인터넷 거버넌스 논의의 틀

한국방송통신대학교 이영음

I. 거버넌스 분석 기본 개념
II. 거버넌스 시스템의 구성
III. 국가 사례
IV. 한국의 사례

I. 거버넌스 분석 기본 개념

1. '바람직한 거버넌스' 원칙

- '바람직한 거버넌스' 모델의 수립을 위해 적용할 수 있는 원칙이 무엇인지를 우선 알아 보아야 함
- 인터넷 거버넌스와 관련해서 가장 널리 인정될 수 있는 것 중 하나는 Netmundial Multistakeholder Statement에서 합의된 "Internet Governance Process Principles.'
  ① **Multistakeholder**
  ② **Open, participative, consensus driven governance:**
  ③ **Transparent**
  ④ **Accountable**
  ⑤ **Inclusive and equitable**
  ⑥ **Distributed**
  ⑦ **Collaborative**
  ⑧ **Enabling meaningful participation**
  ⑨ **Access and low barriers**
  ⑩ **Agility**

2. 구성과 과정

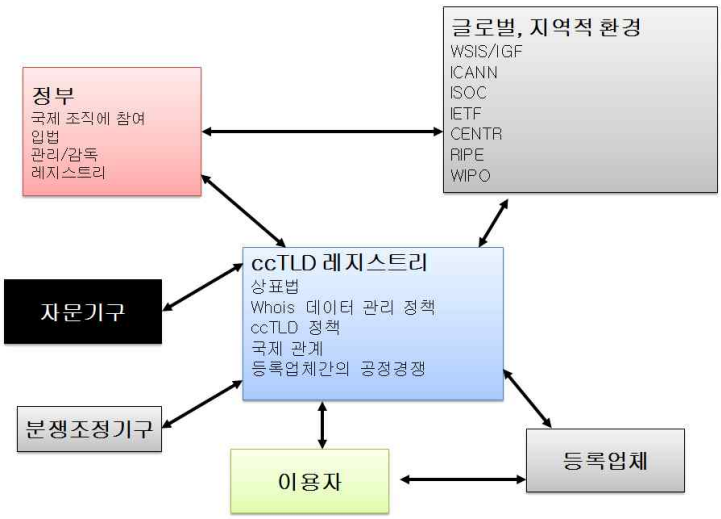
- 위의 원칙들은 크게 '구성'과 '과정'으로 구분해서 볼 수 있다. 따라서 우선 '구성'과 관련하여 다양한 모델을 분석, 비교해 보고 '과정'에서의 요소들을 이해할 수 있는 사례를 살펴볼 것
- 구성: multistakeholder model 개념 및 운영 관련 사항, 정부의 역할 관련 사항
- 과정: 정책 결정 과정의 투명성, 개방성, 책임성, 참여의 정도, 합의의 과정 등에 대한 사항

II. 거버넌스 시스템의 '구성'

1. 인터넷 거버넌스 시스템 구성 기본 구도

- 일반적 구도는 다음과 같다

<그림 1> ccTLD 거버넌스의 핵심 요소



출처: Christou & Simpson, 2007.

- 이 중에서 거버넌스 구성과 관련해서 정부, 자문기구, 이용자 등의 역할이 중요함

2. Multistakeholder적 구성

- 기본 원칙은 Multistakeholder
- Internet governance should be built on democratic, multistakeholder processes, ensuring the meaningful and accountable participation of all stakeholders, including governments, the private sector, civil society, the technical community, the academic community and users. The respective roles and responsibilities of stakeholders should be interpreted in a flexible manner with reference to the issue under discussion. (Netmundial Initiative)
- 이 중 '구성'과 관련된 부분은 정부, 민간영역, 시민, 기술, 학술 사회 등의 부분으로 나뉘게 됨
- 정부, 민간영역, 시민사회 등의 역할이 거버넌스 구도에 얼마나 영향을 미칠 수 있는가?

3. 정부의 역할

- 정부의 역할은 인터넷 발전 초기에 비해 전세계적으로 늘어나는 추세

- 정부 역할의 강도에 따라 몇 단계로 구분해서 생각할 수 있음

*** 공공영역과 사적 영역간의 거버넌스 관계**

Hierarchical ⟷ Non-hierarchical

'Concerted action'	'Subcontracting'	'Market-based/state shadowed self-regulation'	'Voluntary Action'
Where the state sets both formal and substantive conditions for rule-making	Where state involvement is limited to setting formal conditions for rule-making with private actors then shaping the content	Involves industry-setting, monitoring and enforcing standards in the knowledge that if it fails, state intervention could be imminent, that is, self-regulation in the shadow of the state	Self-regulation can occur in a purely voluntary way with no direct state stimulus or intervention.

