Implementation of the Open Internet Regulations
Provisional study findings

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Stakeholder workshop 30/01/2023

Workshop agenda

14h00-14h05	Introduction from European Commission, DG Connect
14h05-14h10	Introduction to the study
14h10-15h05	Article 3 (safeguarding open internet)
15h05-15h15	Break
15h15-16h10	Article 4 (transparency provisions), 5 & 6 (reporting & enforcement)
16h10-16h15	Break
16h15-16h50	Overall conclusions
16h50-17h00	Closing remarks from study team

Agenda

- Context and introduction
- Article 3: safeguarding open internet
- Article 4: transparency provisions
- Articles 5&6: monitoring, reporting and penalties
- Overall conclusions

Context

- Aim of the study: Assess the implementation of the Open Internet Regulation provisions (articles 3-6) and provide analysis to support the preparation of the European Commission's report to Council and Parliament on this subject as required by the Regulation (by 30 Apr 2023)
- Legal and regulatory developments:
  - Significant ECJ rulings regarding "Zero Tariff Offers" (ZTO)
  - Revised BEREC Guidelines June 2022 (including updates to reflect ECJ rulings)
  - Entry into force of European Electronic Communications Code (EECC) including consumer protection aspects, some of which elaborate on OIR provisions
- Technological and market developments
  - COVID pandemic leading to structural increases in online activity / bandwidth demand
  - Deployment of 5G mobile services with potential for development of quality-assured mobile services based on 5G network slicing
  - War in Ukraine and Council Regulation calling for the blocking of Russian media

Study methodology and timeframe

- Methodology
  - Desk research including 2019 Bird & Bird study (for baseline), analysis of BEREC and NRA Implementation reports 2021-2022, other BEREC documentation (NTP, QoS), literature, stakeholder position papers.
  - Interviews with BEREC, consumer and civil rights organisations (BEUC, Epicenter.works), ISPs (Vodafone, ETNO and members, ECTA and members), CAPs (CCIA and members, Netflix), Ericsson
  - Online survey (17 Nov-13 Dec): 44 responses of which 21 NRAs, 9 consumer / civil rights, 8 ISPs, 5 CAP of which 3 representing broadcasters
  - Validation through study team expert group and stakeholder workshop
- Timeframe
  - Oct 2022: Kick-off and development of materials
  - Nov-Dec 2022: Data gathering
  - Dec 2022-Jan 2023: Analysis
  - 19 Dec: Expert group
  - 30 Jan: Stakeholder workshop
  - March: Study finalised

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- Context and introduction
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- Article 4: transparency provisions
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Provisions of the OIR: Article 3

- Article 3: “safeguarding of open Internet access”
  1) seeks to ensure that end-users have the right to access and distribute information and content, use and provide applications and services and use termination of their choice;
  2) forbids commercial agreements that limit the exercise of those rights;
  3) requires ISPs to treat all traffic equally, save for certain exceptions relating to compliance with Union legislative acts or national legislation, network integrity and security, and mitigation of exceptional or temporary network congestion. Reasonable traffic management measures are also permitted;
  5) Providers of electronic communications to the public are expressly permitted to offer services other than Internet Access which are “optimised” (often called specialised services) if such optimisation is necessary to meet requirements for a specific quality of service and provided the provision of such services do not impact the quality of the Internet access.
- Main issues raised:
  - Restrictions regarding terminal equipment
  - Withdrawal of ZTO and exemptions for “public services”
  - Legal clarity around blocking content
  - Potential to offer quality assured services e.g. via 5G network slicing
  - Alleged under-provisioning of interconnect leading to service degradation

Article 3(1) – freedom of choice for end-users

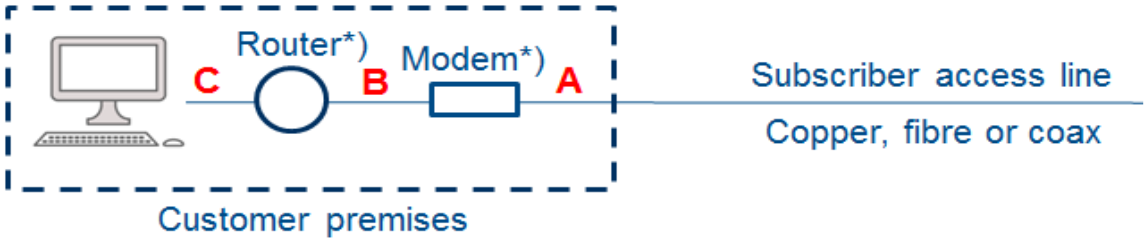
Information from data gathering and interviews

