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Making the Rules

The Governance of Standard Development Organizations and their Policies on Intellectual Property Rights

Authors:
Justus Baron
Jorge Contreras
Martin Husovec
Pierre Larouche

Editor:
Nikolaus Thumm

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Methodology

- Comprehensive literature review (law, economics, political science)
- Case studies (17): AFNOR, CEN-CENELEC, DIN, DVB, ECMA, ETSI, IEC, IEEE-SA, IETF, ISO, ITU, JEDEC, SAC, TSDSI, VITA, W3C, as well as ANSI
  - Interviews + document review
- Survey of stakeholders
  - 57 questions (Y/N, 5-point scale, open-ended) (30-60+ min.)
  - 475 stakeholders identified (SEP holders, SDO members, implementers, civil soc'y)(US, EU, Asia)
  - 47 valid responses (high quality/detailed)
    - Europe (62%), N. Am. (23%), Asia (9%)
    - For-profit firms (70%)
    - >10,000 empl. (48%), <50 empl. (26%)
    - Patent-Centric (30%), Product-Centric (53%), Non-Participant (17%)
- Stakeholder workshop (Mar. 2018)
  - 31 invited participants
- Input from EC, steering group and peer-review board

Overview

- SDO ecosystem
  - Legal constraints
  - Government relationships
  - Competitive & cooperative relationships among SDOs
- SDO governance architecture
  - Form of incorporation, mission statement, form of membership
  - Governance bodies and their respective roles and processes
- SDO governance principles
  - Procedural principles: openness, balance, consensus, transparency, appeal
  - Sources of legitimacy of SDO decision making
- Application of overall framework to the case of IPR Policies
- Conclusions and Policy Recommendations

Summary of findings

I. SDO Ecosystem – External Constraints

- Legal framework:
  - Trade law (leading to standard-specific law), antitrust/competition law, procurement, IP law
  - Overall predominance of a self-regulatory approach (ex post intervention, and focus on process rather than output)
- Relationships with government
  - Some SDOs have important regulatory functions and privileged role in national or international regulatory systems (esp. NSBs, ESOs, ISO/IEC/ITU)
  - Little government participation in most industry-driven SDOs and consortia
- Cooperative relationships with other SDOs
  - Vertical: hierarchical (ISO/IEC/ITU, ESOs, NSBs) and bottom-up (ANSI, ECMA/DVB → ETSI)
  - Horizontal: formal (e.g. 3GPP) and informal (numerous focused cooperations)
- Competitive environment
  - Traditional view of competition among SDOs: Stakeholders “voting with their feet”
  - Importance of other competitive responses: “stepping out of the room”; disagreement within SDO

I. SDO Ecosystem – A Three-Layer Model

Layer	Attributes	SDOs
First	- Quasi-regulatory functions delegated by government - Importance of network of vertical relationships - Specific and formal legal requirements	AFNOR, ANSI, DIN, CEN, CENELEC, ISO, IEC, ITU, SAC
	- Shares elements with first and second (depending on the activity)	ETSI, TSDSI
Second	- Established leadership over technical field - Importance of switching costs	IEEE, IETF, W3C
Third	- Significant competitive constraints - Bottom-up orientation to more formal bodies for greater legitimacy	DVB, ECMA, JEDEC, VITA

II. SDO Architecture – Internal Processes

- Form and mission:
  - Variety of forms: non-governmental (except ITU and SAC), independently incorporated (except IEEE-SA, IETF, W3C)
  - Type of membership: national basis, organizational, individual
  - Limited practical role of mission statement
- SDO staff and boards
  - Different roles and types of leadership; different expectations/fiduciary duties
  - Election/nomination process give boards different degrees of independence
- Processes for policy development
  - Bodies involved; voting rules; openness; transparency
  - Different degrees of consensus
- Dispute resolution

