ANNEX B

TARGETS FOR THE QUALITY OF FIXED VOICE TELEPHONY SERVICE FOR THE YEAR 2022

Quality indicators pursuant to AGCOM resolutions n. 254/04/CSP and n. 79/09/CSP and following amendments

N.	INDICATOR	TARGETS
1	Malfunction rate per line of access: ratio between the number of reports made by customers of actual malfunctions during the period of observation and the average number of active lines of access, recorded on a monthly basis, in the same period.	INDIRECT SERVICES IN CPS MODALITY: 12%
2	Time to fix malfunctions: time elapsed between the report by the customer of an actual malfunction and the relevant fixing of the malfunction.	INDIRECT SERVICES IN CPS MODALITY 80% percentile: 38 working hours 95% percentile: 100 working hours
	Percentage of repairs of malfunctions completed within the maximum time provided by the contract	INDIRECT SERVICES IN CPS MODALITY 90%
3	Time of reply to the calls to the operator's customer services: a) minimum navigation time to access to the choice "human operator" b) average time of reply to the incoming calls c) percentage of incoming calls where the time of reply is	a) 70 seconds b) 70 seconds c) 45%
	less than 20 seconds d) Percentage of complaints solved without need for the customer to make further calls to the customer care number for the same complaint e) Total time of reply by human operator: e.1) average time of reply to incoming calls e.2) percentage of incoming calls where the time of reply is less than 20 seconds	e.1) 140 – 190 sec. e.2) 25% - 30%

4	Delivery time of Carrier Preselection : the time between the day of the valid order and the day when voice service is available for use	95th percentile: 60 calendar days 99th percentile: 80 calendar days:
5	Contested invoices: percentage of invoices for which the customer filed a complaint (in writing or other modality accepted by the operator and that can be tracked) versus the number of invoices issued in the same period	2.5%
6	Billing accuracy: percentage of invoices object of complaints deemed grounded that imply the reimbursement of amounts to the customer by way of another invoice containing an adjustment or a credit note, versus the number of invoices issued in the same period	1%

ANNEX C

TARGETS FOR THE QUALITY OF INTERNET ACCESS SERVICE FROM FIXED LOCATION FOR THE YEAR 2022

Quality indicators pursuant to AGCOM resolutions n. 131/06/CSP, n. 244/08/CSP, n. 79/09/CSP, and following amendments

N.	INDICATOR	TARGETS
1	Time of activation of the service: first activation orders addressed to an operator providing Internet broadband access service different from the operator which provides direct access service for a telephone line already active.	-95% percentile: 295 calendar days: - 99% percentile: 310 calendar days - Percentage of valid orders completed within the maximum term provided by the contract: 80%
	change orders of the operator that provides Internet access service for a line in which the Internet broadband access service is already active.	-95% percentile: 295 calendar days: - 99% percentile: 310 calendar days
	broadband access service is already active.	Percentage of valid orders completed within the maximum term provided by the contract: 80% Average (calendar days): 136
2	Malfunction rate: ratio between number of reports made by customers relating to actual malfunctions during observation period and the average number	Service provided by using wholesale services: 18%