- **Restrictions on terminal equipment** remain relatively common, but responses from NRAs vary. Some pursue "router freedom" and have taken associated action (e.g. NL, DE, FI). However, in others NRA has found it justified to require use of ISP router (e.g. to support bundled services), or to enable ISP to establish specifications or require certification.
- Stakeholders consider that restrictions on terminal equipment have reduced but consumer organisations have persisting concerns over router freedom in some MS. Some ISPs also highlight concerns around high cost of incumbent router certification as barrier to free choice.
- Router/modem freedom is linked to the **definition of the "Network Termination Point" (NTP)**. NTP has been defined in 16 out of 24 MS, but definition varies. 8 out of 17 NRAs responding to the survey said it excluded the router, 4 said router was included, and 5 said it depended on the technology
- Stakeholders have differing views regarding the NTP definition
  - ETNO and BEREC consider differences justified due to national specificities / technology
  - Consumer and civil rights organisations argue that the user should have full freedom of choice as regards the router, which implies that the NTP should be before the router (e.g. the socket in the wall). This does not prevent network operators from offering to lease the router, as long as the consumer makes the choice.
- Incidence of **tethering restrictions** appears to have reduced significantly. NRAs observe that previous restrictions have been removed (following intervention in DK, DE), and most stakeholders consider that tethering is no longer an issue, although one ISP highlighted concerns that "device neutrality" could go too far e.g. permitting multi-device tethering e.g. in dorms.
- Action has been taken to prohibit charging for IPv4 addresses in some MS.

Article 3(1) – freedom of choice for end-users

Recommendation regarding NTP

- Freedom of choice for the router or modem depends on the *Network Termination Point (NTP).*
- NTP is defined in the EECC, and the concept is elaborated in BEREC Guidelines BoR(2)46
- Per BEREC: "The degree that the NTP location fosters innovation and competition on the TTE market is highest for point A, lower for point B and still lower for point C … it follows that equipment at the customer premises is part of the TTE unless there is an objective technological necessity for equipment to be considered as part of the public network. Consequently, the TTE includes the maximum number of pieces of equipment at the customer premises possible and, therefore, end-users have the maximum freedom to use the equipment of their choice."



- **Recommendation**: NRAs or other competent authorities that have not already done so should clarify their interpretation of the NTP in relation to implementation and enforcement of the OIR. They should document their decision in their annual OIR implementation reports and should explain how it relates to the criteria established in the BEREC NTP Guidelines. NRAs should be vigilant against ISPs that seek to impose onerous certification or testing requirements that in practice limit freedom of choice in the router and/or modem.

Article 3(1-3) – zero tariff offers & other commercial agreements

Information from data gathering and interviews

- Information from NRAs suggests that progress has been made in **phasing out ZTO** in line with the ECJ judgements. As of Dec 2022 ZTO was reported as fully withdrawn (not marketed or available to existing customer) in 6 MS while in a further 5 MS existing customers are served but ZTO is due to be phased out by March 2023. In 3 MS, ZTO is said not to be relevant.
- ZTO is still marketed in 5 MS (FR, EL, PL, PT, SK), but dialogue is ongoing and action is being taken including a "stop sell" of 31/1/2023 in SK and draft decision in PT to cease ZTO within 20 WD for new and 90 WD for existing contracts.
- BEREC expects that ZTO will have been removed in most MS by March 2023, but consumer organisations express concerns about delays
- Some large ISPs express concerns that the ZTO prohibition will exclude them from **zero rating "public interest" services**; however consumer groups and certain ISPs suggest providing an exception for public interest services would be a "slippery slope" undermining the principles of the OIR
- As of Apr 2022, ZTO was reported as available for social or education purposes in EL, DK, HE, IT and SE. Provision also in a number of MS during COVID. Access to customer care is also zero rated in some MS, Decision by RO NRA to zero rate access to performance measurement tool. BEREC considers that "public interest" ZTO can be handled under Article 3(3)a OIR
- There were no reports of cases regarding commercial agreements other than ZTO under Article 3(2) OIR

Article 3(1-3) – zero tariff offers & other commercial agreements

Conclusions regarding ZTO

- The ECJ rulings seem to have provided substantial clarity, where previously interpretations regarding ZTO differed
- Conclusion: Regarding the phase-out of ZTO, since the current expectation is that most ZTO offers will have been phased out by the end of 1Q2023, we believe that there is no need for immediate policy intervention.

- Regarding exemptions for public interest services
  - Under ECJ case law, ZTO now becomes an Art. 3(3) issue.
  - Under Art. 3(3) OIR, traffic management is permitted in order to "comply with Union legislative acts, or national legislation that complies with Union law, …"
  - Per Art. 103(4) EECC, "Member States may require that providers of internet access … distribute public interest information free of charge to existing and new end-users …"
- Conclusion: Where MS consider that there is a case to apply ZTO to public services, they should explore the use of exemptions under Art 3(3)a.

Article 3(3): treating traffic equally, traffic management

Information from data gathering and interviews

- **Blocking of content on legal grounds** is widespread. Subjects include e.g. illegal gambling, child pornography, breach of copyright, media sanctions, extremist content or “threat to the State”. Many ISPs complained that it was not always clear what to block (in particular, but not only regarding sanctions) and that responsibility over this matter was not clearly established.
- 24 MS confirm the presence of **port blocking** primarily to preserve network integrity and security (in particular port 25 (spam), 53, 445 (DoS attack), 137-139 (printer sharing). In some cases, port blocking is legally required by the MS. Most stakeholders acknowledge that practice on port blocking diverges considerably, but this was not highlighted by stakeholders as a significant concern.
- Much less use reported for exemption allowing **throttling to address time-limited network congestion**, even during COVID. However this exemption has been used in some MS to justify throttling when mobile users exceed caps in mobile data plans, to prevent overload during festivals / power outage, traffic reallocation between FWA and mobile networks during congested period.
- Most stakeholders do not highlight specific problems with **unjustified throttling**, but certain CAPs (on demand content / broadcasters) cite concerns that congestion of interconnection points is being used by some large network operators to similar effect. One provided data to illustrate this point.

