2021 NTIA Spectrum Policy Symposium

ISART 2022 Preview: Evolving Spectrum-Sharing through Data-, Science-, and Technology-Driven Analysis and Decision-Making

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https://www.its.bldrdoc.gov/isart/isart-home
Current Process

Broadly generalized graphic depiction of the current linear spectrum sharing regulatory process
# Applying Lessons Learned

<table>
<thead>
<tr>
<th>Lessons Learned</th>
<th>Potential Solutions</th>
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<tr>
<td>▶ Feasibility studies include incomplete technical data on system parameters,</td>
<td>• Better data could reduce margins/worst case analyses, longitudinal data spur</td>
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<td>and assumptions on deployments</td>
<td>reassessments</td>
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<td>▶ Engineering studies done late in the process may identify obstacles omitted</td>
<td>• Begin engineering studies early and repeat as the technology matures, to refine</td>
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<td>in the sharing parameters</td>
<td>parameters</td>
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<td>▶ Innovation in hardware and software outpaces the regulatory process</td>
<td>• An iterative process could potentially keep better pace with innovation</td>
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<td>▶ Funds do not exist to incent Federal-unlicensed sharing</td>
<td>• Alternative funding could be developed</td>
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<td>▶ Information asymmetries exist</td>
<td>• Transparency, open data, and data sharing incentives could be developed</td>
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<td>▶ Coexistence is not always considered in standards processes</td>
<td>• Standards that engineer for co-existence could expedite sharing</td>
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Evolving the Process

Broadly generalized potential continuous regulatory improvement model
ISART 2022 Call for Conference Papers: Suggested Topics for Evolving Spectrum Sharing Through Science and Engineering

- Retrospectives on AWS-3, CBRS, and AMBIT
- NTIA spectrum sharing feasibility analyses
- Data sharing and transparency
- Model standardization
- Risk-based interference prevention
- Ex post developments

- All submissions must be made via email to isart2022@ntia.gov
  - Use IEEE conference paper format guidelines
  - Limit abstract to one page and paper length to four pages

- Important dates:
  - Submission window opens: 03 January 2022
  - Abstract deadline: 14 January 2022
  - Abstract acceptance notification: 11 February 2022
  - Complete paper deadline: 18 March 2022