MALTA COMMUNICATIONS AUTHORITY

CONSULTATION DOCUMENT

Quality of Service Parameters to be Measured by Providers of Internet Access Services and Publicly Available Interpersonal Communications Services

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1 Abbreviations

BEREC	Body of European Regulators for Electronic Communications
ECNSR	Electronic Communications Networks and Services (General) Regulations (Subsidiary Legislation 399.48 of the Laws of Malta)
EECC	Directive (EU) 2018/1972 of the European Parliament and of the Council establishing the European Electronic Communications Code
ETSI	European Telecommunications Standards Institute
IAS	Internet Access Service
ITU	International Telecommunications Union
MCA	Malta Communications Authority
PA-ICS	Publicly Available Interpersonal Communications Services
QoS	Quality of Service
S.L.	Subsidiary Legislation

2 Background and Purpose

One of the objectives of the European Electronic Communications Code (hereafter the 'EECC') is to enable end-users to compare the quality of the services being offered by providers of internet access services (hereafter 'IAS') and of publicly available interpersonal communications services (hereafter 'PA-ICS'). The provision of comparable and updated information about the performance of the quality of services (hereafter 'QoS') being offered by providers, empowers end-users to make more informed decisions when they are in the process of selecting a service. Besides benefitting end-users, this information would allow the Malta Communications Authority (hereafter the 'MCA' and/or the 'Authority') to monitor more accurately trends in the sector. It would also enable service providers to benchmark the quality of their services with that of other service providers, thereby fostering greater competition in the market.

To fulfil this objective, on the 14th December 2020 the MCA published a public consultation document titled 'Quality of Service Parameters to be Measured by Internet Access Service Providers and Publicly Available Interpersonal Communications Providers' (hereafter referred to as *'MCA's 2020 QoS Consultation'*). The purpose of this public consultation was to enable the MCA to determine:

1. the QoS parameters to be measured by IAS and PA-ICS providers;
2. the methodologies to be used to measure the identified QoS parameters; and
3. the frequency and manner in which the performance results of the QoS parameters measured by providers are to be published.

In response to MCA's 2020 QoS Consultation, which concluded on 8th February 2021, the MCA received feedback and submissions from five (5) stakeholders, namely the Consumers' Association – Malta (hereafter 'CAM'); Epic Communications Limited (hereafter 'EPIC'); GO plc (hereafter 'GO'); Melita Limited (hereafter 'Melita'); and Tektraco Telecom.

In the interim, the MCA undertook further work to address key issues raised by some stakeholders in their feedback to the 2020 QoS consultation, which required careful consideration. MCA's efforts and approach were further informed by significant discussions within BEREC, culminating in the publication of updated Guidelines by BEREC on 7th March 2024 detailing quality of service parameters (hereafter *'BEREC Guidelines'*[1]). In the light of these developments and the considerable lapse of time since MCA's 2020 QoS Consultation, the MCA deems it is appropriate to carry out a fresh round of consultations on its revised

[1] BoR (24) 42, BEREC Guidelines detailing Quality of Service Parameters

decision notice proposal before publishing its final decision. This provides stakeholders with an additional opportunity to submit their feedback.

In this new consultation document, greater emphasis is placed on QoS parameters that are more meaningful to end-users and easier for the general public to understand and interpret. Consequently, several QoS parameters proposed for measurement in the MCA's 2020 QoS Consultation and which are considered to be more technical and complex for end-users to comprehend, have been excluded from this document[2]. In this respect, since 2020, the MCA has made progress in developing, and is actively working on alternative mechanisms for measuring certain QoS parameters excluded from this new consultation document. These initiatives are distinct from the information which providers are being requested to collect through this consultation and are specifically designed to address more technical aspects.

During the preparation of this consultative document, the MCA has considered the feedback received from stakeholders in response to the MCA's 2020 QoS Consultation. The MCA wishes to clarify that certain queries submitted by stakeholders in response to the 2020 consultation are addressed in the *'User related QoS parameter definitions and measurements'* document published by ETSI and which is referenced throughout this consultation document. Section 5 of this consultative document presents the MCA's clarificatory feedback on these stakeholder queries.

