

Expiring Spectrum Licences in Europe: Renewal, Re-auction, or Alternative Approaches?

The 21st European Spectrum Management Conference

Brussels, 17-18th of June 2026

Stefan Zehle

CEO, Coleago Consulting

stefan.zehle@coleago.com

Expiring spectrum licences: The Commission favours stability



Brussels, 21.1.2026
COM(2026) 16 final

2026/0013 (COD)

Proposal for a

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on digital networks, amending Regulation (EU) 2015/2120, Directive 2002/58/EC and Decision No 676/2002/EC and repealing Regulation (EU) 2018/1971, Directive (EU) 2018/1972 and Decision No 243/2012/EU (Digital Networks Act)

{SEC(2026) 14 final} - {SWD(2026) 13 final} - {SWD(2026) 14 final}

*“The preferred option entails mainly **unlimited licence duration by default**, with possibility for review clauses and revocation of rights of use, quasi automatic renewals, ...”*

Whereas:

(102) As long-term investment planning depends on guarantees for renewals of the rights of use in the same way as on the duration of the rights of use, **the renewal should be in principle automatic, unless there are compelling reasons against it.**

Article 25 - Renewal of individual rights of use for harmonised radio spectrum

In principle...

1. Any right of use of harmonised radio spectrum subject to limited duration shall be automatically renewed for a similar duration and with similar conditions upon request by its holder.

...but there is reasonable flexibility

2. By derogation to paragraph 1, ..., the ... authority may decide, at least five years in advance of the expiry of the right, not to automatically renew ... for one or several of the following reasons:
 - a) the fulfilment of ... public policy objectives ...;
 - b) the implementation of a new technical implementing measure...;
 - c) the serious non-implementation of the conditions;
 - d) competition concerns;
 - e) technological or market evolution;
 - f) where radio spectrum was granted free of charge

Spectrum pricing for renewal may remain a point of divergence between member states

Whereas:

(103)

Renewals should be accompanied by a review of the annual and one-off fees for the use of radio spectrum to ensure that those fees continue to promote optimal use,

Such review should be based on the value of the rights of use as resulted from the latest competitive or comparative assignment procedure

The revenues per connection, as well as the overall burden that holders of rights have from all their radio spectrum holdings, should also be taken into account, to avoid that very high prices paid in past auctions continue to overburden holders of rights and prevent them from investing in networks.



Where prices were high, shall renewal prices also be high and where they were low, shall they remain low?



Acknowledges that
a) the cost of spectrum relative to revenue is a problem
b) high prices hinder investment

Article 25 Renewal of individual rights of use for harmonised radio spectrum

Paragraph 4

.....

When defining the level of the fees, ... authorities shall take into account among others

- historical prices,
- international benchmarks,
- the evolution of the average revenue per MHz per connection taking into account all radio spectrum used for the respective service, and
- the opportunity cost of radio spectrum.

These are all very different reference points – there is no guidance towards a common approach to pricing renewal of spectrum licences.

