NETWORK FEES REDUX

THE HISTORY OF A MISGUIDED INTERNET ACCESS POLICY

By Fiona Alexander

About the Author

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Chapter One: Setting the Scene

It's an old idea that refuses to go away.

European voices have reopened a debate about forcing mostly American Internet platforms to pay telecom companies extra fees for transmitting data. Since these content providers generate a high amount of Internet traffic; telecom operators argue that they should pay network fees to them for carrying their content - or as they put it, their 'fair share'.

The new initiative could come in the form of the upcoming European Union Digital Networks Act. Instead of outright direct payments, as in previous plans, the forthcoming law may attempt to establish a dispute resolution procedure that would achieve the same goal of forcing the U.S. tech companies to pay fees to telcos.

Such network fees represent an idea in search of a problem. The Internet works, and it works well. In three short decades, it has grown, bottom up, to serve 5.5 billion users, 68% of the world's population. 'Fair share' payments turn upside down a key Internet principle of net neutrality: that everybody, small startups and giant multinationals, are treated equally on the Net. Payments would insert governments, unnecessarily, in the middle of private commercial negotiations.

This paper details the history of the network fees debate – and explains why the misguided idea which attempts to graft rules developed for the 19th century telephone age to the 21st century digital age, has been rejected, not once, but two, three, four times. For a long time, Europe even joined the U.S. in pushing back. This changed only after its own, former government-owned and still often government-influenced, incumbent telephone providers, complained.

Almost as soon as the Internet emerged, the fight over how to pay for its infrastructure emerged. The Internet broke with the old rules of how to price

connectivity. Telephone companies charged customers per minute, and prices depended on the distance connected over copper wires. Internet pricing is a flat rate determined by bandwidth. Telephone and SMS interconnect where agreements are commercial and require extensive regulation to prevent abuse. Internet peering works well by itself. According to a 2021 study conducted by European communications regulators, 99.998% of peering arrangements are concluded without any contracts or paperwork.

The Internet represents a communications revolution, improving quality, lowering prices, and boosting consumption - which in turn increases total revenues for all involved. From a historical perspective, it repeats the pattern of previous communications revolutions, ordinary mail, the telegraph and the telephone. Efforts to buck this trend go against the natural trend of technological innovation.

Yet Europe's incumbent telecom carriers persist in demanding what they call a "fair distribution" of Internet interconnection. They argue that content providers flood networks with Internet traffic, without regard to the cost and quality of service to users - even though the users' quality of experience is key to a platform's success. They aim to use government intervention in the market to maintain or recoup the revenue margins they once had as government-owned or established monopolies of the late 19th and early 20th centuries.

Over the years, network fees have been called different things. The concept emerged at the turn of the millennium under the moniker, "Internet charging arrangements for Internet services" or ICAIS. Europe and the U.S. united to reject the idea. At the 2005 WSIS conference in Tunisia, it popped back up. Again, Europe and the U.S. united to block it. At the 2012 WCIT conference in Dubai, Europe and the U.S. again rejected the concept in the form of a network fees proposal. Yet now it is back in consideration in the upcoming European Digital Networks Act, as fair share, either as direct payments or forced payments under a dispute resolution scheme.

Throughout, I have held a front line position. In 2000, I represented the U.S. government at the International Telecommunication Union (ITU) conference in Montreal that launched the fight. For the next two decades, I served as the

principal official responsible for the development, and execution of international Internet, cyber, and communications policy at the National Telecommunications and Information Administration.

In that role, I developed U.S. policy toward Internet governance. At the Organisation for Economic Cooperation and Development (OECD), I initiated the OECD's Internet policymaking principles and chaired the group that developed the OECD's Artificial Intelligence Principles, the first intergovernmental standard on AI.

My leadership to privatize the Internet domain name system earned me a Presidential Rank Award, despite, as I recount in a recent book I co-authored, Geopolitics at the Internet Core, accusations of an illegal giveaway of U.S. government property. Of course, that wasn't true. No single government or entity owns the Internet. It is built on a voluntary system of standards, largely privatized.

At the ITU's World Summit on the Information Society (WSIS) in 2003 to 2005, where debates about Internet cost sharing featured prominently, I served as a lead U.S. government negotiator. The debates were persistent, tortured, and emotional. At one point, a government official from a third country equated the choice between open source or proprietary software to the choice a parent makes about feeding their child breast or formula milk. At another moment, he blamed the Internet for being the equivalent of the "atomic bomb."

