

Press Release Under embargo until 12:01 am, 26 June 2025

DE-CIX study reveals Top 10 Digital Capitals in the world: Frankfurt, Germany, ranks Number 1

Frankfurt (Germany), 26 June 2025. Frankfurt, Germany, is the Digital Capital of the world, with an unparalleled combination of very high-density digital infrastructure and the largest interconnection ecosystem of any city on the planet. This is one key finding from a new independent <u>study</u> by the Dstream Group published today. Commissioned by DE-CIX, the world's leading Internet Exchange (IX) operator, today's publication of the study coincides with the 30th anniversary of the company's first IX, DE-CIX Frankfurt. In addition to benchmarking and ranking the world's Top 10 Digital Capitals, the study presents a comprehensive analysis of the economic value of Internet Exchanges, demonstrating that DE-CIX Frankfurt, the largest IX in Europe, contributes close to 4 billion Euros annually to the German national economy through optimizing the performance of digital services and increasing the resilience of company networks.

The Top 10 Digital Capital Ranking

Starting with a pool of more than 30 of the world's most significant digital infrastructure hubs, the Dstream Group's analysis benchmarked the top ten locations globally, dubbed Digital Capitals, and ranked them as follows:

Frankfurt
Amsterdam
London
Washington D.C. (incl. Ashburn & Reston)
Paris
Singapore
Tokyo
Bay Area (incl. San Francisco & Silicon Valley)
Hong Kong
New York

The analysis investigates the infrastructure categories Internet Exchanges, data centers, connectivity infrastructure, and networks, and the German city of Frankfurt takes the number one position. With 20 flourishing Internet Exchanges and 200 terabits of connected port capacity across the city, 2,500 unique networks and the most highly interconnected data center landscape in the world, Frankfurt is peerless within the global interconnection landscape.

"Frankfurt has emerged as the world's Digital Capital in 2025 — a title earned through decades of investment in digital infrastructure. With the world's most powerful interconnection hub at its core, the city now leads the way in shaping how the global Internet connects, grows, and creates value," comments co-author of the study, consultant Serge Radovcic of the Dstream Group, on the findings. According to Radovcic, certain cities achieved top rankings for one specific infrastructure area – such as the Washington D.C. metropolitan region (including Ashburn, Virginia) for data centers or Singapore for connectivity infrastructure – while other cities achieved high placements on several criteria. London, for example, achieved good results for both IXs and data centers. However, Frankfurt was the only city to score high rankings in three categories: the top position in IXs (shared with Amsterdam) and networks, and second position in data centers.

Internet Exchanges – the hidden champions of the digital economy

Using DE-CIX Frankfurt as a basis, the authors also looked into the economic impact of peering – or the direct interconnection of networks – via an Internet Exchange. "Internet Exchanges allow for the optimization of data flows, making networks not only more resilient, but also reducing latency and increasing stability. In this study, we wanted to quantify the positive impact of IXs – as the hidden champions of digital infrastructure – on business in general. As far as we know, this is the first analysis of its kind to be undertaken," Radovcic explains.

The analysts calculated the market share of the IX for carrying data flows of both end users and businesses in Germany. This was combined with KPIs in economic domains that can be enhanced by network optimization, such as the cost of network outages, the impact of latency (network delays) on e-commerce revenues, and the impact of latency, network stability, and predictability on the success of cloud projects. For each domain, calculated on a German national level, the proportional added value generated by resilient, stable, and low latency network interconnection over an Internet Exchange, compared to other connectivity solutions, was estimated. The results show a direct economic contribution of DE-CIX Frankfurt of more than €3.7 billion per year to the national German economy.

"I'm delighted to be able to present the results of this new independent study, showing the importance of Frankfurt for global Internet traffic and demonstrating the importance of Internet Exchanges to our digital economy," commented Ivo Ivanov, CEO of DE-CIX, on the release of the study. "Without high-performance and resilient digital infrastructure there can be no digital development. This is becoming increasingly clear with the latest advancements in artificial intelligence, driving innovation in areas like e-health, the financial sector, production, autonomous vehicles, and even humanoid robots. The future will demand even greater density

of digital infrastructure and more Digital Hubs and Capitals to meet the requirements of the next wave of digital evolution. But the city of Frankfurt will continue to shine as the world's most important aggregation point for digital infrastructure – the powerhouse of interconnection."

A combination of research using raw data from publicly available sources, the collation of published data from respected industry sources such as PeeringDB and Euro-IX, and the results of expert interviews were used for the benchmarking and calculations. The benchmarking takes around 30 indicators into account and evaluates the opportunities and obstacles of the respective locations with regard to the status quo of networks, data centres, connectivity, and Internet Exchanges. The full methodology can be found in the study, "Frankfurt: The Digital Capital – Internet Exchanges as a success factor for digital ecosystems & economies", which can be downloaded here: https://www.de-cix.net/en/resources/white-papers/digital-capital-frankfurt

###

About DE-CIX

DE-CIX, pronounced DEE-KICKS [d'i:-k'xks], is the world's leading operator of Internet Exchanges (IXs). Founded in 1995, the company is celebrating its 30^{th} anniversary in 2025. DE-CIX offers its interconnection services in 60 locations in Europe, Africa, North and South America, the Middle East, and Asia. Today, accessible from data centers in over 600 cities world-wide, DE-CIX interconnects thousands of network operators (carriers), Internet service providers (ISPs), content providers and enterprise networks from more than 100 countries, and offers peering, cloud, and other interconnection services. DE-CIX Frankfurt is one of the largest Internet Exchanges in the world, with a data volume of over 45 Exabytes per year (as of 2024) and close to 1100 connected networks. Close to 250 colleagues from over 35 different nations form the foundation of the DE-CIX success story in Germany and around the world. Since the beginning of the commercial Internet, DE-CIX has had a decisive influence – in a range of leading global bodies, such as the Internet Engineering Task Force (IETF) – on co-defining guiding principles for the Internet of the present and the future. As the operator of critical IT infrastructure, DE-CIX bears a great responsibility for the seamless, fast, and secure data exchange between people, enterprises, and organizations at its locations around the globe.

Media Contact DE-CIX:

Judith Ellis, Nils Klute, Elisabeth Marcard, Viola Schreiber, Robert Stotzem, Emil Suhrab & Carsten Titt – Global Public Relations – Telephone: +49 (0)69 1730902 130 – Email: media@de-cix.net