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NEGOTIATION OF INTERESTS IN GOVERNING COMMUNICATION TECHNOLOGY: TRACING ACTOR-NETWORK IN THE USE OF 2.4GHZ BAND FOR WIRELESS LOCAL AREA NETWORKS IN INDONESIA

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This research aims to provide analysis of the ways in which technology is governed and the ways in which actors play their roles in regulating, resisting, and negotiating their interests in the governing process. It focuses historical analysis of the use of 2.4 GHz radio bands for Wireless Local Area Networks (WLANs) in Indonesia. In 2003 Indonesian Government announced a new policy regarding the use of 2.4GHz for the purpose of outdoor Internet or Wireless Area Network (WLAN). The policy required all the users of this radio band to obtain license and pay the annual concession fee for using the band to the government. This policy faced a strong reaction and controversies from a number of communities in the country, such as business communities, users communities, communities of academia, and communities of Internet expert. Some of the controversies were voiced through mass media (newspapers and magazines), but more elaborate dialogues can be found through a number of mailing lists or listserv of some of the communities that concern with Internet development. The controversies regarding to this policy eventually brought a number of communities' representatives and state government to sit together in a series of dialogues, where negotiation of interests occurred. In the end, by January 2005, the government changed the policy and liberates the 2.4 GHz radio band to be use for WLAN for free by the Indonesian public.

This research aims to provide an account of the ways in which process of policy change took place. It aims to identify the parties involved in the process, their concerns, and the ways in which they communicate and negotiate their interests. This research gains its insight from the Actor-Network Theory (ANT) as a useful perspective to study technology and society. One of the main arguments of ANT is that 'the social' does not consist of stable structures. Rather, society consists of a series of associations of heterogeneous entities that precariously link together to obtain particular objective(s) (Law, 1992; Latour, 2005). ANT explains power dynamics through the logic of association. Power is a result and not a cause of associations. In the case of policy to govern 2.4 GHz band in Indonesia, power and order also viewed as a result of series of resistances, negotiations, and associations. Power and order are viewed not belong and achieved solely by state government, but as a result of associations of several relevant

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actors. Thus, ANT conception, this research argues, will be useful to see the details of the formation of regulation in the governing of the 2.4 GHz band for wireless Internet access in Indonesia.

The investigation of actor-network that involve in the case is done through the traces left by the actors in a written record that took place during policy formation in a discussion called INDOWLI. It focuses on the time year prior to the announcement of policy change, from December 2003 through December 2004. This research argues that this forum conversation reflects parts of the universe of actors that involved in the process since it captured various voices of different actors. Verbal data analysis, then, is used to examine the conversation in the forum. To capture the essence of information from the data corpus, this research used two cycles of data coding. The first coding cycle used provisional coding, in which codes were developed from the anticipated categories prior to reading the data. ANT as theoretical framework, informed the decision to create the code dimension "actor" and the code dimension "interest". The second coding cycle used descriptive coding, in which the codes emerge from the data content after reading and rereading the data.

A number of actors that emerge from data coding include; (1) Human actors, consist of international regulatory bodies (such as ITU, FCC, ETSI, IEEE); national regulatory bodies (such as Directorate of Post and Telecommunication - DGPT); Telkom (a state-owned company); profit Internet providers; internet cafés; noncommercial 2.4 GHz band users; INDOWLI (a community of 2.4 GHz users); and (2) Nonhuman actors, consist of regulations/policies; the 2.4 GHz band; WLAN technological instruments (such as antennae, boosters, and BTS); and technological devices (such as computers, Wi-Fi enabled devices, routers, cellular phones).

Temporal analysis of the data shows there are dynamic in the ways in which actors discussed in the forum conversation. The dynamic can be seen through the figure below.