The network fees debate represents one of the most enduring Internet policy challenges of the last almost three decades. We now have solid evidence that such fees boomerang. South Korea was an Internet fast mover, building world class infrastructure that provided speedy broadband connections. It then imposed a regime akin to network fees on its domestic telecom market. The results have been disastrous. Internet providers shifted traffic outside of the country to avoid prohibitive costs, to Taiwan and Japan. Investments in telephone infrastructure plummeted. Prices rose for consumers. Connection speeds slowed - and Internet innovation declined.

Talk of imposing network fees in Europe threatens to impact already strained transatlantic relations. The Trump administration has signaled its opposition to what it considers a potential European tax on U.S. firms. Tensions would also rise at the United Nations and the ITU, where concerns around financing connectivity for the developing world are once again back on the agenda. If a cost-sharing model is imposed, it will ignore the technical standards that have resulted in today's interoperable, global Internet. It would undermine the fundamental, common principles of the Internet's current architecture, potentially setting a precedent that leads to government control over the web.

Europe needs a modern communications infrastructure for innovation, lower prices, and improved choices for consumers. But it should not rely on 19th century regulatory concepts to achieve that goal.

Key Dates in the Battle over Network Fees

2000

Proposals introduced at the ITU for “Internet charging arrangements for Internet services” or ICAIS. Europe and the US united to reject the idea.

2002

An OECD report concludes that market liberalization and privatization, not incumbent rent-seeking, represented the best path forward for spreading low-cost Internet access.

2005

At the WSIS 2005 Tunis conference governments recognize developing countries' concerns, dubbed now Network Fees - but called for competitive commercially negotiated arrangements.

2012

At the World Conference on International Telecommunications in Dubai, European telecommunications companies propose that the ITU develop a “reference” model for commercial negotiations.

2013

The OECD confirms an efficient market for Internet interconnection existed and that it had "produced low prices, promoted efficiency and innovation, and attracted the investment necessary to keep pace with demand."

2022

The European Commission proposes a Declaration on Digital Rights and Principles that "all market actors" should make a "fair and proportionate contribution" to the cost of the required infrastructure.

2024

Italy codifies its telecom law to bring content delivery networks explicitly under its regulator's remit, obliging them to register and comply with certain network rules.

2025

The European Commission proposes a new Digital Networks Act, which may include mandatory Network Fees arbitration.

Chapter Two: Millennium Mess

When I walked into a Montreal hotel lobby late one evening in October 2000, I was a just-minted American government employee, in my third week on the job. The Canadian city was the venue for the ITU's World Telecommunications Standardization Assembly.

Internet connection costs represented one of the main agenda items. Dull speeches, long discussions, and obscure queries about voting lay ahead. After my first day spent 11 hours listening to debates, I returned to the hotel wondering about my assignment.

My experience was limited. I was a few years out of graduate school, a late addition to the U.S. delegation. My interest in technology stemmed from my years at American University. Our dorms were being wired for the Internet. The campus help desk for the students had an opening to help resolve students' connection problems. I was hired. After graduating, Booz Allen assigned me to work on plans for expanding wireless communications services to public safety officials and to develop a strategy for distributing refurbished radio equipment to tribal and underserved areas in the United States. I also investigated international spectrum management costs to develop a pricing model for South African radio frequency spectrum licensing.

Little of this education and work experience prepared me for the intricacies of international negotiations. My most relevant experience was nine years of participation in Model UN in high school and college. Most of the other 72 other members of the U.S. delegation had spent months preparing for the 10-day Montreal conference, while I was just dropped into it.

More than 1,000 people crammed into a convention room. At a contentious moment, a new colleague leaned over and said, "don't worry, in time this will all make sense." Little did I appreciate the truth behind those words. The debate about Internet traffic and revenue flows would continue to provoke tension and conflict for the rest of my government career.

In Montreal, the fight centered on an acronym, ICAIS, short for Internet Charging Arrangements for Internet Services. Who should pay and how much for Internet traffic flows? Should it be the sender of the data, who in responding to a request for information by an Internet user, was clearly sending more in terms of volume? Or should it be the source of the initial data request to whom the sender was simply responding?

The “right” answer to these questions depended on where you sat. The U.S. and Europe, the source of most transiting data, preferred private commercial negotiations. Some countries in the developing world fretted about their poor Internet connectivity and high price of connections at the time. They demanded a more “equitable” split or sharing of the costs.

The ITU seemed sympathetic. Starting in 1998, its secretariat had carried out studies warning of “the high costs of the international circuit for Internet connectivity between least developed countries and the Internet backbone networks.”

The ITU’s role complicated the debate. The organization predates the modern United Nations. It was born in 1865 as the International Telegraph Union, with a mission to coordinate telegraph signals. After Alexander Graham Bell invented the telephone, the ITU expanded its mandate in 1885. At that time, a specific article was added to the Telegraph Regulations establishing a five-minute unit as the base charge for international telephone calls. The circuit switched accounting rate regime soon emerged.

