

CHIPS ACT

Proposal COM(2022) 46 of 8 February 2022 for a Regulation establishing a framework of measures for strengthening Europe's semiconductor ecosystem (Chips Act)

cepPolicyBrief No. 8/2022

SHORT VERSION [[Go to Long Version](#)]

Context | Objective | Interested Parties

Context: Many sectors of the economy, e.g. the automotive industry, are currently facing shortages in the supply of computer chips. This supply bottleneck was triggered inter alia by the increased demand for server power, and for terminal devices such as PCs and laptops, as a result of the COVID-19 pandemic, as well as by production deficits in key chip factories. As the EU's share of global chip production has continued to fall in recent decades, the EU has become dependent on chip supplies from other economic regions.

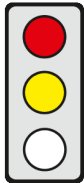
Objective: Chip production in the EU is to be increased, thereby ensuring the supply of chips to European companies.

Affected parties: Companies that produce chips and their suppliers; companies that need chips; research institutes

Brief Assessment

Pro

- ▶ The establishment of a virtual platform and the expansion of pilot lines may result in companies being able to develop and test chips more cheaply, and bridge the gap between research and production.



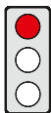
Contra

- ▶ Securing the chip supply is primarily the responsibility of companies. If the supply shortage is a temporary occurrence in otherwise functioning markets, state intervention is unfounded.
- ▶ The focus on chips with small node sizes is misguided as there is no demand for this in the EU.
- ▶ The conditions for activation of the crisis stage by the Commission are too vague and therefore fail to satisfy the principle of legal certainty.
- ▶ Export controls are questionable under WTO law, and of dubious benefits since chips mostly have to be custom-made for individual companies.
- ▶ Prioritising orders from EU companies in the event of a crisis jeopardises free trade.

Objectives of the Chips Act [Long Version Section A.2]

Commission proposal: With the Chips Act, the Commission aims in particular to

- ensure the EU's resilience and security of supply with regard to semiconductor technology,
- bridge the gap between chip research and chip production, and
- increase the value of the EU's share of global chip production to 20% by 2030. Europe is to focus on chips with a node size of below 10 nm, and especially below 2 nm.

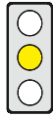


cep-Assessment: Ensuring the chip supply is primarily the responsibility of companies. There is no market failure on the chips market that would justify interventions like those provided for in the Chips Act. The focus on chips with small node sizes is misguided. There are hardly any customers for this in the EU.

Research and Development [Long Version Section A.3]

Commission proposal: In order to promote chip development in the EU, the Commission wants to

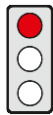
- deploy a virtual platform enabling the use of advanced software for the design of cutting-edge chips and thereby increase the design capacity for semiconductor technology in the EU, and
- expand pilot lines in the EU. Pilot lines are used to research and test new technologies or materials. The Commission wants to close the gap between research and commercial production.



cep-Assessment: The establishment of a virtual platform and the expansion of pilot lines may result in companies being able to develop and test chips more cheaply because existing public piloting facilities are often unsuitable for state-of-the-art chips. State-of-the-art chips – with just a few exceptions – therefore have to be tested on private facilities. It remains unclear, however, how the money needed to keep public pilot plants constantly abreast with the latest state of the art is to be raised.

Support for Chip Production [Long Version Section A.4]

Commission proposal: The construction of chip factories can be given financial aid covering up to 100% of the funding gap if inter alia the production facilities are first of a kind, would not be built without support, are economically viable in the long term without operating support and the companies involved commit to investing in the next generation of chips.

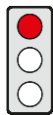


cep-Assessment: Support should be viewed critically from the point of view of state aid law. In addition, Member States are heading for a subsidy race with each other and with third countries. This risks the build-up of overcapacities causing production facilities to be underutilised, thus making them uneconomic. European production facilities would be particularly affected by this as production costs for chips are lower elsewhere due to lower energy and labour costs. There is then a threat of permanent subsidisation.

Crisis Stage [Long Version Section A.5]

Commission proposal: The Commission can activate the so-called crisis stage in the event of a semiconductor crisis, i.e. where serious disruptions in the supply of chips arise that lead to significant shortages, which

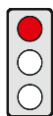
- entail significant delays or significant negative effects in one or more economic sectors in the EU, or
- prevent the supply and maintenance of essential products used by critical sectors.



cep-Assessment: The requirements for activating the crisis stage are a collection of undefined legal terms. This violates the principle of legal certainty because it is not possible to specify with the necessary clarity the conditions under which the Commission will activate the crisis stage.

Priority Orders [Long Version Section A.5]

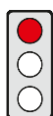
Commission proposal: In the crisis stage, the Commission may oblige companies which have accepted this option when receiving funding to accept and prioritise, at fair and reasonable price, orders from the EU for crisis-relevant semiconductors – i.e. chip components consisting of a series of layers of semiconducting, insulating and conducting materials –, intermediate products or raw materials.



cep-Assessment: Prioritising EU companies in the event of a crisis may lead to a corresponding backlash from other economic regions. This would not increase security of supply in the EU as the EU is dependent on other economic regions for the production of chips and will remain so for the foreseeable future. The EU Commission should refrain from unilateral measures that threaten free trade.

Export Controls [Long Version Section A.5]

Commission proposal: In the crisis stage, the European Semiconductor Board – a body made up of representatives of the Member States to advise and assist the Commission – may assess and advise on the introduction of export controls and “further appropriate and effective emergency measures” if this appears to be appropriate to address the semiconductor crisis in the EU.



cep-Assessment: Export controls not only restrict free trade but also freedom of contract. They are questionable under WTO law. The benefit of export controls is in any case doubtful since chips have to be custom-made for individual companies. Chips that are manufactured in the EU are therefore not necessarily usable by European companies. This is especially true for chips with very small node sizes as buyers of such chips primarily produce in Asia.