



# University of Zurich

Faculty of Law  
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## **Law & Economics**

### **Economic Analysis of Law**

Intellectual Property Law

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# Approach – Content

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- **Definition and problems with intellectual property**
- Design principles
  - Scope of protection
  - Duration of protection
- Special intellectual property rights
  - Copyright protection
  - Trademark protection

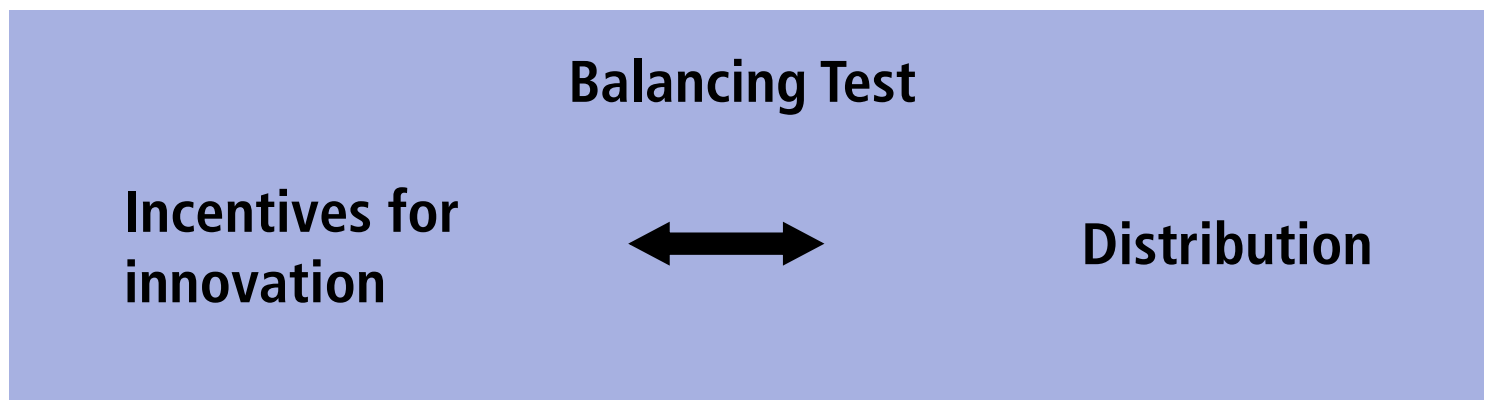
# Intellectual Property Rights v. Property Rights

## ■ Property right

- Allows the owner to claim to the „social value“ of a property
- Gives him incentives to create values
- Allows the exclusion of others