The MCA reserves the right to introduce additional QoS parameters, beyond those proposed in this consultation. The introduction of additional QoS parameters or amendments to any part of MCA's final decision will be subject to a separate public consultation providing all interested parties with the opportunity to submit their views and feedback.

[2] The QoS parameters being excluded are: 'Dropped Call Ratio,' 'Unsuccessful Call Ratio,' 'Call Setup Failure Probability,' 'Packet Loss Ratio,' and 'Latency.' In this consultation, the MCA is proposing the inclusion of a new QoS parameter, aimed at measuring the 'Number of Customer Complaints Per Data Collection Period.' This parameter has been introduced by BEREC in its updated guidelines on quality of service parameters.

3 Legal Basis

The legal instruments listed under subsections 3.1 to 3.3 below empower the MCA to introduce the requirements being proposed in this consultative document titled 'Quality of Service Parameters to be Measured by Providers of Internet Access Services and Publicly Available Interpersonal Communications Services':

3.1 The Electronic Communications Networks and Services (General) Regulations[3] ('ECNSR')

Regulation 89 of the ECNSR empowers the MCA to introduce the requirements being proposed in this consultative document.

Regulation 89 (1) states that the MCA:

> *'may require providers of internet access services and of publicly available interpersonal communications services to publish comprehensive, comparable, reliable, user-friendly and up-to-date information for end-users on the quality of their services, to the extent that they control at least some elements of the network either directly or by virtue of a service level agreement to that effect, and on measures taken to ensure equivalence in access for end-users with disabilities'.*

In addition to the above, Regulation 89 (4) states that:

> *'the Authority shall specify, taking utmost account of BEREC guidelines, the quality of service parameters to be measured, the applicable measurement methods, and the content, form and manner of the information to be published, including possible quality certification mechanisms. Where appropriate, the parameters, definitions and measurement methods set out in the Tenth Schedule, shall be used'.*

3.2 BEREC Guidelines detailing Quality of Service Parameters

Under Article 104(2) of the 'EECC', BEREC is mandated to develop guidelines outlining the pertinent QoS parameters to be measured and disclosed by service providers. In this context, in 2020, BEREC issued guidelines detailing QoS parameters to aid national regulatory authorities and foster a harmonised approach on the measurement and publication of QoS information across Member States. These 'BEREC Guidelines' were updated by BEREC in

[3] The Electronic Communications Networks and Services (General) Regulations, Subsidiary Legislation 399.28 of the Laws of Malta.

2024 following a public consultation which was launched in October 2023 and which was concluded in November 2023. The updated 'BEREC Guidelines' are being taken into consideration in this consultation.

3.3 Additional Legal Considerations

In accordance with the legal provisions it administers, the MCA reserves the right to introduce other QoS parameters to be measured in addition to those being proposed in this consultative paper. The introduction of additional measures or amendments to any decision issued by the MCA will be subject to a public consultation in which interested parties will be able to submit their views and feedback. The proposals of the MCA are without prejudice to any other obligations arising from any applicable legal requirements including amongst others the European Union's Regulation on 'Open Internet Access'[4] and MCA's decision entitled 'Broadband QoS Framework'.

[4] Regulation (EU) 2015/2020 of the European Parliament and of the Council laying down measures concerning open internet access.

4 QoS Parameters to be Measured for IAS and PA-ICS

The MCA considered different QoS parameters which could be measured and at this juncture is proposing a selective set of parameters as indicated in this consultation paper. MCA's proposed approach entails that service providers measure the performance of a set of identified QoS parameters.

'Annex 1' attached to this consultation, proposes the following:

- The QoS parameters to be measured by IAS and/or PA-ICS;
- The definitions of each of the QoS parameters identified; and
- The methodologies to be used to measure these QoS parameters.

For the scope of this consultation, the MCA will adopt the definitions and methodologies established in ETSI and ITU standards as incorporated by BEREC in its guidelines. The MCA proposes that the QoS parameters to be measured comprise the performance of the QoS provided to both consumers and businesses in aggregate.

