The functional-temporal Combined Charging System step model

And the parallel work in different organizations

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CCS development	Step 1	Step 2	Step 3	γ_{-}
in 3 steps	"CCS Basic" (implementation guide)	"CCS Extended" (implementation guide)	"CCS Advanced" (implementation guide)	
	 + Thermal management (up to 500 A) in V2.0 AC, DC charging without thermal management (up to 200 A) in V1.0 External identification means, unscheduled load balancing, diagnostics (CP-states), power 	 Secure charging / PnC Resumed / fleet charging Value added services Smart charging Meter reading Broadband reliable charging 	 ACDS ACDU WPT ACD (pantograph) BPT/V2X (also aggregated charging) 	22001,28
CCS charging technologies	indication	Area A:	National and international laws, directives and acts.	
(1) Manual conductive (AC, DC)		Legislation		
2 Manual conductive with thermal management (DC)		Area B: Standardization	National and international charging standards.	
Comfort conductive side coupler (AC, DC)	The development of an interoperable charging technology is based on the parallel interconnected work in different areas.	Area C: Representation of interests	Technical recommendations, position papers and guidelines.	
Comfort conductive underbody coupler (AC, DC)		Area D: Research Area Companies Universities Research	Technical knowledge, prototypes,	
Comfort wireless inductive (AC)		Area E:	scientific publications.	
6 Pantograph (AC, DC)		Product development Manufacturers	Interoperable charging products.	

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