

Mastering European telecoms regulation

A THREE-DAY TRAINING COURSE



MODULE 1
Introduction to the EU regulatory framework

MODULE 2
Market analysis & symmetric regulation

MODULE 3
Consumer protection & end-user rights

MODULE 4
Spectrum management and 5G



INTERNATIONAL



in-person
training

regulation made simple

Mastering European telecoms regulation



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training

TRAINING

The training will provide attendees with:

- A comprehensive overview of regulatory issues and developments in the telecommunications sector, using real-life examples and case studies from the European Union.
- An insight into the latest developments in the fields of broadband deployment and access regulation, radio spectrum policy and awards, net neutrality, mobile regulation and roaming.
- An update on the current EU policy goals, the review of the EU regulatory framework for electronic communications and consumer protection.
- An understanding of the key institutional aspects, notably the EU legislative process relevant for the telecoms sector and the harmonisation mechanisms used in Europe, e.g. for market reviews and spectrum policy.
- A historical perspective on European telecoms regulation for participants to gain a clear appreciation of the key regulatory trends.

“Cullen International manages to keep the complex topic of Telecoms Regulation as simple and tangible as possible. An extremely good overview! Cullen excels in simplifying without falsifying.”

Anja Ingenrieth, Deutsche Telekom

Who should attend and why?

The seminar is suitable for:

- Seasoned regulatory experts who have become specialised in a specific regulatory area but who wish to refresh their understanding of the broader range of regulatory issues.
- Regulatory specialists dealing with a specific country who want to become acquainted with broader regulatory developments across Europe.
- Individuals who have recently moved into a regulatory position and wish to acquire a rapid grasp of the key debates.

- Regulatory experts who wish to reflect on regulatory trends in industry.

The seminar is not designed for experts who already have a broad range of regulatory experience – please take a look at our specialist seminars.

Furthermore, the programme will meet the needs of those who want to:

- Gain a clear insight into the main issues of the EU telecoms regulatory framework and other relevant EU legislation.
- Understand how these issues affect their own national regulatory environment.
- Learn and exchange views on emerging questions faced by the communications industry.

The training organiser

Cullen International provides regulatory, competition and sustainability intelligence in telecoms, media, postal and the digital economy covering developments across Europe, Americas, the Middle East and North Africa, as well as key trends across the globe.

For almost 40 years, we have been providing comprehensive, neutral, unbiased, timely information that is trusted by industry and official institutions alike. We are widely recognised as the leading regulatory intelligence provider in the field.

Our subscription services consist of a unique range of alerts, reports, benchmarks and enquiry services that are complemented by our topical conferences and regulatory training offer.

We are also regularly selected to carry out important research and studies for the European Commission and other organisations and we are frequently sought out to chair and make presentations at industry events.

COURSE TIMINGS

For future course dates and the detailed agenda, please visit our website:

www.cullen-international.com



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Trainers



Veronica Bocarova, *Head of Regulatory Training*, is responsible for Cullen International's regulatory training portfolio, developing and executing training and capacity building programmes for industry stakeholders, policymakers and regulators across the globe. With over 20 years of professional experience, she has extensive knowledge of the implementation of the EU regulatory framework across Europe. Before joining Cullen International, Veronica worked for Ericsson consulting practice in Stockholm.



Philippe Defraigne, *Director*, has worked extensively on EU regulation affecting the telecoms and internet sectors and the implementation at national level across Europe. He is widely regarded in the industry as one of the leading experts in the field.



Teresa Felix, *Senior Analyst*, follows telecoms regulation in Portugal. She is a legal expert in EU and national telecoms and postal regulation, largely dedicated to consumer issues. Before joining Cullen International, Teresa worked in Portugal at the national regulatory authority for communications (ANACOM) as a legal advisor to the Information and Consumers Department. She has also worked as a legal advisor at the Portuguese Association for Consumer Protection.



Dries Indesteege, *Head of Telecoms*, leads our research on telecoms regulation in Europe, pulling in contributions from our analysts and correspondents across the continent. Prior to his collaboration with Cullen International, Dries worked at Belgacom / Proximus on local loop unbundling and the company's launch of IPTV.



