

Circular business models

- *7 minute presentation followed by 5 minutes of questions from audience (2 – 3 max)*

Circular Business Models: creating value through circularity

Sample

50 cases

7 countries

7 product groups:

food and catering, furniture, clothing and textiles, built environment, ICT.

Main business strategies

Promoting sufficiency
Waste as a resource
Product life extension
Performance model
Marketplace creation
Recovery

Advantages of CBM:

Lower cost for materials

Less materials used

Less waste generated

Help reduce consumption

Products used multiple times

Used products are appealing for certain customers

Waste-based products are unique

Challenges for CBM

Higher salary costs

Difficulties in standardization

Restrictive regulations

High transaction costs

Misconceptions from consumers (e.g. old or unsanitary, needs to be cheap, new designs),

Hibernation of products



What type of circular business models can be found in the different product groups?



Food and food-based products

- Facilitate sustainable consumer practices such as allowing consumers to buy in bulk, or minimize food waste at the household level.
- Capitalize on the residual value of secondary flows (e.g. by-products from production or “waste” generated across the supply chain)
- Create or enhance accessibility to secondary flows through digital or physical markets, particularly to the food service industry and consumers.



ICT equipment

- Capitalize on the residual value of used ICT equipment by acquiring it from organizations and private individuals; then refurbishing it (i.e. repair, upgrade and data wipe) in order to be sold to different users
- Collaborate between manufacturers and remanufacturers to include a buy-back guarantee into leasing programs
- Provide office ICT equipment management as an integrated service including purchasing, upgrade and take-back of used equipment that can be re-sold.



Built Environment

- Design constructions that incorporate available material flows in the region. Improve the coordination between (selective) demolition sites and new constructions through digital flow mapping
- Design components (e.g. carpeting, luminaries and insulation panels) based on circularity principles. When possible, offer these components as a service (e.g. luminaries or signs as a service)
- Renovate construction components such as lighting fixtures and conduct selective demolition in order to recover valuable components.



Furniture

- Provide office furniture management as an integrated service including design, manufacturing, maintenance and buy-back or collection.
- Collect used furniture that can be refurbished and re-sold. Offer training courses for consumers and organizations to refurbish their own furniture.
- Facilitate the connection between supply and demand for used and refurbished furniture through digital markets.



Clothing and textiles

- Purchase recycled material, by-products from other industries (e.g. leather from furniture sector) or consumer garments (e.g. old jeans) in order to use them as the main raw material for manufacturing of new garments. Offer a buy-back guarantee of own garments
- Provide washing, drying and maintenance as a service for corporate clothing
- Collect un-wanted clothes that can be repaired and resold, reworked into new garments or down-cycled as non-clothing textiles



Organizational barriers and opportunities in municipalities for Circular Procurement

- 7 minute presentation followed by 5 minutes of questions from audience (2 – 3 max)



