

Luxembourg, 11 July 2025

# A. Introduction

FEDIL, the Voice of the Luxembourg's Industry, representing over 700 companies, welcomes the European Commission's Call for evidence on the upcoming Digital Networks Act ("DNA"). We strongly support the EU's goals to modernize network infrastructure and achieve the Digital Decade targets.

Luxembourg's telecom sector is advanced: nearly 100% gigabit-capable coverage (via full-fibre and cable) and 99% 4G/5G population coverage have been or will soon be achieved. Our small, open economy relies on resilient cross-border connectivity and a fair, pro-competitive regulatory framework. The DNA must thus be fit for all Member States, including highly connected ones like Luxembourg, and ensure no one is left behind.

This paper analyzes the DNA's key points, highlights Luxembourg challenges, and offers practical recommendations to tailor the DNA for our country and operators.

The Digital Networks Act is intended to update the EU telecom framework (replacing the 2018 Electronic Communications Code) with a more harmonized, simplified set of rules. We understand that the DNA's core mission is to create a pro-investment, pro-innovation regulatory environment that accelerates gigabit and 5G rollout, reduces red tape, and strengthens Europe's network resilience and sovereignty. FEDIL supports these goals. In particular, having nearly achieved national gigabit coverage in Luxembourg, our members welcome EU efforts to ensure all Member States catch up (thus avoiding a digital divide in the single market). However, the policy tools chosen must recognize local specificities and starting points. We urge the Commission to adopt a flexible, proportionate approach that fosters innovation and investment in Luxembourg's digital networks while preserving competition and end-user interests.

## B. FEDIL's Input on the White Paper – What We Advocate

FEDIL participated in the 2024 consultation on the EU White Paper "*How to master Europe's digital infrastructure needs*" (which laid groundwork for the DNA). Our contribution emphasized several points, which remain highly relevant as the Commission drafts the DNA. We recap our main recommendations from that input and adapt them to the DNA context.

#### a) One-size rarely fits all – Need for flexibility

We cautioned that while Europe's connectivity goals are common, **national situations differ**. For instance, Luxembourg has already extensively deployed fiber; conversely, some larger countries have significant rural gaps. Therefore, the DNA's measures (e.g. deadlines for copper switch-off, or approaches to spectrum awards) should be **principle-based and not overly prescriptive** in a way that ignores local realities. FEDIL recommended robust impact assessments and broad stakeholder debates before adopting any sweeping changes; a view we reiterate and highlight that these assessments should include **clear evidence of market failure** and consumer harm before justifying regulatory intervention.



Concretely, the Commission **should allow differentiated approaches** under the DNA: e.g., define the copper switch-off target but let countries with >90% fiber (like Luxembourg or Danemark) implement it faster, if feasible and implementable by the operators, and those with terrain challenges perhaps use fixed wireless as interim.

Likewise, broadening the scope of telecom rules to new digital players (like messaging apps) should be carefully assessed to avoid stifling innovation. The scenario 4 of the White Paper on "same service, same rules" was, in our view, too simplistic. The DNA should instead focus on **functional neutrality**, i.e., ensure consumer protection and security regardless of service type, but not necessarily drag completely different services into a telco-style licensing regime without evidence of harm. FEDIL's stance: *keep the DNA flexible and evidence-driven*.

Critically, any regulatory intervention must be preceded by robust evidence of actual market failure, consistent with the EU's Better Regulation Framework. The DNA should explicitly state that well-functioning markets should remain undisturbed, and intervention should only occur where clear evidence demonstrates consumer harm or competition concerns that cannot be addressed through existing legal frameworks.

#### b) Preserving well-functioning digital infrastructure markets

FEDIL recognizes that many digital infrastructure markets in Europe function effectively through commercial agreements. For instance, internet protocol interconnection operates successfully with millions of connections and very few disputes, as consistently documented by BEREC assessments over more than a decade. The DNA should acknowledge these success stories and **avoid creating regulatory solutions for non-existent problems**.

BEREC's recent clarifications on Open Internet rules provide additional tools to address exceptional cases. Creating new intervention mechanisms could paradoxically incentivize disputes rather than resolve them, undermining the collaborative approach that has made these markets successful.