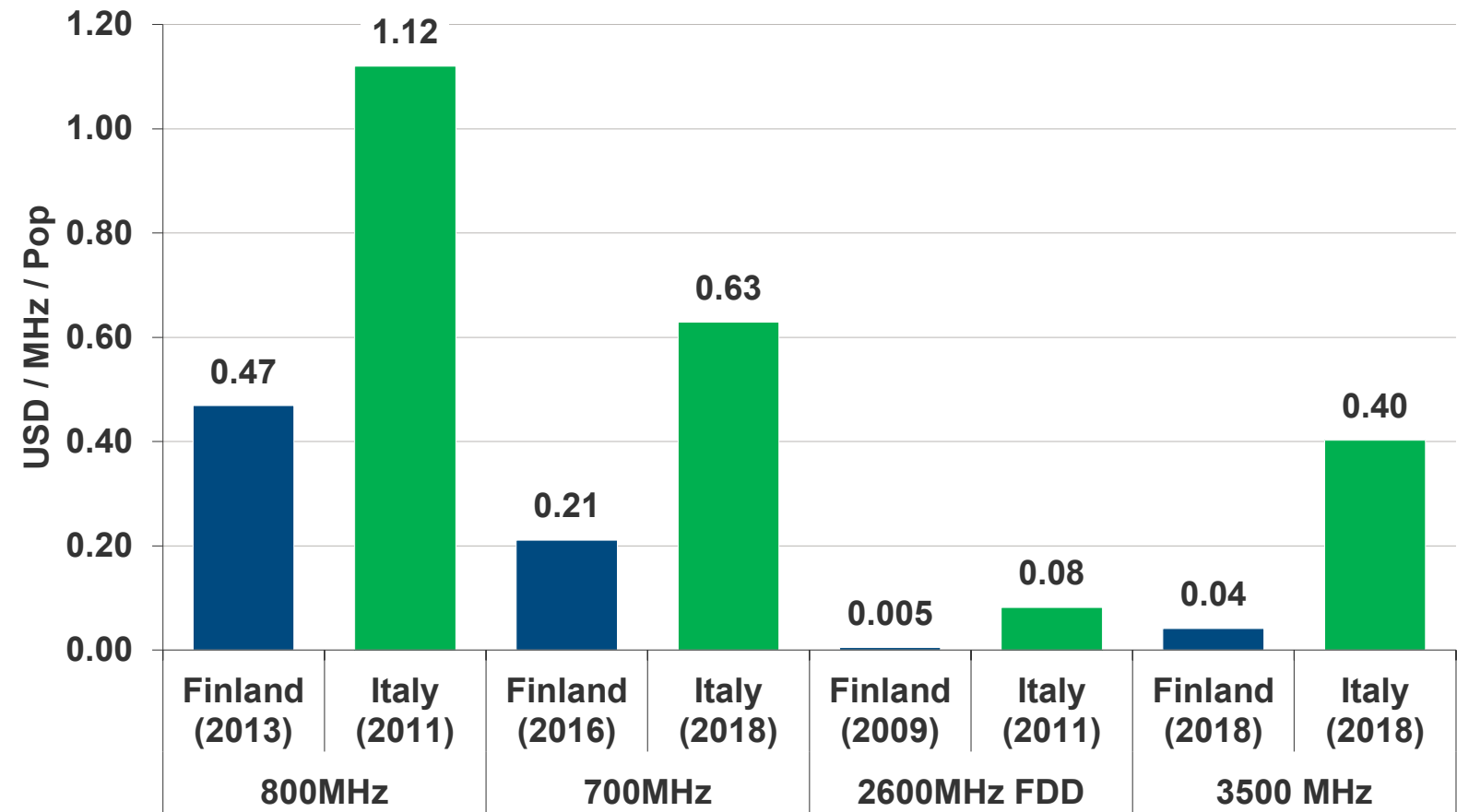
The likely outcome is that the wide divergence in spectrum prices among EU countries will not disappear.

Setting prices based on benchmark is a deeply flawed pricing methodology

Differences in prices paid for spectrum in Europe are mostly due to the policy objectives of the regulator.

Example, spectrum prices paid in Finland vs. Italy.