II. Leadership- vs. membership-driven bodies

Governance feature	Leadership-driven model	Membership/consensus-driven model
Ultimate decision maker	Elected board (DIN, IEEE-SA.. Unelected leadership (SAC, W3C)	General Assembly (DVB, ETSI.. Open processes (IETF)
Voting rules		National aggregation of votes (IEC/ISO/ITU, CEN-CENELEC, ETSI on HS and policies) Votes by category (DVB)
Election process	Staggered tenure (DIN, IEEE) Nomination committee approach (ANSI) Election by dispersed individual members (IEEE)	Board members appointed by members (DVB, JEDEC) Overweighting of relevant stakeholders (ETSI)
Individual duties	Fiduciary duties to organization (IEEE..) Representation of broader interests (ANSI)	Represent membership (ETSI, DVB…)
Organizational form	Activity of another organization (IEEE-SA, W3C)	Activity of its members (DVB, JEDEC, VITA)
Role of staff	Extensive staff (AFNOR, DIN, SAC), significant staff leaders (ANSI, IEEE, VITA, W3C)	Very limited or almost absent (ECMA, IETF)

Overview

Layer	Stakeholder/membership consensus-driven SDOs	Leadership-driven SDOs
First	CEN-CENELEC, IEC, ISO, ITU	AFNOR, ANSI, DIN, SAC
	ETSI, TSDSI	
Second	IETF	IEEE, W3C
Third	DVB, ECMA, JEDEC	VITA

III. SDO Governance Principles

- Procedural approach arising from legal framework
- Principles for standardization
  - Enshrined in numerous legal instruments/review mechanisms
  - Applicability to policy development disputed (SDOs vs. stakeholders)
- Openness and transparency
  - Formal openness and effective inclusiveness
  - Openness/transparency of process vs. outcome
- Balance of interests
  - Commercial, geographic, by type; ad-hoc
- Consensus
  - Absence of sustained opposition
- Interplay of principles
  - Openness vs. balance: conflict?

III. SDO Governance Principles

- Link with Legitimacy
- Possible sources of legitimacy (from literature)
  - Consent-Based Legitimacy
  - Market-Based Legitimacy
  - Democratic Legitimacy
  - Due Process and Procedural Legitimacy
  - Expert Legitimacy
- Outcome: Multi-faceted Legitimacy

IV. Application to IPR: SDO Ecosystem and Baseline Policies

- SDO IPR Policies implement external constraints
  - External constraints come from legal framework: trade law, competition/antitrust law, etc.
    - e.g. horizontal guidelines, ANSI ER, CEN Guide, 3GPP Agreement etc
  - Safe harbour approach complementing the procedural approach to governance in general
  - External constraints converge to elements of ‘baseline’ policy:
    - Disclosure
    - Availability of licenses at least on FRAND terms
  - Diversity of approaches of implementing the baseline policy
- Baseline Plus Policies
  - Going beyond the Baseline
    - Licensing obligations for members/contributors
    - Specifications for licensing terms beyond FRAND (RF or specific definitions)
  - Implementing underlying requirements through alternative means (e.g. only disclosure (IETF) or generic licensing obligation (consortia))

IV. Application to IPR: SDO Ecosystem and Baseline Policies

- Baseline Plus Policies rare in the first layer:
  - ISO/IEC/ITU, NSBs, CEN-CENELEC, ANSI: very limited and general policies sticking close to the baseline
  - ETSI, TSDSI: elaborate policies adding few substantive requirements
- Many third-layer organizations follow/implement baseline:
  - Voluntarily seek ANSI accreditation, often literally adopt ANSI ER as policy
  - Use text of formal bodies in their own policies (ECMA)
  - Submit their TS to standardization by formal bodies with their rules (DVB)
- Baseline-Plus Policies tend to dominate in second layer
  - Significant additional restrictive rules (IEEE SA, W3C)
  - Alternative, tailor-made IPR policy (IETF)

IV. Application to IPR: SDO Architecture and Committal Decisions

- SDO policy making ‘beyond the baseline’:

- Relatively uncontested (technical) decisions (e.g. transferability of licensing obligations, design of disclosure system)

- Contested (distributional) questions: committal vs. non-committal decisions
  - Committal decisions: Biding policies, specific interpretation of contested policy term
  - Non-committal decision: option-based policies, open interpretations, ambiguity