In 1932, the ITU was renamed the International Telecommunication Union, covering also radio. Based in Geneva, the ITU’s global membership now includes 194 countries and over 1,000 businesses, academic institutions, and international and regional organizations. It occupies three large office buildings in the Swiss city’s UN district.

Under the ITU’s Public Switched Telephone Network system, a caller initiates a connection on a dedicated circuit, establishing a pathway to the receiver. This direct link over copper wires could be used for the duration of the call by

the two specific parties, making the concept of splitting or sharing the associated costs straightforward.

The ITU specified how to distribute the costs and the exact rates that would be paid. Since most telephone providers were government-owned (France Telecom, Telecom Italia, etc.) or government sanctioned monopolies (AT&T), it made sense to negotiate those rates inside an intergovernmental system.

For the most part of the 20th century, little changed. In 1988, ITU members agreed to the International Telecommunications Regulations, which merged the old telegraph and telephone regulations into one treaty.

Subsequent disagreements over the actual rates flared. The U.S. deregulated. Much of the rest of the world did not. Incumbents, often still state owned, in the less competitive markets demanded artificially high international termination rates. Between 1985 and 1998, U.S. telecom operators paid roughly $35 billion in settlement payments to operators in these less competitive markets.

A majority of ITU members blocked efforts to bring the rates down towards the true cost of carrying calls. The funds were supposed to be used for infrastructure development. Instead, they often went into foreign government bank accounts, with limited transparency regarding their final deployment.

Washington became frustrated. The Federal Communications Commission issued in 1997 a Benchmark Order that set rates, based on a country's economic development, and required U.S. carriers to renegotiate rates downward to comply. By acting unilaterally, the U.S. reduced its net payments.

Internet and IP-based services and applications upended the entire ITU system. They allowed companies to bypass the telephone accounting rate regime. Telephone payments to the Global South dropped - fueling the ICAIS battle that exploded in Montreal.

Operators in less competitive markets argued that Internet charging was unfair and unbalanced because they paid what they perceived to be a disproportionate amount of the costs. During the Internet's early days, North

America and Europe housed the majority of Internet exchange points. When a network query came from Africa or elsewhere, it traveled to North America or Europe where the data was stored, before a response returned.

The appropriate solution, from this perspective, was to develop a cost-sharing regime similar to the one used for the old telephone network. At the ITU, developing countries proposed taking "into account compensation between them for the value of elements such as traffic flow, number of routes, geographical coverage and cost of international transmission, amongst others."

The proposal ignored how Internet traffic differs from traditional telephone connections that depend on a dedicated circuit-switched line to connect a single voice call. The telephone system is inefficient, using lines only for voice transmission, and then only within a limited audio frequency range.

In contrast, the Internet uses a packet-switched system that breaks data into small packets, each with an address, and sends them independently along various paths. Since the Internet shares bandwidth among many users and types of data, it is efficient and versatile. Multiple users and different types of data (voice, video, text) can share the same physical lines by using different channels or frequencies. All types of data, including voice (through VoIP), video, and files, travel at speeds far exceeding traditional phone lines.

How could the new dynamic Internet be squeezed back into the old telephone box? Developing world supporters of a cost-sharing model suggested stipulating that payments should be the result of bilateral commercial negotiations, not an international treaty as with traditional telephony. Sound familiar? Indeed, the obligation for commercial negotiations echoes the recent European calls for a "dispute resolution mechanism" to impose network fees.

In Montreal, in 2000, a majority of governments supported forced commercial negotiations. The U.S., however, remained unconvinced. Greece also objected, though on procedural, not substantive, grounds. The rest of Europe went along with a compromise out of a desire to reach a consensus, though it succeeded in stipulating that negotiations would be conducted on a

commercial basis and not between governments. Details were agreed to be sorted later, an approach common in Brussels where legislation is often followed by 'explanatory guidelines' on compliance after a rule is put in place.

That approach is not typical in Washington. The U.S. issued a press release calling the ITU recommendation "premature," containing "a number of internal contradictions and ambiguities, which will make its implementation problematic, if not impossible." Internet charging "arrangements are commercial in nature and that it is inappropriate for the ITU to adopt any recommendation at this time, which suggests that certain conditions should be imposed on such commercial arrangements."

How to bring fast, affordable Internet to the developing world remained unresolved. While the U.S. said it "strongly supports the goal of developing telecommunications and information infrastructure globally," it believed that private sector leadership would best accomplish this task. The ITU "recommendation does not help to advance that goal," the U.S. argued, warning that "the ITU must tread carefully and refrain from unnecessary regulations or recommendations that might hinder the spread of the benefits of the Internet."