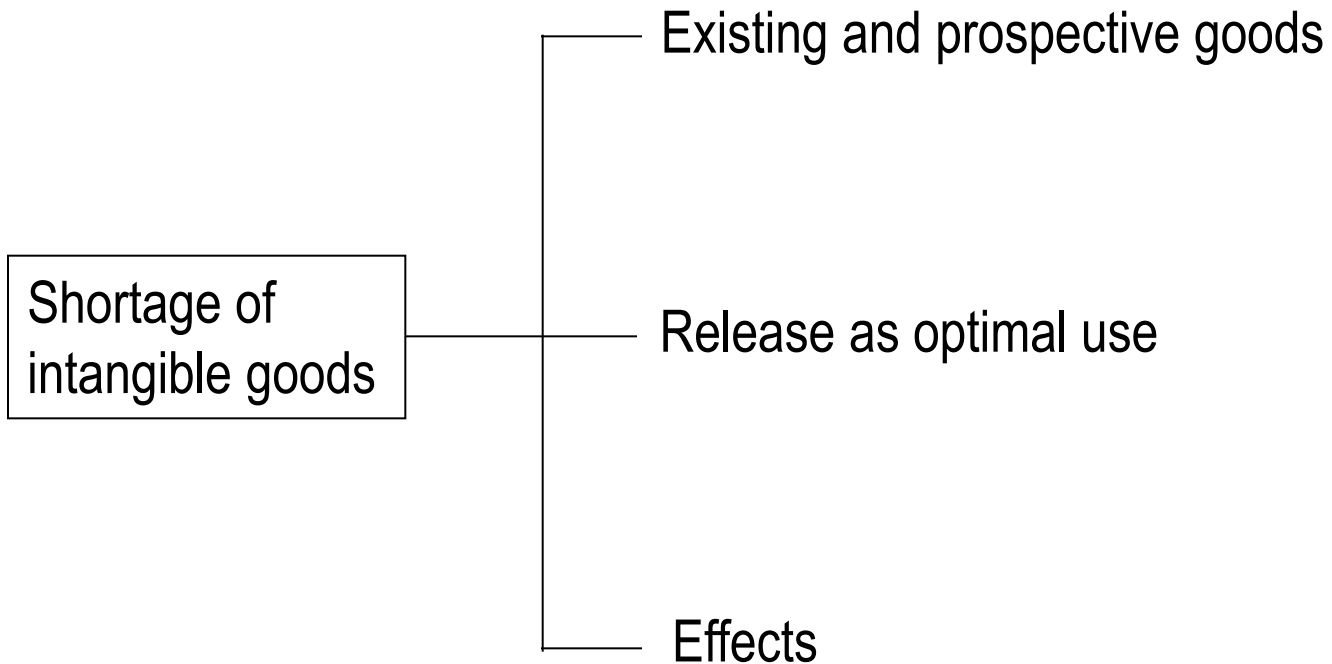
## ■ Intellectual property rights

- Protection is limited to a period of time



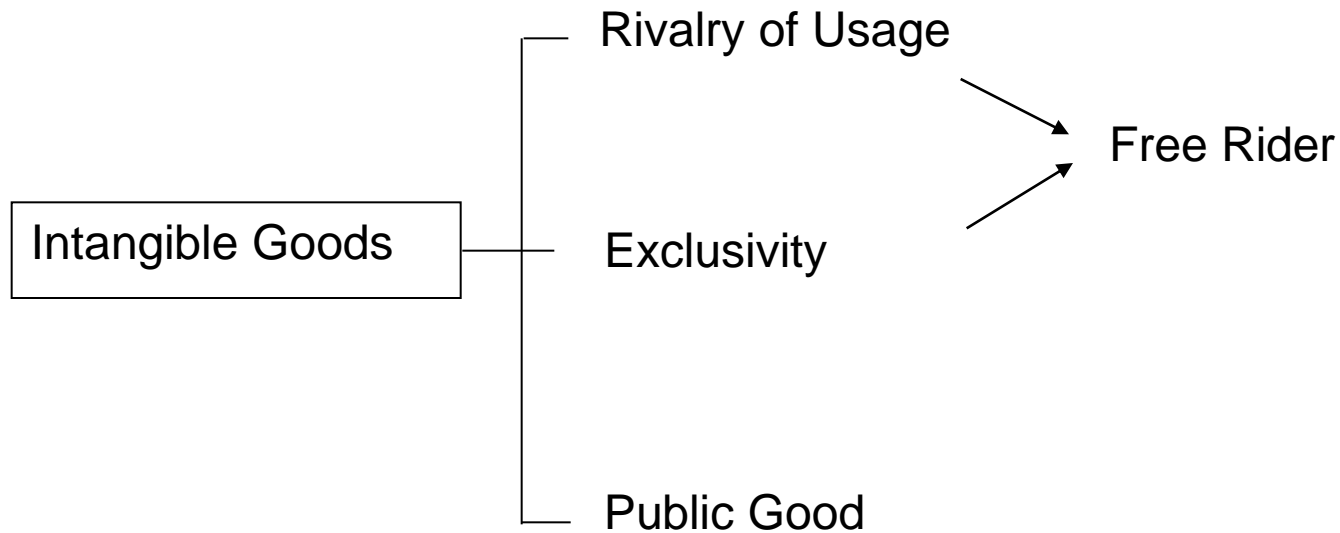
# Intellectual Property Rights v. Property Rights

