product? (2) \ Recycler Sorter Collector User Retailer Brand Manufacturer Material Supplier Actor CQs (1) Are there are pair the product in spare parts? Repairer User Repairer User Manufacturer Material Supplier Actor CQs (1) Are there are pair the prosingle components? disassembled the product in spare parts? Repairer User Retailler Brand Manufacturer Manufacturer	e material composition of the Vhat is the quality of the terial? (3) How can the sassembled? (4) Is there a te of the claims on material and quality?	Provides information on: composition of recyled material, quality and recycling method Quality characteristics of the material (2) - - - Composition of the product including added material and components (e.g., for the assembly) (1,3) Certification of organisation and product (4) Composition of the single materials (substances) (1,2) Certification of organisation and materials (4) Provided information
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User Retailer Brand Manufacturer Material Supplier		- -
Retailer Brand Manufacturer Material Supplier		
Brand Manufacturer Material Supplier		
Manufacturer Material Supplier		-
		Manufacturer of product: Repair instructions (1,5), list of components and their characteristics (2,3), information on the assembly of the components (4). Manufacturer of the spare parts: DPP of spare parts, with their components and material composition (6)
Actor COs		Compositition of materials for original components (3) and spare parts (6)
Actor COs		
		Provided information
product? (2) composition c	e remaining quality of the What is the material of the product? (3) Is there a te of the claims on material and quality?	
User		remaining product quality (1)
Retailer		remaining product quality (1)
Brand		-
Manufacturer		- certificates of the product (3)
		material composition (2), certificates of the
Material Supplier		materials (3)
Use Case: Smartphone		

Actor	CQs	Provided Information
Recycler	 (1) What is the composition of the product (components> materials> substances)? (2) How can the product be disassembled? (3) Is there rare earth included in the smartphone? (4) If yes, how can it be retrieved? (5) Are there any substances of concern in this product? 	Provides information on: composition of recyled material, quality and recycling method
Sorter		-
Collector		-
User		-
Retailer		-
Brand		-
Manufacturer		Composition of the product including substances, materials and components (1,5), information of the product assembly and its disassembly (2,4)
Material Supplier		Composition of the materials including the substances (of concern) and rare earths (1,3,5)
Actor	COc	Provided information
Actor	CQs (1) What are the single components of	
Refurbisher	this product? (2) What are the characteristics of the components? (3) How can the product be disassembled (if needed)? (4) What are the characteristics of the components in the product in order to decide on suitable spare parts? (5) What is the material composition of the spare parts?	Provides information on: what was broken, what part/component of the product was refurbished, what new components were inserted (if any) and their composition, how was it refurbished, by whom, and when
User		-
Retailer		-
Brand Manufacturer		- Composition of the product including substances, materials and components (1,2,4), information of the product assembly and its disassembly (1,3)
Material Supplier		Composition of the materials including the substances (of concern) (2,5)
Actor	CQs	Provided information
Repairer	(1) Are there any instructions on how to repair the product? (2) What are the single components of this product? (3) What are the characteristics of the components? (4) How can the product be disassembled (if needed)? (5) What are the characteristics of the components in the product in order to decide on suitable spare parts? (6) What is the material composition of the spare parts?	Provides information on: what was broken, what part/component of the product was repaired or replaced, what new components were inserted (if any) and their composition, how was it repaired, by whom, and when
User		-
Retailer		-
Brand		- Manufacturer of product: Repair instructions (1,5), list of components and their characteristics (2,3), information on the assembly of the components (4). Manufacturer of the spare parts: DPP of spare parts, with their components and material composition (6)
Manufacturer		their components and material composition (6)

Material Supplier		Compostition of materials for original components (3) and spare parts (6)
Actor	CQs	Provided information
Re-user & Re-seller	(1) What is the remaining quality of the product? (2) What is the component composition of the product? (3) Is there a certification of the product?	
User		remaining product quality (1)
Retailer		-
Brand		-
Manufacturer		certificates of the product (3), component composition from the manufacturer(s) (2)
Material Supplier		certificates of the materials (3)