Article 3(3) – traffic management

Conclusions regarding content blocking and interconnection

- The OIR has proven robust in the face of increased bandwidth demands resulting from COVID restrictions, providing scope for potential **exemptions in exceptional cases**, even though in practice, few challenges were reported
- At the time of the 2019 implementation report, there was a lack of clarity around **port blocking**. Today, after many years of experience and also thanks to a helpful review by ENISA, this seems to largely be a settled matter
- We believe that the OIR clearly sets out the circumstances (exemptions from the normal rule) in which **content blocking** is permitted. ISPs have not always received clear guidance about what must be blocked. This is not however a matter that can be addressed through the OIR.
- Conclusion: Where needed, Member States should provide clarity around the legal grounds for content blocking in their jurisdiction, what to block and how to block it.
- The OIR does not explicitly deal with interconnection; however, the OIR and the Guidelines provide NRAs with significant authority to act if interconnection practices risk undermining the effectiveness of OIR Art. 3, see para 6 and para 93 of the Guidelines. ARCEP monitors and produces a “barometer” of data interconnection.
- Conclusion: NRAs have the authority to gather data regarding interconnection. They also have the authority and responsibility to act in substantiated cases, e.g. where an ISP fails to provide adequate interconnection capacity, for instance by failing to provide timely upgrades when warranted. How NRAs should monitor possible infractions, and what action if any should be taken, are left to the discretion of the NRAs.

Art. 3(5) - Specialised services

Information from data gathering and interviews

- Many ISPs provide “optimised” services: especially IPTV, VoIP, VoLTE, although IPTV is provided OTT in some cases e.g. EL.
- Specialised services are generally considered by NRAs to be compliant with OIR and not to impact IAS – few breaches have been found. Most CAPs also do not report major issues.
- Some stakeholders consider that the need for specialised services may decline as average performance of IAS increases, but others including in particular larger ISPs consider that there may be more demand in the context of 5G network slicing.
- Per BEREC guidance, 5G network slicing is not per se in conflict with the OIR
- Many interviewees think that the rules on 5G network slicing are clear and consider that specialised services should be assessed case by case, but others have requested more clarity, potentially in BEREC guidance or in an EC Recommendation. Questions include:
  - In which circumstances are services for businesses / enterprises excluded from the scope of the OIR?
  - Do HD video calls qualify as a specialised service? What about low latency gaming subscriptions?
  - What about a dynamic or user-driven “boost” function e.g. for HD video conferencing?
  - If not counted as “specialised”, how could applications such as these be supported whilst remaining “application agnostic”?
- Discussion is however largely theoretical as there is limited deployment of 5G standalone networks, and use cases are still at an exploratory phase

Article 3(5) – specialised services

Recommendations regarding 5G network slicing

- While many ISPs have concerns around the interpretation of the OIR regarding applications based on network slicing, to us the text of the BEREC Guidelines seems clear on this point.
- There seem to be three possible scenarios depending on the service at hand:
  1) The service is not provided via a "publicly available" network (provided on a private network) -> excluded from the scope of the OIR (paras. 8 – 12 BEREC Guidelines 2022)
  2) The service is provided via a publicly available network but there are objective reasons why it requires QoS optimisation -> specialised service (paras. 8 – 12 BEREC Guidelines 2022)
  3) The service is provided via a publicly available network and there are no objective reasons for it to require QoS optimisation -> a QoS prioritised IAS could be offered which supports services of this type, provided it is application agnostic (paras. 34 – 35 BEREC Guidelines 2022)
- Conclusion: The OIR and the BEREC Guidelines do not need further clarification as regards the permissibility of 5G network slices under the OIR. Stakeholders, BEREC and the NRAs are encouraged to engage with one another over questions regarding the interpretation of the OIR and the Guidelines in relation to specific use cases.

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- Article 4: transparency provisions
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Provisions of the OIR: Article 4

- Article 4: “transparency measures for ensuring open Internet access”
  1) and 3) ISPs must provide information in their contracts regarding Internet speeds, traffic management practices and potential remedies
  2) Requires ISPs to put in place transparent, simple and efficient procedures to address complaints of end-users
  4) Introduces presumption that any significant discrepancy between the actual performance of the IAS regarding speed or other quality of service parameters and the performance indicated by the provider should, where the relevant facts are established by a monitoring mechanism certified by the national regulatory authority, trigger remedies available to consumers
- Key issues include:
  - Compliance with transparency requirements and understandability by consumers
  - Accessibility of complaints procedures and data on such procedures
  - Elaboration and measurement of concepts relating to Internet speeds
  - Availability and certification of measurement tools and link to “significant discrepancy” and remedies

Articles 4(1) and 4(3) – information for end-users

Information from data gathering and interviews

- Many (14) NRAs report that they proactively assess contract conditions (incl. e.g. requiring notification, reviewing publicly available info, conducting audits at point of sale) but some rely only on self-assessment by ISPs and/or consumer complaints.
- NRAs generally consider there is good compliance regarding transparency in contracts. Exceptions typically relate to MS where there are large numbers of small ISPs, lack of reporting by mobile ISPs e.g. on maps, interpretation of “unlimited” data / fair use policy, but many NRAs have taken action and there is evidence of progress over time.
- However, compliance remains incomplete in some MS, and consumer organisations note that information gaps remain and information is not always easy to understand for consumers.
- Another issue is that while many NRAs have defined the concepts of how to measure “minimum”, “maximum” and “normally available” speed (18 MS of which 5 non-binding), these concepts have not been elaborated in some MS, and where elaborated, there are significant inconsistencies. In addition, in many cases, it has not been clarified how these concepts should relate to the “advertised”/headline speed that is most visible to consumers. BEUC considers that the contractually agreed speed should relate to the actual speed unless there is a genuine technical barrier.

