

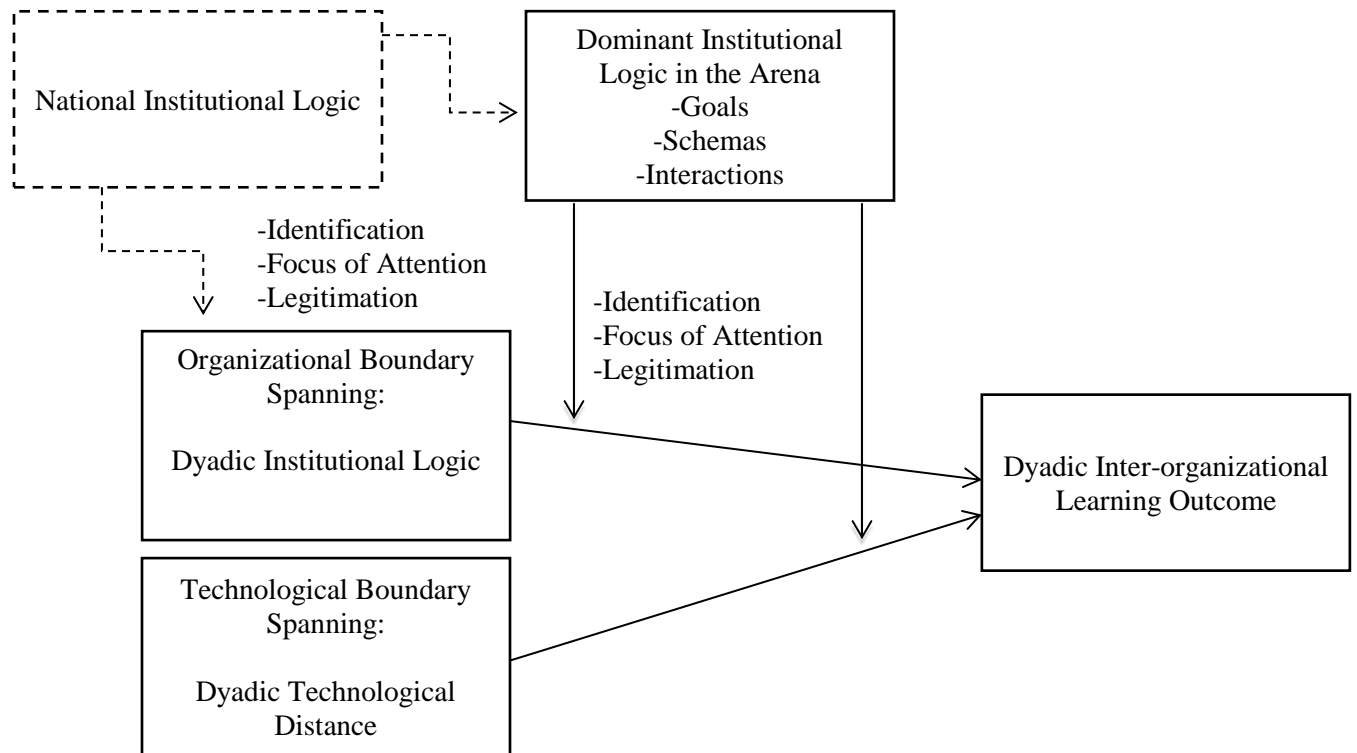
## Online Appendix

### Institutional Logics and Inter-Organizational Learning in Technological Arenas:

#### Evidence from Standard Setting Organizations in the Mobile Handset Industry

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**Figure 1. Model Relationships**



**Table 1. Standards Setting Organizations Summary**

Standard Setting Organization	SSO Corporatism		SSO Formal Establishment		
	Corporatism Index <sup>†</sup>	Polity of Sponsor(s)	State Sponsored	Basis of Decision Making	Organizing Framework
Nordic Group (2G Proposal)	0.94	Corporatist	No	Consensus	Hybrid Committee
W-CDMA (Japan 3G Proposal)	0.81	Corporatist	No	Sponsor	Vertically Integrated
NTT (Japan 1G)	0.73	Corporatist	Yes	Sponsor	Vertically Integrated
NMT 450-25 (Nordic 1G)	0.65	Corporatist	No	Consensus	Hybrid Committee
D-AMPS (US 2G)	0.65	Pluralist	No	51% Majority Vote	Market Committee
S900-D (Fr/Ger 2G Proposal)	0.61	Mixed	Yes	Sponsor	Vertically Integrated
NMT 900 (Nordic 1G)	0.57	Corporatist	No	Consensus	Hybrid Committee
IS-136 (US 2G)	0.56	Pluralist	No	51% Majority Vote	Market Committee
CDMA-One (Korea 2G)	0.55	Corporatist	Yes	Sponsor	Vertically Integrated
GSM (EU 2G)	0.55	Mixed	No	71% Majority Vote	Hybrid Committee
MATS-E (France 1G)	0.43	Pluralist	Yes	Sponsor	Vertically Integrated
TD-SCDMA (China 3G)	0.33	Corporatist	Yes	Sponsor	Vertically Integrated
PDC (Japan 2G)	0.25	Corporatist	Yes	Sponsor	Vertically Integrated
TACS (UK 1G)	0.24	Pluralist	No	Sponsor	Hybrid Committee
CD 900 (Fr/Ger/It 2G Proposal)	0.21	Mixed	Yes	Sponsor	Vertically Integrated
AMPS (US 1G)	0.14	Pluralist	No	Sponsor	Hybrid Committee
N-AMPS (US 2G proposal)	0.01	Pluralist	No	51% Majority Vote	Market Committee

<sup>†</sup>The SSO Corporatism Index is calculated as  $\frac{1}{G} \sum_{i=1}^G w_{it} \cdot H_{it}$ , where  $H_{it}$  is the Hicks-Kenworthy corporatism measure (Hicks and Kenworthy, 1998) in year  $t$  for the home country of firm  $i$ ,  $w_{it}$  is a socio-technical weighting based on firm  $i$ 's cumulative patenting and interfirm alliances in year  $t$ , and  $G$  is the number of firms in the SSO. For presentation in this table, the index is averaged over the SSO duration.

