

# Standards – promoting quality or restricting competition?

James Christie

# James Christie

## jack of all trades, master of some

Developer & Business Analyst

Project Manager

Computer Auditor

Information Security Manager

Test Manager & Consultant

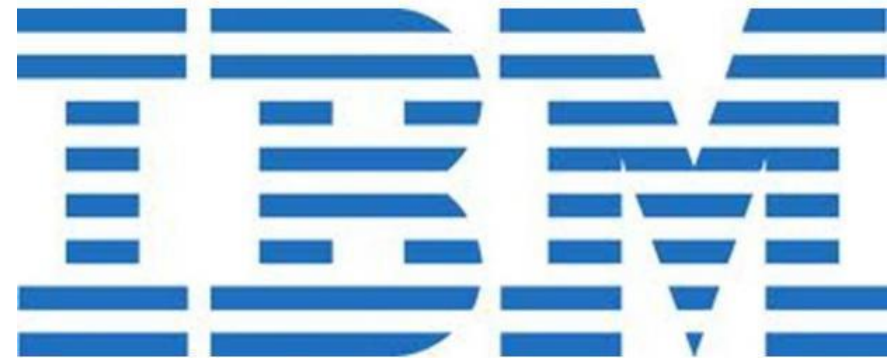
*investment accountant*

*trainee chartered accountant*



**General Accident**

INSURE TODAY-  
BE SURE TOMORROW.



# Standards are a good thing

Shared understanding/definitions

Connecting the world

Repository of collective experience

Protect suppliers from  
unscrupulous competition

Protect customers from  
unscrupulous suppliers

*Can be attached to or referenced  
by contracts*

*Increase professional discipline*



## But testing standards ?

My objection here is to their status as standards, rather than their content.

*“ISO/IEC29119 relates to bullshit”*

James Bach

*“If you need ISO29119, you probably couldn't make good use of it.*

*If you could make good use of it, you probably don't need it.”*

Iain McCowatt

Search for Michael Bolton & testing standards.



# What I learned from economics

1. There's far too much unjustified certainty around from people who should know better.
2. Everything I learned about economics is either rubbish, or simplistic (but interesting). Probably. I'm not certain (see #1).
3. The assumptions you start with dictate the conclusions you arrive at.
4. In trying to understand what's happening start by following the money (cui bono).
5. Dig below the surface. Always.





# What is economic rent?



capital

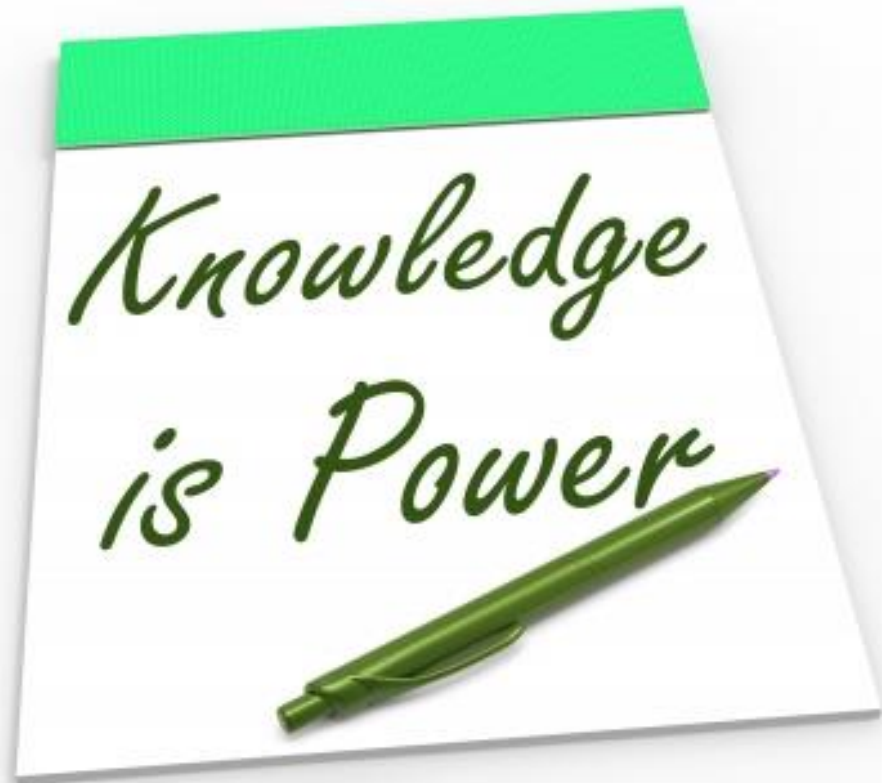


land



labour

# What is economic rent?



Unearned income? Or income that's not consistent with free market returns?

