



tukes

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# Market surveillance and circular economy

Turvallisuus- ja kemikaalivirasto (Tukes)

## Products



- Biocides
- Fireworks and explosives
- Articles of precious metals
- Gas equipment
- Plant protection products
- Transport tanks for chemicals and dangerous goods
- Chemical products
- Cosmetics
- Consumer products
- Measuring instruments
- Pressure equipment
- Rescue service equipment
- Construction products
- Electrical and electronic appliances
- Industrial and consumer chemicals

## Services



- Inspection, testing and other compliance assessment services
- Installation and maintenance services
- Consumer services

## Installations



- Electrical equipment
- Gas, oil and refrigeration equipment
- Pressurised systems

## Plants and mines



- Chemical applications
- Explosives factories and warehouses
- Mines
- Mineral exploration
- Gold panning

## Accreditation



- Laboratories
- Certification bodies
- Inspection bodies
- Providers of proficiency testing
- Verifiers

# Market surveillance

- Ensures that the devices and equipment on the market are safe for people's health, property and the environment (and otherwise compliant)
- Aims on ensuring a level playing field in the market
- Regulation has focused a lot on safety, but emphasis on environmental issues is growing (RoHS, Ecodesign, Single Use Products, WEEE...)
- Only small part of the products in the market are proactively checked by market surveillance or by third party
- Products are checked by MSAs only after they have entered the market, usually in environmental point-of-view " the damage" has already been done (e.g. includes hazardous substances)
  - From safety perspective the damage is yet to come
- Best way to advance circular economy perspective in products is to have regulations related to it (and enough resources for market surveillance)
  - Some regulations already exists under the ecodesign directive

# What to consider when writing regulation?

- Are the requirements even possible? For example, if the requirement is to use 50% recycled materials, is there enough recycled material available (e.g. batteries)?
- Is the requirement something that is needed/used in practise?
  - E.g. companies dismantling electronics do not have time to search dismantling instructions online for each of the products, but legislation requires the information to be there
- Will there be requirements that are difficult or impossible to measure or monitor?
  - Is the requirement specific or very general?
  - Can they be fulfilled with good paperwork with no actual positive impact?
  - Are there suitable testing standards? How to prove that requirements are fulfilled?
    - How to measure the amount of recycled materials in the product?
    - How to monitor how unsold items have been demolished?
    - Requirements for design and manufacturing process? Products done usually outside Finland -> no jurisdiction

# Reuse/repair/recycling from market surveillance perspective



- Selling recycled/fixed/upgraded products is a growing business
  - Electrical appliances, construction products, jewelry etc.
- Products need to comply with the regulation which is in force the day they are placed on the market
- Becoming a totally new product
  - E.g. jewelry is made from old bike tires (requirements for chemicals are totally different)
- Becoming a modified similar product: product which has been subject to important changes or overhauls aiming to modify its original performance, purpose or type may be considered **as a new product**
  - The person/company who carries out the changes becomes then the manufacturer with the corresponding obligations.
  - Does the new product fulfill the current regulation?
    - Good aims of circular economy vs. reality of regulation requirements
  - Couple examples on the next slides:

## Power chain starts buying and selling used home electronics, aiming to get 20,000 tonnes of scrap a year for recycling from Finland, Denmark and Norway

Power will start buying used devices in mid-October. The first second-hand product trading facility will open in November," says Juha-Mikko Saviluoto, CEO.



- Old fridge with new motor -> more efficient, and thus new product
  - Technical documentation and Declaration of Conformity
  - Energy label
  - RoHS, LVD, EMC, ecodesign
  - Manufacturers information

Lot of requirements to fulfill for one unit



## Used computers from the online store

The second-hand computers and used corporate laptops sold by Machines Kiertoön Oy are, as a rule, highly reliable computers with a clearly sturdier structure than a normal consumer laptop. They are efficient and long-lasting, and our maintenance has checked all laptops to work.

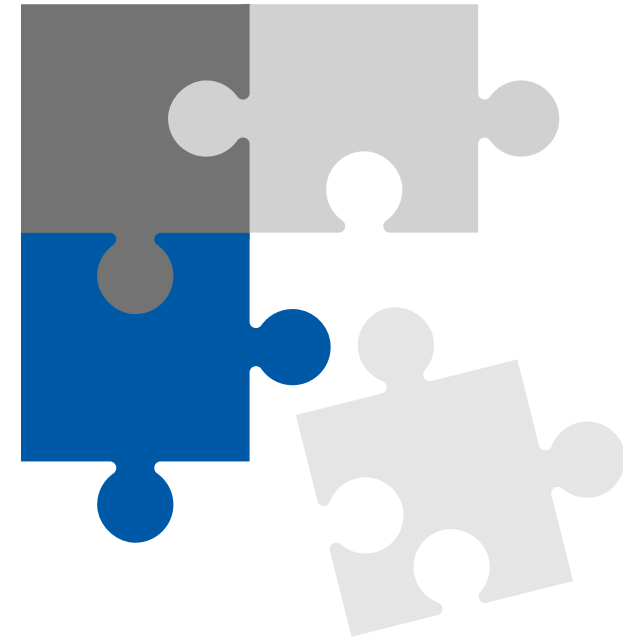
### Used computer for student - Abitti compatibility

Most of the used computers on sale are Abitti compatible laptops. A used laptop is often a very sensible and ecological option for the student – you will get a powerful, reliable and compatible computer at a much lower cost than the corresponding new machine. For example, different versions of Lenovo Thinkpad computers are very popular laptops for matriculation examinations, as is HP's EliteBook series.

- Changes to software and/or hardware -> new product

# In conclusion

- How to make sure, that requirements promote the aims of circular economy, but are still reasonable and surveilable?
- How to tackle the problem related to old product becoming a new product? (without creating big loopholes)





**Thank you for listening!**