Alessandro Mauro, *Senior Analyst*, is responsible for managing the European telecoms benchmark tables. Before joining Cullen International, Alessandro had long career at Telecom Italia and FiberCop. He holds a degree in economics from La Sapienza University of Rome and a master's degree in EU project financing.



Laurence Nivot, *Consumer Protection Manager*, follows telecoms regulation in Belgium, France and Lithuania. Laurence is also lead author of the Consumer Protection Cross-Country Analysis report, covering 12 European countries. Laurence joined Cullen International in 2012, previously working as a journalist for the European Commission's news website.



Matej Podbevšek, *Principal Analyst*, follows telecoms regulation in Latvia, Slovenia and the UK, and is the lead author of the monthly Europe Telecom Update. Before joining Cullen International in 2014, Matej was a senior advisor in the telecommunications department of the Slovenian regulator for communication networks and services (AKOS).



Martin Schraa, *Principal Analyst*, follows regulation at EU level, covering the European Commission, Parliament, Council and BEREC. He also follows postal and telecoms regulation in the Netherlands. Martin joined Cullen International in 2007 after an internship at the European Telecommunications Network Operators Association (ETNO).

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MODULE 1

Introduction to the EU regulatory framework

Telecoms technology and networks

- Data networks and the internet protocol (IP)
- Very high-capacity networks (VHCN)
- Fibre-to-the-home (FTTH) and fibre-to-the-building (FTTB)
- Point-to-point (P2P) and passive optical networks (PON)
- Mobile networks

Telecommunications regulation and the role of regulators in perspective

- History, drivers and trends in regulation
- Ex ante vs ex post regulation
- Infrastructure vs service-based competition
- Evolving role of regulators in response to new technologies, business models and market structures

The EU regulatory framework: policy context and main goals

- Evolution of the EU telecoms regulatory framework and main elements of the EECC
- Policy context: 2030 connectivity goals for fibre and 5G
- Governance: Digital Decade Policy Programme (DDPP)
- Beyond the EECC: towards the Digital Networks Act (DNA)

Governance aspects: NRAs, BEREC and RSPG

- Governance in the context of the telecoms framework
- Set-up of NRAs and rules to ensure their independence
- Status and tasks of BEREC and the BEREC Office
- Role and tasks of RSPG



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MODULE 2

Market analysis and symmetric regulation

Market analysis: market definition

- Main concepts of ex ante regulation
- Retail and wholesale markets
- Substitutability and the SSNIP test
- Relevant markets susceptible to ex ante regulation

Market analysis: SMP assessment and remedies

- SMP assessment based on the European Commission guidelines: single and joint SMP
- Ex ante regulatory obligations that can be imposed on SMP operators and their application in different electronic communications markets
- The European Commission guidance to the national regulators for imposing ex ante remedies (Gigabit recommendation)

Symmetric regulation

- Physical infrastructure access and transparency obligations under the Broadband Cost Reduction Directive and the Gigabit Infrastructure Act (GIA)
- Symmetric access obligations under article 61 of the EECC, covering non-replicable assets, and conditions and procedures under which such obligations could be imposed.

Copper decommissioning

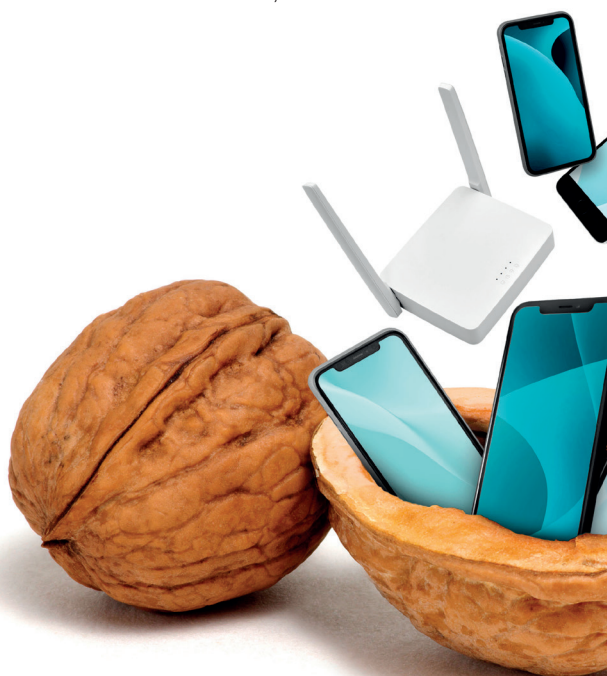
- Copper decommissioning and the transition from legacy copper to fibre networks
- EU rules governing copper decommissioning, including art. 81 of the EECC and the Gigabit recommendation
- Copper switch-off across the EU