## Problem of Shortages

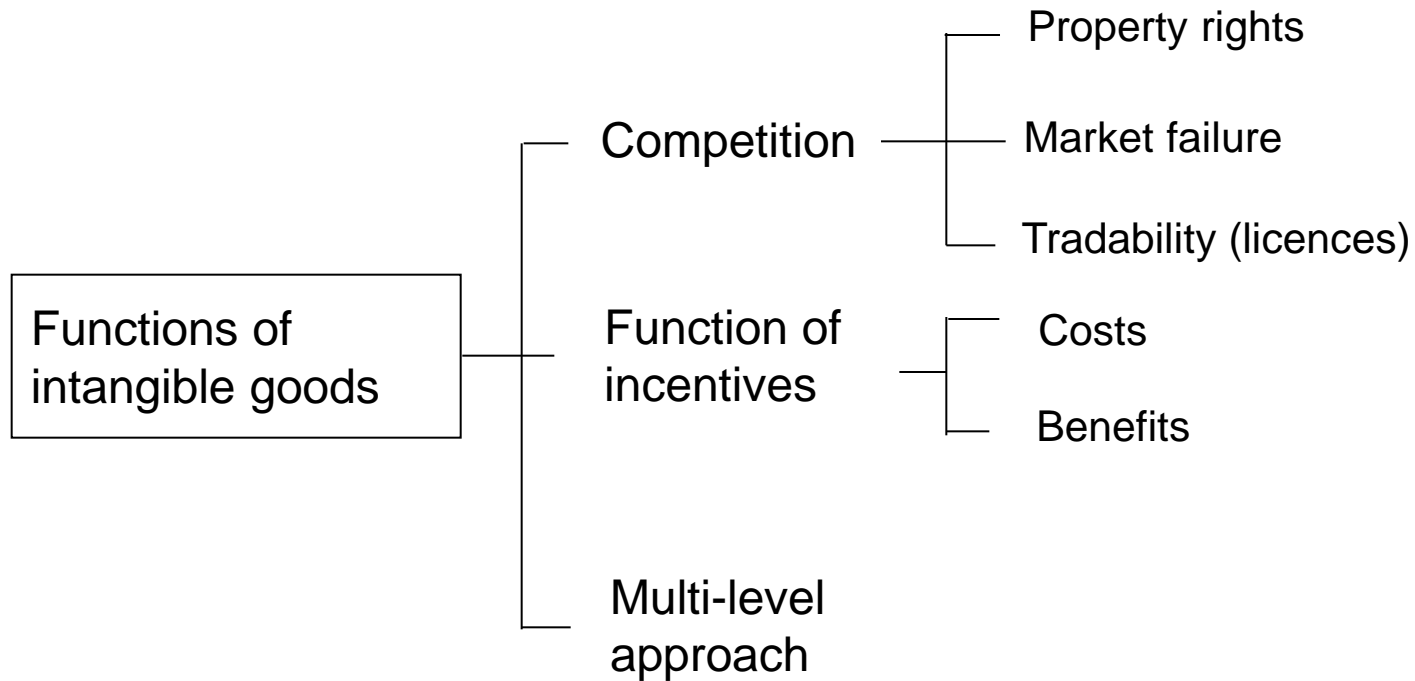


# Intellectual Property Rights v. Property Rights

## Free Rider Problem



# Functions of Intangible Goods



# Intellectual Property Rights v. Property Rights

## Monopoly Power

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- **Monopoly situation for a specific good**
  - Right protects from competition
  - Prices not at marginal costs
  - Amount of output too small
- **Consequences for intangible goods**
  - Too few medicaments ...
  - Too few books...
  - Too few stage plays...
- **...but otherwise there could be none or some of worse quality?!**

# Approach – Content

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  - Scope protection
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# Scope of Protection (1)

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## ■ Broader protection

- Only one patent for „similar“ inventions
- „Winner takes all“
- Effects: fast, research in various fields

## ■ Narrow protection

- Different patents for „similar“ inventions
- „Little for everyone“
- Effect: slower, complementary research

# Scope of Protection (2)

- **Typical for research and development**
  - First inventions (basic research) without or with small market value
  - Additional inventions, applications have market value
- **Example**
  - Basic research costs 100'000 €
  - Result without direct market value
  - Additional inventions needed to develop an application
  - The resulting application has a market value of 1 Mio. €
- **Result with broader or narrower protection?**

# Scope of Protection (3)

- **„Doctrine of Equivalents“**
  - Similarity of inventions decide on protection regime
- **Welfare maximisation ?**
  - Basic research v. applications
  - Often diversity of interpretations
  - Consequence: Basic research is protected separately from applications
  - Problem: insufficient basic research
- **Solution approaches**
  - Modification in doctrine: on the way to economic concepts
  - Reward-System
  - Basic research as public good?

