

BCO Network WEBseries 17

Evolving backbone needs – the growth of data centers

09 December 2025

Speakers:

Matthias Plötzke, German Datacenter Association

Michael Ritter & Stephan Wanke, Colt



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Save the date

2026 BCO Network

In-Country Workshop

Prague, Czech Republic

11-12 June, 2026

Registrations open

Send an email to: sofia.profico@broadbandeurope.eu



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Our Next Workshops

16 December 2025

OPEN EVENT - How to fill the digital gap: two successful examples of broadband deployment in remote areas

ERMES and FTTH Gigabit Access Network Deployment in ultra-rural areas in Castilla Y Leon projects



Survey opens on the future of the Digital Decade Policy Programme

Please find the Public Consultation [here](#)



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GERMAN
DATACENTER
ASSOCIATION

Evolving Backbone Needs – the Growth of Data Centers

9 December 2025, BCO NETWORK WEBSERIES 17

GERMAN DATACENTER ASSOCIATION

BACKGROUND

The Association

- founded in 2018
- GDA-headquarters in Frankfurt
- Capital representation office in Berlin

Membership development

2020: 14 Members

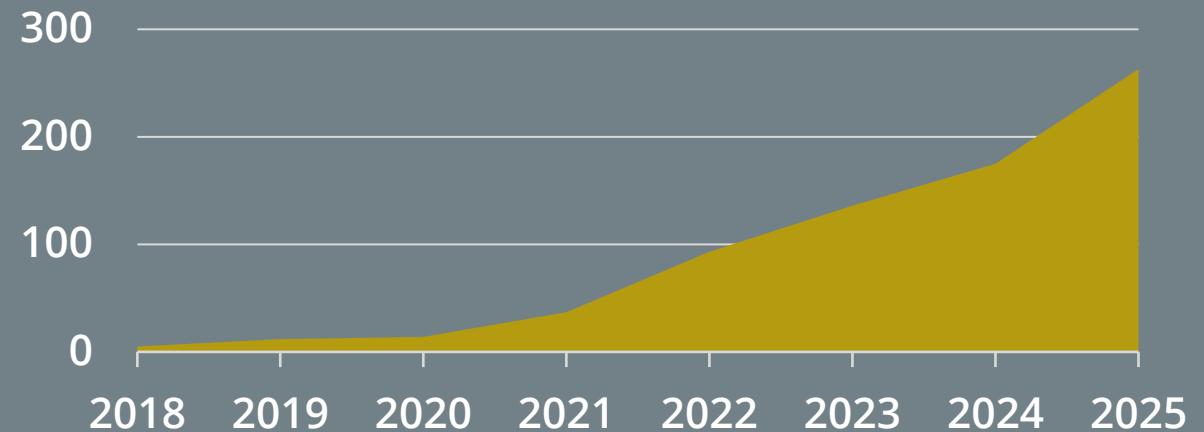
2021: 37 Members

2022: 93 Members

2023: 136 Members

2024: 175 Members

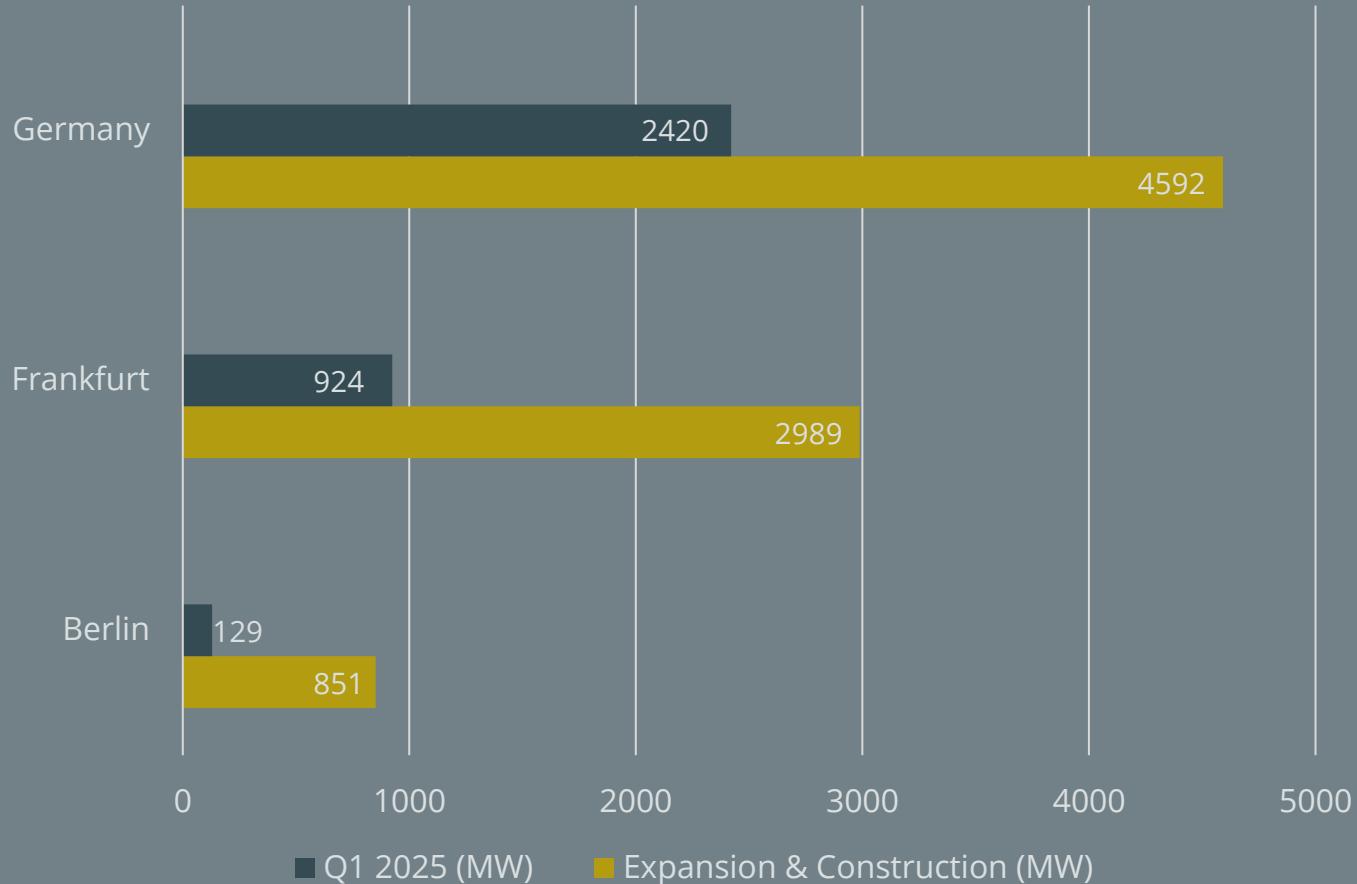
2025: 263 Members



IT CAPACITY GROWTH IN GERMANY

Breakdown

- Germany's data center market (sites > 50 kW) is expected to grow to roughly 4.6 GW by the end of 2030 (with the actual figure likely higher).
- Frankfurt is projected to locate about 65% of this capacity.