Wholesale access regulation in fixed broadband networks

- Virtual unbundling (VULA)
- Local, central and high-quality access
- Commitments procedures for access and co-investment offers as an alternative to SMP obligations

Geographic aspects of market analysis

- Key methodological considerations applied by NRAs in analysis of broadband markets when dealing with geographically differentiated competitive conditions
- EECC requirements to survey the state of broadband networks and investment plans across the national territory



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MODULE 3

Consumer protection and end-user rights

End-user rights

- Horizontal vs sector-specific telecoms consumer protection rules, the rationale for sector-specific regulation
- Evolution of the EU regulatory approach
- Maximum harmonisation of end-user rights
- Overview of the key EECC provisions and the applicability of end-user rights to specific categories of the ECS.

Universal service: towards affordable broadband

- Fundamental requirements of universal service: availability, accessibility, and affordability
- Evolution of the universal service scope under the EU regulatory framework
- Universal service financing mechanisms

Policies on open internet and net neutrality

- Concept of net neutrality
- Ecosystem of internet services and the role of OTT/CAPs
- EU net neutrality regulation and BEREC open internet guidelines
- Provisions on reasonable traffic management, specialised services, transparency
- National implementation of the EU net neutrality rules, including decisions on zero rating, traffic management measures and specialised services

EU roaming

- EU approach to regulating international roaming
- Transparency measures to prevent bill shock
- Impact and practical implementation of the roam like at home measures introduced by the TSM Regulation, including fair use policy and derogations mechanism

MODULE 4

Spectrum management and 5G

Introduction to mobile spectrum and 5G

- Spectrum for mobile communications: properties and characteristics of different bands
- Evolution of mobile technology from 2G to 5G
- 5G pioneer bands
- 5G non-standalone and standalone networks
- Wave, beamforming, and network slicing

Spectrum policy implementation: stimulating investment in 5G

- Spectrum award mechanisms for 5G pioneer bands
- Outcomes of the recent 5G auctions and financial burden on MNOs
- 5G spectrum licence conditions: geographic scope, rollout, coverage and quality of service obligations
- Spectrum for private industrial 5G networks



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MODULE 4

Spectrum management and 5G

Radio spectrum management: institutional and regulatory framework

- Key institutions shaping spectrum policy globally, at the EU and national level
- Spectrum assignment methods: central planning, individual rights of use and licence-exempt use
- Award mechanisms: auctions, beauty contests, first come first served
- Spectrum auctions as the most common award mechanism: economic rationale, policy objectives, format and design
- Competition measures: spectrum caps and reservations
- Licence conditions: duration, coverage and quality of service, network sharing and wholesale access obligations
- Measures to enhance efficient use of spectrum, including secondary trading, leasing, shared spectrum use, spectrum fees and “use it or lose it obligations”
- EECC provisions to ensure more harmonised implementation of the EU spectrum policy, common assignment deadline for 5G pioneer bands and light deployment regime for small cells

Network sharing and wholesale access in mobile networks

- Infrastructure vs service-based competition in mobile networks
- Different forms of network sharing and wholesale access
- Legal basis for imposing regulated access to mobile networks and infrastructure sharing
- Overview of recent network and spectrum sharing agreements, specific national policies and regulatory approaches taken by national regulatory and competition authorities
- MVNO access and relevant policy considerations for 5G

Specialise in competition law in the telecoms sector

A one-day seminar, conveniently attached to the Telecoms masterclass, focusing on the application of competition law in the telecoms sector. This training will provide attendees with:

- An overview of the relationship between competition law and the approach to economic regulation developed specifically for the telecoms sector;
- In-depth analysis and understanding of the key competition law concepts applied in the telecoms sector and relevant cases covering anticompetitive agreements, abuses of dominance and mergers;
- A chance to discuss competition law issues with experts and peers, and to compare experiences and different regulatory approaches.



