

METI JPO-RIETI International Symposium” Toward Solving Disputes over Standard Essential Patents (SEPs): Licensing 5G SEPs”, March 13th 2018

Panel 3 on FRAND royalties

- I. Introduction of four questions on FRAND
- II. Moderator’s views on four questions

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I. Introduction of four questions on FRAND

Q.1 on appropriation of the value of standard

“Is it reasonable to include the perceived market values that standards have achieved, into the royalties? (ex ante)”

- It would be important for us to understand the sources of such market values as well as the role of royalties as incentives
- Why “Ex ante”?

Q. 2 on Royalty base

“How can reasonable royalty rates be calculated? (EMV v. SSPPU)”

- What are the advantages and disadvantages of these royalty bases for promoting upstream and downstream innovations?

Q.3 on use-based licenses

“Is establishing royalty rates based on the intended use of patents (use-based licenses) considered discriminatory?”

Q. 4 on global licensing

“Does FRAND include global licensing terms? (Global v. Regional)?”

- Both questions are on whether the variation of licensing conditions across markets is inconsistent with non-discrimination requirement of FRAND terms.
- What role does non-discrimination requirement play?

II. Moderator's view on Q1 (*appropriation of the value of standard*)

- R&D investments by standard developers and those by the implementers are complementary in enhancing the value of the standard based innovations (better standard \Rightarrow larger network & anticipation of larger network \Rightarrow more standard investment).

-Royalties linked with the down stream value of standard can serve as incentives for the upstream investments for developing and contributing a new technology to standard, internalizing such complementarity

Moderator's view on Q1 (*appropriation of the value of standard, continued*)

- Why “Ex ante”?
 - being free from hold up (based on hypothetical negotiation before the sunk investment by an implementer) and
 - in comparison with alternatives (before the standard agreement, incremental value of new inventions)
 - upstream investment incentive (before such investment)
- Royalty stacking be avoided. It reduces the aggregate surplus.

Moderator's view on Q. 2 on *Royalty base*

- Royalty base be chosen to maximize the total value of the SEP holders and implementers, including the innovation incentives, taking into accounts the costs and benefits:

- Incentive for the innovations

SSPPU would provide a stronger link between the invention and the reward based on the market price for both component and the final product firms than a broader base would (clear division of innovative labor) .

- Measurement and IPR protection

Measurement of the use of the standard

Components which may not honor the SEPs

Moderator's view on Q3 (*use-based licenses*)

- Nondiscrimination promotes efficient allocation of production resources among the implementers in the same market as well as to protect competition.
⇒ Non-discrimination across firms in the same market is important.
- At the same time, differentiation of royalties across different markets (industries) per se is not such discrimination.
- It may actually result in efficient pricing: lower price where low price significantly expands the use of the standard (Ramsey pricing).
- Other efficiency reasons for seemingly discriminatory pricing: incentives for early contacts to jump start the new standard and a fixed cost for contracting

Moderator's view on 4 (*Global license*)

- The question posed seems to be whether the variation of licensing conditions across regions is contrary to FRAND terms or not.
- The large variations of income per capita across regions implies a large variations of willingness to pay for the products based on a new standard across nations.
- Reflecting these differences into royalty rates would not be against FRAND (again Ramsey pricing).
- Standard is global so that a national court addressing the global license question would greatly save the costs of diffusing the standard.