*"The payment to a factor of production in excess of what is required to keep that factor in its present use."*

David Ricardo

*"There are two ways to become wealthy; to create wealth or to take wealth from others."*

Joseph Stiglitz, Columbia University,  
Nobel prize winner in Economics.

# What is economic rent?

Free  
money

Theft

Rare talent

Monopoly profits

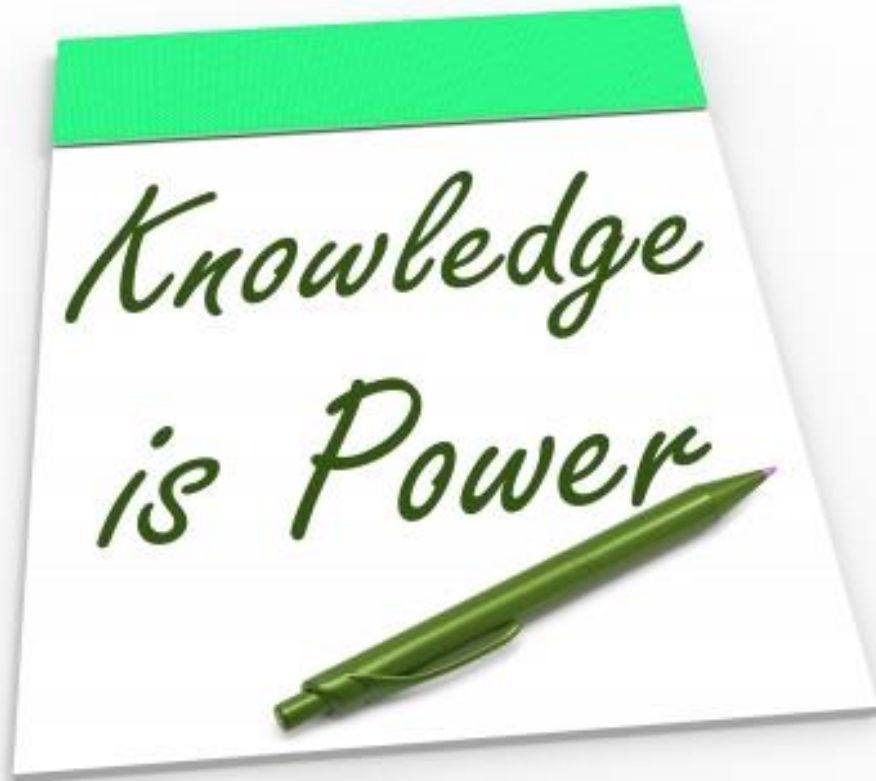
Insider dealing

Asymmetric knowledge