Articles 4(1) and 4(3) – information for end-users

Recommendations regarding contracts and speed concepts

- Most NRAs have been very active on implementing Arts. 4(1) and 4(3) OIR, and there are many examples of good practice. However, not all NRAs have been proactive and consumer groups perceive that significant problems remain.
- The implementation of Arts. 102 – 104 EECC help improve transparency by requiring ISPs to publish "contract summaries" before contract signature.
- The BEREC Guidelines provide some advice regarding the elaboration of speed concepts such as "minimum", "maximum" and "normally available" speeds and mention advertised speeds but do not make concrete recommendations on these points.

- **Recommendation**: NRAs should systematically and proactively verify the claims of IAS providers as regards their compliance with the transparency measures for ensuring open internet access that appear in Arts. 4(1) and 4(3) OIR by directly reviewing contract terms or (if many ISPs) a sample of contracts. BEREC should consider strengthening its guidance on this issue in a future review of the OIR Guidelines.
- **Recommendation**: NRAs should build on the BEREC OIR Guidelines and BEREC's Guidelines detailing Quality of Service Parameters (BoR (20) 53) by clarifying the concepts of minimum, maximum, and normally available speed, the measurements required to establish the relevant values, and the relationship of these concepts to the advertised speed.
- The BEREC Guidelines could provide more explicit guidance on these topics when they are next reviewed.

Article 4(2): Complaints procedure

Information from data gathering and interviews

- End-user complaint handling procedures differ across the Member States.
  - A few NRAs are very active in handling consumer complaints (e.g. DE, AT); but
  - Not all NRAs have authority to handle end-user complaints.
  - In some cases, complaints must be handled first by the ISP with the NRA as an escalation path.
  - In some cases, complaints are handled by a different body such as an ombudsman.
- There is limited data in many cases and little cross-comparability of data across the Member States.
  - Complaints to ISPs or consumer protection authorities do not necessarily appear in national OIR implementation reports or in BEREC data.
  - Classification of complaints is not standardised.
- Consumer organisations consider that ISP complaint handling procedures are often substandard. Suggestions from BEUC include: that consumers should be able to enforce redress rights to the authorities directly, that ISPs should provide a clear point of contact for complaints (often hard to find) and there should be an obligation for ISPs to respond. They propose that consumer organisations should be recognised as technical experts.

Article 4(2) – End-user complaints

Recommendations regarding complaint handling procedures

- The OIR requires ISPs to establish transparent, simple and efficient complaint handling procedures. However, information about these procedures and the outcomes from these procedures is not consistently reported
- Effective complaints handling procedures are important inter alia in ensuring that consumers can access remedies where services do not meet expectations
- Consumer organisations consider this is an area where improvements could be made.
- **Recommendation**: In order to enable proper statistics gathering and reporting at Member State and EU level, NRAs could oblige providers of internet access services to report the number and subject of complaints to the NRA and/or competent authority as well as the status of such complaints and the time taken to resolve them. This could be justified under the authority implicit in Art. 4(2) OIR.
- **Recommendation** BEREC could develop a standard taxonomy for classifying end-user complaints that are relevant to the OIR and potentially also other consumer complaints relating to IAS.

Article 4(4): Performance monitoring / significant divergence

Information from data gathering and interviews

- Best practice involves clear elaboration of how to measure the concept of "significant discrepancy" in speeds alongside a reliable measurement tool that can be automatically linked to redress procedures
- 12 NRAs define the meaning of "**significant discrepancy**", but not all provide a definition and the definitions / burden of proof vary widely.
- Increase in the availability of **certified monitoring tools** (7 NRAs). Non-certified monitoring tools are available in a further 12 MS with tools under development in 3 MS. In most cases NRA develops tool, but FR has Code of Conduct for commercial QoS monitoring tools + standards and APIs for reporting of the environment within consumer set-top devices. High usage of tools reported in many countries
- Many NRAs report that there is "some use" of **remedies** but limited data.
- Many (but not all) NRAs report conducting their own or reporting crowdsourced speed measurements.
- BEUC notes that telecoms is the market where consumers have most complaints – in particular regarding quality of service. Considers that agreed speed should relate to the actual speed unless genuine technical barrier. Clarification needed at EU level on meaning of "significant" discrepancy between advertised and actual speeds. "Loose standards gives the wrong incentive to the market not to keep up with obligations." Epicenter.works asks for certified tools to be directly linked to consumer complaint mechanisms. One stakeholder noted that making tests reliable and accurate is challenging, and highlights the need to performance test at the user level and take into account the user environment

Article 4(4) – Performance assessments and associated remedies

Recommendations on “significant discrepancy” and the use of tools

- It is of concern that many jurisdictions have not defined “significant discrepancy”, even though this is vital in clarifying when end-users can seek redress. Important elements include:
  - how much deviation from a given speed serves as a trigger, and
  - how many measurements over how many successive days must arrive at a significant discrepancy result in order to trigger remedies.