	of broadband access lines, detected on a per-				
	customer monthly basis, in the same period.				
3	Time to fix malfunctions: time between the reporting of an actual malfunction by the customer and the restoration of complete functionality	Services using wholesale services: 80% percentile: 12 hours (total hours)			
	and the restoration of complete ranstionality	95% percentile: 27 hours (total hours)			
		Percentage malfunctions fixed within the maximum term provided by the contract: 85%			
		Average time to fix: 28 hours (total hours)			
4	Time of reply to the calls to the operator's customer services: a) minimum navigation time to access to the choice "human operator" b) average time of reply to the incoming calls c) percentage of incoming calls where the time of reply is less than 20 seconds d) Percentage of complaints solved without need for the customer to make further calls to the customer care number for the same complaint e) Total time of reply by human operator e.1) average time of reply to incoming calls e.2) percentage of incoming calls where the time of reply is less than 20 seconds	a) Weighted Average 70-120 sec. b) 70 sec. c) 45-60% d) 95% e.1) 140 – 190 sec. e.2) 25% - 30%			
5	Data transmission speed : data transmission speed, measured by way of transmission of predefined test files, sent between a remote site	Download minimum bandwidth (Percentile 5° of download transmission speed)			
5.1	where a client is located and a server for downloading with regard to broadband internet access service of reference.	Nominal profile in download of 640 Kilobit/s (with access in ADSL technology) 450 Kilobit/s			
5.2		Nominal profile in download of 1,2 Megabit/s (with access in ADSL technology)			
5.3		Nominal profile in download of 2 Megabit/s (with access in ADSL technology)			
5.4		Nominal profile in download of 4 Megabit/s (with access in ADSL technology) 1,3 Megabit/s download of 4 Megabit/s (with access in ADSL technology)			
5.5		Nominal profile in download of 7 Megabit/s (with access in ADSL technology) 2,1 Megabit/s download of 7 Megabit/s download of			

5.6	Nominal profile in download of 10 Megabit/s (with access in ADSL technology) Nominal profile in download of 20 Megabit/s	(with access in ADSL technology) (with access 7,2 Megabit/s	
	-	(with access in VDSL2 technology)	14 Megabit/s
5.8	Nominal profile in download of 30 Megabit/s (with access in VDSL2 technology)	21 Megabit/s	
5.9	Nominal profile in download of 50 Megabit/s	(with access in VDSL2 technology) (with access in FTTH	31 Megabit/s 40 Megabit/s
5.10	Nominal profile in download of 100 Megabit/s	technology) (with access in VDSL2 technology) (with access in FTTH technology)	40 Megabit/s 60 Megabit/s
5.11	Nominal profile in download of 300 Megabit/s (with access in FTTH technology)	180 Megabit/	s
	Upload minimum b		centile 5° of
5.12	upload transmissio Nominal profile in upload of 256 Kilobit/s (with access in ADSL technology)	n speed) 100 Kilobit/s	
5.13	Nominal profile in upload of 384 Kilobit/s (with access in ADSL technology)	200 Kilobit/s	
5.14	Nominal profile in upload of 512 Kilobit/s (with access in ADSL technology)	250 Kilobit/s	
5.15	Nominal profile in upload of 704 Kilobit/s (with access in ADSL technology)	300 Kilobit/s	

5.16		Nominal profile in	400 Kilobit/s	
5.10		upload of 1	TOU MIDDINS	
		Megabit/s (with		
		access in ADSL		
		technology)		
5.17		Nominal profile in	1,2 Megabit/s	<u> </u>
0.17		upload of 3	1,2 Wegabit	3
		Megabit/s (with		
		access in ADSL		
		technology)		
5.18		Nominal profile in	(with	2
		upload of 10	access in	Megabit/s
		Megabit/s	VDSL2	J
			technology)	
			(with	6
			access in	Megabit/s
			FTTH	
			technology)	
5.19		Nominal profile in	(with	4
		upload of 20	access in	Megabit/s
		Megabit/s	VDSL	_
			technology)	
			(with	12
			access in	Megabit/s
			FTTH	
			technology)	
6	Rate of loss of packets	Probability of loss	Objective	
		of packets		
6.1		Nominal profile in	0,7%	
		download of 640	0,1.70	
		Kilobit/s (with		
		access in ADSL		
		technology)		
6.2		Nominal profile in	0,7%	
		download of 1,2		
		Megabit/s (with		
		access in ADSL		
		technology)		
6.3		Nominal profile in	0,5%	
		download of 2		
		Megabit/s (with		
		access in ADSL		
-		technology)	0.50/	
6.4		Nominal profile in	0,5%	
		download of 4		
		Megabit/s (with		
		access in ADSL		
6.5		technology)	0,3%	
0.5		Nominal profile in download of 7	0,3/0	
		Megabit/s (with		
		access in ADSL		
		technology)		
6.6		Nominal profile in	0,3%	
0.0		download of 10	0,070	
		aowinaaa of 10	ĺ	
1		Megabit/s (with		
		Megabit/s (with		
		Megabit/s (with access in ADSL technology)		