Inappropriate regulation

Patent ambush

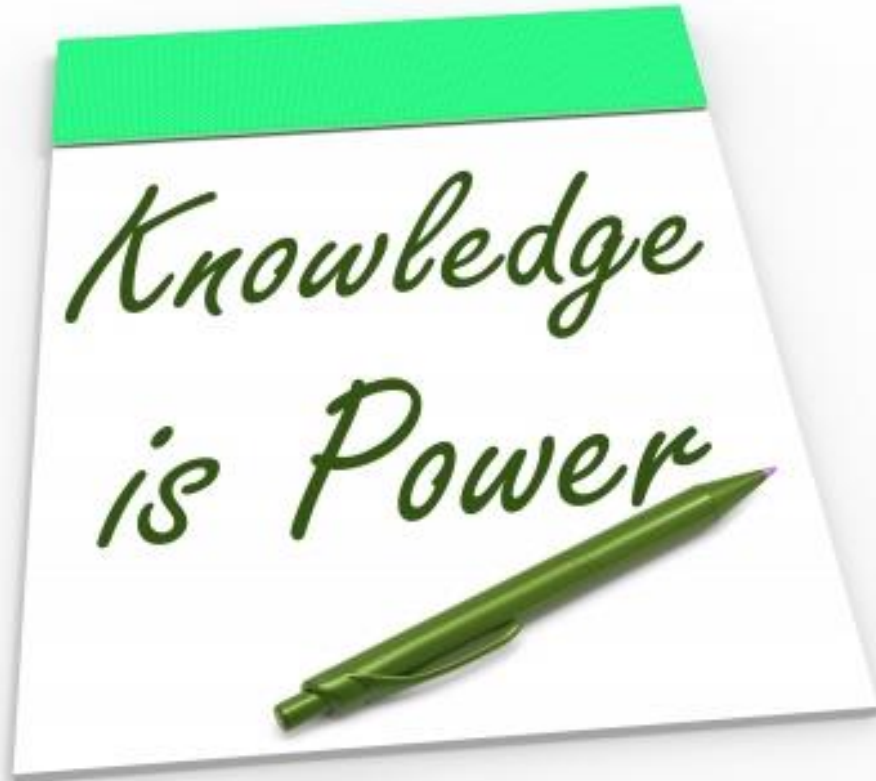
Collusion over standards





# Rent Seeking (it's the name of the game)

## Influencing public policies for personal or factional gain

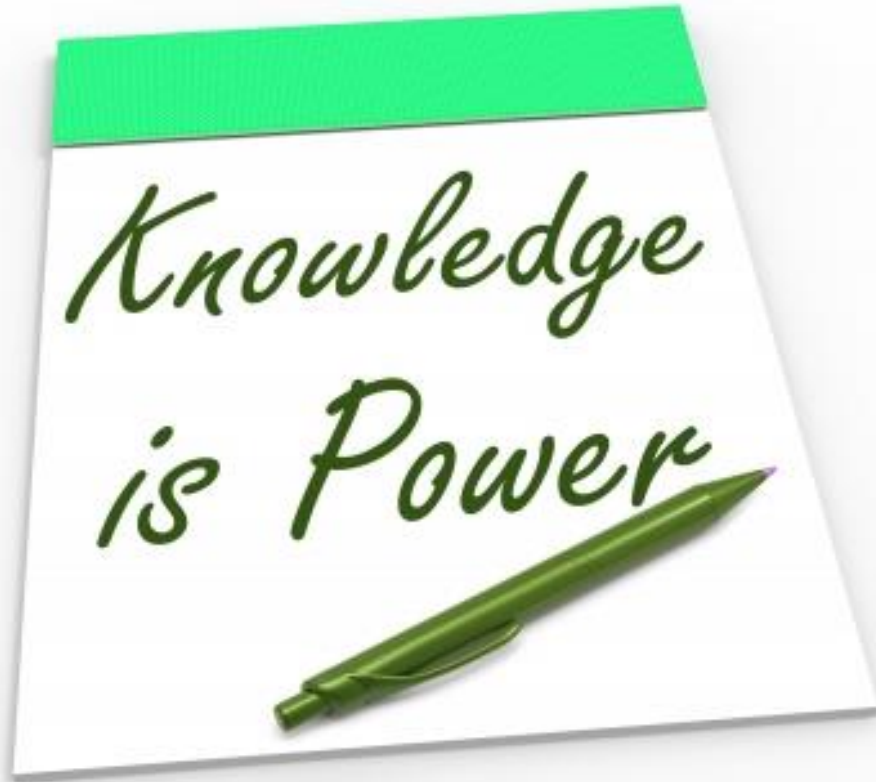


A negative sum game



# Rent Seeking (it's the name of the game)

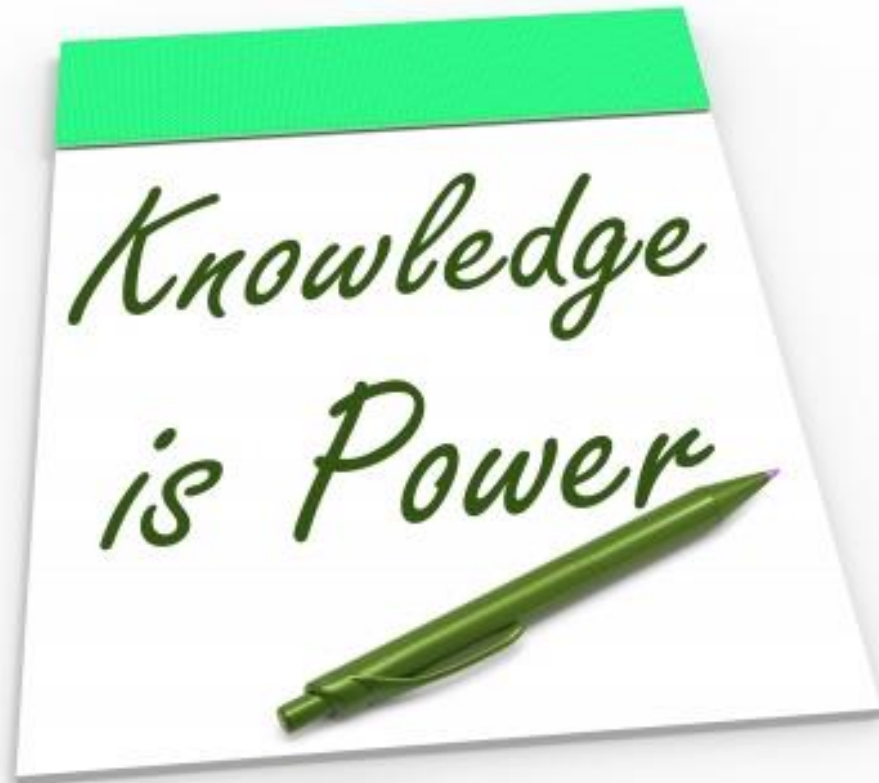
Influencing public policies for personal or factional gain