### c) Technology neutrality and inclusiveness

FEDIL underscored that regulation must remain **technology-neutral**. For example, while fiber is a cornerstone, cable, 5G fixed wireless access, and satellite also contribute to connectivity. In Luxembourg, modern cable networks (DOCSIS 3.1/4.0) deliver gigabit speeds in some areas and will evolve alongside fiber.

The DNA should, as we wrote, avoid any wording that implies *fibre is the only solution*. Instead, it should emphasize performance targets (gigabit speeds, low latency, reliability) and let operators choose the optimal mix to achieve them.

FEDIL members specifically commented on the White Paper's "best available technology" concept for rural areas: requiring only fiber could be counterproductive when other solutions can deliver quality service sooner. Our consultation's response advocated focusing on **meaningful connectivity for all** (everyone should get at least high-speed broadband), then upgrading to gigabit where feasible.

The DNA should thus ensure **digital inclusion** by supporting alternate technologies as interim steps or scalable solutions in harder-to-reach locations. This principle safeguards Luxembourg in cases where a specific high-performance wireless solution is best suited for a niche scenario, such as connecting a temporary site or serving a mobile, cross-border user group. The regulatory framework should be **flexible enough** to accommodate such situations.



Furthermore, the DNA should recognize that different technology sectors - including cloud computing, content delivery, and telecommunications - are complementary rather than converging. Each serves distinct functions in the digital ecosystem. Cloud services provide horizontal infrastructure components used across all industries, while telecommunications operators maintain their core network functions. The DNA should avoid regulatory approaches that assume artificial convergence where none exists, as this could lead to inappropriate interventions that harm both innovation and consumer welfare.

Finally, the DNA's technology neutrality principle should extend to content delivery and caching services, which are intermediary technologies that enhance performance for all users. Luxembourg's digital economy depends on efficient content delivery that reduces latency and improves user experience. Any regulatory approach should **recognize the distinct role of intermediary services** and avoid applying frameworks designed for network operators to fundamentally different service models.

#### d) Spectrum: preserve national flexibility within harmonization

In our White Paper's feedback, we responded to ideas of EU spectrum governance changes (scenario 6). FEDIL, aligning with Luxembourg's government view, **opposed any shift to fully centralized EU spectrum allocation**. We argued that our national regulator is best placed to judge local needs (as Luxembourg did set coverage obligations and reasonable fees tailored to our market).

We stressed that harmonization should focus on **outcomes** (e.g. all countries to license the 3.5 GHz 5G band by 2020) and technical conditions (block sizes, interference limits), but the assignment process (auction design, reserve prices) should remain a national competency conditioned by EU broad principles.

Also, we flagged that divergent EMF radiation limits and permit rules (not spectrum policy per se) are real deployment blockers in some states. These should be addressed before considering radical spectrum re-think.

For the DNA, we reiterate: *foster cooperation and best practice sharing on spectrum*, e.g. through strengthening the role of the Radio Spectrum Policy Group (RSPG) and peer reviews, but we recommend not to introduce any measure that could undermine Luxembourg's sovereign ability to manage spectrum assignments tailored to the market size. This ensures **competitive balance**. As we noted, a single EU auction might lead to only big pan-EU operators winning everywhere, which could hurt Luxembourg's consumers by reducing local competition.

#### e) Lighter regulatory burden & competition safeguards

FEDIL's contribution welcomed the aim of simplifying the regulatory framework and reducing administrative burdens, especially for smaller operators and those offering purely B2B connectivity services (e.g. IoT networks). We support the White Paper's direction to streamline general authorization conditions, and, in the DNA, we suggest **eliminating duplicative reporting**.

For example, today, operators in Luxembourg (and across the EU) must submit various data (coverage, quality, pricing) to national authorities, BEREC, Eurostat, etc. The DNA can **introduce** *one unified annual reporting* that serves all needs, thereby cutting red tape by up to 50% as the Commission envisages.

Additionally, we argued that any new rights for co-investment or wholesale-only models come with responsibilities; conversely, new obligations (e.g. stricter consumer rights) should come with offsetting burden reductions elsewhere.