For more information



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How to register?

Please register by filling in the respective form on our website:
www.cullen-international.com

Fees

Fee per delegate

Early-bird fee (up to two months before the event starts)	€ 2,950 (€ 3,570 VAT included)
Standard fee	€ 3,300 (€ 3,993 VAT included)
1-day seminar on competition law in the telecoms sector	€ 950 (€ 1,150 VAT included)

10% discount for multiple registrations from the same organisation.

Belgian VAT (21%) is chargeable on all bookings.

The fees include the course materials, refreshments, lunches on the three days and dinner on the first and second evenings. They do not include travel costs nor accommodation.
Upon receiving your registration, we will send you an invoice to be paid within one month and in all cases before the event. Payments can be made by credit card or by bank transfer and should be made before the training starts. Registrations will only be confirmed after the payment is received.

Training courses and conferences general terms and conditions

A. Eligibility

Cullen International's training courses are designed for the use of government entities, regulators, communications service providers or manufacturers. We reserve the right to offer access to our training courses only to selected organisations. Feel free to contact us if you have any questions regarding your eligibility.

B. Limited number of delegates

To ensure a high-quality training/conference experience, the number of participants in the training/conference programme will be limited. Cullen International reserves the right to refuse registrations once the maximum number of participants is reached.

C. Cancellations and substitutions

Cancellations must be made in writing. Full refunds will be paid only if cancellations are received by Cullen International 30 days before the start of the training/conference course. There will be no refund in case of cancellations within 30 days before the start of the training course. Delegate substitutions can be made at any time. They must be communicated to Cullen International before the start of the course.

D. Non-attendance

In the event of non-attendance, full training/conference fees will remain payable, and no refunds will be paid.

E. Changes to programme, venue or date or format

Cullen International reserves the right to make changes to the programme, the venue, the presenters and the training format. Cullen International also reserves the right to cancel or re-schedule the training/conference if there are insufficient participants. Delegates will be notified in good time and will be entitled to a refund of the fee if the training/conference is cancelled or is changed to a date which is not convenient for the delegate. In case the training course cannot be organised onsite, because of any event preventing the training organisation in a classroom format, Cullen International reserves the right to change the course format to an online course. Participants will be notified in due time. If the course is changed to an online format, Cullen International will not reimburse any travel or accommodation costs. It is strongly recommended that participants include a cancellation insurance when booking travels and accommodation.

F. Invoicing and payment conditions

Registrations will only be effective after payment receipt and payment must be done before the event takes place. Cullen International reserves the right to refuse attendance of a participant whose invoice has not been paid prior to the event. Cullen International also reserves the right to refuse registrations to members of organisations who had registered participants to previous events and not paid their invoices. The delegate

shall provide, while registering to attend an event, all requested information necessary for the issue of the invoices. All invoices are payable in total, for the amount invoiced including the taxes stated on each invoice (VAT). No withholding for tax or administrative reasons will be accepted.

G. Data protection

Your personal data will be used for the purpose of organising the training or conference. Cullen International will also subsequently use such data to inform you of its future training programmes and other activities or services, unless you opt out by sending us an email. Your personal data will not be communicated to any third parties.

H. Confidentiality and copyright

All Cullen International training/conference material is subject to normal copyright conditions. Any copy is subject to prior written authorisation from Cullen International. The training/conference material is for the delegate's own use and may not be disclosed to any third party. It shall be treated with a high-level of confidentiality, in the same way as the delegate protects its own confidential information.



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