Prices paid for spectrum Finland vs. Italy

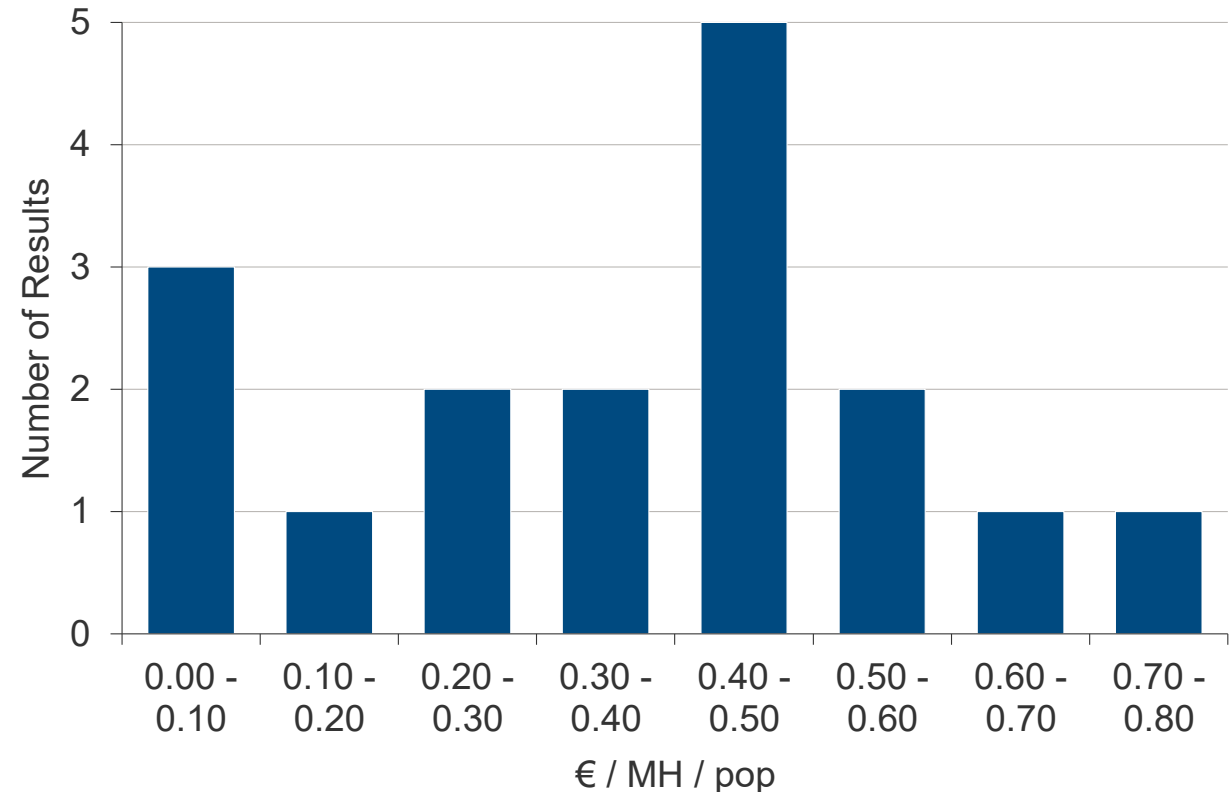


Calculating an average from a dataset with a wide range is meaningless

Range of prices paid for 800 MHz spectrum in Europe

As an example, prices paid for 800MHz spectrum licences in European countries differ by a factor of 10.

Calculating an average says nothing about the value of 800MHz spectrum.





Expiring spectrum licence process

- Spectrum licences in eight bands will expire between June 2028 and October 2032.
- The consultation process started in May 2023 and looked well planned and designed, allowing for stakeholder inputs and reply comments.
- Based on stakeholder inputs, the regulator (ACMA), decided to renew rather than re-auction with a rationale similar to that which informed the Digital Networks Act.

Spectrum licence renewal pricing was a key issue for mobile operators

- The ACMA decided to derive renewal prices from a benchmarking prices paid at auction in other countries.
- In May 2025, the ACMA published the results of the benchmarking and a view on preliminary prices for consultation.

Up to this point everything followed the planned process.

Note: Coleago Consulting Ltd is the advisor to Optus. Further details on the process, submissions, including Coleago's papers, can be found on the ACMA website.

Spectrum pricing became the sticking point – it is highly likely that political pressure to extract higher licence fees turned an initially well designed process into a farce

In December 2025, the ACMA published a revised document for consultation with “*Updated preliminary views on pricing*”.

- The ACMA had engaged a different advisory firm to redo the spectrum price benchmarking.
- Suddenly proposed spectrum licence renewal prices were substantially higher.
- These new prices were put to consultation, but ACMA did not engage substantively with the submissions.



**Depending on how it is done,
benchmarking can give any
answer you want.**

There is now a substantial risk of litigation by Telstra, the leading operator in Australia

Legal challenge on the unreasonableness of ACMA's approach:

“Our analysis demonstrates that the ACMA’s updated preliminary views rely on DotEcon’s analysis which in turn is premised on incomplete and incorrect data, methodical and statistical flaws, and implausible assumptions.

We consider much of the DotEcon analysis should not be adopted by the ACMA when setting the renewal spectrum prices (in line with our recommendations).