Circular Procurement Practices: Organizational barriers and opportunities

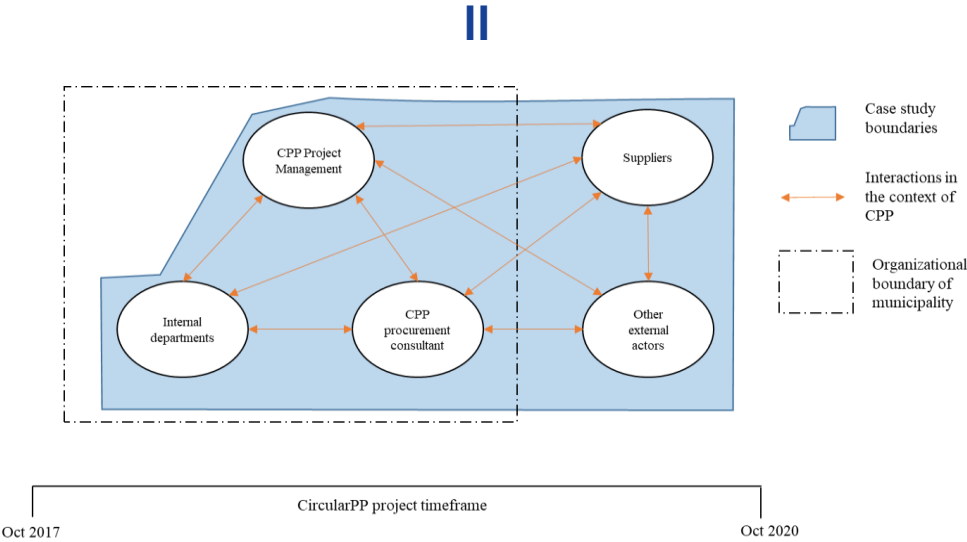
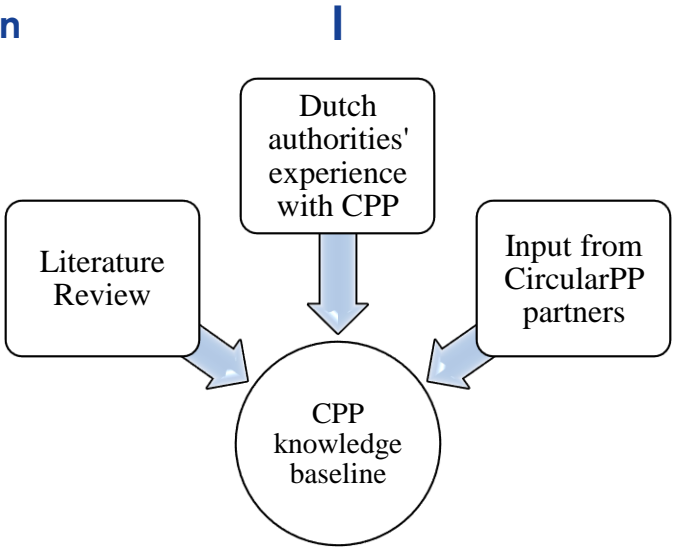
Cases Analyzed

Aalborg: procurement of **ICT collection service**

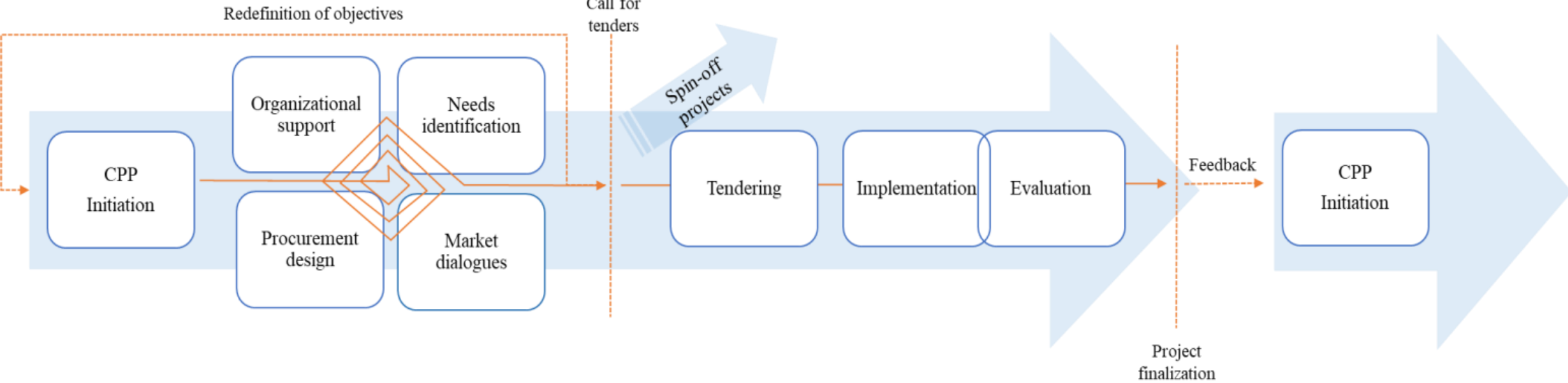
Malmö: procurement of **re-used furniture and related services**

