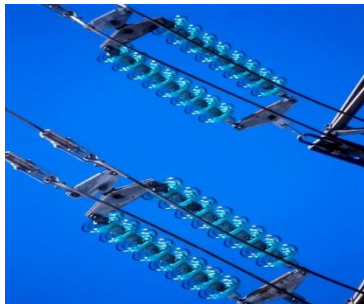




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Regulation



Veli-Pekka Saajo

The Future Role of DSOs

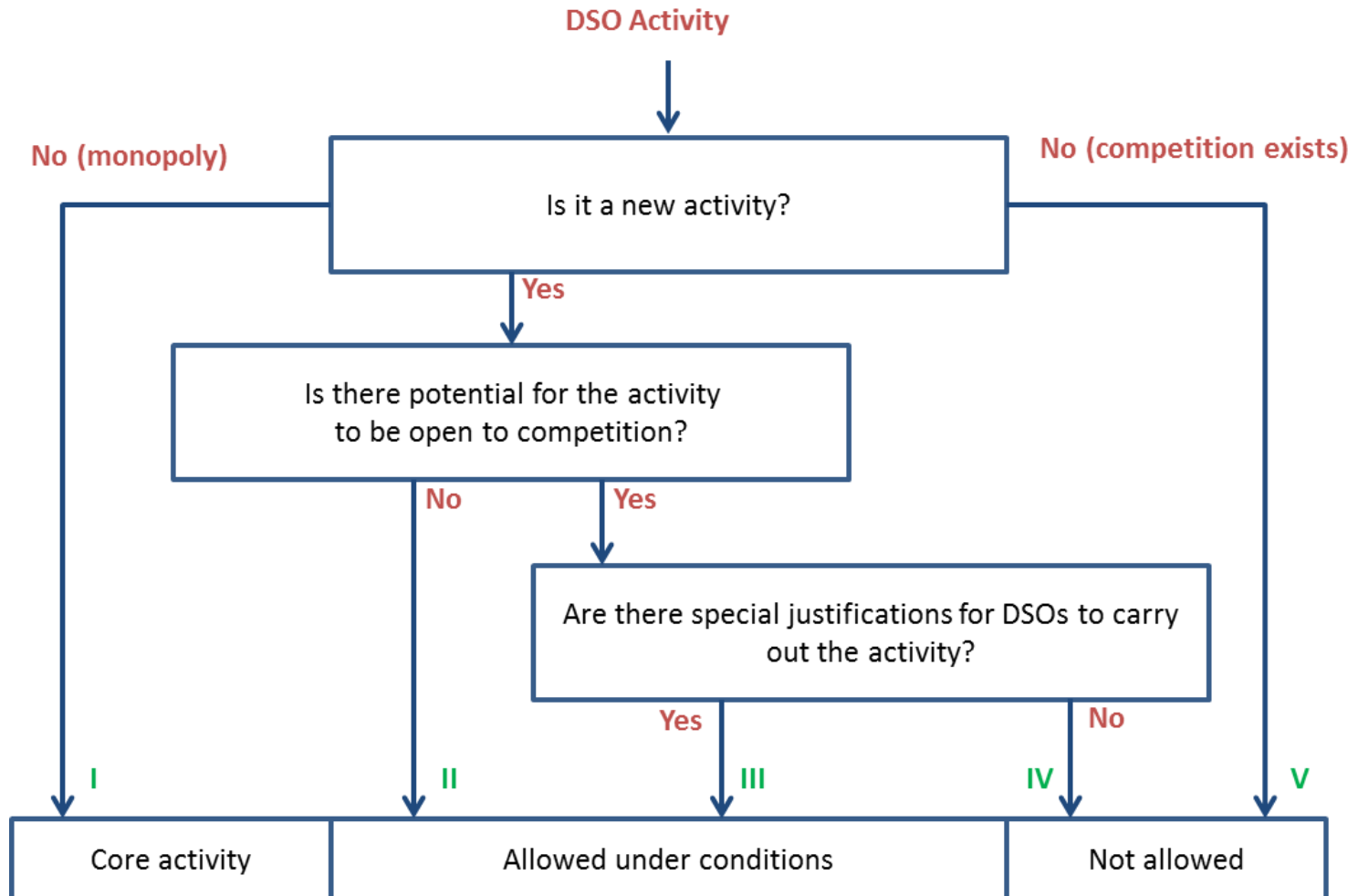
A CEER Public Consultation Paper



- Role of DSOs mirrored to other stakeholders
 - THE ROLE OF THE DSO AND NEED FOR REGULATORY OVERSIGHT
 - DSO-TSO RELATIONSHIP AND RESPONSIBILITIES
 - ECONOMIC SIGNALS FOR DSOS AND CUSTOMERS
- OPEX or CAPEX (active or passive network?)
- Output based regulation
 - Controllable
 - Measurable
 - Comparable
 - Applicable