The prisoner's dilemma

# Rent Seeking (it's the name of the game)

## Influencing public policies for personal or factional gain



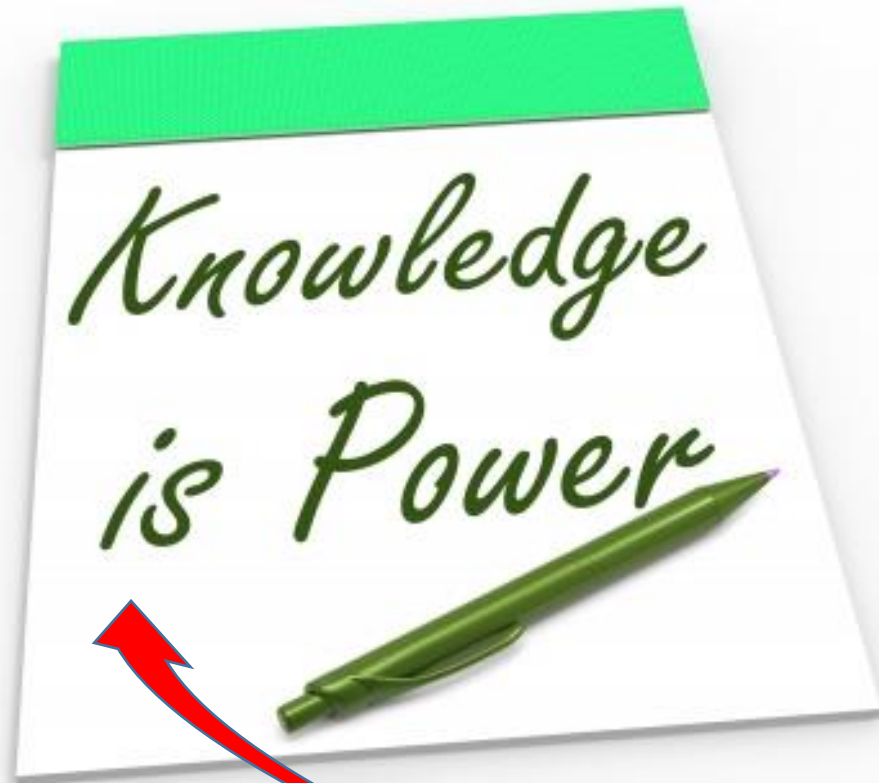
A few big winners

Many small losers



# Rent Seeking (it's the name of the game)

## Influencing public policies for personal or factional gain



A few big winners  
Large testing consultancies?

Many big losers





# Regulatory Capture

Don't break the law. Make the law.