The MCA proposes that when the measurement of a QoS parameter applies to more than one electronic communications service, providers are not required to report the performance of that QoS parameter separately for each electronic communications service, but should report one result comprising all electronic communications services together.

Proposed Decision 1

Providers of IAS and PA-ICS are to measure the QoS parameters listed in *'Annex 1: QoS Parameters to be Measured by Providers of IAS and PA-ICS*. The measurement of these parameters shall be completed in accordance with the methodologies set out in this same Annex. The QoS parameters to be measured shall comprise the performance of the QoS provided to both consumers and businesses in aggregate.

5 Feedback received from stakeholders by the MCA in response to the *'MCA's 2020 QoS Consultation'*

To guide stakeholders, the MCA is providing clarifications in response to queries raised during the 2020 consultation period. These clarifications pertain exclusively to QoS parameters carried over from the 2020 consultative document and are now being factored into the current one.

Supply time for initial connection

The MCA received feedback from one respondent indicating that, in some instances, end-users may request an appointment for the initial connection of a service at a later date than the first available installation offered by the service provider. In this context, the MCA notes that ETSI's measurement methodology for Supply Time for Initial Connection (Section 5.1) allows service providers to exclude cases where delays to provision are requested by the end-user when calculating the times within which the fastest 50%, 95%, and 99% of orders are completed.

The respondent also highlighted that some installation appointments are cancelled by users. In this regard, the MCA points out that ETSI's measurement methodologies for Supply Time for Initial Connection (Section 5.1) specify that orders cancelled by end-users should be excluded from all service quality parameter measurements related to Supply Time for Initial Connection.

Additionally, ETSI's methodologies specify that cases where essential access to the customer's premises is not provided by the end-user on the agreed date and time may be excluded from all service quality parameter measurements related to Supply Time for Initial Connection.

Fault Rate per Fixed Access Lines

One respondent stated that the faults included in this measurement should be:

- Valid service outages reported directly by end-users to Customer Care;
- Outages unrelated to end-user-owned equipment connected to the providers' network;
- Outages not caused by the core or international network;
- Outages not caused by third-party services (e.g., WhatsApp, Facebook, Netflix, or similar OTT services).

To ensure consistency across providers, the MCA recommends adherence to ETSI's Fault Rate per Fixed Access Line methodology (Section 5.4). In response to the queries in points (i) to (iv), the MCA refers to ETSI's definition of a fault report:

'A fault report is a report of disrupted or degraded service that is notified by the customer to the published point of contact of the service provider and is attributable to the fixed access line, and that is not found to be invalid. Faults in any equipment on the customer side of the

network termination point and faults which are attributable to the core network or other networks are excluded'.

For clarity, the MCA emphasises that in accordance with the above definition, reports of any disrupted or degraded service (including intermittent faults or slow internet speeds) must be recorded and published by service providers.

Fault Repair Timeframe

One respondent sought confirmation that the timeframe for this parameter refers to the duration from when a fault is reported by an end-user until it is resolved. The MCA confirms this and advises adherence to ETSI ES 202 057-1 (Clause 5.5.1), which provides the following:

'The duration from the instant a fault report has been made to the instant when the service element or service has been restored to normal working order.'

Another respondent requested clarification on the term "objective" in the table, asking if it refers to the timeframes committed to in service providers' terms and conditions. The MCA confirms this understanding and refers to ETSI ES 202 057-1 (Clause 5.5.1.1):

'The "standard repair" times are the times stated in the terms and conditions of the service provider'.

Response Time for Operator Services (Customer Care Telephony Support Services)

A respondent noted that measuring telephone support performance alone does not provide a comprehensive view of support across various channels.

The MCA's proposal to focus solely on telephone support is based on the following factors:

- A 2022 MCA study found that telephone support remains the most preferred channel among end-users[5].
- BEREC guidelines and ETSI measures currently focus only on telephone response times.

Given these factors, the MCA recommends adopting this approach as outlined in this consultative document but remains open to expanding QoS parameters in the future following further industry consultation.