*Should the ACMA proceed with its updated preliminary views when setting the spectrum renewal prices, then **we consider the SAC determination may be subject to legal challenge and be found to be legally unreasonable.**”*

Source: Submission to ACMA Consultation Expiring Spectrum Licences Stage 4: Pricing, Public Submission, 27 February 2026, Telstra

Public interest should override all other criteria when dealing with expiring spectrum licences

The socio-economic impact of mobile services eclipses any amount that could be extracted from spectrum licence fees.

- Spectrum is already efficiently allocated is that it is unlikely to be in the public interest to re-auction expiring licences.
- A nominal (public interest) pricing approach to renewal fees would take into account the overall return to the community from both fees and the socio-economic impact of mobile.



Renewal rather than re-auction

Unlimited licence duration, as is the case in Finland

Nominal spectrum licence fees

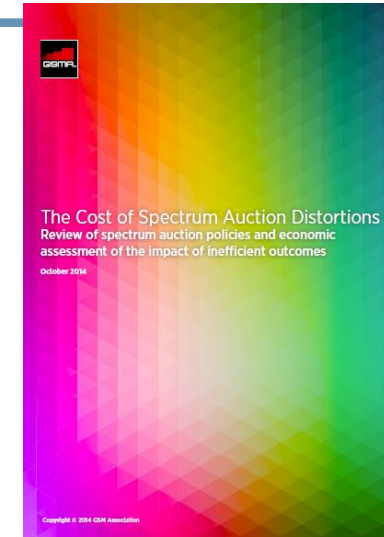
A sample of Coleago reports in the public domain



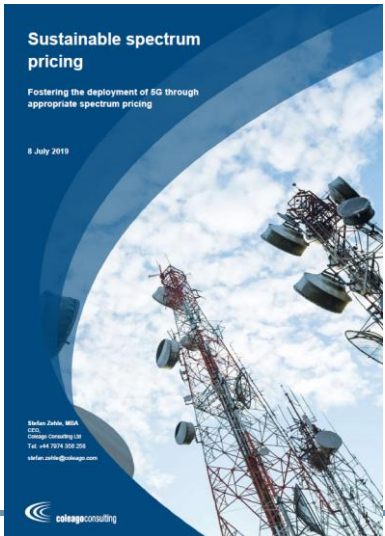
Report on Coleago spectrum demand model for the GSMA to estimate mid-bands spectrum demand for 5G as an input to the WRC-23.



Meeting low-band needs requires long-term planning from policymakers. Low-band spectrum is the cornerstone of digital equality and a driver of broad and affordable connectivity. This Coleago report for the GSMA was published in June 2022.



The cost of spectrum auction distortions, a Coleago report for the GSMA to highlight how flawed spectrum auction rules result in inefficient outcomes and adverse consequences for a country's economy



Sustainable spectrum pricing, providing policy makers with a methodology to assess spectrum pricing, taking account of the increased spectrum needs for 5G without endangering operator's ability to deliver the 5G vision.



The benefits of technology neutral spectrum licences, a Coleago report for the GSMA showing clear evidence that technology neutral spectrum licences produce benefits for mobile services development and efficient use of spectrum.



Mobile Services, Spectrum and Network Evolution to 2025, a review for telecoms regulators and operators of global developments, insights, trends, and best practices, to inform spectrum policy and management and operator strategies

Download spectrum related articles and papers from Coleago's website

www.coleago.com/insights/



Industry Comment

The End of Telecoms History? – Not Quite!

February 20, 2025
By Stefan Zehle

At the European 5G conference, Stefan Zehle highlighted that differences in mobile data usage across countries result from variations in price and network availability. While European policymakers celebrate 89% 5G coverage, gaps in both outdoor and indoor connectivity limit usage. William Webb's prediction that data traffic will plateau at 20 GB per user per month by 2027 seems unlikely, given that top users already exceed 100 GB. To fully realise 5G's potential, policymakers must address these coverage issues in a cost-effective manner.