# Duration of Protection

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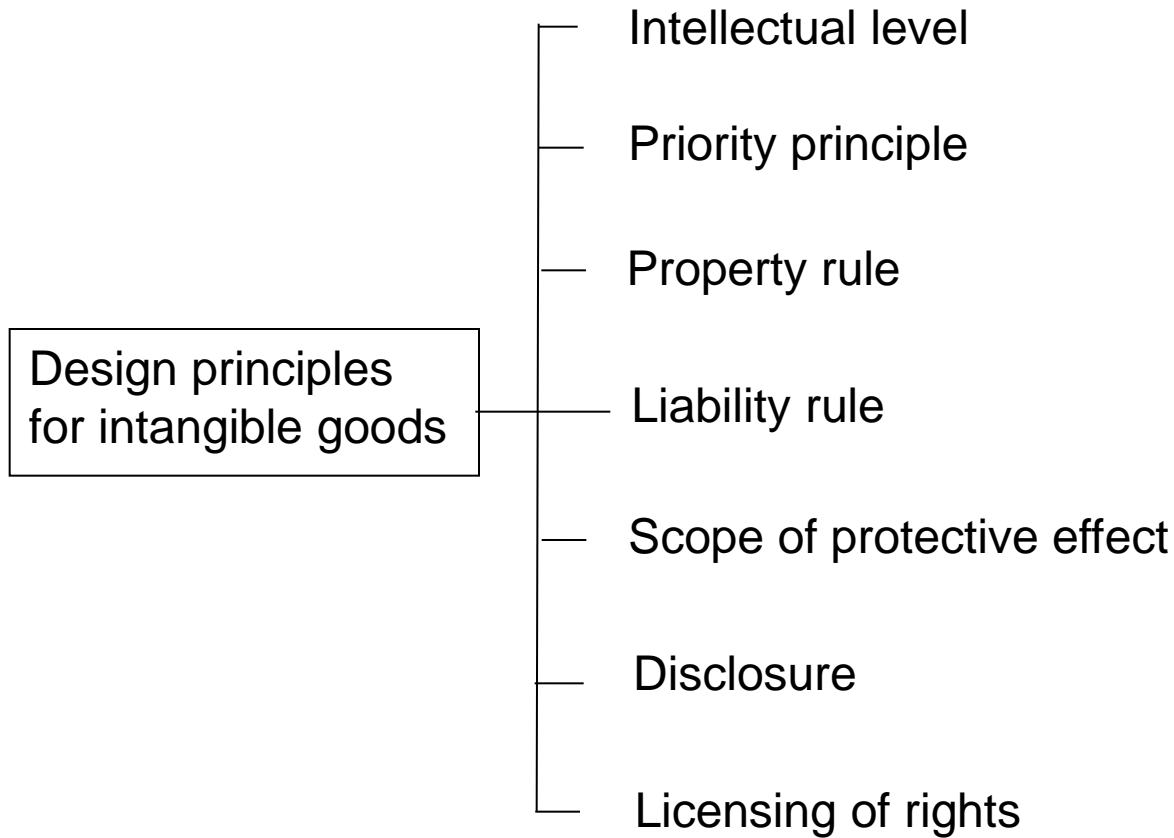
## ■ Economic theory

- Marginal benefit innovation v. marginal costs due to lack of distribution
- Optimal: flexible term of protection for each innovation

## ■ Practicable solutions?

- Patent protection USA: 20 years, relatively strictly
- Germany/CH: more complex system
  - Gradually granted patent protection
  - Annual patent fee
  - Consequence: Hardly any patent is valid for full period

