

Internet Exchange Points (IXP)

Aleksandra Angjelkovikj

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Mentor: Prof. Dr. Sime Arsenovski

The thesis analyses Internet Exchange Points (IXPs) as a key element of modern internet infrastructure. The research focuses on their role, advantages, and limitations, as well as their impact on efficiency, costs, latency, and localisation of internet traffic. The methodology is based on the analysis and comparison of relevant models and practices, while analytical and synthetic methods are applied in drawing the conclusions. The thesis shows that a well-organised IXP can improve network connectivity, reduce unnecessary international routing, and contribute to a more resilient local internet ecosystem. The findings also emphasise the importance of cooperation among operators and appropriate infrastructure planning.

Keywords: Internet Exchange Points (IXP) · Internet infrastructure · Network connectivity