- **Recommendation**: NRAs should elaborate what is meant by a “significant discrepancy” and what measurements are needed to demonstrate such a discrepancy. BEREC should continue its work on identifying tools and best practices for demonstrating a “significant discrepancy”.

- BEREC notes that the OIR “does not require Member States or an NRA to establish or certify a monitoring mechanism. The Regulation does not define how the certification must be done. If the NRA provides a monitoring mechanism implemented for this purpose it should be considered as a certified monitoring mechanism …”
- Robust mechanisms and automated tools can contribute substantially to meeting the goals of the OIR, in this and in many other aspects. BEREC has done substantial work on this theme over the years, including the development of an Open Source implementation of a BEREC Net Neutrality measurement tool. There are also interesting developments at national level.

- **Recommendation**: BEREC should continue to refine methodologies and automated tools for identifying problematic Quality of Service (QoS), and to identify best practice. NRAs that have not yet done so would be well advised (1) to introduce certified monitoring mechanisms and to clearly identify how they should be used to trigger remedies under Art 4(4) OIR where applicable, (2) to consider the use of automated tools, and (3) to identify the remedies that are available in case contractual requirements are not met. Where automated tools are in place, having the tool itself apply for redress might constitute a best practice.

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Provisions of the OIR: Articles 5 & 6

- Article 5: “supervision and enforcement”
  - Requires NRAs to monitor and ensure compliance with Articles 3 & 4 and notes that NRAs may impose requirements concerning technical characteristics, minimum QoS requirements and other appropriate and necessary measures on ECS providers incl. ISPs
  - Requires NRAs to publish annual reports on monitoring and findings
  - Requires ECS providers incl ISPs to make available information relevant to the obligations in Art 3 &4 incl. information regarding management of network capacity and traffic
  - Requires BEREC to issue Guidelines for the implementation of OIR obligations

- Article 6: “penalties”
  - Member States must lay down rules on penalties applicable to infringements. Penalties must be effective, proportionate and dissuasive.

- Main issues identified:
  - Lack of outcome data in reporting
  - Level of penalties in some Member States

Article 5 – Monitoring and enforcement

- NRA practices as regards monitoring and enforcement are exceedingly diverse. This may not be a problem of itself; but the effects are difficult to assess because
- Very few *outcome metrics* are captured. This should be possible at least for Article 4.
- The absence of outcome metrics may make it difficult to conduct a meaningful formal evaluation of the OIR when the time comes.
- **Recommendation**: BEREC should ensure the provision of more comparable and complete information regarding the "outputs" from NRA monitoring, and should identify and describe key outcome indicators that should be gathered by all NRAs and included in national OIR monitoring reports as well as in the BEREC monitoring report. Outcome metrics should be identified at least for Article 4 e.g. through the publication of actual speed in relation to advertised speeds. Consideration should also be given as to whether outcome measures can be identified for Article 3.

Article 6 – Penalties

- 13 MS set maximum penalties as a % of ISP turnover – varies from 0.25%-5%. In other cases a maximum amount is provided for, ranging from €100,000-€5m (for large enterprises). A few MS distinguish between penalty levels for Article 3 (generally higher) vs Article 4. 5 MS allow for increased fines in the case of recurring breaches.
- Only 5 NRAs report applying penalties in cases where they have found breaches of the OIR
- BEREC and NRAs generally consider that penalty powers are adequate, but epicenter.works has argued that the fines actually imposed in practice are often not sufficiently dissuasive, and should be set as a % revenue. They consider the EC should launch infringement proceedings.
- The level of penalties permitted and applied represents only one out of many potential factors underlying effective enforcement. We note that approaches such as informal engagement have been used to good effect in many cases, with little or no recourse to formal proceedings and fines.
- However, it is vital to establish dissuasive penalties (and use them) in countries where there are breaches of the OIR and where ISPs tend not to respond well to informal approaches.
- **Recommendation**: Member States which have experienced a persistent lack of compliance should consider whether it may be appropriate to make more use of financial penalties and/or to increase the maximum limits for penalties relative to the revenues of ISPs if these are currently low relative to benchmarks.

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Overall assessment

Objectives of the OIR for purposes of our assessment

- Art. 1(1) of the Regulation tells us that common rules are needed to ensure the safeguarding of "**equal and non-discriminatory treatment of traffic** in the provision of internet access services and related end-users' rights".
- Per Recital 34, "the objective of this Regulation [is] to establish common rules necessary for **safeguarding open internet access**".
- Per Recital 1, the OIR "aims to protect end-users and simultaneously to **guarantee the continued functioning of the internet ecosystem as an engine of innovation**".
- Per Recital 3, "The internet has developed over the past decades as an open platform for innovation with low access barriers for end-users, providers of content, applications and services and providers of internet access services. The existing regulatory framework aims to promote the ability of end-users to access and distribute information or run applications and services of their choice. However, a significant number of end-users are affected by traffic management practices which block or slow down specific applications or services. Those tendencies require common rules at the Union level to ensure the openness of the internet and to **avoid fragmentation of the internal market** resulting from measures adopted by individual Member States."
- The headings of Articles 3 (safeguarding of open Internet access) and 4 (**transparency measures** for ensuring open Internet access) provide further indications of the objectives relating to these provisions.

