



ReCiPSS



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Paving the way for innovative Circular Economy products and services in the electronic and automotive sectors: Lessons learned and way forward

An event by the H2020 C-SERVEES and ReCiPSS projects

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Key points from the discussions

Introductory C-SERVEES presentations

- PSS (Product-System Service) is about disconnecting business success from product sales, combining products and service. The C-SERVEES project was constructed on basic reference models.
- Environmental savings thanks to Logistics Platform are 30-40%. However, the net present value is a big concern for all three companies involved in developing the platforms.

C-SERVEES Panel discussion

“How did the C-SERVEES Circular Economy Business Models work in practice? Demonstrations on TVs, ALMs, printers and toner cartridges and washing machines”

Moderator: Constantin Herrmann

Michele Liberati, PNO
Ana Isabel Díaz, GAIKER
Özlem Ünlüer, Arçelik
Klaus Grobe, ADVA
Patrick Carminati, Lexmark
Hans-Christian Eberl, EC DG RTD

- For effective Circular Economy (CE) business models implementation several factors shall be considered within the companies: strategical (i.e. CE objectives, internal budget, top management commitment, etc.); organisational (i.e. dedicated teams, training/upskilling, KPI, alignment of incentives, etc.); and process related. Together with external enablers (ICT tools and policy).
- There are four levels: a) technical aspects (around products and end-of-life), b) marketing/communication/awareness/change perspective, c) clients/external expectations/societal expectations and acceptance, and d) legal/market boundaries.
- The continued function of a product in the event technology or performance are outdated needs to be ensured. Electronics may not allow for this principle, see printed circuit boards. PSS may affect the optimum lifetime of products.
- Any circular action like lifetime extension must be checked against the Do No Substantial Harm principle laid down in EU Taxonomy. In certain cases this means that lifetime extension shall not be enabled, for reasons of energy efficiency.

- The migration to full circularity will, in most cases, be gradual. This does not necessarily mean slow and it may include disruptive changes in certain areas. Graduality is necessary in order to avoid discontinuity in business operations.
- The cost of circular initiatives is often too high, the return on investment too far in the future, and revenues too risky. Unless a positive economic outlook can be secured, managers will hesitate to contemplate circular models.
- Customer perception changed specifically recently; they seemed more open to re-use, for example.
- The biggest challenge is more on the marketing side than on technical aspects; marketing is reluctant to declare that there are refurbished components in new products.
- Users expect the cost of a refurbished product to be 50% of the new equivalent. One in five products in shops in the Nordics is refurbished. The risk embedded in reuse is less significant than thought.
- The issue of refurbished components in new products is dissimilar from reused products as such. The pandemic was a huge gift for sustainability teams, because it allowed them to convince marketing to extend warranties.
- New business models around refurb medical equipment are required.
- Manufacturers have no interest in becoming parts providers.
- Companies that had reman divisions during the Coronavirus pandemic had a competitive advantage, because they were in a position to continue sales.
- Some argue that retailers may be the blind spot in the process. The EU is in a position to enable new thinking that goes beyond technology.

ReCiPSS Panel discussion

“Resource-efficient Circular Product-Service Systems (ReCiPSS) and how large-scale implementation of circular manufacturing systems in the electronics / white goods and automotive sectors can lead to a stable circular economy in the EU”

Moderator: Constantin Herrmann

Dr Farazee Asif, KTH
 Ales Mihelic, Gorenje
 Markus Wagner, C-ECO
 Ruud de Bruijkere, Signifikant AB
 Hans-Christian Eberl, EC DG RTD

- The challenge is how to deal with the valley of 18 months during which no profit arises from the circularity initiative.
- There are legal aspects involved in pay-per-use as a service.
- The logistics was more challenging than the technology. How to ensure the right info at the right player through the value chain, how to distribute profit and revenue across the diversity of info and material flow through the value chain.
- Information is not just technology related. Information is diverse; a social media platform may allow distribution of information in line with demand and supply.
- The extension of warranties is challenging and costly.
- Should the Digital Product Passport (DPP) be centralised or de-centralised? The questions are: who owns the data and with whom should data be shared, when and for what purpose.

- Nobody has a problem to rent a book from the library even though it is second (100th) hand. The challenge is to increase awareness that second hand products are reliable (if reuse is organised, save, reliable).
- Right to repair should mean right to let it get repaired.

Joint Panel discussion

“Policy-relevant results and insights for the Circular Economy, jointly provided by C-SERVEES and ReCiPSS”

Moderator: Constantin Herrmann

Federica Rosasco, RINA-C

Jan Koller, Fraunhofer IPA

Özlem Ünlüer, Arçelik

Maxime Furkel, Lexmark

Ales Mihelic, Gorenje

Wagner Markus, C-ECO

Olivia Chassais, EC DG ENV

- It is important to have the European single market in mind.
- Used electronic product keeps being considered as waste by most of the parties. It starts with customers and then all along the supply chain, which minimise the likelihood to be refurbished/remanufactured.
- The expectation on remanufactured products from society is supposed to be high, but sometimes over-estimated (not so high in reality).
- There is a higher cost related to the introduction of remanufactured products and PSS.
- Green public procurement should introduce and stick more to remanufactured products, see EPEAT (Electronic Product Environmental Assessment Tool). Should a similar system be designed for the EU market?
- EU grant funding of projects allows the research department of companies to engage with the c-suite and rethink processes and products.

More information

✚ Conference agenda: <https://bit.ly/3DUjXRW>

✚ Recording of the session: <https://www.youtube.com/watch?v=WDXSt3x5GCw>

✚ Presentations shown: <https://bit.ly/3WHpq7c>

✚ <https://c-serveesproject.eu/>

✚ <https://www.recipss.eu/>