We also insisted on maintaining a **level playing field**. If the DNA eases rules for certain players (say, non-telco "digital networks"), it must ensure this does not give unfair advantages in competing with regulated telcos in overlapping markets. At the same time, going forward, at the centre of the DNA, an ambitious simplification/reduction of burden should be present; and against this background, instead of broadening the scope of the rules and increasing the regulatory burden for other actors, one should consider reducing the burden on the electronic communication service providers, thus promoting investment conducive policies to boost digital infrastructure deployment as well as a competitive and innovative telecommunications market in the EU.

In Luxembourg, the market is competitive but fragile. The DNA should **guard against unintended consequences such as market concentration**. For instance, if pan-European consolidation is encouraged, ensure robust **merger control and pro-competitive safeguards** so that Luxembourg's consumers continue to benefit from choice and affordable prices.

#### f) Investment and cost-sharing

FEDIL did not take a definitive stance on the fair contribution in our White Paper's reply, but we expressed concern that a misguided approach could *"discourage the development of the internal market"* and violate net neutrality or cost-pass-through principles.

The current market-driven system of commercial arrangements functions effectively, delivering efficient outcomes through competitive negotiations. Luxembourg's experience demonstrates that existing competition and consumer protection frameworks already provide sufficient oversight, making additional regulatory intervention unnecessary and potentially harmful to the digital ecosystem.

Luxembourg's success in achieving high connectivity also demonstrates the importance of demand-side factors. The DNA should encourage the development of applications and services that drive genuine demand for high-speed connectivity, rather than focusing solely on supply-side interventions. This approach ensures that infrastructure investments deliver real value to consumers and businesses.

In summary, FEDIL's prior input championed **flexibility**, tech neutrality, targeted harmonization, burden reduction, and preserving competition.

We are pleased to see many of these reflected in the DNA guiding principles. Our message to the Commission: *"Be ambitious but also pragmatic."* Achieve Europe's goals by building on what works in leading Member States like Luxembourg and by avoiding disruption where not needed. We believe the DNA can establish a modern framework that incentivizes investment and innovation. We stand ready to contribute Luxembourg's successful experiences (e.g. collaborative broadband roll-out, balanced spectrum policy, etc.) as best practices.



## C. Recommendations for the European Commission

FEDIL puts forward the following specific recommendations to ensure the Digital Networks Act works for Luxembourg and its operators, and indeed for all Member States large and small. These recommendations are aimed at making the DNA a success.

### 1. Embrace principle-based flexibility

Draft the DNA as a principles-oriented framework rather than a rigid rulebook.

While setting common EU targets, such as the copper switch-off by 2030, is valuable, national regulators must retain the flexibility to tailor implementation to local realities. Luxembourg, for example, is already on track to retire copper by 2030, with Luxembourg telecom operators leading the transition, while other Member States facing geographic or economic constraints should be allowed short extensions, provided they meet interim milestones. This approach aligns with the European Parliament's<sup>1</sup> call for a non-binding, flexible timeline and ensures that early movers like Luxembourg are not penalized by one-size-fits-all mandates. This flexibility will build buy-in and realistic planning.

### 2. Ensure technology neutrality in law

Explicitly state in the DNA that **technology neutrality** remains a core principle.

Regulatory measures should focus on performance criteria and outcomes, such as gigabit speeds, low latency, and reliability, rather than prescribing specific technologies like fiber. In Luxembourg, gigabit coverage is achieved through a mix of full-fiber and DOCSIS 3.1/4.0 cable networks. The DNA should recognize this diversity and avoid language that implies fiber is the only acceptable solution or that mandates "access to gigabit connectivity". This is especially important for the last few percent of households in hard-to-reach areas, where fixed wireless or satellite may be more practical to address connectivity gaps. The European Parliament's<sup>2</sup> emphasis on meaningful connectivity and FEDIL's advocacy for performance-based standards both support this inclusive, future-proof approach.

#### 3. Strengthen cross-border coordination mechanisms

Introduce provisions that mandate enhanced cooperation on cross-border coverage and spectrum.