IV. Application to IPR: SDO Architecture and Committal Decisions

	Committal choices		Non-committal choices	
Policy choices				
Ex-ante disclosure of licensing terms	Mandatory ex-ante disclosure	VITA	Optional ex-ante disclosure	ETSI, IEEE (2007)
Dispute resolution	Mandatory ADR	DVB, VITA	Leave dispute resolution to parties	most SDOs (incl. ETSI, IETF, ISO/IEC/ITU)
	Restricting right to seek injunctive relief	IEEE (2015)		
Interpretations				
FRAND	Define specific criteria of FRAND	IEEE (2015)	provide no position as to what (if any) specific pricing criteria define FRAND	ETSI, IETF, ISO/IEC/ITU, and most other SDOs
Component-level licensing	Specific policy provision requiring component-level licensing	IEEE	No position with respect to ongoing controversy/ ambiguity of policy	ETSI
	Specific policy interpretation	ANSI		
Royalty-free licensing	mandatory RF	W3C	optional	IEEE, IETF, many, other SDOs
	potentially mandatory RF	OASIS, ECMA (experimental)		

IV. Application to IPR: Legitimacy and Public Policy

- Two issues:
  - Who defines the policy?
  - Is policy coordination across SDOs needed and if so, how?

- Balance between safe harbour (baseline) and SDO self-regulation

- Circulation of SDO policy choices (experimentation, precedent, emulation)
- Role of ANSI and antitrust authorities for precedential effect

- The role of government in defining IPR policies:
  - Government objectives in SDO IPR Policies
  - Government 'calling upon SDOs'
  - Towards public-private cooperation

Take-aways, policy recommendations

I. Best Practices from Public Policy Perspective

- SDO Policy Making on IPR takes place within a self-regulatory model
- Policy makers have affected SDO decision-making through a combination of
  - Procedural approach
  - Safe-harbour approach

- Advantages:
  - Attainment of public policy objectives (“quality” policy)
  - Avoidance of public policy problems (trade law, competition law)
  - Avoidance of over-extension of public authorities
  - Legitimacy
  - Preservation of innovation incentives of private actors
  - Respect for diversity of SDO approaches
    - ‘Local preferences’ and experimentation
  - International harmonization through SDO efforts

II. Representation of Diverse Stakeholder Interests in SDOs

- A core of committed stakeholders drives the process
  - Overlapping set of firms across SDOs
- A larger group of stakeholders is potentially affected
  - Other tech developers, firms in other sectors, SMEs, consumers
- Balance between
  - Enforcing openness and balance of interests
  - Keeping SDO processes effective
- Options
  - Direct representation of dispersed stakeholders (e.g. through interest groups) plays more limited role in IPR debates than other standard-related policy areas
  - Duties on SDO leadership (but unclear how interpreted/enforced)
  - Importance of public authorities safeguarding general interest by providing appropriate regulatory framework (e.g. competition law)

III. Weaknesses of the Current Model

- Overall satisfactory functioning
- Departure from successful self-regulatory model in the specification of FRAND
  - Mainly driven by court and authorities, at variance with model
  - International fragmentation, burden on courts/authorities, non-experts in charge, inconsistency over time and place
  - SDOs have not succeeded in their own efforts
  - Our project explains why:
    - Absence of guidance regarding the principles and legitimacy of SDO policy-making on contested issues, no mechanisms in place to review SDO policy-making processes
    - Absence of forums for circulation of clarifications and interpretations of policy terms common to a larger number of SDOs

III. Weaknesses of the Current Model

- Our recommendations
  - Give guidance on application of procedural approach to SDO policymaking
    - Principles of consensus, openness, balance, transparency and availability of appeal should apply to policy decision-making of SDOs in the first layer (e.g. NSBs, ESOs)
    - Value of experimentation and idiosyncratic approaches among SDOs in the competitive third layer warrants a lenient approach
    - Case-by-case analysis, taking into account effects on legacy standards, ongoing projects and existing property rights
  - Coordinate internationally among public authorities on substantive guidance
  - Provide forum for SDOs to coordinate on policy issues

IV. SDO Policy Coordination

- No place to do this for ICT standards globally
  - ISO/IEC/ITU outside of ICT world
  - ANSI in the US
- Left to focused initiatives, e.g. 3GPP
- No need for forced harmonization, rather coordination forum (ordered diversity)
- Our recommendation: explore use of MSP for that purpose

V. A Possible “Tandem” Approach

- 2017 Communication on SEPs
  - Less directive approach than elsewhere
  - Commission wants to work with stakeholders
- Our recommendation: consider a “tandem” approach
  - Next to procedural approach (SDO governance in general) and safe harbour approach (for IPR policies)
  - Public authorities clarify their priorities
  - SDO improve their policies
  - Both sides take note and provide feedback to each other
    - Example: Transferability of commitments