Role of the DSOs

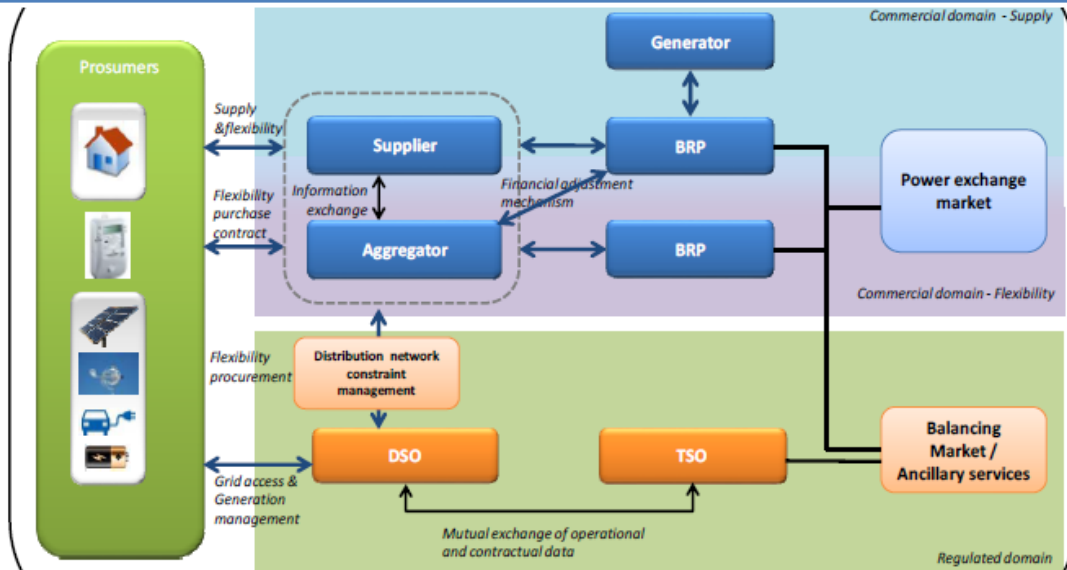




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EU commission and stakeholders (EG3)