The U.S. did not apply the ITU standard. Far from settling the battle over Internet charges, Montreal did not even result in a cease fire. It left a festering dispute that became my personal recurring nightmare.

International Telecommunication Union (ITU) headquarters campus buildings in Geneva.
(Source: Wikimedia Commons)

View from Lake Geneva.

Chapter Three: Recurring Nightmares

Over the course of the next 12 years, I spent countless hours in windowless conference rooms debating the illogical idea of imposing rules developed for the telephone age onto the Internet.

Governments, angry about declining telephone revenues, attempted to dictate the terms of commercially negotiated Internet interconnection arrangements. Proposals for an Internet accounting rate regime ignored how Internet traffic flows worked. Suggestions that the underlying Internet standards should be scrapped and redesigned neglected the success of the powerful bottom-up rollout.

Most debates took place in Geneva at the ITU headquarters under the auspices of blandly bureaucratically named Study Group 3, or SG3, of the organization's standards sector. Like all ITU-T study groups, SG3 produces ITU Recommendations (voluntary standards), technical reports and other publications.

The Study Group 3 was born back in 1928 as a working group to study telephone tariffs. It addressed the old analog circuit accounting rates. As Internet-based services displaced those revenue streams, the group searched for a new assignment. It grabbed onto the issue of Internet traffic flows.

During the first decade of this century, SG3 studies probed 'the broader effects of the Internet and emerging technologies on the economics of telecommunications.' SG3 studies the impact of Over-the-top (OTT) messaging services such as WhatsApp and Signal, artificial intelligence (AI), mobile payments and other new services.

Battle lines formed.

On one side, some countries argued that the Internet peering and transit system was unfair and failed to recognize their development needs. They

pushed for a shift to a sender pays transit model under which large content providers would pay extra for sending their traffic.

On the other side, the U.S. formed a coalition that included European governments and the European Commission. Both European and American telecom operators fought to fend off forced terms and conditions for Internet transit. They argued that such a shift would lead to inefficient Internet traffic flows and higher costs for consumers. Instead of imposing network fees, developing countries should focus on adjusting their domestic regulations so that competitive markets would develop and Internet exchange points.

The OECD examined the issue, hoping to break the deadlock. In 2002, it produced a 52-page study titled Internet Traffic Exchange and the Development of end-to-end International Telecommunication Competition. The report came to clear conclusions: market liberalization and privatization, not incumbent rent- seeking, represented the best path forward for spreading low-cost Internet access. It endorsed 'the current arrangements' saying they 'provide the right incentives for developing backbone markets.' Peering deals were spreading. Prices were decreasing. In short, the market was working.

The OECD rejected calls for network fees, saying they run "the risk of fundamentally altering the incentives for commercial responses and solutions to any perceived problems." It warned against any move to "strengthen existing distortions where monopoly power exists." The "best guarantee this will occur is to ensure there is sufficient competition in backbone markets." The two most competitive telephone markets, the UK and the U.S., have spearheaded Internet adoption.

After the OECD report, the ITU's Study Group 3 work in this area shifted away from efforts to impose network fees. Discussions continued on a slow burner, while the rollout of the Internet accelerated around the globe. Cables were laid. Internet exchange points were deployed.

Even so, critics of the existing charging system did not give up. They criticized the OECD as a "rich man's club," since its membership only includes advanced industrialized economies. They brought a call for equity and

fairness in Internet arrangements issue into the preparations for United Nation's World Summit on the Information Society, known by the acronym WSIS.

Proposals rejected by the ITU Study Group 3 reemerged. As a key member of the U.S. delegation at WSIS, many meetings sounded like a broken record, once again featuring calls for direct government intervention in commercial Internet transit markets. U.S., European governments, and others stood firm in opposition.

The conflict came to a head in Tunisia, at the WSIS 2005 Tunis conference. The agenda recognized developing countries' concerns—but called for competitive commercially negotiated arrangements. The Internet marched on. Traffic flows adjusted. New cables were laid. Connectivity in developing countries improved. The battle over network fees looked finished.

Wrong.

Network fees soon reemerged - and with a dangerous new twist. The setting was the 2012 ITU World Conference on International Telecommunications (known by the acronym WCIT). It took place in December in Dubai, and as delegates sweated away in a hot convention center, it proved the most controversial and conflicted in the ITU's long history.