Overall assessment

Intervention logic

Rules

OIR

National OIR implementing measures incl penalties

BEREC OIR Guidelines (+ NTP, QoS Guidelines)

Other relevant provisions e.g. EECC Art 102-104

Market conditions

Stakeholder conduct

Consumer proactivity

Application

Nature and frequency of monitoring

Implementation of tools for QoS monitoring

Guidelines on concepts and measurement

Processing of cases and complaints incl. penalties applied

Resourcing within NRAs and industry

Implied specific objectives

Open Internet preserved

Transparency for end-users

Maintain internet ecosystem as engine of innovation

Avoid fragmentation of the internal market

Outcomes

End-users able to access content services, and use equipment of their choice – no unjustified blocking, throttling, equipment restrictions

Consumers are informed about and receive the speeds they expect

Equal and non-discriminatory treatment of traffic enabling innovation "on top"

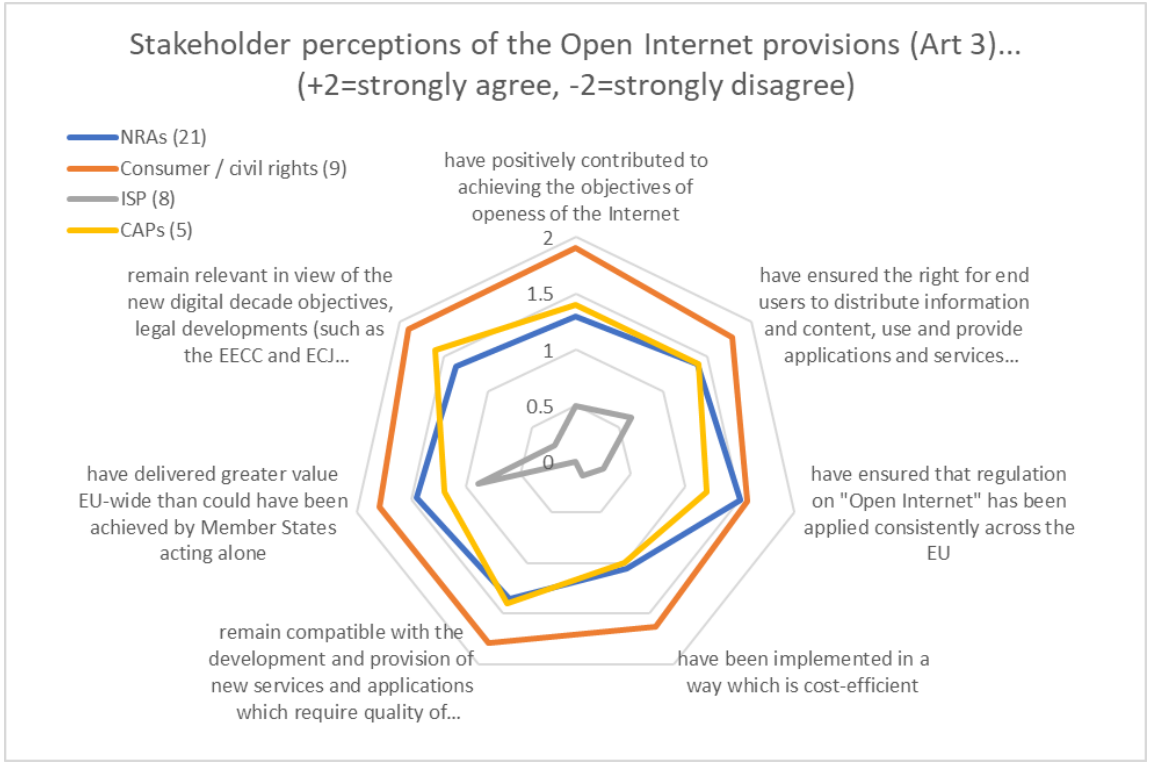
Consistent application of the rules

Source: WIK-Consult

Overall assessment

Stakeholder perspectives: Art. 3

- Most stakeholders view Art. 3 of the OIR as having been effective.
- Consumer groups and civil rights organisations feel that the OIR has positively contributed to achieving the objectives of openness of the Internet and the right for end users to distribute information and content, use and provide applications and services of their choice.
- They also strongly agree that it remains relevant in view of the new digital decade objectives and legal developments such as the EECC and ECJ judgements regarding zero tariff offers, and remains compatible with the development and provision of new services and applications which require quality of service guarantees.
- Conversely, ISPs who are subject to the regulations express differing views around its effectiveness, the efficiency of its implementation and relevance to future developments, but consider it has delivered added value compared with MS acting alone.