Given Luxembourg's unique position, with nearly half its workforce commuting daily from neighboring countries, seamless cross-border connectivity is essential. The DNA should mandate **enhanced cooperation among national regulators on border coverage and spectrum planning**. For instance, annual consultations between ILR and counterparts like ARCEP and BNetzA should be formalized, and BEREC could be tasked with establishing a Cross-Border Digital Infrastructure Forum. This would help synchronize 5G rollout along transport corridors and resolve issues like inconsistent EMF limits or permit delays. The European Parliament's support for spectrum harmonization without centralization reinforces this need for structured but flexible coordination.

<sup>&</sup>lt;sup>1</sup> https://www.europarl.europa.eu/RegData/etudes/BRIE/2025/772864/EPRS\_BRI(2025)772864\_EN.pdf

<sup>&</sup>lt;sup>2</sup> https://www.europarl.europa.eu/RegData/etudes/BRIE/2025/772864/EPRS\_BRI(2025)772864\_EN.pdf



## 4. Calibrate spectrum policy – No forced EU auction

When reforming spectrum governance, the Commission should **codify best practices rather than centralize**.

While the DNA should promote convergence in spectrum policy, it must avoid centralizing spectrum allocation and preserve national discretion over auction design. This would level the playing field without removing national prerogatives. The Institut Luxembourgeois de Régulation (ILR) has successfully managed spectrum to achieve 100% 4G/5G coverage, and any shift to EU-run auctions could undermine this success.

We explicitly urge the Commission to **avoid any single EU-run auction pilot** for 5G/6G. As FEDIL and many others argued, it could harm competition at the expense of small markets. Instead, **an EU-level "peer review"** (as already in the Code) should be strengthened: e.g. the DNA could give the Commission power to issue an opinion if a national spectrum auction deviates from principles (much like it can review remedies today). This retains flexibility while promoting convergence.

### 5. Simplify administrative and reporting obligations

The DNA should contain a chapter on reducing operator administrative burdens.

To reduce burdens on operators and regulators, especially in small markets like Luxembourg, the DNA should **streamline administrative processes**. A unified annual reporting template accepted by all EU and national authorities would eliminate duplicative data submissions. The "country-of-origin" principle should be applied to non-infrastructure providers, allowing Luxembourg-based operators to expand across borders with minimal red tape.

Some form of harmonization or one-stop-shop approach should also be promoted to support the enforcement of national rules on lawful interception and cybersecurity. Consumer protection rules should be harmonized with existing frameworks like the DSA and GDPR, and the Commission should publish clear DNA-specific guidelines to help operators communicate rights effectively. These measures are vital for Luxembourg's multilingual, resource-constrained environment and align with the European Parliament's call for regulatory simplification.

#### 6. Encourage cooperative investment models

Lean into provisions that **facilitate co-investment and sharing**, especially important in smaller markets.

The DNA should actively support co-investment and infrastructure sharing, particularly in smaller markets where scale is limited. FEDIL recommends that the DNA include **pre-approved templates for co-investment agreements**, ensuring compliance with competition rules while reducing legal uncertainty. Luxembourg's operators already engage in network sharing, and EU-level endorsement of such models would encourage further collaboration.

The DNA should also facilitate cross-border consortia, e.g. POST Luxembourg partnering with regional peers for 6G procurement and provide targeted financial support for high-cost final rollout phases. This approach ensures that even small countries can sustain top-tier infrastructure and aligns with Parliament's emphasis on investment incentives and proportional regulation.



## **D. Conclusion**

Luxembourg's telecom industry is **fully committed to Europe's digital connectivity vision**. We believe the DNA can be a game-changer if it **combines ambition with nuance**. Our operators have shown that with the right conditions – investor-friendly climate, tech-neutral choices, regional cooperation – even a small country can achieve top-tier digital infrastructure.

We ask the European Commission to use Luxembourg's experience as proof that **flexibility and competition yield results**. By implementing the above recommendations, the DNA will provide a robust yet adaptable framework for all Member States, including Luxembourg, to succeed in the Digital Decade.

FEDIL stands ready to continue this dialogue and assist in fine-tuning the Digital Networks Act for the benefit of consumers and industry in Luxembourg and across the EU. We look forward to a Digital Networks Act that enables Europe and Luxembourg to master our digital infrastructure needs in the coming years.

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