

ONLINE APPENDIX

[Freyburg & Garbe: Blocking the Bottleneck, *International Journal of Communication*]

Online Appendix 1. Raw Data

case: country-election year	ISP state ownership (≥ 51 percent)	autocracy (parcomp < 2 ≠ 0; exrec < 5)	electoral violence (v2elpeace_ord ≤ 2)	shutdown
<i>Benin 2015</i>	Libercom (100); be.telecoms (100)	no (4; 8)	no (4)	no
<i>Benin 2016</i>	Libercom (100); be.telecoms (100)	no (4; 8)	no (4)	no
<i>Botswana 2014</i>	BTCL (100)	no (4; 7)	no (4)	no
<i>Burkina Faso 2015</i>	Onatel (20)	no (4; 7)	no (4)	no
<i>Burundi 2015</i>	Onatel (100)	yes (3; 3)	yes (0)	yes
<i>CAR 2015</i>	--	yes (-77)	no (3)	no
<i>CAR 2016</i>	--	no (3; 7)	no (3)	no
<i>Chad 2016</i>	Groupe Sotel (100)	yes (3; 5)	yes (1)	yes
<i>Djibouti 2016</i>	Djibouti Telecom (100)	no (0; 7)	no (4)	no
<i>Equatorial Guinea 2016</i>	Gecom (51); Getesa-Orange (60)	yes (2; 4)	no (3)	yes
<i>Ethiopia 2015</i>	Ethio Telecom (100)	yes (3; 3)	no (3)	yes
<i>Gabon 2016</i>	Gabon Telecom (49)	no (3; 7)	yes (0)	yes
<i>Gambia 2016</i>	Gambia Telecom (100)	yes (2; 5)	no (4)	yes
<i>Ghana 2016</i>	Vodafone Ghana (30)	no (4; 8)	no (3)	no
<i>Guinea 2015</i>	--	no (3; 7)	no (3)	no
<i>Guinea-Bissau 2014</i>	Guinetel (100)	no (4; 7)	no (3)	no
<i>Ivory Coast 2015</i>	--	no (3; 7)	no (3)	no
<i>Ivory Coast 2016</i>	Comium (100)	no (3; 7)	no (3)	no
<i>Lesotho 2015</i>	Econet Lesotho (30)	no (4; 8)	no (3)	no
<i>Malawi 2014</i>	--	no (3; 7)	no (3)	no
<i>Mauritania 2014</i>	Mauritel (45.5)	yes (0; 5)	no (4)	no
<i>Mozambique 2014</i>	Mcel (26); TDM (90)	no (4; 7)	yes (2)	no
<i>Namibia 2014</i>	MTC (66); Telecom Namibia (100)	no (4; 7)	no (4)	no
<i>Niger 2016</i>	Sonitel (100); Sahelcom (100)	no (4; 7)	no (3)	no
<i>Nigeria 2015</i>	ntel (100)	no (4; 8)	no (3)	no
<i>Republic of Congo 2016</i>	--	yes (2; 4)	yes (2)	yes
<i>South Africa 2014</i>	Telkom (51); MTN (17)	no (4; 8)	no (3)	no
<i>Sudan-North 2015</i>	Sudatel (30)	yes (2; 4)	yes (2)	yes
<i>Tanzania 2015</i>	Airtel (40); Tanzania Telecom (65)	no (3; 7)	yes (2)	no
<i>Togo 2015</i>	Togo Telecom (100)	yes (3; 3)	no (3)	yes
<i>Uganda 2016</i>	Uganda Telecom (31)	yes (3; 5)	yes (2)	yes
<i>Zambia 2015</i>	Zamtel (100)	no (4; 8)	no (3)	no
<i>Zambia 2016</i>	Zamtel (100)	no (3; 8)	yes (1)	no

Note: The Polity IV project codes cases that experience “complete collapse of central authority or a revolutionary transformation in the mode of governance” (Marshall et al. 2017: 35) with ‘-77’; the combined polity2 score converts this ‘standardized authority score’ to a score of ‘0’, which falls within the category of autocracies (see CAR 2015).

Online Appendix 2. Truth Table

ISP	violence	autocracy	OUT	N	incl	PRI	Cases
0	1	0	1	1	1	1	Gabon_2016
0	1	1	1	3	1	1	Republic of Congo_2016, Sudan-North_2015, Uganda_2016
1	0	1	1	4	1	1	Equatorial Guinea_2016, Ethiopia_2015, Gambia_2016, Togo_2015
1	1	1	1	2	1	1	Burundi_2015, Chad_2016
0	0	0	0	7	0	0	Burkina Faso_2015, CAR_2015, Ghana_2016, Guinea_2015, Ivory Coast_2016, Lesotho_2015, Malawi_2014
0	0	1	0	2	0	0	CAR_2015, Mauritania_2014
1	0	0	0	11	0	0	Benin_2015, Benin_2016, Botswana_2014, Djibouti_2016, Guinea-Bissau_2016, Ivory Coast_2016, Namibia_2014, Niger_2016, Nigeria_2015, Zambia_2015, South Africa_2014
1	1	0	0	3	0	0	Mozambique_2014, Tanzania_2015, Zambia_2016

Note: OUT = outcome value (here: internet shutdowns); N = number of cases; incl = sufficiency inclusion score (i.e. consistency measure); PRI = proportional reduction in inconsistency; ‘incl’ and ‘PRI’ are always equal for crisp sets.

Online Appendix 3. csQCA output with Gabon recoded as autocracy

	cases	conditions		coverage		consistency	
		ISP state ownership	autocracy	electoral violence	raw		unique
positive outcome	Equatorial Guinea_2016, Ethiopia_2015, Gambia_2016, Togo_2015; Burundi_2015, Chad_2016	●	●		0.60	0.40	1.0
	Gabon_2016 ; Republic of Congo_2016, Sudan-North_2015, Uganda_2016	○		●	0.40	0.00	1.0
	Gabon_2016 ; Republic of Congo_2016, Sudan-North_2015, Uganda_2016; Burundi_2015, Chad_2016		●	●	0.60	0.00	1.0
	Solution 1	ISP*AUTOCRACY + (isp*VIOLENCE) <=> SHUTDOWN			1.0	1.0	1.0
	Solution 2	ISP*AUTOCRACY + (VIOLENCE*AUTOCRACY) <=> SHUTDOWN			1.0	1.0	1.0
negative outcome	Burkina Faso_2015, CAR_2016, Ghana_2016, Guinea_2015, Ivory Coast_2015, Lesotho_2015, Malawi_2014; CAR_2015, Mauritania_2014	○		○	0.39	0.09	1.0
	Burkina Faso_2015, CAR_2016, Ghana_2016, Guinea_2015, Ivory Coast_2015, Lesotho_2015, Malawi_2014; Benin_2015, Benin_2016, Botswana_2014, Djibouti_2016, Guinea-Bissau_2014, Ivory Coast_2016, Mozambique_2014, Namibia_2014, Niger_2016, Nigeria_2015, South Africa_2014, Tanzania_2015, Zambia_2015, Zambia_2016		○		0.91	0.61	1.0
	Solution	autocracy + isp*violence <=> shutdown			1.0	1.0	1.0

Note: Empty circles depict the absence of the condition, shaded circles its presence. In line with Boolean operators, upper-case letters indicate the presence of an outcome or a condition, and lower-case letters indicate their absence; * designates logical AND, while + designates logical OR, and the logical (set-theoretical) relation <=> signals both necessity and sufficiency.