- 이 중 특히 '정부의 역할'과 관련된 분석이 중요 쟁점
- <부록 1> ccTLD 레지스트리와 정부의 관계 현황표 참조

IV. 각 국가의 사례

(관련 내용의 원문 발췌한 부분입니다.)

<Switzerland>

* **delegated (by the state) public-private governance system**.

- In Switzerland, the Swiss Education and Research Network (SWITCH) as the registry for dot ch plays the pivotal role in ccTLD governance.
- It is something of a hybrid governance body since it was established in 1987 by the Swiss state and the university sector as a foundation of the private sector.
- in the late 1980s, there was no direct government involvement in the Swiss domain name system due in part to a lack of understanding of its significance and potential future strategic importance.
- An important change occurred in 1996, when the Swiss state introduced the idea of 'holdership', that is the right of use only of a domain name.
- Another significant venture by the state into the TLD domain occurred in 2002 when the Swiss government decided to take over responsibility for oversight of its ccTLD.
- Thus, in 2003, a set of regulations for dot ch were laid out in law in the Federal Constitution through the Telecommunications Act. An administrative contract between the Swiss telecommunications national regulatory authority, OFCOM, which plays a public oversight role, and SWITCH was established.
- The underpinning goals of the Swiss system are to ensure credibility for the registry,

transparency in the system of registration, and shared responsibilities between the registry (functional and operational mostly) and government (representational in international fora mostly) (Schneider 2005).

<Norway>

- Since UNINETT is owned by the Norwegian state through its Ministry of Education and Research, the system is overwhelmingly characterized by '**sub-contracting**' though there are also elements of '**concerted action**' due to the backstop regulatory role played by the Norwegian telecommunications regulator.
- The Norwegian registry for dot no, Norid, claims that it is a 'neutral actor', 'anchored in a strong social responsibility' (Norid 2007a).
- Norid is regulated by the Domain Name Regulation which is part of the 2003 Electronic Communications Act and, like the Swiss case, is under the aegis of its national telecommunications regulatory authority.
- Norid is part of UNINETT AS, the National Academic Research Network, which was delegated responsibility for dot no by the state in 1987.
- Norid is an unusual organization to have been devolved regulatory responsibility – it is a novel example of a publicly owned (but private) company undertaking a number of key governance functions.
- 'the administrative model for the .no domain…combines a domain name policy set by the registry (in consultation with the Norwegian community) with a high-level administrative framework set by the Norwegian government through regulation. Added to this mix is a private sector registry that is owned by the Norwegian state'

<France>

* **public-private hybrid nature** of the dot fr governance system
* In this case, clear evidence exists of **a mix of commercialisation a**nd **non-hierarchical governance measures.** However, the significant presence of the state in AFNIC suggests that the French system contains **important elements of 'concerted action' and 'sub-contracting'.**
- From 1986-1997, the ccTLD in France was under the control of the French National Institute for Information Technology and Automation research (INRIA).
- in 1995, by the creation of a Naming Charter of rules for domain name assignment (authors' interview, 2008). Until this point, the system bore many of the hallmarks of 'voluntary action', though in 1997 the French state intervened to change the nature of dot fr governance very considerably.
- The system was made a part of French law, accompanied by the establishment of the registry AFNIC by INRIA and the French government.
- AFNIC's management structure is a reflection of the dilemma of a traditionally mercantilist state such as France in the governance of a communications asset

with both social and commercial imperatives.

- On the one hand, the presence of the state is very much in evidence in the management structure of the registry, the aim being to secure 'co-development'. as much as half the board of management of AFNIC come from the public sector, or 'founder members', as they are described: two representatives from INRIA and three from French government
- the French government (2003: 2) has also stated unequivocally that in France, 'the ccTLD is held to be a public or collective resource that cannot come under the heading of private property and must be managed in the general interest...governments' in the final instance have authority over the ccTLDs pertaining to their territory'.
- It is paradoxical therefore that there has been a very significant move in the direction of liberalisation in the ccTLD market in France since approximately 2000. in May 2004, through the current French postal and electronic communications law, it was made bureaucratically less burdensome (more flexible) for companies to register under dot fr, which resulted in an 88% growth in registrations in the following year (OECD 2006: 17).
- a much more market-oriented approach is being developed by AFNIC