# Other Design Principles



# Approach – Content

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  - Duration of protection
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# Copyright Protection

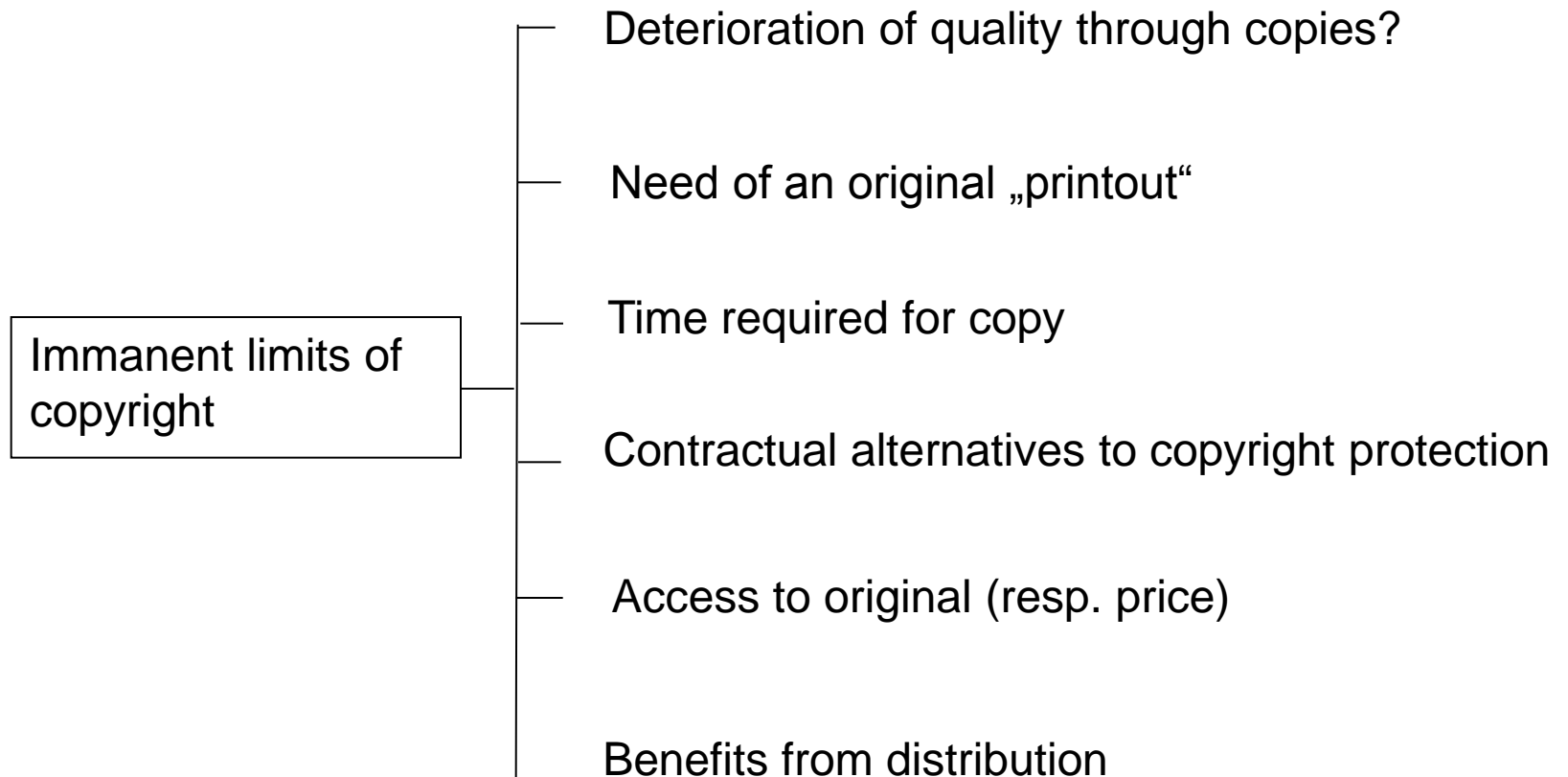
## ■ Features and problems

- Longer period of protection than patents
- „Weaker protection“
  - Transaction costs => „Fair use“
- Registration not necessary
  - Tracing Costs: Did anybody already create the same?