Bill Correctness Complaints

[5] According to MISCO's 'Quality of Experience' survey, 58% of respondents indicated telephone customer care as the most preferred customer contact channel: https://www.mca.org.mt/sites/default/files/Mr.%20Lawrence%20Zammit.pdf

For clarity, the MCA states that goodwill compensations by service providers not due to billing inaccuracies, should not be recorded as bill correctness complaints. Providers should follow ETSI ES 202 057-1 (Clause 5.11), which defines:

'A bill correctness complaint is an expression of dissatisfaction with a bill received from a customer i.e. the bill is found to be inaccurate by the customer. An inaccuracy occurs when, for example, incorrect call data are used, calls are charged at an incorrect rate, services are billed incorrectly, call discounts, credits or debts are handled incorrectly, or the total charge including VAT is calculated incorrectly. A bill correctness complaint should not be confused with a billing query (a request for information) or with a fault report'.

Customer complaints[6] resolution time

One service provider noted that it does not currently record complaints resolved at first contact and suggested limiting the parameter to formal, registered complaints.

The MCA clarifies that ETSI ES 202 057-1 (Clause 5.10.1) does not exclude first-contact resolutions from measurement and recommends including all complaints notified to any point of contact.

In response to additional feedback received, the MCA clarifies that, in accordance with the recommendations of the above quoted ETSI standards:

- Where more than one complaint is made by the same end-user on the same subject, each instance of the complaint should be counted separately in the statistics. If an end-user complains again before an existing complaint has been closed, then this should not be treated as a separate complaint but as a continuation of the first unclosed complaint.
- When calculating the complaint resolution time, service providers may subtract from the measured time any delay introduced by the end-user.
- If the resolution of a complaint is delayed because the collaboration of the end-user is needed but cannot be obtained in a reasonable term, the instance may be excluded from the statistics.
- If a complaint is received within the data collection period but too late to be solved within the time stated as an objective by the service, it should be counted in the following reporting period.

[6] A complaint is defined in ETSI 202 843V1.2.1 (page 25) as a 'statement by a user or customer expressing dissatisfaction due to a gap between the expected and the delivered benefits from the use of a service NOTE: A complaint may be made in various forms, writing, electronic means, or in person. From ITU-T Recommendation E.800 [i.13]'.

6 Publication of Information on the Performance of QoS Parameters Measured by Providers of IAS and PA-ICS

The MCA is proposing a set of requirements that would ensure that the information about the performance of the QoS parameters published by service providers is:

- easily comparable from one provider to another;
- easily accessible and understandable by end-users; and
- frequently updated by service providers.

In order to facilitate comparability, the MCA proposes that the information about the performance of QoS parameters is published by providers in a standardised manner using a common structured format. As part of this consultation the MCA is presenting a proposed template to be used by all providers when publishing this information, as set out in 'Annex 2: Quality of Service Performance Report Template'.

Further to the above, and in order to ensure that the publication of this information remains reliable, accurate and relevant to end-users, it is of utmost importance that service providers regularly update this information with the latest information about the performance of the quality of their services. In this regard, the MCA proposes that providers publish periodic reports about the performance of the quality parameters of their services twice yearly.

Within the scope of this decision, the MCA understands that the industry's efforts to empower end-users can only be fulfilled if one can ensure that this information is easily accessible to end-users. The MCA recognises that service providers nowadays engage on several platforms with end-users to promote their services. Notably, the service providers' website remains one of the main sources from where end-users can obtain information about products and services offered by providers. In this respect, the MCA proposes that the information gathered by service providers is published on their respective websites, and is linked in a clear and visible manner on any of the service providers' webpage where any offer, plan or package is being made available by service providers.

Proposed Decision 2

Providers of IAS and PA-ICS shall publish information on the performance of the QoS parameters set out in the 'Proposed Decision 1' using the format contained in 'Annex 2: Quality of Service Performance Report Template'.

The information shall be published bi-annually and shall cover the periods 'January – June' and 'July – December' of each year. Measurement results are to be published within one month commencing from the last day of the period being reported.