A coalition led by Russia and China mobilized, with the goal of setting controls on the free and open Internet. Russia proposed giving the ITU control over the Internet's operation. "Member states shall have equal rights to manage the internet, including in regard to the allotment, assignment and reclamation of internet numbering, naming, addressing and identification resources and to support for the operation and development of basic internet infrastructure" the Kremlin said in a submission.

This would have marked a shift from the current set-up in which non-profit bodies manage the Internet. Other proposals supported by Russia, China and the Gulf states would have permitted governments to censor legitimate speech, even allow them to cut off internet access - and not least, to charge network fees on services like YouTube, Facebook, and Skype.

The ITU leadership leaned towards such proposals. A new treaty was needed to ensure "the free flow of information around the world, promoting affordable and equitable access for all and laying the foundation for ongoing innovation and market growth," the Secretariat argued. The ITU Secretary General at the time brought network fees into the center of the debate, saying that the Dubai meeting should "address the current disconnect between sources of revenue and sources of costs," adding that telecom companies had the "right to a return on [the] investment" needed to avoid congestion.

In Dubai, the coalition against these unsavory ideas came close to cracking. Out of the blue, the European Telecom Network Operator's Association (ETNO), home to incumbent telephone operators such as Deutsche Telekom, Orange, and Telefonica, stunned delegates with a proposal to address the new Internet ecosystem. ETNO highlighted what it perceived as shortcomings in the Internet interconnection market, proposing that the ITU develop a 'reference' model for commercial negotiations. The model, based on the concept of sending party pays, would allow improved compensation for Europe's telephone operators for carrying Internet services over their networks.

The reaction was swift and decisive. The U.S. said no. Japan said no. Most important of all, the European Union said no.

The U.S. delegation met with ETNO's Executive Board Chair. Why should governments intervene to bail out these operators as opposed to telecom companies actually innovating? we asked. The board chair had no response. In a speech, my boss, Lawrence E. Strickling, the U.S. Assistant Secretary of Commerce for Communications and Information, derided the ETNO proposal as "a bad idea." It is a "solution in search of a problem and it most likely would disadvantage the developing world which has the most to gain from continued growth and expansion of the Internet," he insisted.

The Dubai conference collapsed. Many countries, including all then European Union governments, refused to sign the proposed change, citing concerns about the potential negative impact on the free and open Internet. International institutions originally designed for a world of monopoly

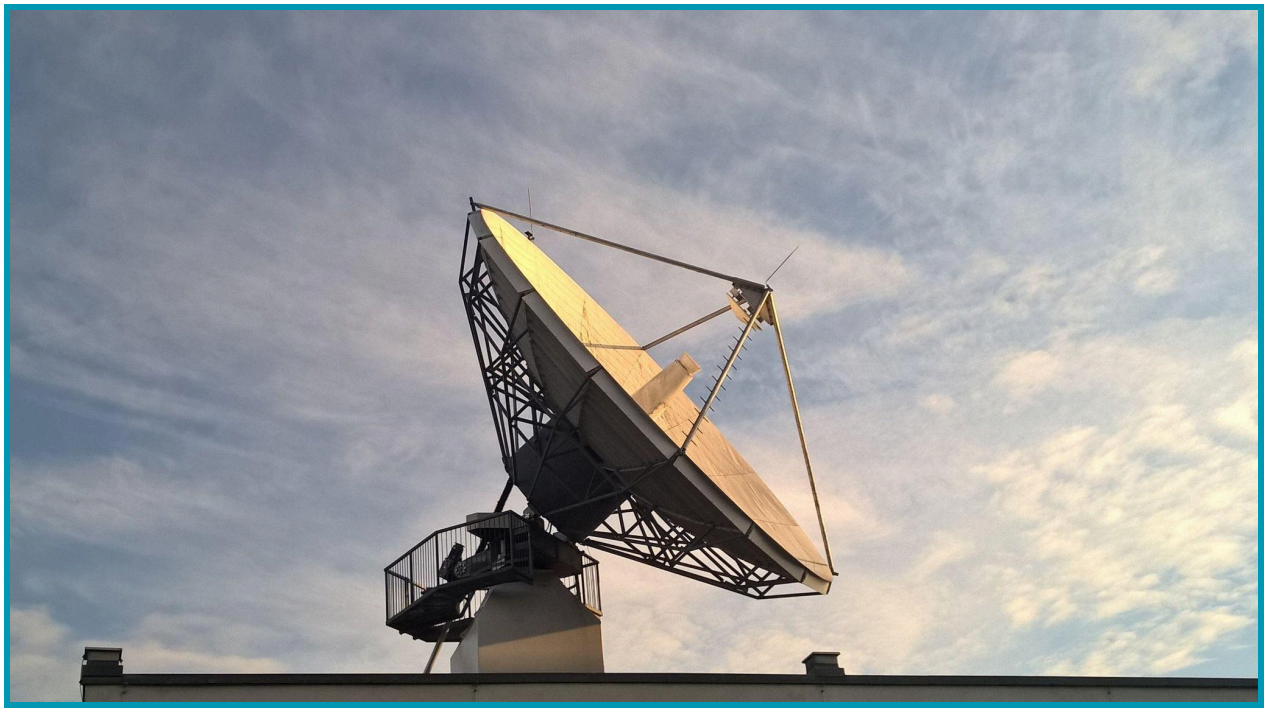
providers operating within national borders do not work well in the borderless, global, multi-layered world of the Internet. And governments struggle with how to define their roles in this new reality.