Regulatory Recommendations for the Deployment of Flexibility

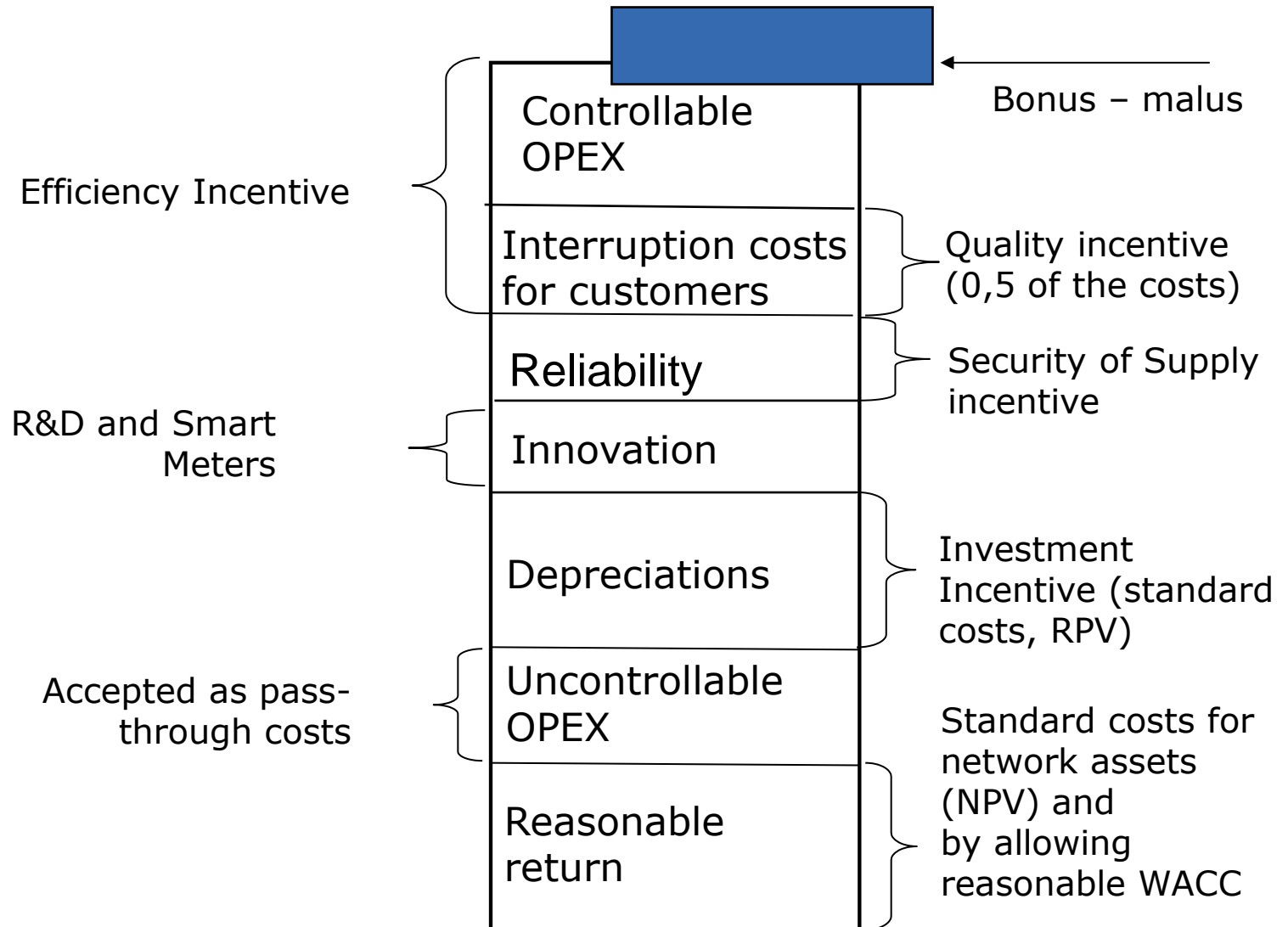


RECOMMENDATION 12. INCENTIVISE GRID OPERATORS TO ENABLE AND USE FLEXIBILITY



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Electricity DSOs Revenue Cap





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Investment incentives

- Purpose is to encourage DSOs to develop and invest in networks
- Investment incentives:
 - Replacement value (updated annually)
 - Depreciation is based on the replacement value of the components
 - Smart Meter or not?
 - Monitoring investments and dividends
 - New guidelines: smart grids activated network costs allowed into RAB



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Innovation incentive

- DSOs R&D costs related to new network technologies to be developed and functionally deployed
- DSOs are allowed R&D operational costs as pass through
- Smart Grids demonstration projects and pilots linked to the costs of new technologies
- Academic research projects that promote smart solutions for network operation, are included in R&D function



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Innovation incentive II

Reasonable R&D Costs

- *Operational R&D costs = max 0,5 % * DSO's annual turnover*
- Activated costs not included