*“As a rule, regulation is acquired by the industry and is designed and operated primarily for its benefits.”*

George Stigler, University of Chicago, Nobel prize winner in Economics

*“Regulation was often sought by industries for their own protection, rather than being imposed in some ‘public interest’.”*

Barry M Mitnick, University of Pittsburgh





# Regulatory Capture

Don't break the law. Make the law.



Favourable legislation

Cognitive capture

Revolving doors

Licensing





# Regulatory Capture – Licensing



1970s, 10% of US workforce in licensed occupations  
2008, 30% of US workforce in licensed occupations  
(Morris Kleiner)

# Implications – the vision of standards

imagine



*“Imagine an industry where qualifications are based on accepted standards, required services are specified in contracts that reference these same standards, and best industry practices are based on the foundation of an agreed body of knowledge – this could easily be the testing industry of the near future.”*

Stuart Reid, convenor of ISO 29119 Working Group



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Working Group



# Implications – the vision of standards



Have you ever felt insignificant?



# Implications – the vision of standards



# Implications – the vision of standards

## What is most likely to stop ISO 29119?

Fear of change

'Not invented here' syndrome

Perceived as competition

Lack of required use

**Anti-standardization – craftsmen**

No evidence of efficacy

Cost of use

Complexity

Lack of responsiveness

Lack of inclusiveness...

Irrelevant  
“craftsmen” as  
opposed to...?

Serious  
corporate  
testers?

Responsible  
professionals?

Certified  
testers?



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How government & big corporations  
might see “craftsmen” testers?



# Implications – the vision of standards



How the standards lobby wants to see  
“serious” testers?

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What we might get; drudgery, but we're  
proud to say we do ISO standard drudgery.

# Implications – the Healthcare.gov fallout



## *“Test Maturity and the Obamacare Website*

*Contractors to Government should have a high CMMI and TMMI Level proving that they not only have processes of high maturity but continuously operate in a mature environment.*

*The CMMI and TMMI are required by many Department Of Defense and U.S. Government contracts, since it will give the Government the peace at heart that they are dealing with a mature Company operating with best practices.”*



# Implications – the Healthcare.gov fallout

Sales blurb?

or

Submission to  
federal government  
by professional  
body?

*“Lessons Learned From Healthcare.gov's Troubled Launch”*

*“Apply standards judiciously ... and selectively apply frameworks such as CMMi and ITIL to embrace their value-adding processes and functions.*

*Service providers themselves should define expectations regarding the application and adherence to international standards like ISO 29119 for software testing ... to avoid a situation where a solution or service has never been tested and operational readiness is questionable.”*

# Implications – the Healthcare.gov fallout



Sales blurb? **Oct 15**  
~~or~~ **both** **2013**

Submission to US  
 Environmental  
 Protection Agency



**Dec 12 2013**

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# Implications – the Healthcare.gov fallout



*“What the Outsourcing Industry Can Learn from the HealthCare.gov Fiasco.*

*Set and adhere to standards.*

*Never put out a product to the market without adhering to international standards. There is ISO 29119 for software testing and ISO 20000 for service management.”*



*“We base our approach to test strategy and planning on ISO 29119 ... to which we are a contributor... (So) you are assured your test strategy will reflect the complexity of any given development project.”*



# Implications – the Healthcare.gov fallout



£352.00  
Per test case

(for 2000 automated tests)

*“Infuse Test Factory is delivered on pre-built centre of excellence model. The test factory is an industrialized test delivery service based on best of breed process, people, and technology.*

*The service can be applied to functional testing and non-functional testing.*

*Built on a proven methodology and a certified TMMi Level 3 testing service; the Test Factory is built to ISO 29119 & ISO 25010 standards.*

*The Infuse Test Factory provides an efficient and effective service with guaranteed outcome.”*

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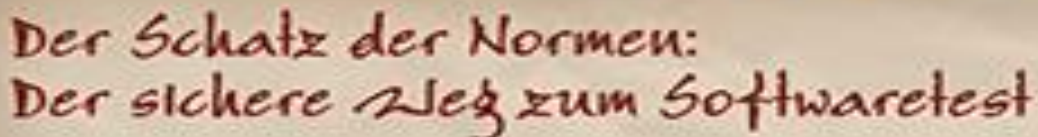
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# Marketing ISO 29119 – the treasure of the standards