<UK>

* dot UK functions in operational and regulatory terms predominantly as **a system of 'voluntary action'**, although there is nevertheless the shadowing presence of the UK state in evidence.
* The UK ccTLD provides an example of a very **liberalised and commercially successful system.**

- Like most ccTLDs, the governance of dot uk occurred initially through classic 'voluntary action' administered in the 1980s by an organization known as the Naming Committee.
- domain names management was formalised through the creation in 1996 of Nominet, the dot uk registry, as a private not-for-profit concern (Nominet 2007b2007b) over which its private members have ultimate control
- The UK government was not concerned with Nominet's monopoly control over dot UK as it firmly believed that any potential abuse of this situation could be dealt with through existing regulatory legislation and bodies. The only issue for the UK government, therefore, was whether the proposed regulatory model for Nominet – underpinned by openness, transparency, inclusiveness, flexibility, and objectivity – was congruent with the direction of UK public policy

<Argentina>

- The Argentine ccTLD is located in the Ministry of Foreign Affairs

- It was created in 1987 and since then it has managed the national domain names.
- According to its coordinator, "the management of domain names is a scarce and strategic resource, particularly more so when IPv6 becomes finally adopted and I consider that it is best to maintain the policies and strategic functions within the state"

<Brazil>

- multistakeholder model
- It attempts to follow a multi-stakeholder approach, similar to the experiences of the World Summit Information Society (WSIS) and the IGF.
- The Brazilian Internet Steering Committee has 21 members20, comprising nine federal government representatives, four from the private sector (ISPs, telecommunications infrastructures providers, hardware and software industries and general business sector users); four representatives of non-governmental organizations, three members of the scientific community and one "Internet expert"
- CGI.br comprises a variety of organizations and initiatives among its umbrella protection:21

<Australia>

- .auDA is a small organisation managed by a Chief Executive Officer, a Policy Officer and administrative staff. It is funded by contributions from members, registrar fees ($11 per domain name registration), registry fees and, most recently, by off-budget windfalls from the sale of generic domain names. It does not receive funding from government.
- It operates under the Corporations Law and is managed by a Board of Directors (currently 13) eleven of whom are elected by .auDA's members[41] and two of whom are appointed as Independent Directors.[42]
- A range of formal working parties has assisted policy development. Members of those parties serve on a voluntary basis. As such, the cost of regulation has been successfully transferred from government to those subject to the regulation in a similar way, for example, to the work of the Australian Communications Industry Forum (ACIF)
- Membership of .auDA's policy panels is representative of the broader community with skills in information technology and engineering, telecommunications policy, intellectual property protection and consumer advocacy. The Registrar's Code of Practice is a case in point.
- The activity of the working parties is publicised by .auDA through public forums and the online membership list.
- As a result, the regulatory load of DNS governance in Australia is spread across representatives from peak associations, registrars, the technical community and individual members.

<New Zealand>

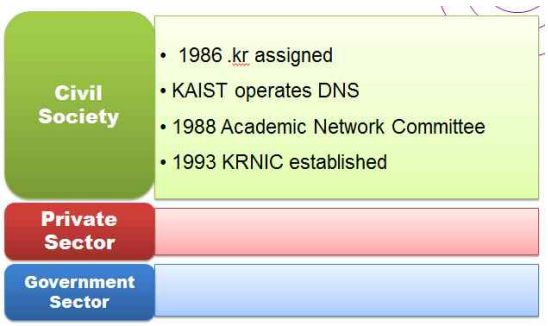
- the Ministry is, as defined in RFC1591, a significantly interested party when it comes to the management of the .nz ccTLD.
- The Ministry's primary role in the .nz ccTLD is focused on the stability of the Internet.
- The Ministry has the responsibility for ensuring that New Zealand's communications infrastructure – including its domain name space - is reliable and responsive.
- Its secondary role is a monitoring role
- The Ministry has a role as a long standing participant in ICANN through the Governmental Advisory Committee (GAC)
- InternetNZ was chosen by the local Internet community at a public meeting in 1996 to be the designated manager for the .nz ccTLD.
- InternetNZ's primary role in relation to this MoU is to manage .nz in the public interest as set out in the objects of the society.
- InternetNZ's role is:
    a. The technical operation of the .nz registry and .nz DNS.
    b. Deciding and implementing the market structure for .nz, guided by its object to promote the competitive provision of Internet access, services and facilities in an open and uncaptureable environment.
    c. Determining the principles and policy under which .nz operates.
    d. Regulating the .nz market and ensuring compliance with the .nz policies by market participants.
- In its role as designated manager InternetNZ commits to high standards of public transparency and commits to continuing with the following established practices:
    a. Publishing its annual report publicly and in a timely fashion;
    b. Holding meetings of its governing Council in public and publishing the minutes afterwards in a timely fashion;
    c. Providing public reports on its activities that are funded by the surplus from .nz;
    d. Engaging in broad community consultation on any changes to the objects of InternetNZ.
- Both parties commit to regular, open dialogue regarding the management of the .nz ccTLD.
- At any time the Ministry can contact InternetNZ seeking explanation, clarification or dialogue on any matter concerning the operation of .nz.
- Under the .nz Policy Development Process any party is free to identify possible policy requirements and raise these.
- In the event that this clear consensus exists then the local Internet community may, through the Ministry (or through other means), instruct IANA to process a transfer of designated manager of the .nz ccTLD.