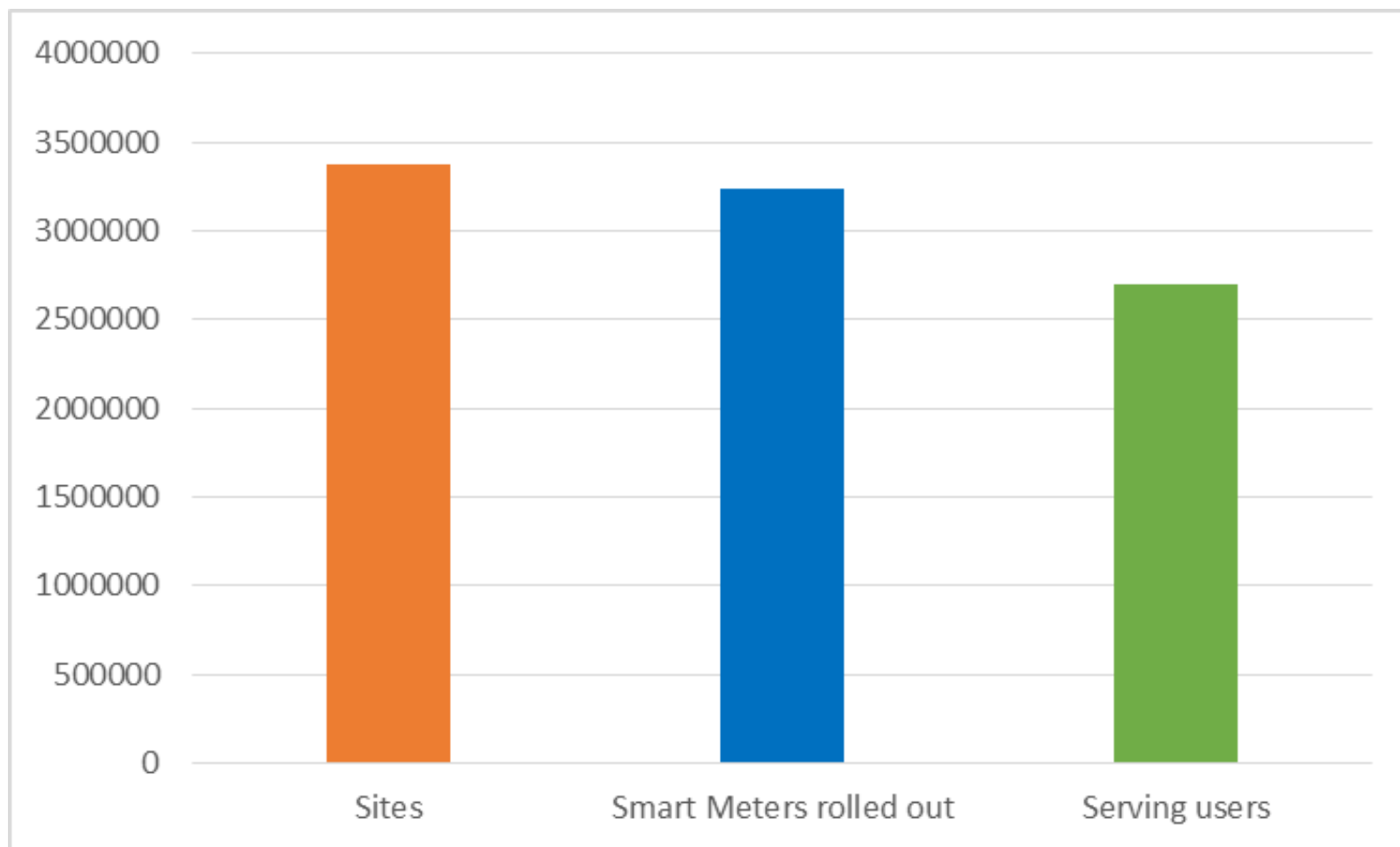
Reasonable Smart Meter rollout costs

- *Rollout costs = max 5€ (per site up to 63 A) * number of hourly read smart meters*
- Energy balance settlement done by using the data from smart meters



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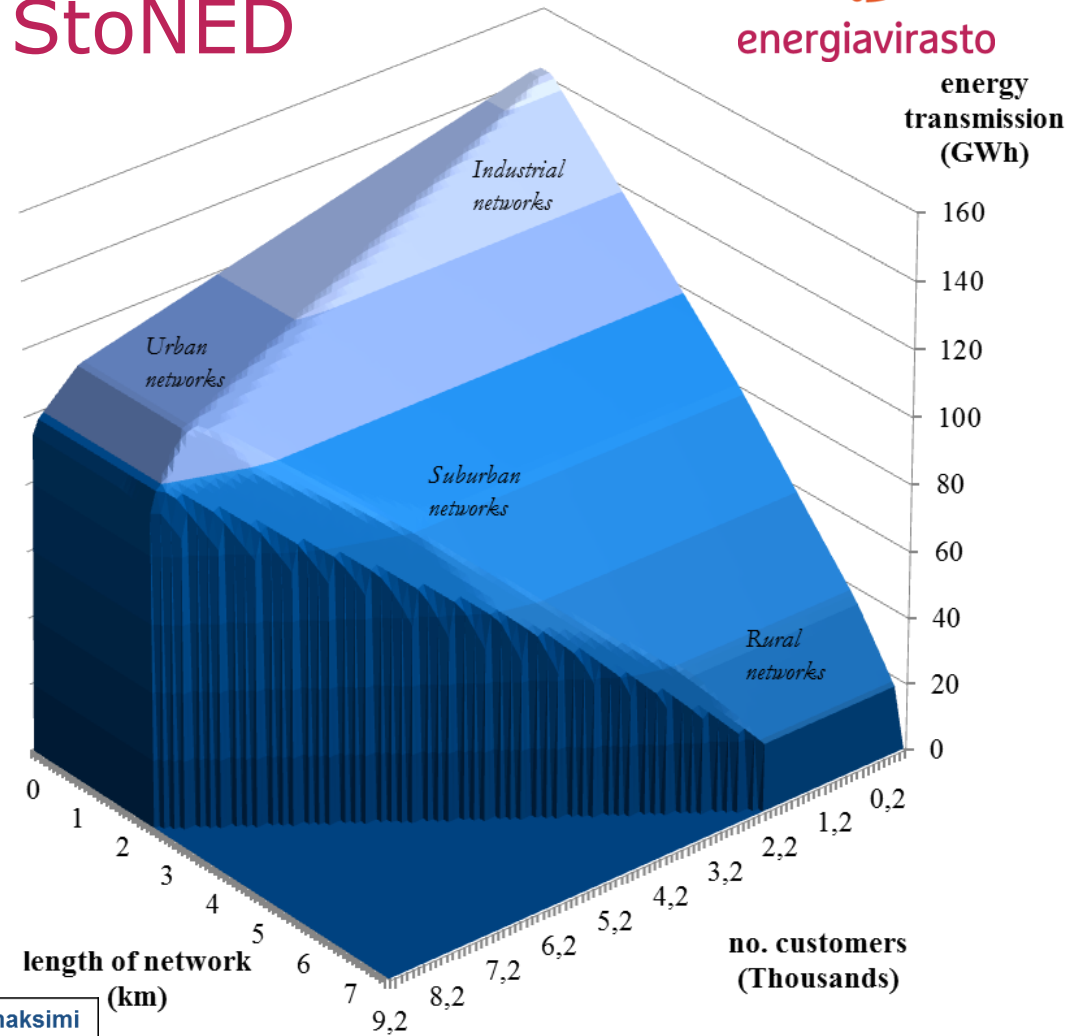
Smart Meters in place per site





