

Online Appendix: Picking Sectors: IPCEIs and Europe's Emerging State Capacity for Strategic Identification

Table 1: IPCEIs approved between 2018-2025

IPCEI	Number of Member states	State aid (€bn)	Expected private investment (€bn)	Emergence
Microelectronics (2018)	5	1.9	6.5	Initiated in 2015 by semiconductor firms in Germany lobbying the Ministry of the Economy for subsidies. Early endorsement at European level by France, Italy and UK, and supported by DG Connect. Austria joined late in 2021 after finding out about the IPCEI only after approval.
Batteries (2019)	7	3.2	5	Mainly driven by political initiative from German and French Ministers of Economy Altmaier and Le Maire and DG GROW. Industry, especially automotive OEMs, very sceptical. European Battery Alliance, set up by DG GROW in 2017, helped in the process.
Batteries – EuBatIn (2021)	12	2.9	9	
Hydrogen Hy2Tech (2022)	15	5.4	8.8	Strongly driven by DG GROW and the European Clean Hydrogen Alliance, set up by DG GROW in 2020 in the context of the new industrial strategy for Europe. But also demanded by EU member states: 22 member states (+Norway), coordinated by Germany, signed a manifesto calling for IPCEIs for the hydrogen value chain in Dec 2020.
Hydrogen Hy2Use (2022)	15	5.2	7	
Microelectronics and Communication Technologies (2023)	14	8.1	13.7	Large German semiconductor firm pitched the need for a second IPCEI on microelectronics to the German Ministry of the Economy in summer 2019. The Ministry set up a working party with various semiconductor firms that would later become part of the IPCEI (almost all firms from first IPCEI Microelectronics were included) and started the coordination process with other member states and DG Connect.
Next Generation Cloud Infrastructure and Services (2023)	7	1.2	1.4	Coordination mainly driven by DG Connect which reached out to various member states to gauge interest and collaborated with industry associations like Bitkom.
Hydrogen Hy2Infra (2024)	7	6.9	5.4	Similar process as for Hydrogen Hy2Tech and Hy2Use, see above.
Hydrogen Hy2Move (2024)	7	1.4	3.3	
Med4Cure (2024)	6	1	5.9	Initiated by France during the Covid-19 pandemic. DG COMP demanded that France ensure the participation of other member states. France, supported by DG GROW, reached out to other member states via email, eventually leading to a joint memorandum of interested member states.
Tech4Cure (2025)	5	0.4	0.8	

Source: Authors' elaboration based on data on member states, state aid and expected private investment from https://competition-policy.ec.europa.eu/state-aid/ipcei/approved-ipceis_en, accessed 17 July 2025; and story of emergence based on interviews.

Table 2: List of Interviews

Interview-	Position
Interview-1	Former Minister, large member state
Interview-2	Former Deputy Director-General, DG Connect
Interview-3	DG COMP Official I
Interview-4	DG COMP Official II
Interview-5	DG COMP Official III
Interview-6	Ministry Official, medium-sized member state
Interview-7	DG GROW Official I
Interview-8	Ministry Official, large member state
Interview-9	Ministry Official, small member state
Interview-10	Ministry Official, medium-sized member state
Interview-11	DG COMP Official IV
Interview-12	Former Ministry Official, large member state
Interview-13	Private sector representative, consultancy
Interview-14	DG GROW Official II
Interview-15	JRC Official
Interview-16	Ministry Officials, medium-sized member state
Interview-17	Former Senior Ministry Official, German Ministry of the Economy