IAS and PA-ICS providers shall publish information on the performance of the QoS parameters on their website on a dedicated webpage, hereafter referred to as 'target page'. All webpages on a provider's website publicising the details of a service offer/s or plan/s, shall provide distinctive and clearly visible access to the target page by means of a hyperlink. The anchor text, i.e. the visible clickable text in the hyperlink, shall be titled 'Quality of Service results' and must be:

i. distinct (e.g. in 'Bold Font' or/and in 'Capital Letters'); and,

ii. the same size or larger than the prevailing font size used to highlight the main characteristics of the service offer/plan. [7]

[7] To maintain consistency, it is being proposed that similar transparency measures, as those included in MCA's decision on 'Price Indexation Clauses' also apply to the publication of information on the performance of QoS parameters on providers' websites as provided for in bullets (i) and (ii) in 'Proposed Decision 2' above.

7 Entry into force of MCA's Final Decision Notice

The MCA shall take into consideration all feedback it receives before issuing its final decision. A final decision is expected to be published by the MCA by not later than the end of June 2025. The MCA proposes that the first QoS parameters to be measured by providers should cover the period 01st January to 30th June 2026. In accordance with MCA's proposed decision, the first set of measured results would need to be published by not later than 31st of July 2026.

8 Submission of Responses

In accordance with the requirements of article 4A of the Malta Communications Authority Act [Cap 418 of the Laws of Malta], the MCA invites written comments from interested stakeholders on MCA's Consultation and Proposed Decision on *'Quality of Service Parameters to be Measured by Providers of Internet Access Services and Publicly Available Interpersonal Communications Services'.*

The MCA appreciates that respondents may provide confidential information in their feedback to this consultation paper. Such information is to be included in a separate annex and should be clearly marked as confidential. Respondents are requested to state the reasons why the information should be treated as confidential. The MCA will take the necessary steps to protect the confidentiality of such material as soon as it is received by the MCA in accordance with the MCA's confidentiality guidelines and procedures[8]. Respondents are however encouraged to avoid confidential submission wherever possible.

The MCA will, after taking into consideration all the responses received to this consultation, publish a Decision Notice on *'Quality of Service Parameters to be Measured by Providers of Internet Access Services and Publicly Available Interpersonal Communications Services'.* For the sake of openness and transparency, the MCA will publish a list of all respondents to this Consultation Paper in the ensuing Decision Notice.

Interested stakeholders are invited to submit their comments and representations regarding this proposed decision in writing by **12:00hrs CET on 7th March 2025**. Submissions should be addressed to the Chief Executive Officer and can be sent electronically to **consultations@mca.org.mt** or delivered by hand or post to the following address:

Chief Executive Officer
Malta Communications Authority,
Valletta Waterfront,
Pinto Wharf,
Floriana, FRN1913,
Malta

Extensions to the consultation deadline will only be permitted in exceptional circumstances and where the MCA deems fit. The MCA reserves the right to grant or refuse any such request at its discretion. Requests for extensions are to be made in writing within the first ten (10) working days of the consultation period.

[8] http://www.mca.org.mt/sites/default/files/articles/confidentialityguidelinesFINAL_0.pdf

Annex 1 - QoS Parameters to be Measured by Providers of IAS and PA-ICS

1. Applicable to Fixed Services Only

Supply Time for Initial Connection[9]	
Definition	**Measurement method**
ETSI ES 202 057-1 (clause 5.1)	ETSI ES 202 057-1 (clause 5.1.3)
The duration from the instant of a valid service order being received by a direct service provider to the instant a working service is made available for use. This should exclude cancelled orders.	It is measured by: a) the times by which the fastest 50%, 95% and 99% of orders are completed; b) the percentage of orders completed by the date agreed with the customer and, where the percentage of orders completed by the date agreed with the customer is below 80%, the average number of days, for the late orders, by which the agreed date is exceeded. Statistics for all fixed access networks.

[9] The supply time for the initial connection of 'fixed wireless internet' subscriptions is to be excluded from this statistic.