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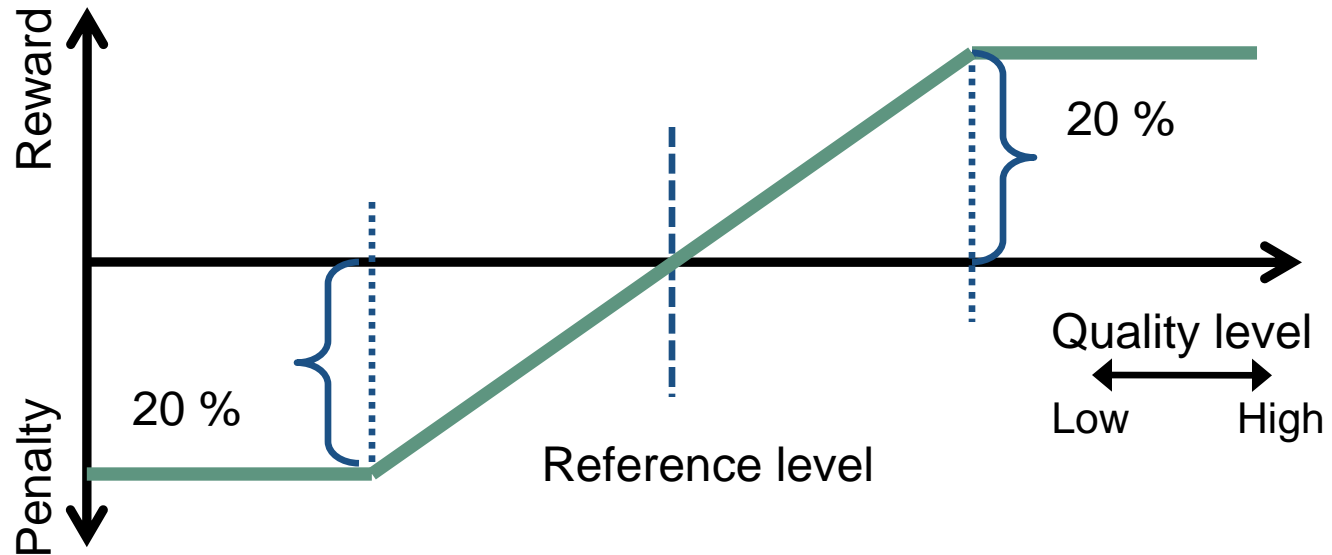
Efficiency Incentive: StoNED



| | keskiarvo | keskihajonta | mediaani | minimi | maksimi |
|-----------------------------|-----------|--------------|----------|--------|---------|
| Tehokkuuserroin | 81,8% | 15,7% | 81,4% | 39,7% | 119,0% |
| Vuotuinen tehostamistavoite | 4,69% | 2,37% | 4,55% | -0,09% | 12,75% |

Quality of Service Incentive – Interruption Costs to the Customer

- Reward or Penalty of the interruption costs is limited



- Maximum Reward or Penalty is 20 % of the annual reasonable return in euro



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Conclusion:

- Smart Grids and “Smart Regulation” – coordination and incentives are needed
- DSOs are the gatekeepers for market participation of active consumers and producers
- Smart Grid development and investments need performance based incentives
 - Risk of non-coordinated investments
 - Risk of underexploited information usage of smart meters
 - Costs and benefits of smart grids are not equally distributed
 - DSO role and unbundling = ?





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Thank you!

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Reilua energiaa