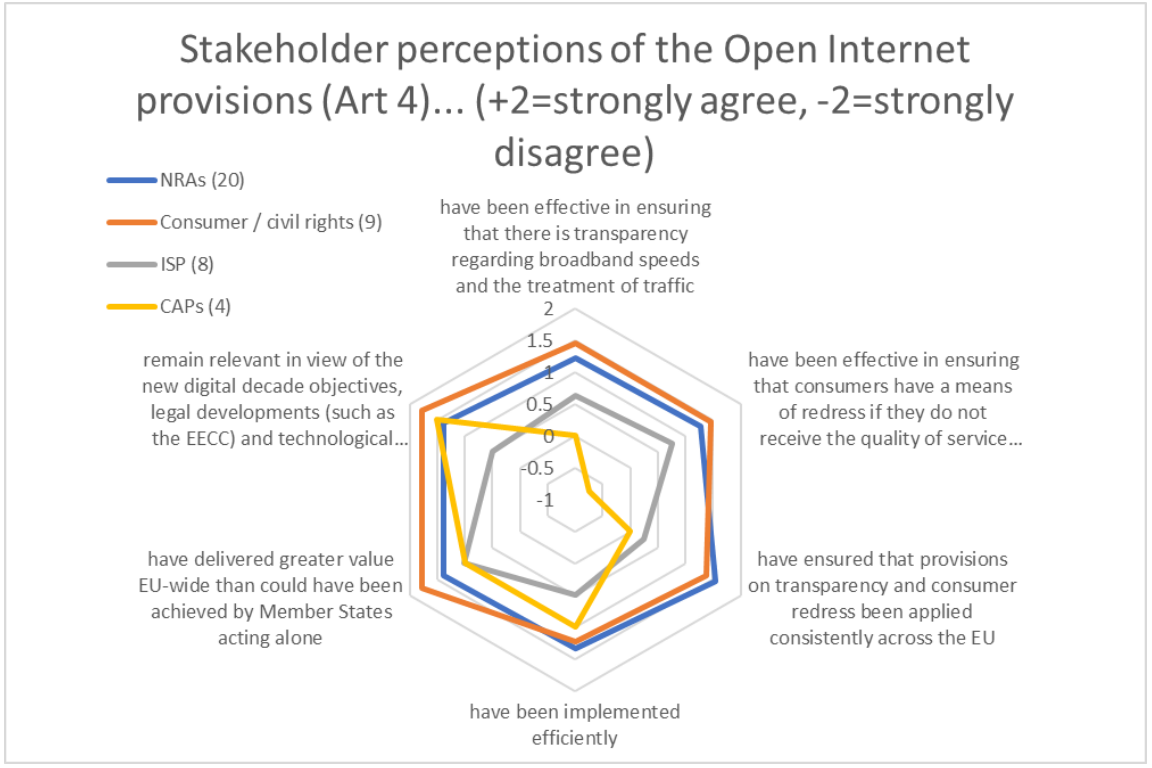


Source: WIK ICF survey Dec 2022

Overall assessment

Stakeholder perspectives: Art. 4

- Consumer and civil rights organisations and NRAs also agree that Article 4 of the OIR has
  - Been effective in ensuring that there is transparency regarding broadband speeds and the treatment of traffic, and
  - Been effective in ensuring that consumers have a means of redress if they do not receive the quality of service they expect.
  - Has delivered greater value EU-wide than could have been achieved by MS acting alone
  - Has been implemented efficiently
  - Remains relevant in light of new objectives and the EECC
- ISPs agree that the OIR has made a positive contribution to adding value at EU level. They also agree with other statements on average, but to a lesser extent than consumer organisations and NRAs