V. 한국의 경우

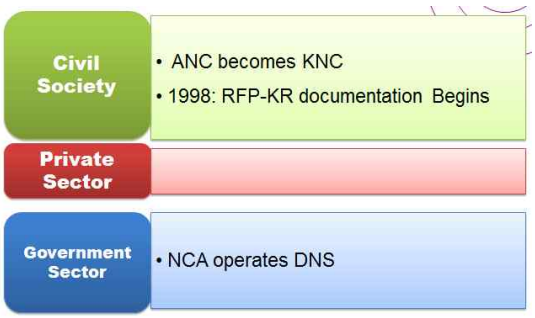
- 역사

Academic Society Led:1986 – 1994 : KAIST
Civil Society Led Cooperation: 1994 – 1999 : NCA Operated
Independent Organization: 1999 – 2004 : KRNIC Operated
Legislation – government: 2004 – 2009 : Address Law
Government led cooperation: 2009 – 2012 : Merged KISA

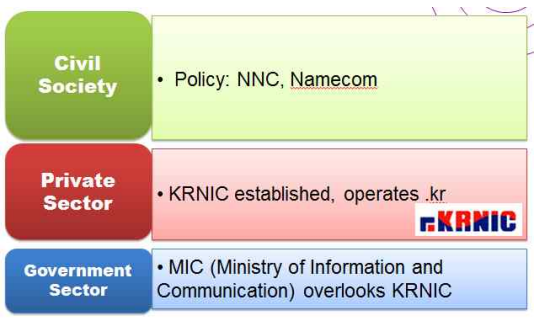
<1986 – 1994 : KAIST >



<1994 – 1999 : NCA >



<1999 – 2004 : KRNIC>



<2004 – 2009: 주소자원법, NIDA>

<2009 – :KISA>

<참고문헌>

Aguerre, Carolina, "ccTLDs and the local dimension of Internet Governance," DOCUMENTO DE TRABAJO N°8, http://live.v1.udesa.edu.ar/files/AdmTecySociedad/8-ccTLDs_aguerre.pdf

Christou, George & Simpson, Seamus "New modes of regulatory governance for the internet? Country code top level domains in Europe," Paper Prepared for the New Modes of Regulatory Governance Panel, European Consortium for Political Research General Conference, Pisa, Italy, 6-8 September, 2007.

"Netmundial Multistakeholder Statement," http://netmundial.br/netmundial-multistakeholder-statement/

"MEMORANDUM OF UNDERSTANDING: Management of the .nz Country Code Top Level Domain" https://internetnz.nz/sites/default/files/2016-05-InternetNZ-MBIE-MoU-dotNZ.pdf

OECD, "EVOLUTION IN THE MANAGEMENT OF COUNTRY CODE TOP-LEVEL DOMAIN NAMES(ccTLDs)" https://www.oecd.org/sti/ieconomy/37730629.pdf

Williams, Liz, "Internet Governance in Australia: Modelling Self-Regulatory Structures in the Domain Name System," Murdoch University Electronic Journal of Law, Volume 10, Number 2 (June 2003)