## ■ Future prospects

- „Celestial Jukebox“
  - Big provider paid royalties
- „Digital Libertarianism“
  - Encryption allows individual use

# Copyright and its limits





# Trademark Protection

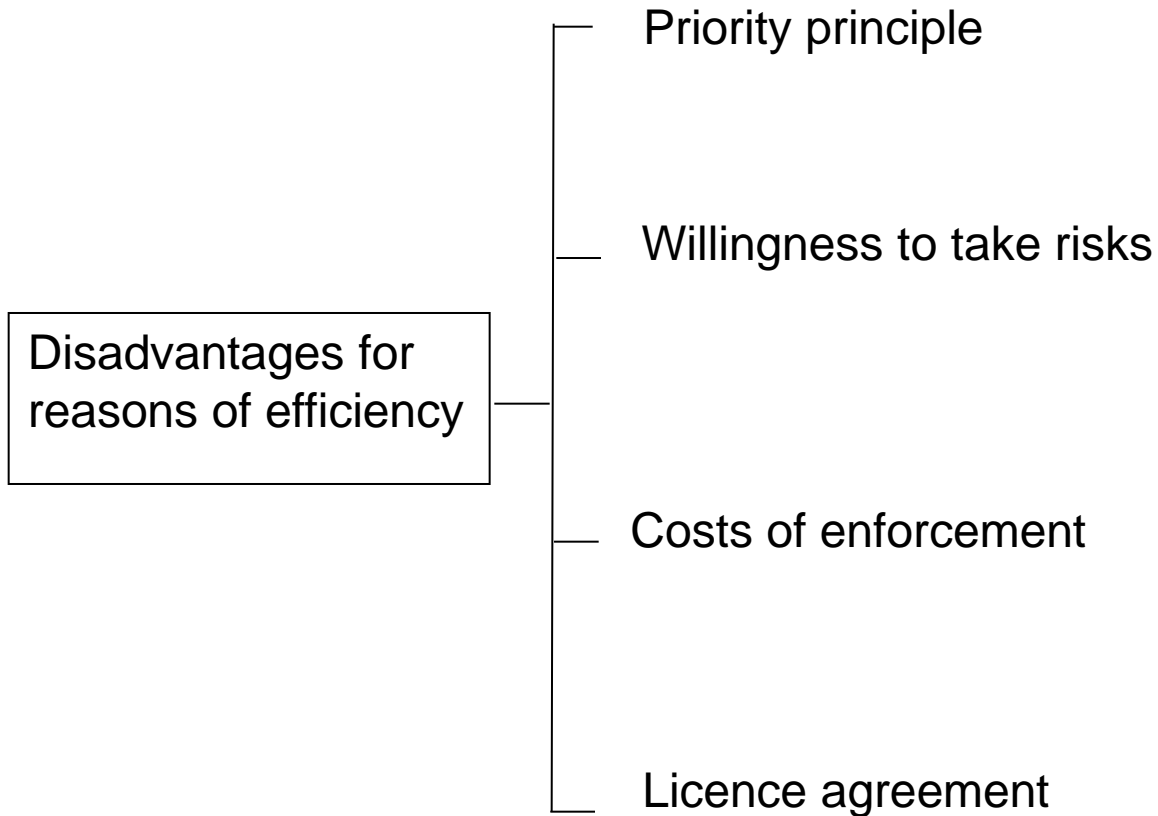
## ■ Reasons for protection?

- Decreased costs for searching through signalling effect
  - Quality (evidence: Soviet era, e.g. car(s))
  - Reputation, status
- Trademark as credible obligation
  - Trust
  - Warranty

## ■ Differences to copyright and patent rights

- No monopoly status
- „Infinite“ term of protection
- Problem of Standardisation
  - „Post-it“, „Aspirin“, „Cola“, „Google“ etc.

# Efficiency – Problems



# Regulatory Solutions