SSO procedures and characteristics are taken from the standards literature (e.g. Bekkers 2001, Chiao et al. 2007, Farrell and Saloner 1988, Funk and Methe 2001, Funk 2002, Funk 2009, Garrard 1998, Gessler 2002, Lindmark and Granstrand 1995, Manninen 2002, Srivastava 2003, Tate 2001, West 2000).

**Table 2. Sensitivity Analysis**

	DV: dyadic patent citation, 5 year window									
	Log-odds		Mixed Effects		Fixed Effects		Fixed Effects		3 year window	
	Model 6	Model 6	Model 7	Model 7	Model 8	Model 8	Model 9	Model 9	Model 10	Model 10
SSO corporatism	-10.45*	(5.52)	-0.09*	(0.05)			-0.15*	(0.08)	-0.41**	(0.06)
Dyadic corporatism	-3.93	(5.16)	-0.06*	(0.03)			-0.20*	(0.09)	-0.17*	(0.08)
Technological distance	-7.44**	(2.27)	-0.11**	(0.02)	-0.09**	(0.03)	-0.05	(0.04)	-0.11*	(0.05)
SSO corporatism * Dyadic corporatism	15.31*	(7.85)	0.08+	(0.06)			0.42**	(0.09)	0.58**	(0.11)
SSO corporatism * Tech. distance	12.59**	(4.31)	0.20**	(0.04)					0.22*	(0.10)
Dyadic corporatism * Tech. distance							0.09+	(0.06)		
SSO prop. corporatist					-0.20*	(0.11)				
SSO prop. corporatist * Corporatist dyad					0.29**	(0.11)				
SSO prop. corporatist * Mixed dyad					0.16+	(0.11)				
SSO prop. corporatist * Tech. distance					0.14**	(0.06)				
<b>SSO controls</b>										
SSO formal establishment	1.83	(1.41)	0.05*	(0.02)	0.05**	(0.02)	0.04+	(0.02)	0.10**	(0.03)
Statism index	2.38	(7.02)	-0.26**	(0.08)	-0.19	(0.17)	-0.28+	(0.14)	-0.23*	(0.11)
Rejected	0.53	(1.69)	-0.08**	(0.03)	-0.07*	(0.03)	-0.04	(0.03)	-0.13**	(0.04)
Age	0.25	(0.16)	0.01**	(0.00)	0.02**	(0.00)	0.02**	(0.00)	0.01**	(0.00)
Alliance density	0.14	(0.98)	0.02	(0.01)	0.02	(0.02)	0.03	(0.02)	0.07	(0.05)
Cultural diversity	-0.25	(0.17)	0.00	(0.00)	0.00	(0.00)	0.00	(0.00)	-0.01*	(0.00)
Regional diversity	4.56	(4.77)	-0.04	(0.05)	-0.12	(0.08)	-0.08	(0.08)	0.11+	(0.06)
<b>Dyadic controls</b>										
Industry experience	-0.26	(0.20)	0.00+	(0.00)	-0.02**	(0.01)	-0.02**	(0.00)	-0.02**	(0.01)
Prior alliances	0.49+	(0.29)	0.00	(0.00)	0.01+	(0.00)	0.01**	(0.00)	0.01*	(0.01)
Prior citations (within dyad)	-0.38**	(0.12)	-0.00	(0.00)	-0.01*	(0.00)	-0.01*	(0.00)	-0.00**	(0.00)
Prior patenting	0.04**	(0.01)	0.00**	(0.00)	0.00**	(0.00)	0.00**	(0.00)	0.00**	(0.00)
Prior SSO joint participation	2.70**	(0.67)	0.00	(0.00)	0.06**	(0.01)	0.07**	(0.01)	0.07**	(0.02)
Investment	-0.22	(0.90)	-0.01	(0.01)	-0.02	(0.01)	-0.02	(0.01)	-0.01	(0.01)
Firms in dyad countries	0.09	(0.17)	0.00**	(0.00)	0.01	(0.00)	0.00	(0.00)	0.01*	(0.01)
GDP per capita	0.07	(0.09)	0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)	0.00	(0.00)
Lambda	-0.50	(0.35)	0.00	(0.00)	0.00	(0.00)	0.00	(0.00)	0.00	(0.01)
Year dummies	Included		Included		Included		Included		Included	
Constant	-7.27	(5.09)	0.12+	(0.07)	0.15	(0.13)	0.26**	(0.09)	0.39**	(0.12)
R-squared	0.45				0.45		0.47		0.37	
Log likelihood	-1026		1351		1458		1468		1126	

Robust standard errors in parentheses

\*\* p<0.01, \* p<0.05, + p<0.10; one-tailed tests for hypothesized parameters; two-tailed tests for controls

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