Strategic Spectrum Review

Insights from a Strategic Spectrum Review

January 28, 2025
By Graham Friend

The mobile industry has accumulated a fragmented spectrum portfolio, consisting of various frequency bands that are sub-optimally allocated for modern technologies like 4G and 5G. As operators transition from legacy technologies such as 2G and 3G to newer, bandwidth-intensive solutions, the need for contiguous spectrum blocks has become critical.



Industry Comment

The End of Telecoms History? Not Really

October 24, 2024
By Stefan Zehle

In his book *The End of Telecoms History*, William Webb uses extrapolation of mobile data usage growth curves to claim that mobile data "user requirements are nearly met" and that "we have all we need". He predicts mobile data usage to "plateau at around 15-20 Gbytes/user/month". Webb claims that no further investment in 5G capacity is needed and that the only remaining problem is ubiquity, notably in-building coverage. This article provides evidence that, while the author makes some good points, his analysis with regards to mobile data usage is flawed and hence the conclusions he draws are quite wrong.



Telecom Regulation

Mobile Network, Spectrum, and Public Policy Outlook to 2030

September 12, 2024
By Stefan Zehle, Nick Pookas and David Tanner

The report is based on the Coleago report 'Mobile Services, Spectrum and Network Evolution to 2025' (March 2021), updated to align with the latest developments as well as with market projections to 2030. It provides a review for telecoms regulators and mobile operators of key global developments, insights, trends, and best international practices, to inform future spectrum policy and management as well as operator strategies.

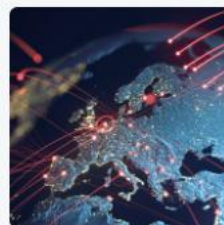


Spectrum Valuation and Auctions

Kazakhstan 3.6 GHz Spectrum Auction

January 23, 2023
By Graham Friend

The Ministry of Digital Development, Innovations and Aerospace Industry of the Republic of Kazakhstan recently announced the results of their spectrum auction for two 100 MHz lots of 3.6 GHz spectrum. The spectrum was acquired by a consortium formed by mobile operators Kcell and Mobile Telecom Service (Tele2-Altel), both part of the Kazakhtelecom Group.



Spectrum Valuation and Auctions

Future Utilisation of the 470-694 MHz Band in the UK

November 30, 2022
By Scott McManis, Ade Ajibola, David Barker and Nick Pookas

In this report, written for the UK Spectrum Policy Forum ahead of WRC-23, Coleago explores the future use of the 470-694 MHz UHF band in the United Kingdom post 2030. The band is sought after and used by a wide range of services, including digital terrestrial television (DTT), programme-making and special events (PMSE) and mobile services amongst others.



Spectrum Valuation and Auctions

Vision 2030: Low Band Spectrum for 5G

June 14, 2022
By Coleago Consulting

In this report, written for the GSMA, Coleago explores why low band spectrum is the cornerstone of digital equality and affordable connectivity to ensure that mobile's economic and social benefits can be felt in all communities.



Spectrum Valuation and Auctions

The South African Spectrum Auction: An Insider View

April 2, 2022
By Graham Friend

A review of the recent South African spectrum auction and the learning for other regulators seeking to award spectrum to support the development of mobile broadband and 5G.



Spectrum Valuation and Auctions

The Nigerian 3500 MHz Spectrum Auction

January 8, 2022
By Graham Friend

A review of the NCC's 3500 MHz spectrum auction and the learning for other regulators seeking to award spectrum to support the development of mobile broadband and 5G.



Spectrum Valuation and Auctions

Estimating Mid Bands Spectrum Needs for the 2025-30 Timeframe

July 5, 2021
By Stefan Zehle and David Tanner

This report, written by Coleago for the GSMA, provides a global analysis of spectrum needs to meet the 5G vision of providing ubiquitous high-speed wireless mobile connectivity and a user experience to match that of fixed networks.

Coleago Consulting Ltd – a specialist telecoms management consulting firm established in 2001

Coleago is a telecommunications consulting and training firm.

We offer an experience-based consulting approach, with project teams entirely made up of partner-level consultants, each with a minimum of 20 years' experience in the telecoms sector.

**Spectrum Valuation
and Pricing**

**Spectrum Auction
Bidding Strategy and
Auction Design**

**Telecoms Policy and
Regulation**

**Strategy and Business
Planning**