<부록 1> ccTLD 레지스트리와 정부의 관계 현황표

Table 1. Status of ccTLD registry and relationship with government in OECD and selected countries

cc	Country	ccTLD registries	Status[1]	Government Relationship[2]	Government Activity	ccNSO membership[3]	URL
.au	Australia	auDA	Not-for-profit corporation	Formal	Endorsement	Yes	http://www.auda.org.au
.at	Austria	Nic.at	Not-for-profit corporation	Informal	Observer	No	http://www.nic.at
.be	Belgium	dns.be	Not-for-profit corporation	Informal	none	No	http://www.dns.be
.ca	Canada	CIRA	Not-for-profit corporation	Formal	Agreement	Yes	http://www.cira.ca/
.cz	Czech Republic	CZ.NIC	Not-for-profit corporation	Formal	Management	Yes	http://www.nic.cz
.dk	Denmark	DK Hostmaster	Not-for-profit corporation	Formal	Legislation	No	http://www.dk-hostmaster.dk
.eu	European Union	eurID	Not-for-profit corporation	Formal	Legislation[33]	No	http://www.eurid.eu
.fi	Finland	Ficora	Part of government	Formal	Legislation	No	http://www.ficora.fi
.fr	France	AFNIC	Not-for-profit corporation	Formalising	Council reps	Yes	http://www.nic.fr
.de	Germany	DENIC eG	Not-for-profit cooperative	Informal	Observer	No	http://www.denic.de
.gr	Greece	FORTH-ICS	Foundation	Formal	Legislation-Contract with NRA	No	https://grweb.ics.forth.gr
.hu	Hungary	Domain.hu		Formal	Legislation	No	http://www.nic.hu
.is	Iceland	ISNIC	Private sector	Informal	None	No	http://www.isnic.is
.ie	Ireland	IEDR	Not-for-profit corporation	none	Legislation	No	http://www.iedr.ie
.it	Italy	NIC.IT	Not-for-profit corporation	Formal	Management	No	http://www.nic.it/
.jp	Japan	JPRS	Private sector	Formal	Endorsement	Yes	http://jprs.co.jp
.kr	Korea	NIDA	Part of government	Formal	Approval	Yes	http://www.nic.or.kr
.lu	Luxembourg	RESTENA Foundation	Academia			No	http://www.dns.lu
.mx	Mexico	NIC-Mexico	Academia	Informal	Proposed legislation	Yes	http://www.nic.mx
.nl	Netherlands	SIDN	Not-for-profit corporation	Joint project	Cabinet Review	Yes	http://www.sidn.nl
.nz	New Zealand	InternetNZ	Not-for-profit corporation	Informal	Endorsement	Yes	http://www.domainz.net.nz
.no	Norway	Norid	Not-for-profit corporation	Formal	Legislation[34]	No	http://www.norid.no
.pl	Poland	NASK	Not-for-profit corporation	Formal	Endorsement	No	http://www.nask.pl
.pt	Portugal	FCCN	Not-for-profit corporation			No	http://www.dns.pt /
.sk	Slovak Republic	SK-NIC				No	http://www.sk-nic.sk
.es	Spain	ES-NIC	Part of government	Formal	Legislation	No	http://www.nic.es
.se	Sweden	IIS	Not-for-profit corporation	Informal	Legislation	No	http://www.iis.se
.ch	Switzerland	SWITCH	Academia	Formal	Legislation	No	http://www.nic.ch/
.tr	Turkey	METU	Academia			Yes	http://www.nic.tr
.uk	UK	Nominet UK	Not-for-profit membership corporation	Informal	Advisory	No	http://www.nic.uk
.us	US	NeuStar	Operated by the private sector under contract	Formal	Contract	Yes	http://www.nic.us
.ar	Agentina	Nicar	Part of government	Formal	none	No	http://www.nic.ar/
.br	Brazil	Comité Gestor do Internet do Brazil	Multistakeholder	Formal	Participates	Yes	http://www.nic.br/
.cn	China	CNNIC	Part of government	Formal	none	No	http://www.cnnic.cn
in	India	NIXI	Not-for-profit corporation	Formal	none	No	http://www.nixi.org/
.com	Commercial	VeriSign	Private sector	Informal	N/A	Yes	http://www.verisign-grs.com/
.org	Organisation	Public Interest Registry (PIR)	Not-for-profit organisation	Informal	N/A	Yes	http://www.pir.org/
.net	Network	VeriSign	Private sector	Informal	N/A	Yes	http://www.verisign-grs.com/
.biz	Business	Neulevel	Private sector	Informal	N/A	Yes	http://www.neulevel.biz/
.info	Information	Afilias	Private sector	Informal	N/A	Yes	http://www.nic.info/gateway/
.name	Name	Global Name Registry (GNR)	Private sector	Informal	N/A	Yes	http://www.nic.name/

1: Entity type as self defined by the registries on their websites.
2: indicates whether a formal agreement between the government and the registry exists.
3: ccNSO membership as of 1 September 2006, http://ccnso.icann.org/applications/summary-approved.shtml and *Source*: Registry websites and ICANN website.[35] http://ccnso.icann.org/applications/summary-new.shtml.