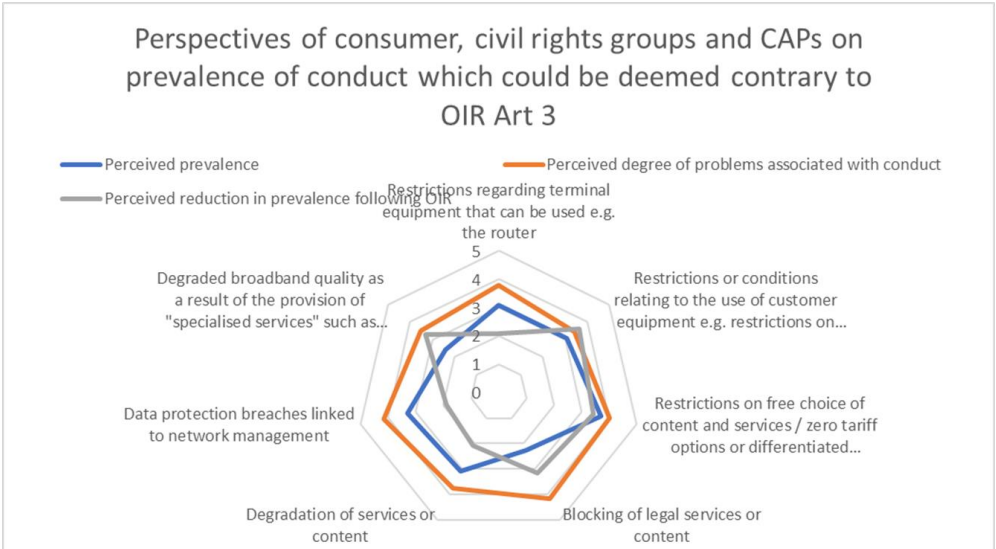


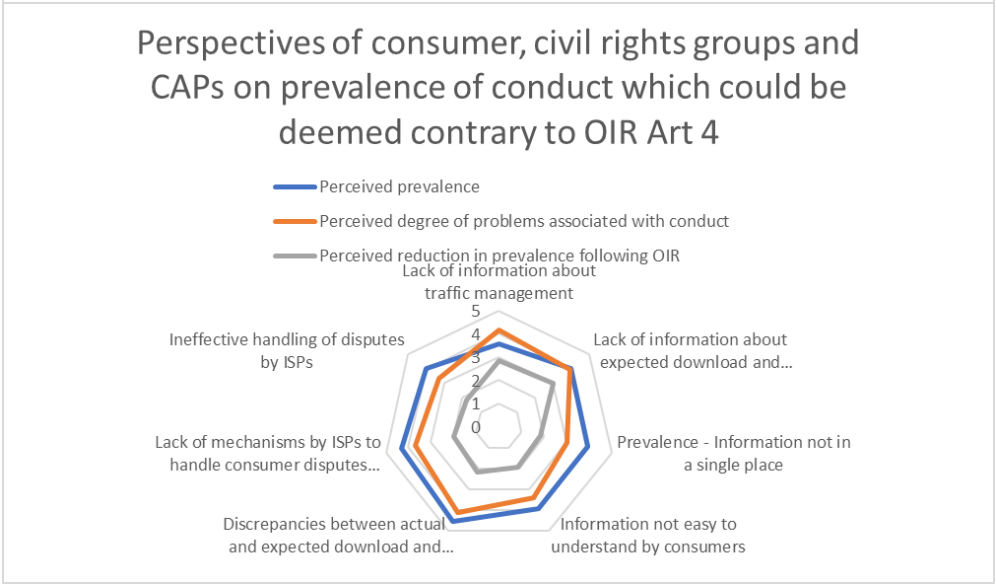
Source: WIK ICF survey Dec 2022

Overall assessment

Effectiveness

- Beneficiary stakeholders note that the prevalence of practices limiting open internet has reduced since the OIR (equipment restrictions to a lesser extent) and that transparency has increased although problems remain regarding understandability of information to consumers, complaint handling procedures and discrepancies between actual and expected speeds. Evidence from data gathering tends to support this.
- Notwithstanding differences in some areas, the evidence base suggests that the OIR has significantly reduced unjustified divergent practices, thus contributing to the internal market
- In line with its goals, the OIR has enabled innovation in services provided over the open Internet





Source: WIK ICF survey Dec 2022

Overall assessment

Efficiency

- In Better Regulation practice, efficiency reflects the degree to which the goals were achieved at minimum (economic) cost. This is sometimes expressed in comparison to the economic gains that were achieved by the policy intervention in question.
- Our survey results provide a reasonably clear picture of the direct costs that the NRAs incurred in implementing the OIR (at a national level and through contributions to BEREC), mainly in terms of increased headcount / FTEs, at a total estimated EU-27 cost of €0.5-€0.7m annually.
- Market players, however, were not able to provide their ongoing direct costs.
- Some large IAS providers argued that the OIR had limited their ability to introduce innovative new services, which if true would constitute an indirect cost of the OIR; however, many other interviewees contested this claim, and also pointed to positive gains in innovation by CAPs.
- A rigorous assessment of costs was not a goal, and is impractical with the information at hand.
- An assessment of benefits is also impractical. Many of the most important benefits, such as a gain in consumer empowerment, are not readily monetised or quantified.

Overall assessment

Coherence

- We see no coherence issues relative to the Treaties, but certain elements of the OIR, the EECC and consumer protection law are not fully aligned
  - There are differences as to whether quality of service information must be published, and if so, what.
  - Another difference lies in *minimum harmonisation of OIR* versus *full harmonisation* of EECC
  - The contract transparency requirements in Art. 102(1) EECC do not protect large enterprises, while the OIR applies in principle to all businesses.
- These inconsistencies are not huge, but they might possibly lead to legal uncertainty.
- **Recommendation**: When the time comes to review the EECC, consideration could be given to whether technical amendments could be made to improve alignment with the OIR and to increase legal certainty.

- One could argue that the failure of Art. 4 OIR to explicitly deal with speed claims made *in advertising* for IAS represents a lack of coherence with the explicit external goal set out in Europe's Digital Decade of promoting Gigabit connectivity for everyone, as well as the EECC goal of fostering Very High Capacity Networks (VHCN), as it could make it challenging for end-users to identify services which normally (as opposed to theoretically) offer Gigabit capability and consequently reduce incentives for both fixed and mobile ISPs to invest in quality improvements. This does not however necessitate amendments to the OIR.

Overall assessment

Relevance and EU Added Value

- The issues addressed in the OIR remain relevant today. Nearly all interviewees including those with reservations about its interpretation considered that the legislation should be maintained unchanged. All stakeholders with the exception of certain ISPs noted in the survey that the provisions of Article 3 and 4 “remain relevant in view of the new digital decade objectives and legal and market developments” and “remain compatible with the development and provision of new services and applications which require quality of service guarantees”.
- The OIR was introduced at a time with MS were starting to introduce their own varying legislation on open internet themes. All stakeholders including ISPs agreed that the OIR has delivered greater added value than would have been the case if Member States had each pursued their own approach.

Overall recommendatíons

- **Recommendation**: We have not identified any aspect of the OIR that requires immediate revision.
- **Recommendation:** We have not identified any aspect of the BEREC Guidelines that requires immediate revision.

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