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TELECOMS IN THE FAST LANE? HOW AI WILL IMPACT NETWORK TRAFFIC AND OPERATIONS

Webinar: Questions and Answers

Questions and Answers:

*This document outlines the questions and answers received from the STL Partners webinar, **Telecoms in the Fast Lane? How AI will impact network traffic and operations**, which was delivered on Thursday 18th September 2025.*

***You can watch the recording of the session, and also access the slides, using the link here.** In this document, we seek to address the questions raised in the webinar that we were unable to address in the time available.*

*The presentation is based on insights and findings from an interview programme conducted with key players across the telco ecosystem. Following the research programme, STL produced a report entitled: "Telecoms traffic headed for the fast lane." **You can access the full research report here.***

If you have any questions not addressed in the webinar or this Q&A document, or want to hear more about our latest research or from our speaker and panellists, please contact:

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In the following pages, we have categorised our questions into four broad categories. Please use the links below to be directed to each section:

Why you think the increase of traffic is an opportunity ? This last decade (and more)the increase of network traffic was huge without increase of revenues for telcos ? Why you think that AI traffic growth will be different from the past with video traffic growth ?

Unlike past mobile data growth (mainly video streaming), AI-driven traffic is likely to be more interactive, uplink-heavy, and tied to enterprise use cases such as real-time analytics, computer vision, or autonomous systems. These require low-latency, high-reliability connections and edge processing, which mobile operators can monetise through premium connectivity (e.g. network slicing, private 5G) and edge compute services, not just bandwidth. To sum up - while video traffic expanded consumer use without adding revenue, AI traffic growth is linked to enterprise value creation, giving telcos a clearer path to monetise performance and infrastructure rather than raw data volume. – Jonas

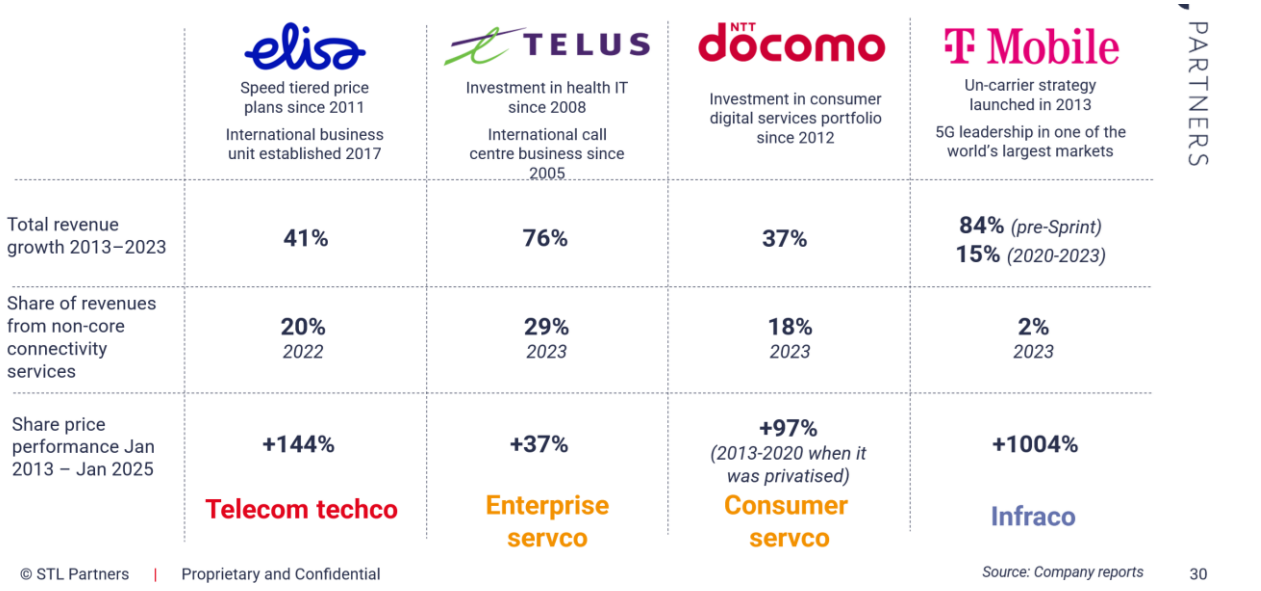
Telecoms handle sensitive user data. How do you see the tension between AI innovation and data privacy regulations?

Telecoms sit on vast datasets: location, usage, billing, network telemetry, but these are tightly regulated under laws like GDPR, ePrivacy, and emerging AI Acts. To innovate safely, operators must

design AI systems around data protection by default. That means training models with federated learning so data never leaves the network, using differential privacy and anonymisation to remove identifiers, and shifting inference to on-device or edge locations where data can be processed locally. Access should be limited through role-based controls and audit trails, and raw data should be aggregated or deleted after use. Operators also need Data Protection Impact Assessments (DPIAs) for every new AI use case, clear consent and purpose limitation processes, and explainable models that can justify outputs to regulators. Overall, AI innovation and protecting sensitive data can be done in tandem – without compromising either. – Jonas

Which network providers do you see focusing in each of the models identified?

Broadly, infracos focus on network efficiency and automation, servcos on customer-led diversification beyond connectivity, and techcos on monetising technology and assets to create new markets. The following operators illustrate how each model is emerging in practice:



– Jonas

Over the last years we observed de-accelerating of traffic growth, both in mobile and fixed network and with every traffic forecast we adjust traffic growth down. Do you really believe that 5G SA and AI business use cases will scale-up in current environment of cost cuts, de-investment, etc.. within next 5 years?

Despite slower overall traffic growth and tighter capex, 5G SA and AI use cases can still scale over the next five years, just selectively. As the AI hype cycle shifts toward practical deployment, enterprises will face growing pressure to monetise AI effectively and justify past investments, driving a renewed focus on real-world implementation. For telcos, this will translate into stronger demand for reliable, low-latency, uplink-heavy connectivity in sectors such as manufacturing, logistics, and healthcare, where deterministic network performance enables automation, real-time analytics, and edge-based intelligence. – Jonas

Get in touch with our panellists to learn more:

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For more information on our research findings, download our report here:
https://stlpartners.com/research/telecom-traffic-heading-for-the-fast-lane/

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