Fault Rate per Access Line	
Definition	**Measurement method**
ETSI ES 202 057-1 (clause 5.4)	ETSI ES 202 057-1 (clause 5.4.3)
The number of reported faults per fixed access line per year.	Statistics for all fixed access lines.

Fault Repair Time	
Definition	**Measurement method**
ETSI ES 202 057-1 (clause 5.5)	ETSI ES 202 057-1 (clause 5.5.3)
The duration from the instant a fault report has been made to the instant when the service element or service has been restored to normal working order.	It is measured by: a) the time by which the fastest 80% and 95% of valid faults on access lines are repaired (expressed in clock hours); and b) the percentage of faults cleared any time stated as an objective by the service provider. Statistics for all access fixed networks.

2. Applicable to both Fixed and Mobile Services

Bill Correctness Complaints	
Definition	**Measurement method**
ETSI ES 202 057-1 (clause 5.11)	ETSI ES 202 057-1 (clause 5.11.3)
The proportion of bills resulting in a customer complaint about the correctness of a given bill.	It is measured by a percentage.

Response Time for Operator Services (Customer Care Services – Help Desk)	
Definition	**Measurement method**
ETSI ES 202 057-1 (clause 5.6.1)	ETSI EG 202 057-1 (clause 5.6.3)
Time elapsed between the end of dialling to the instant the human operator answers the calling user to provide the service requested.	It is measured by: a) mean time to answers; b) percentage of calls answered within 20 seconds.

Number of customer complaints per data collection period	
Definition	**Measurement method**
ETSI ES 202 057-1 (clause 5.9.1)	ETSI ES 202 057-1 (clause 5.9.4)
The number of complaints logged per customer per data collection period.	The number of complaints logged per customer per data collection period should be provided. Statistics should include all complaints received in the data collection period, regardless of the validity and subject of the complaint.

Customer complaints resolution time	
Definition	**Measurement method**
ETSI ES 202 057-1 (clause 5.10.1)	ETSI ES 202 057-1 (clause 5.10.3)
The duration from the instant a customer complaint is notified to the published point of contact of a service provider and is not found to be invalid to the instant the cause for the complaint has been resolved.	It is measured by: a) the time by which the fastest 80% and 95% of complaints have been resolved (expressed in clock hours); and b) the percentage of complaints resolved any time stated as an objective by the service provider.

Annex 2 - Quality of Service Performance Report Template

{Name of Provider}

Covering Period: {day/month/year} till {day/month/year}

Date of Publication: {day/month/year}

Supply Time for Initial Connection (Fixed Services)	
Parameter	**Result**
The time by which the fastest 50% of orders are completed	_____ days
The time by which the fastest 95% of orders are completed	_____ days
The time by which the fastest 99% of orders are completed	_____ days
The percentage of orders completed by the date agreed with the customer	_____ %
Where the percentage of orders completed by the date agreed with the customer is below 80%, the average number of days, for the late orders, by which the agreed date is exceeded	_____ days

Fault Rate and Fault Repair Timeframes (Fixed Services)	
Parameter	**Result**
Fault rate per access line	_____ reports
The time by which the fastest 80% of valid faults on access lines are repaired	_____ hours
The time by which the fastest 95% of valid faults on access lines are repaired	_____ hours
The percentage of faults cleared any time stated as an objective by the service provider	_____ %