Latvia: procurement of **gymnasium furniture and school catering services**

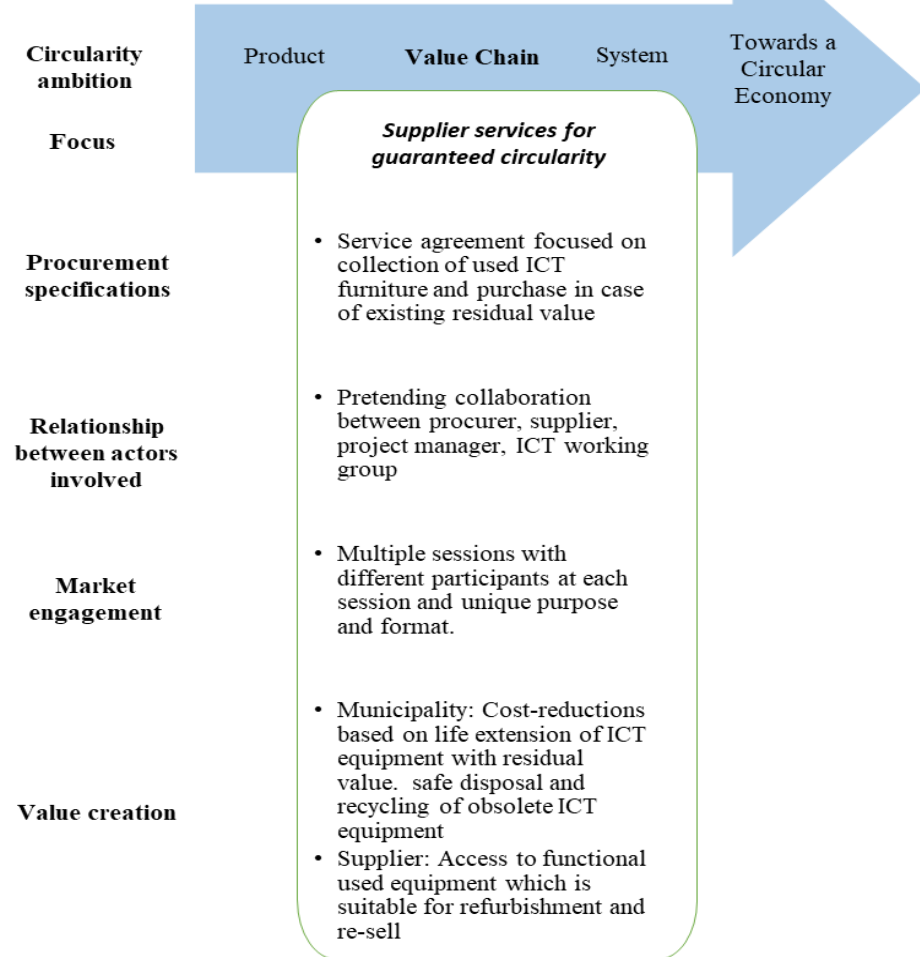
Research Design



CPP Process diagram



Aalborg case: ICT take-out services



- Call for tenders was **not released...however**
- Multiple functions of market dialogues:
 - **For CPP manager:** obtain feedback in regards to potential services and criteria.
 - **For suppliers:** understand the needs and priorities of the municipality, highlight their competitive advantage, influence procurement into specific directions (e.g. creating local jobs).
- Market dialogues without end-users/internal clients have **reduced potential benefits**
- **Initial phases of CPP** (market dialogues, organizational support, procurement design and needs identification), are **diffused across time and take place simultaneously** influencing each other.
- **CPP raised awareness** amongst the ICT leaders and helped **visualize wasteful practices** beyond the original scope of the project
- Since the scope of the contract was focused **only on take outs, it reduced the attractiveness of the contract for suppliers**, since collection is only one part of the business model.
- Limitations of awarding contract to a single supplier - For example, dividing the contract into different lots would have opened the opportunity for socio-economic enterprises

How to improve Circular Procurement practices at municipalities

- **Widespread training** to all relevant personnel
- Establish **flexible methodologies** for stakeholder engagement, including market dialogues and end-user engagement in pre-procurement process
- Develop **synergies** between **internal and external service provision**.
- **Include Socio-economic and small enterprises** in market dialogues
- **Campaigns** for **behavioural change** (framework agreements)
- **Verification mechanisms** for long-term and ongoing circularity
- Use existing green criteria AND **develop ad-hoc circular criteria**
- **Avoid** lowest price, **promote** life-cycle costing
- Balance cost with **quality, environmental and social** criteria



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Thank you for your attention!

For **more information**, go to
CircularPP website > Activities
> State of the Art research.

Full reports are made
available for download as
soon as they are concluded

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