Back in Europe, regulators rejected ETNO's network fees proposal. BEREC, the coordinating group for European national telecommunications regulators, rejected the idea of government intervention, saying it risked "shifting the balance of negotiating leverage between market participants and inducing an abuse of market power by telecoms carriers in relation to terminating traffic." The European Council also rejected the recommendation, and the European Parliament passed a negative resolution.

The OECD took up the issue again. It released an Internet Traffic Exchange paper that confirmed an efficient market for Internet interconnection existed and that it had "produced low prices, promoted efficiency and innovation, and attracted the investment necessary to keep pace with demand."

Network fees looked dead. Or so I thought. Once again, I was mistaken. Regions with rapidly expanding Internet access no longer occupied the front lines. The main battleground turned to Europe.

Communication tower against a bright blue sky.



Large satellite dish against a wispy sky.

Chapter Four: Network Fees Redux

After defeat in Dubai, Europe's telecommunications operators held fire. The EU introduced the Open Internet Regulation, protecting net neutrality after many of the same European telecom companies were found to be arbitrarily blocking access to online services that they deemed to be competing with them, such as VoIP providers like Skype. But after a few years, the operators brought their fight back to Brussels. Their main trade group ETNO renamed itself Connect Europe and wielded its familiar arguments about the need to charge big content providers additional fees.

The campaign kicked off in 2022, when the European Commission first proposed a Declaration on Digital Rights and Principles, set ambitious connectivity targets for the continent to achieve average one gigabyte upload and download speeds, and stipulated that "all market actors'' should make a "fair and proportionate contribution" to the cost of the required infrastructure. The Commission's Digital Decade Policy Programme 2030 codified these targets.

The political climate looked favorable. The EU had spent the previous decade cracking down on U.S. tech, imposing a series of tough laws, first the General Data Protection Regulation to protect privacy, followed by the Digital Services Act to combat illegal content and the Digital Markets Act to reign in powerful "gatekeepers."

Thierry Breton, former director-general (CEO) of France Télécom, served as the European Commissioner responsible for digital affairs. In 2023, he gave a speech in 2023 calling for the imposition of network fees. "At a time when technology companies are using most bandwidth and telco operators are seeing their return on investment drop, this also raises the question of who pays for the next generation of connectivity infrastructure," he explained. "The European Declaration on Digital Rights and Principles for the Digital Decade already established that all market players benefiting from the digital transformation should make a fair and proportionate contribution to public goods, services and infrastructure."

Delighted, Europe's incumbent telecom operators launched an aggressive lobbying campaign. They commissioned a report by Analysys Mason asserting that – despite high levels of telecom investment – roll-out is still too slow and private investment in Europe remains lower than that of global peers. "Tech giants generate disproportionate network costs with respect to consumers, and they monetize this through advertising and exploitation of personal data, it is only logical for tech giants to contribute to network roll-out." Another commissioned report by Axon consulting built on these arguments to unashamedly demand an "annual contribution of €20 billion by OTTs [Internet companies] to the development of telecoms infrastructure in the EU".

The battle turned ugly. A U.S. based tech association commissioned a new Analysys Mason study that pointed to €183 billion on internet infrastructure for Europe between 2011 and 2021 alone. These investments save telecom operators "an estimated $5 to $6.4 billion per year in network and transit fees, "bringing local caching servers as close to the end-user as possible, reducing the amount of work for telcos."

The two sides traded other barbs. Telcos claimed that they had to absorb an explosive growth in internet traffic, driven "by a small number of leading Over-The-Top (OTT) providers." Tech companies retorted that traffic growth was stable at best, and independent observers supported the assertion. A study for the German Federal Network Agency reported "relative market saturation for streaming services." The Body of European Telecom Regulators (BEREC) concluded that "there has been no fundamental change in the general growth tendency."