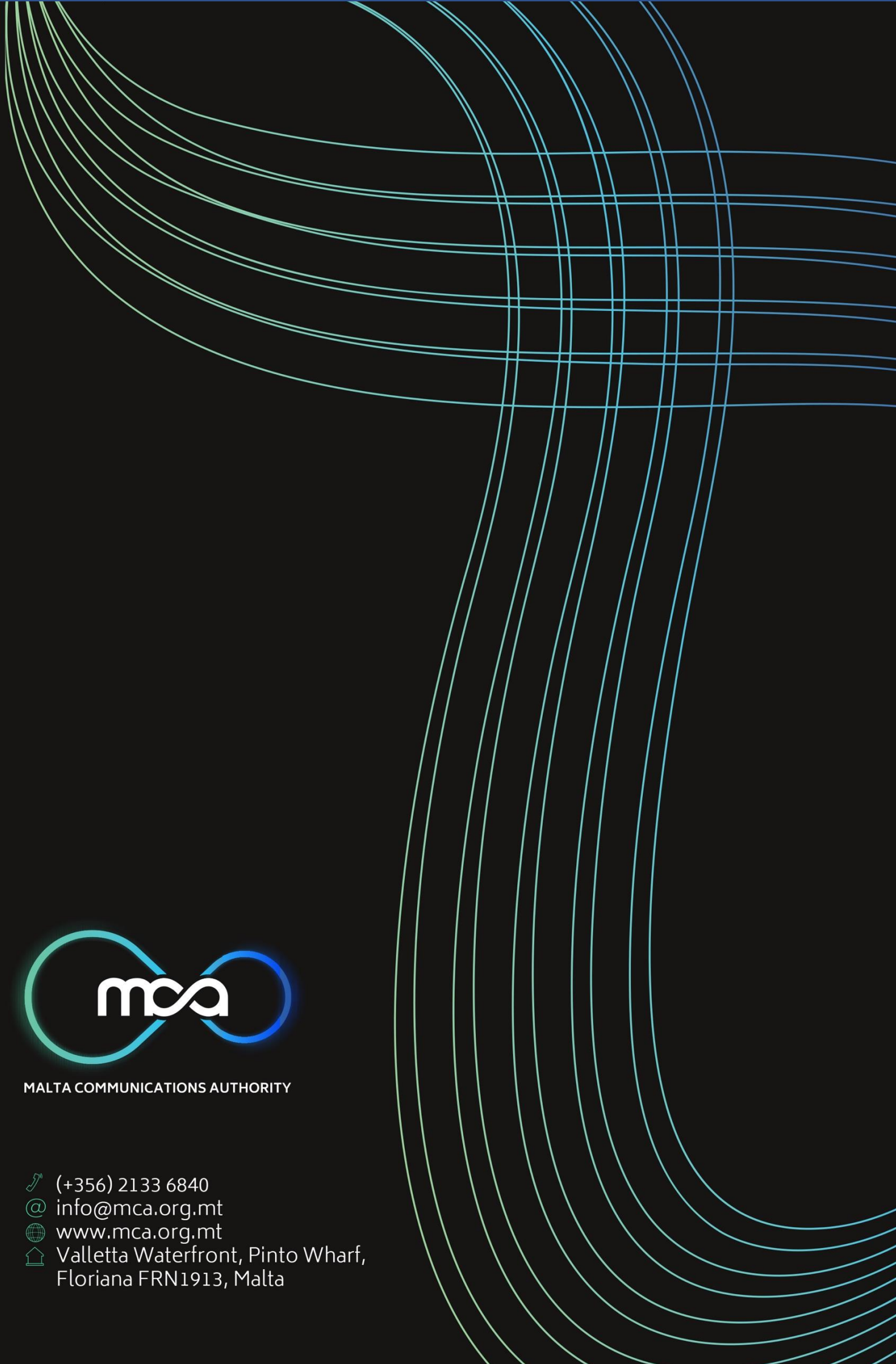
Bill Correctness Complaints (Fixed and Mobile Services)	
Parameter	**Result**
The proportion of bills resulting in a valid customer complaint about the correctness of a given bill	_____ %

Customer Care Response Time (Fixed and Mobile Services)	
Parameter	**Result**
Mean time to answer calls	_____ seconds
Percentage of calls answered within 20 seconds.	_____ %

Number of customer complaints per data collection period (Fixed and Mobile Services)	
Parameter	**Result**
The number of complaints logged per customer per data collection period.	_____per customer[10]

Customer Complaints Resolution Time (Fixed and Mobile Services)	
Parameter	**Result**
The time by which the fastest 80% of complaints have been resolved	_____ hours
The time by which the fastest 95% of complaints have been resolved	_____ hours
The percentage of complaints resolved any time stated as an objective by the service provider.	_____%

[10] The results obtained should be rounded to two decimal places.



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