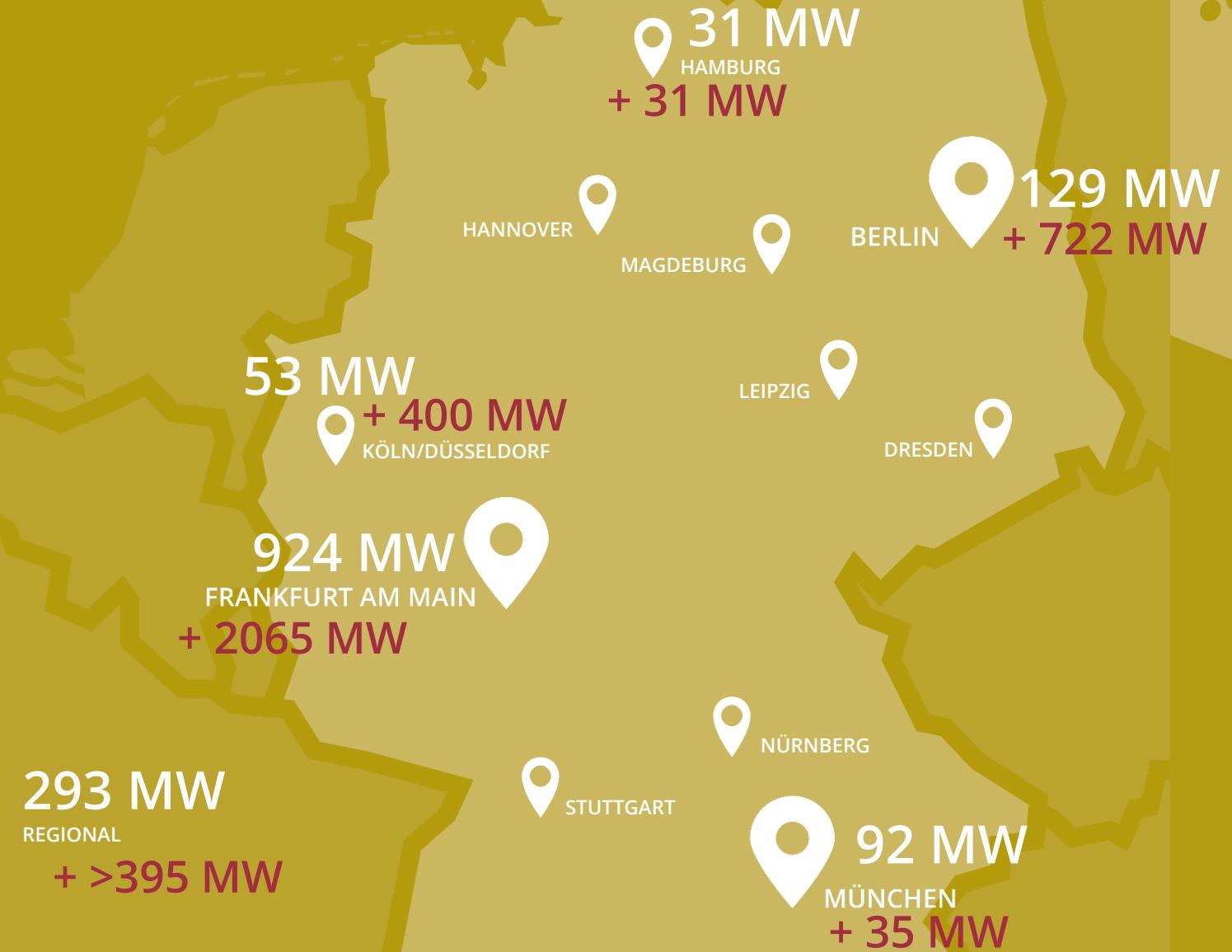
THE GERMAN MARKET



 **2,420 MW**
IT capacity > 50 kW
(as of January 1, 2025)

 **38.4 bn.**
Investment by 2030

Source: Forecast GDA, Q3 2025

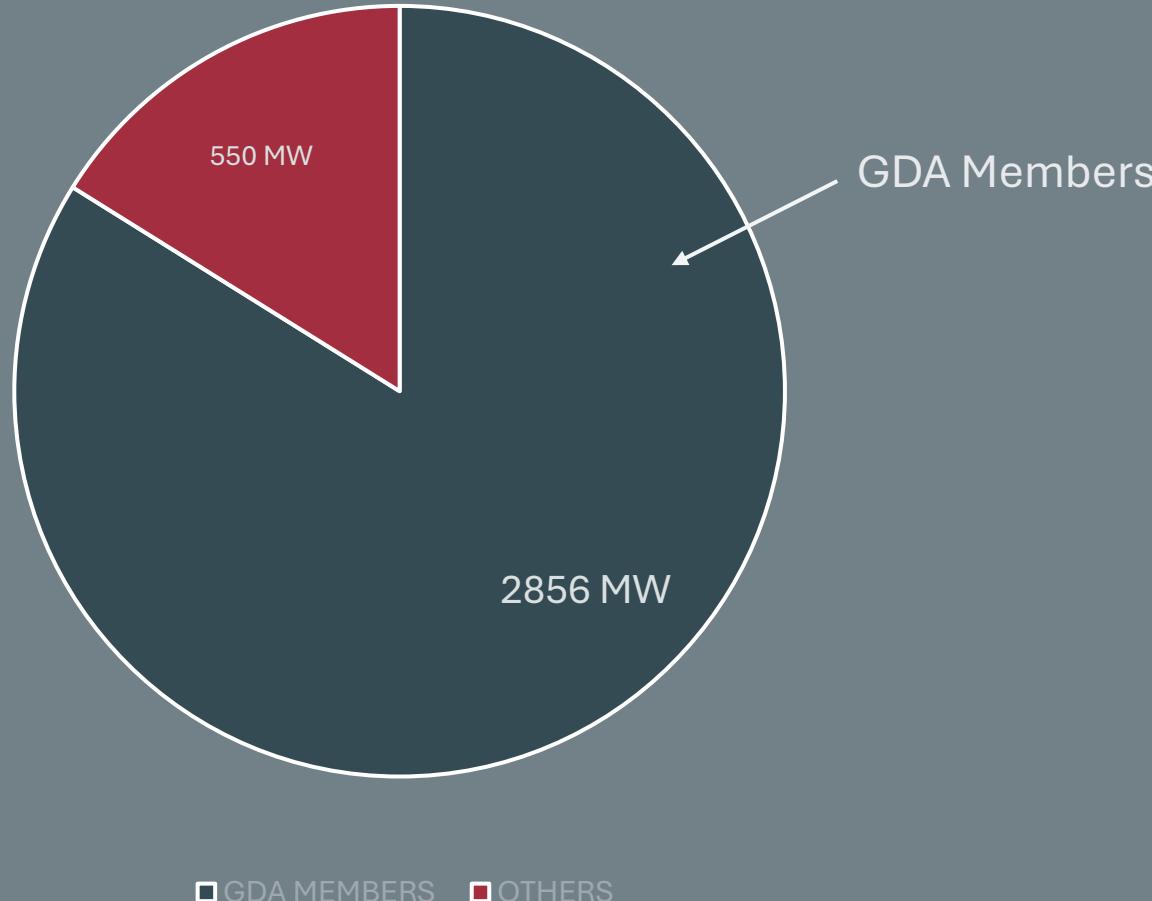


Market capacity & GDA members

BY END OF 2030

Breakdown

- GDA members represent ca. 80% of colocation and hyperscale capacity >300 kW in Germany by end of 2030
- Importance of future-proof political framework condition national and European



DATA CENTER MARKET CHALLENGES

GERMANY

- 1 **Energy & Power:** renewables, supply & availability, grid access, charges, and related factors
- 2 **DC Location Readiness** Land availability and requirements for suitable sites
- 3 **Energy Efficiency:** labelling, minimum performance standards, heat reuse
Align requirements with EED (EU Energy Efficiency Directive) values and deadlines
- 4 **GER - Data Center Strategy**
The development and implementation of practical, real-world regulations and guidelines