Telecom incumbents argued that "telcos' financial health is being increasingly undermined" by "capital investments required to deal with exponential traffic growth." Analysys Mason analyzed the numbers and found that "network-related ISP costs increased by 3% in total between 2018-2021, whilst [global] network traffic increased by over 160%." In reality, this showed that European telecom operators managed steady traffic growth at almost negligible incremental cost.

The biggest disagreement concerned the impact on the fundamental Internet principle of net neutrality, that all traffic, from small and large content providers, be treated equally. Telcos argued that they "are not asking to amend the current EU Open Internet Regulation," which prohibits the discriminatory treatment of internet traffic - even though fees are all about treating internet data differently, giving preferential treatment of companies who (can afford to) pay to reach customers.

Critics pounced. In a joint letter, members of the European Parliament warned that telcos getting their way "would reverse decades of successful internet economics by requiring the providers of websites and applications to pay fees to ISPs that have never existed before." Access fees "would abolish key Net Neutrality guarantees that Europeans fought for." BEREC agreed, forecasting "various risks for the internet ecosystem," it said in its "preliminary analysis" of the network fees proposal.

The bottom line looked clear. "Data is sent to networks because users are requesting it through the internet connection they pay for," digital rights group Epicenter Works argued. In short, it is telcos' own consumers that are requesting data, and they have already paid telcos to receive it. "Who would want a cable running through their home if it was not for the content provided by tech?," asked Communications Chamber consultant Brian Williamson "After all, it is consumer demand for online content that actually drives demand and revenues for telcos."

Perhaps the most damning argument of all came from the only country that imposed network fees - South Korea. The Asian country was an Internet star, building widespread bandwidth connections at blazing speeds. In 2016, it imposed network fees. The results proved catastrophic, consultant WIK reported. Consumer prices soared. Network speeds plunged. Content providers steered content outside of the country, through Taiwan and Japan. Koreans received less diver content at slower Internet speeds – while investments in network infrastructure actually declined.

Europeans took note. The European Internet Exchange Association (Euro-IX) warned that the network fees in South Korea "resulted in reduced quality and security of the services provided to end-users." Analysys Mason predicted

network fees would leave Europeans with |fewer choices and a lower quality of experience, and fewer services for businesses could also slow digitalization." Indeed, a network usage fee would ultimately end up hitting Europeans directly in their pockets, in the form of more expensive cloud and streaming services.

As the evidence mounted about the dangers of network fees, the tide turned against the telecom operators. A new European Commission took over. Commissioner Breton was replaced by a pragmatic pro-digital Finn Henna Virkunnen. She looked ready to reevaluate plans for network fees.

Instead, a backdoor opened. Instead of asking for direct payments, operators have begun demanding the imposition of a 'dispute mechanism.' Content providers would be required to negotiate with the operators for interconnecting their Internet-connected networks. If they disagreed on fees, regulators would impose them. The proposal to regulate Internet interconnection in this way had already emerged as a mechanism to impose network fees, as evidenced by the response from at least one European incumbent telecom operator to a 2023 European Commission consultation.

A 2025 decision by Italian communications regulator AGCOM set off the new battle. It began with a sensitive subject - football. In 2021–2022, British platform DAZN acquired exclusive rights to Italy's top league, Serie A. Outages and poor-quality streams caused nationwide outrage. AGCOM intervened, ordering DAZN to improve reliability.

AGCOM then required DAZN to obtain a general telecom authorization – a status normally held by network operators. Seizing on this precedent, AGCOM brought content delivery networks under the scope of the European telephone code, effectively applying telecom-style rules — including mandatory registration and regulatory oversight — to a critical layer of the Internet.

Telcos rushed to seize the opening. Telecom Italia's CEO Pietro Labriola was quick to praise the decision, calling it "a turning point" for the telecom sector and a step toward "a level playing field." In September, 2025, the French federation of telecom operators signed an op-ed advocating again for

network fees, and openly made the link with a dispute resolution mechanism as a fallback option.

Despite AGCOM's claims to the contrary, the reclassification of content networks reopens the idea that big tech companies should pay telecoms for using their networks. Regulators could impose usage-based charges, turning voluntary interconnection into a regulated cost center, breaking the open architecture of the Internet.