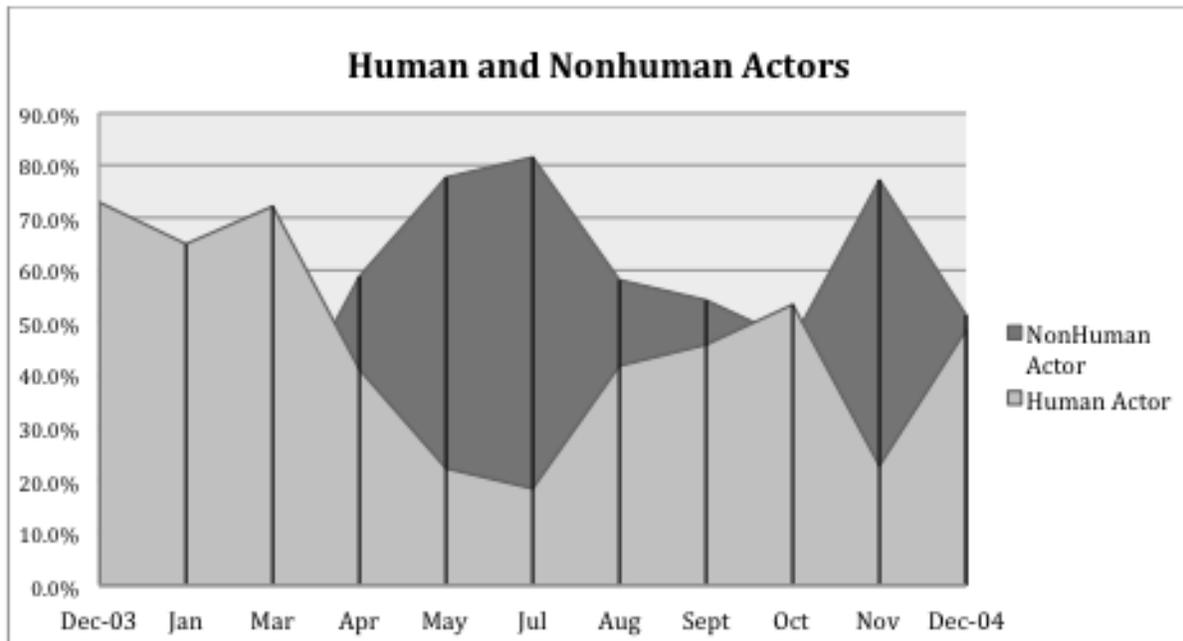


Fig. 1 – Temporal view of the actors' appearances in the conversation.

Over the year, we can see that human actors are the focus of conversation in the beginning of the policy formulation process. Both the Directorate of Post and Telecommunication (DGPT), who initially announced the proposal for the new regulation, and the community of 2.4 GHz users, who would be affected by the regulation, dominated the conversation for the first three months. By the middle of the year, the conversation turned to nonhuman actors. Two main nonhuman actors, WLAN technological instruments and regulations/policies, are the focus of the attention in the discussion around this time. The human actors, mainly the community of 2.4 GHz users, again dominated the discussion for the next couple of months, although WLAN technological instruments were of particular interest towards the end of the conversation.

The patterns and regularities found in verbal data, then, are extended in qualitative data analysis. Using ANT to conduct analysis, there are five profound moments of translation that lead to the change of the policy in governing radio band for WLAN connection. **First moment**, DGPT, as the main regulator body, announced the plan of a new regulation regarding the use of 2.4 GHz radio band. DGPT tried to establish a strong argument regarding to the necessity for a new regulation for a better communication and information sector in the country. The reference to ITU convention is one of the rhetorical moves to strengthen the argument. At the same time, the argument of potentiality and stability/order was also part of the rhetorical moves. **Second moment**, DGPT tried to lock other actors in a particular position in the network. DGPT used a persuasive argument that everybody wanted an affordable Internet connection that could be enjoyed by large number of population. However, at the same time, DGPT emphasized that law is the only way to maintain order and stability. Thus, through

persuasion and authority of state regulation, the DGPT was tried to interest and locking other actor to what was deemed as proper positions.

Third moment, DGPT made attempts to ensure the enrollment of other actors through enforcing the regulation. A number of government raids took place in a different province across the country, according to the conversation in the forum. Among others, the raid also took place in Manado (North Sulawesi), and in Balikpapan (East Kalimantan). Perhaps the most extensive government raid was happened in September-October 2003 in two provinces, Central Java and D.I.Yogyakarta. The raid resulted a high number of equipment confiscation, which forced several ISPs to quit their business, and even went bankrupt. **Fourth moments**, the community countered government's action by proposing a strong argument regarding to self-regulation of the 2.4 GHz band. The community proposed several main points to the government; (1) to exempt the use of 2.4 GHz band from any license; (2) to exempt the use of the band from any concession fee; (3) to use technological designs to diminish frequency interference and establish order; (4) to delegate coordination and monitoring system of the band in the hand of local communities, and not state government.

Fifth moments, there were back and forth discussions of different interests and different actors over the course of the year. By the end of 2004, the conversation culminated into several sets of drafts proposal that was told had been brought to the face-to-face discussion among the spokesperson of the community, regulatory bodies, and the spokesperson of other business entities. There was no detailed information about the face-to face discussions mentioned in the forum. However, by Dec 5, 2004, there was a talk in the forum that government had agreed to the proposal of the community to make the 2.4 GHz band free to the public, without imposing any license and concession fee.

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