Topics for UNECE

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- Regulation and risks consumer overview
- Consumer protection risk management
- The challenges of software functionality including AI

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The Scale of the Consumer Economy





The scale of the consumer economy





Addressing the consumer risk from suppliers

Is regulation actually effective if it isn't enforced

Without enforcement

With enforcement





Regulatory Transparency

Regulators should publish the profiles of supply risk to consumers for the markets that they regulate



Addressing the consumer risk from suppliers A fuller picture

An example from the UK total costs ~ 12% of GDP

Costs to organisations

Cost of regulatory compliance Cost of complaints to business £100 billion £111 billion

4 billion

f

Cost of regulators and enforcement

Costs to consumers

Cost of consumer detriment



£269 billion

Keep regulation with smarter compliance at lower cost

Invest in greater, more effective enforcement

12% of GDP is not productive and reduction of overall costs improves productivity Given the current supply side risk profiles increased monitoring and enforcement would bring down the costs of complaints and detriment Increased efforts to being down the costs of compliance would reduce industry costs





Consumers need protection built into their goods and services

Consumers Standards, Regulation and Enforcement The challenges of digital (software) functionality



Where we are 'going green' and elsewhere too



Hardware products

The design is fixed at 'release to market' time.

For safety regulation this enables 'release to market' tests of functionality for the protective capabilities of the product.

Some sustainability regulation is supported by performance measurement requirements such as cars km per liter or km per kWh

Standards address the functionality requirements such as ventilation hole sizes for electrical equipment to prevent children poking their fingers into dangerous electrical voltages



Standardized tests and test methods

There are 100's if not 1000's of safety standards to cover all the different types of product from baby's dummies to domestic ovens, microwaves, heat pumps and more.

Design update for safety reasons comes through product recalls. Might we face similar for sustainability reasons ?

Standards provide a presumption of conformity



Products that include software are different

- <u>Hard</u>ware = Release to market tests only
- <u>Software</u> = Product software changes very few months

The design is stable at 'release to market' time but gets updates every few months, with some forms of software even changing functionality while in use as can be the case for AI.

This, with the cost of 'release to market' assessment, shifts the emphasis of consumer protection to care and diligence throughout the product lifecycle for consumer goods and services.

From cradle to grave





Products, that is goods and services, that contain software functionality

Initial release to market tests and test methods

Design update via frequent software updates



'Smart' products

Feedback from the 'in use' phase of the lifecycle is vital to maintaining protection and sustainability

Product lifecycles are key for security and sustainability of consumer products with end of life standards are coming into play too.

The software in products and their sustainability require a lifecycle that includes ... design, development, production, distribution, sales, marketing and consumer transaction, installation, online and other forms of consumer help, maintenance and repair, product monitoring during its in use phase, design update and product end of life.



The European AI Act and associated standards

Targeted at AI technology within existing regulation

Standards to provide a presumption of conformity

Main AI sections address the known AI characteristics that lead to problems

But overall there are over 80 clauses with requirements applicable to care and diligence throughout the product lifecycle for consumer goods and services

EU AI Act: first regulation on artificial intelligence

The use of artificial intelligence in the EU will be regulated by the AI Act, the world's first comprehensive AI law. Find out how it will protect you.
Published: 08-06-2023 • Last updated: 19-12-2023 • 11:45



This illustration of artificial intelligence has in fact been generated by AI

https://www.europarl.europa.eu/topics/en/article/20230601STO93804/eu-ai-act-firstregulation-on-artificial-intelligence





What consumer trustworthiness looks like

What are we seeking for AI Trustworthiness (and also all other software based products)

- a) That consumer goods and services are fit for purpose in reasonably foreseeable use
- b) That reasonably foreseeable use includes
 - Use for the product's intended purpose
 - Misuse of the product
 - Malicious use or intrusion by 3rd parties
- c) That care and diligence are exercised throughout the product lifecycle of consumer goods and services for all types of risk and harm

It is c) that is common to all consumer goods and services and so that is the focus for ANEC in Horizontal standards. The requirements that satisfy a) & b) are product type specific and would come from Vertical standards



AI Standards in support of Regulation and Enforcement

Stable doors closing

European AI standards Presumption of conformity

'Green AI' being incorporated for AI's own energy consumption and also its ability to save resources



Thank you

Horse that has bolted

Enforcement to catch up on malicious use of AI

... especially large language models and generative AI for text, images, video, security breaches, net zero denial etc.