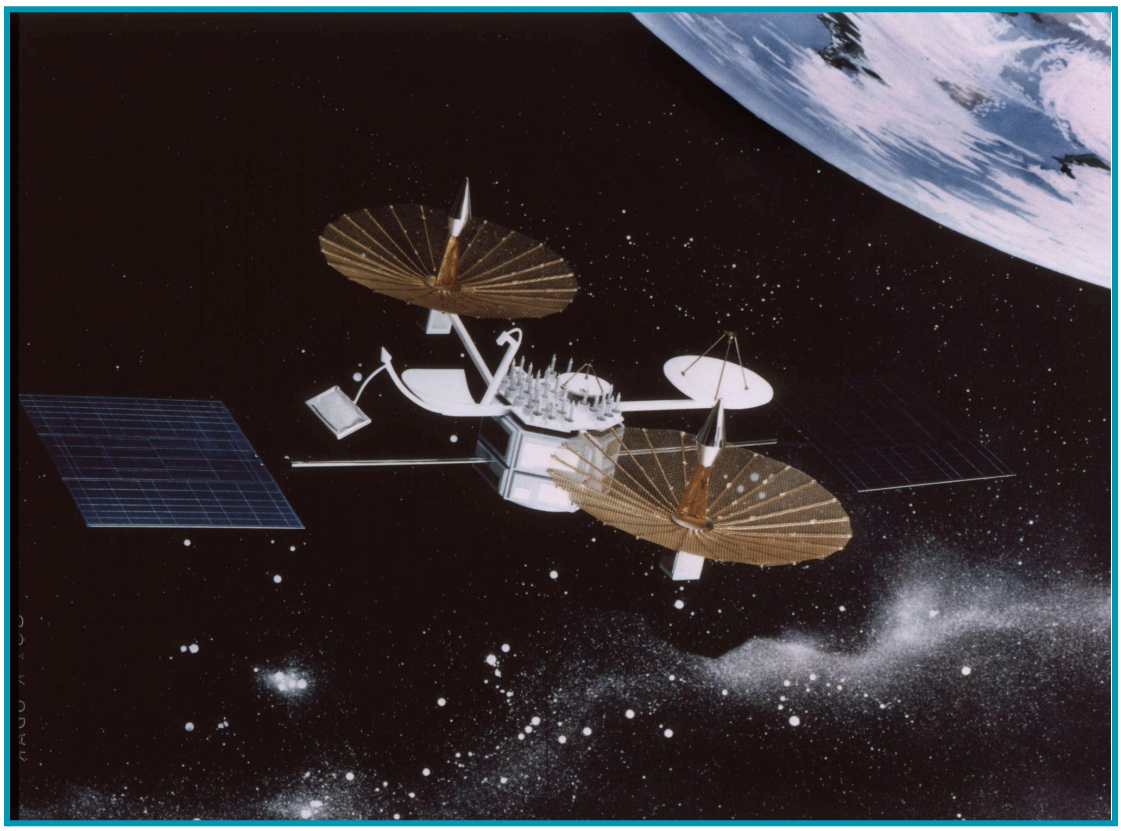
The real world consequences could be dramatic. If global "providers like Akamai, Cloudflare, or Fastly decide that Italy has become too burdensome or hostile an environment in which to operate — due to increased regulatory costs, data localization demands, or forced revenue-sharing with telecom operators — the impact will be immediate and widespread," warned Konstaninos Komaitis, Senior Resident Fellow for Global and Democratic Governance at the Digital Forensics Research Lab (DFRLab) at the Atlantic Council. "Telcos will likely hike consumer prices under the pretense of "infrastructure investment. In reality, Italians would pay more for a slower, less secure internet."

The battle soon will come to a head. Every seven years, the European Union updates its telecommunications regulations. It's a long drawn out process. The European Commission proposes. The European Parliament and European Council representing governments amend. All three institutions then must agree. The next revision is due to be proposed at the beginning of 2026.

If Europe moves ahead with network fees, whether as direct payments or through an indirect dispute resolution mechanism, the consequences could be dramatic, and impact transatlantic relations. In the July, 2025 EU-U.S. trade deal, Brussels promised "that it will not adopt or maintain network usage fees."

Europe stands at a crossroads. The continent acknowledges that it has fallen behind in the digital revolution. "Europe largely missed out on the digital revolution led by the Internet and the productivity gains it brought," former Italian Prime Minister and European Central Bank President Mario Draghi writes in his clarion call for the continent to prioritize economic growth.

The only solution is to defend the bottom-up, open and resilient Internet, which boosts innovation and resilience, not to protect incumbent telecoms. I know firsthand. For two, long decades, I have watched with dismay as entrenched interests have fought to hold back the global Internet. They caused damage, slowing adoption of what has become the biggest single driver of economic growth. Europe acknowledges its pressing needs to boost competitiveness. It acknowledges that its digital regulations go too far, stifling innovation. It vows to simplify the rules. The last thing it should do is introduce backward-looking, counterproductive network fees.



The Tracking and Data Relay Satellite (TDRS) system, depicted here in an artist's concept, revolutionized space-based telecommunications by ensuring almost uninterrupted global coverage. (Source: NASA)