7	Delay of data transmission	Nominal profiles in download of 20 Megabit/s, 30 Megabit/s, 50 Megabit/s, 100 Megabit/s, 300 Megabit/s (with access in ADSL or VDSL2 or FTTH modality) Maximum delay	0,3% 180 milliseconds
7.1		Nominal profile in download of 640 Kilobit/s (with access in ADSL technology)	180 milliseconds
7.2		Nominal profile in download of 1,2 Megabit/s (with access in ADSL technology)	180 milliseconds
7.3		Nominal profile in download of 2 Megabit/s (with access in ADSL technology)	170 milliseconds
7.4		Nominal profile in download of 4 Megabit/s (with access in ADSL technology)	160 milliseconds
7.5		Nominal profile in download of 7 Megabit/s (with access in ADSL technology)	150 milliseconds
7.6		Nominal profile in download of 10 Megabit/s (with access in ADSL technology)	140 milliseconds
7.7		Nominal profile in download of 20 Megabit/s	With access in ADSL technology: 120 milliseconds With access in VDSL2 technology: 100 milliseconds
7.8		Nominal profile in download of 30 Megabit/s (with access in VDSL2 technology)	80 milliseconds
7.9		Nominal profile in download of 50 Megabit/s	With access in VDSL2 technology: 75 milliseconds With access in FTTH technology: 70 milliseconds

7.10		Nominal profile in download of 100 Megabit/s	With access in VDSL2 technology: 70 milliseconds With access in FTTH technology: 60 milliseconds
7.11		Nominal profile in download of 300 Megabit/s (with access in FTTH technology)	50 milliseconds
8	Disputed charges : percentage of invoices for which the customer filed a complaint versus the number of invoices issued during the same period	1%.	

Annex D

Targets for the indicators of the services' quality for Internet in the car services associated to machine-to-machine services for the year 2022 as per AGCOM resolutions n. 154/12/CONS and n. 79/09/CSP and following amendments

Year of reference:	2022

Name of the indicator	Applicable services	Measures	Measu re unit	Targets
Time to recharge the credit (Annex 1 to resolution n.154/12/CONS as amended)	Pre-paid services	percentile 95% of the time of recharge	minu tes	1 minute and 30 seconds
Complaints regarding charges (Annex 3 resolution n.154/12/CONS as amended) (ratio between the number of complaints relevant to charges received and the average number of active SIMs/USIMs in the period considered)	Pre-paid services	Ratio between the number of complaints (in writing or other modality that can be tracked and is acknowledged by the operator and indicated in the chart of services) relevant to charges in the period considered and the average number of active SIMs/USIMs in the same period	%	1,2 <mark>0</mark> %
Time of reply to the calls to the operator's customer services:	Pre-Paid Services	minimum navigation time to access to the choice "human operator"	seconds	70
Time of reply to the calls to the operator's customer services:	Pre-Paid Services	average time of reply to the incoming calls	seconds	120
Time of reply to the calls to the operator's customer services:	Pre-Paid Services	percentage of incoming calls where the time of reply is less than 20 seconds	%	30

Time of reply to the calls to the operator's customer services:	Pre-Paid Services	Percentage of complaints solved without need for the customer to make further calls to the customer care number for the same complaint	%	95
Probability of transfer of SMS to the SMS center (Annex 8 resolution n.154/12/CONS as amended)	SMS services	Percentage of SMS took over by the SMS-C with respect to all the messages arrived to the SMS-C.	%	99%
Delivery time of the SMS at the first attempt (Annex 9 resolution n.154/12/CONS as amended)	SMS services	Arithmetical average of daily times of delivery of the SMS at the first attempt in the period considered	sec	7"
Accessibility of package commutation data services on GSM networks (Annex 10 resolution n.154/12/CONS as amended)	Commutation package data services on GSM networks	Percentage of requests to establish a package data connection, originated or terminated on the operator's network that are successfully carried out.	%	98,20%