Der Schatz der Normen:  
Der sichere Weg zum Softwaretest

Wald des Wissens

Kapelle der ISTQB-Zertifizierung

Testmanagement-Spitze

ISO/IEC 25051

Testbench-Pass

ISO/IEC 29119-3

Dokumentations-berg

ISO/IEC 15288

ISO/IEC 29119-5

ISO/IEC/IEEE 29148

Werkzeug-unterstützung

Testberfeld

Tal der Testautomatisierung

Mit der richtigen Schatzkarte in der Tasche ist der Weg oft ganz einfach – das gilt auch fürs Softwaretesten. Im Spätsommer 2013 sind die ersten drei Teile der neuen Norm ISO/IEC/IEEE 29119 erschienen.

With the right treasure map in your pocket it's easy to find your way – that also goes for testing. The first three parts of the new standard ISO 29119 are coming in late summer 2013.

# Marketing ISO 29119 – the treasure of the standards

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# Marketing ISO 29119 – an appeal to fear



KEEP  
CALM  
AND  
USE  
ISO 29119



*“Imagine something goes noticeably wrong. How easy will you find it to explain that your testing doesn’t comply with international testing standards? So, can you afford not to use them?”*

Stuart Reid



# Marketing ISO 29119 – asymmetric information



KEEP  
CALM

AND

USE

ISO 29119

*“Buyers are unclear on what is 'good test practice' “*

Stuart Reid

Can you tell a lemon from a Lamborghini?

James Christie



# What do the auditors say?



COBIT Framework  
has no insistence  
on “best practice”

No insistence on  
detailed scripts  
or test cases

Countless references to ISO  
standards for;

- Risk management
- Security
- Release management
- Configuration management
- Service level management
- Incident management
- Problem management
- Business continuity
- etc



No mention of  
testing  
standards

None at all!

# What do the auditors say?

## The Snowflake Theory of IT Audit



*“Every IT environment is unique and represents a unique set of risks. The differences make it increasingly difficult to take a generic or checklist approach to auditing.”*

Institute of Internal Auditors  
Global Technology Audit  
Guide, Management of IT  
Audit, 1<sup>st</sup> edition, 2006

ISO standards are not mentioned except  
in an appendix *“... for consideration”*.







## What do the auditors say?

*“Internal auditors should not expect organizations to fully implement PMBOK, PRINCE2, COBIT, or any other large set of best practices. Rather, they should expect to see that these practices have been customized and integrated into the organization’s project management methodology.”*



Institute of Internal Auditors  
Global Technology Audit  
Guide,  
Auditing IT Projects, 2009  
(current)



# Wrapping up – we have to speak out

## The debate must not be framed as a false choice

*“Buyers are unclear on what is 'good test practice' “*



*OR*





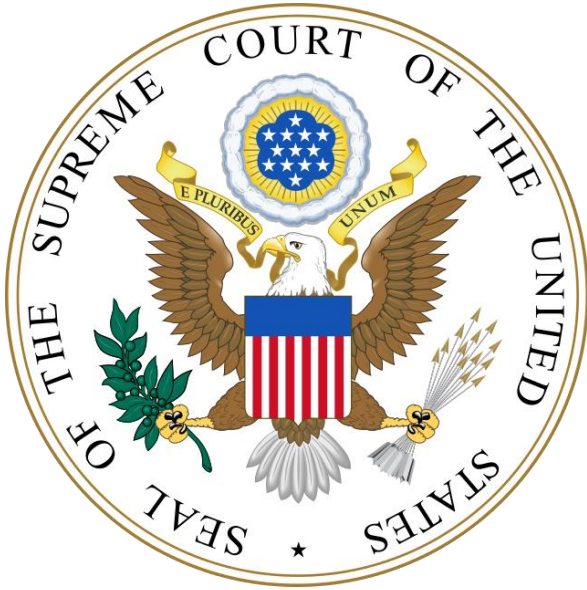


## Wrapping up

American Society of Mechanical Engineers  
v. Hydrolevel Corporation

Response of standards bodies?

Need for consensus regarding both  
standards and their interpretation.



Consensus is  
*“general agreement,  
characterized by the  
absence of sustained  
opposition... by any **important**  
part of the concerned interests”.*



**?**  
really?





# Wrapping up



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