 2019
Location Spotlight – Israel	October 2019
Location Spotlight – Trivandrum, India	October 2019
Location Spotlight – Vietnam	February 2020
Global Locations Annual Report 2020	March 2020
Location Spotlight – Bulgaria	April 2020
Location Spotlight – Indonesia	April 2020
Location Spotlight – Slovakia	May 2020
Location Spotlight – Georgia	June 2020
Location Spotlight – Guatemala	June 2020
Location Spotlight – Wuxi, China	August 2020

Thematic Locations Insider™ reports	Release date
Global Handbook – Focus on Language Skills Availability Across the World	November 2019
Cloud Handbook – Talent Guide to Cloud Skills Across the Globe	June 2020
Engineering Services Skills Handbook: Preparing for the Next Wave of Growth in Global ER&D	July 2020
Leading European Locations for Global Delivery of Engineering Services	**October 2020**

Note: For a list of all our published Locations Insider™ reports, please refer to our website page

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Research calendar – Engineering Services

Published | Planned | Current release

Flagship Engineering Services reports	Release date
Verification and Validation (V&V) Engineering Services PEAK Matrix® Assessment 2020: Enhancing Brand Assurance Through Intelligent and Integrated Quality Engineering	February 2020
Digital Engineering: An Opportunity Unparalleled	February 2020
Engineering Services Skills Handbook: Preparing for Next Wave of Growth in Global ER&D	July 2020
Industry 4.0 Services PEAK Matrix® Assessment 2020	Q2 2020
Semiconductor Engineering Services PEAK Matrix® Assessment 2020	Q3 2020
Digital engineering services PEAK Matrix® Assessment 2020	Q3 2020
Software Product Engineering Services PEAK Matrix® Assessment 2020	Q4 2020

Thematic Engineering Services reports	Release date
Engineering R&D (ER&D) in 2020: Who Will Move My Cheese?	February 2020
The Future of Mobility – on the Cusp of the Electrification Revolution	May 2020
A Framework-driven Approach for Verification and Validation (V&V) of IoT Systems	May 2020
Engineering for the 5G World	June 2020
Leading European Locations for Global Delivery of Engineering Services	**October 2020**
Trends in the Top 200 Engineering Research & Development (ER&D) Enterprises	Q3 2020
Digital Twins and their Adoption Across Industries	Q4 2020

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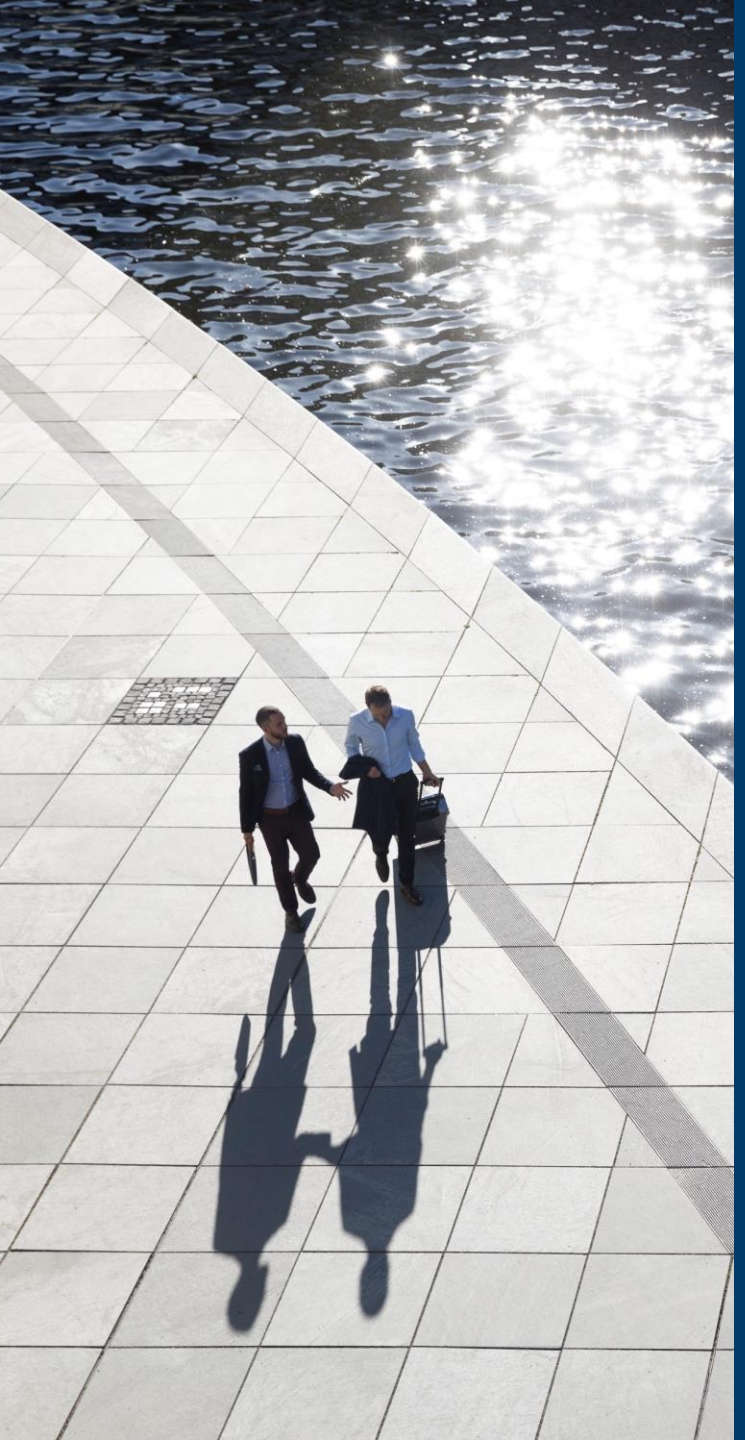

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