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The power of connectivity

BCO Workshop

Dr. Michael Ritter

December 9, 2025

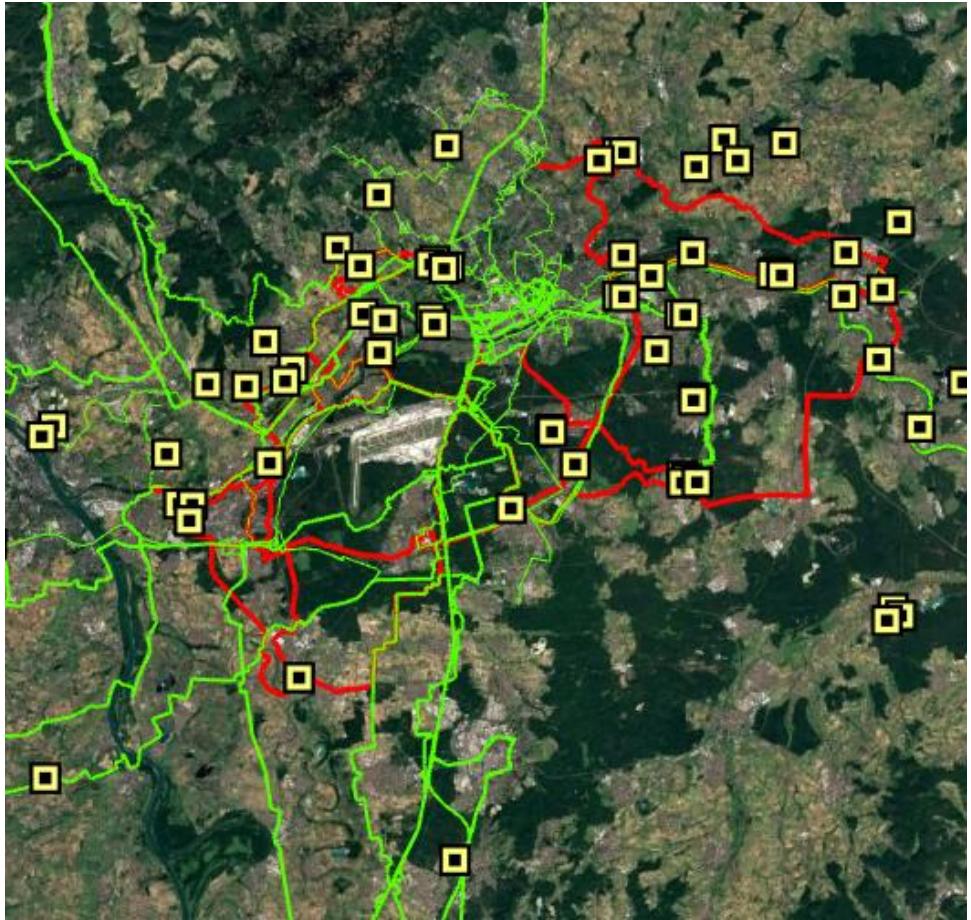


Key applications for high-speed connectivity into DCs

- Data center interconnect (DCI)
 - 10G, 100G and 400G Ethernet plus storage-specific protocols
 - Private and shared infrastructure
 - Metro, national and international
- Corporate access to cloud resources hosted remotely in data centers
 - Mainly 10G and 100G Ethernet
 - Predominantly metro and national
- Access through the public Internet (IP Transit)
 - Tier-1 Internet connectivity is key
- Direct, high-performance access to the cloud (DCA)
 - Available for all hyperscalers



Connected by infrastructure of choice



- Colt is connecting over 1,000 data centers globally today
- Providing ducts, cables, fiber, spectrum, wave services and co.
- Diversity is a must – minimum two and up to 4 redundant routes and building accesses
- Using own infrastructure and cooperating with carrier partners

To whom we sell our data center connectivity

- Internet content providers
- Carriers and network service providers
- Data center operators
- System integrators
- Enterprises of all industry verticals



New data centers and network expansion

- Development has moved away from city centers
- Prio 1 are availability of sufficient electrical power and regulatory constraints
- Increasingly remote from traditional carrier routes
- Network operators get involved early – already during planning and construction
- New network builds are awarded to one operator generally, serving others



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Thank you

Dr. Michael Ritter