Chips Act strengthening R&D&I and supply networks

The Chips Act regulation proposal was published in February 2022 together with the Commission communication *A Chips Act for Europe* and the recommendation on a Union toolbox to address semiconductor shortages. Technology Industries of Finland (later TIF) welcomes well-founded efforts to strengthen the semiconductor sector in the EU. However, each of the three pillars in the Regulation have problematic aspects, RDI funding allocations in Pillar I, use of state aid in Pillar II for securing the supply and finally the Commission control on private enterprises and crisis tools proposed in Pillar III.

**TIF recommends paying attention to the following:**

- Throughout the regulation, the Chips Act should consider the entire semiconductor supply chain, not only chips manufacturing.
- European industry does not need only leading-edge small-node chips, further development of chips with larger nodes must also be secured.
- The funding of Pillar I actions should be clarified. Reallocations of Horizon and DEP programmes and Connecting Europe Facility must not hamper RDI or development of capabilities and infrastructures in other key technology areas.
- The state aid eligibility of first-of-a-kind facilities should be evaluated with care to ensure minimum market distortions and positive impacts to the whole of EU.
- Possible governing structures must have industry representation as full members.
- The relevance of monitoring the semiconductor supply chain should be reassessed.
- The crisis tools should be re-examined to evaluate their applicability in the B2B industry.

**General**

The Chips Act proposal was published in the turmoil of the global chip shortage, and it tends to concentrate on the chips manufacturing itself. When strengthening the position of the European industry, it is important to scrutinize the whole semiconductor ecosystem, the gaps and strengths, the possibilities to develop European capacities, and build on international cooperation in the inevitably global sector. It is as well worthwhile to remember that supply shortages can be encountered in several parts of the supply network, even in raw materials supply.

The Chips Act is referring to next generation chips that are easily understood as small-node chips. It should be clarified that large-node chips can also qualify as next-generation chips. Many applications will need large-node chips also in the foreseeable future and the development on large-node chips is necessary. The market needs should be thoroughly assessed when investments and funding decisions are made.

**R&D&I**

The importance of semiconductor products in all verticals is growing. Thus, increasing funding to RDI is recommendable as well as strengthening Europe’s position globally both in RDI and...
production. Pillar I (Chips for Europe Initiative) components, except Chips Fund activities, will be entrusted to the Chips Joint Undertaking replacing Key Digital Technologies JU. The funding allocation schemes so far presented are complex and raise serious concerns on diminishing allocations on other important technologies and their uptake formerly funded through KDT JU, Horizon Europe Clusters 3-5 and EIC, CEF Digital and Transport and DEP.

The Chips Fund activities for facilitating access to financing and equity by companies in the semiconductor value chain is well appreciated. TIF perceives important that the funding is not limited to SMEs but covers also other companies, especially mid-caps.

First-of-a-Kind facilities

In the case of chip manufacturing, the use of state aid to fill in major gaps in the European supply chains, might be unavoidable. However, state aid creates distortions in the market, and it can put Member States in unequal positions. Only big Member States with adequate resources can fund major manufacturing facilities. TIF sees worthwhile to consider issuing first-of-a-kind status to specialised niche chip manufacturers or e.g., equipment or materials manufacturers. In these cases, state aid support could be possible also for smaller Member States.

The requirements for a first-of-a-kind status must be strict, and there must be clear indications of positive impacts to the whole EU. The application of more flexible state aid rules should be limited up to the first industrial deployment. Under no circumstances should the combined national and EU public support be 100 percent. The entire proposal lacks proper impact assessment, but in the case of state aid use the need for impact assessment is pronounced.

Fast-tracking permit granting procedures can be a good tool for speeding up the long processes, but TIF is doubtful on the notion of security of supply being an imperative reason to override public interest in the context of environmental legislation (Art 14).

Monitoring and crisis response

The monitoring by Member States and the Commission seems heavy, and there is every reason to question the relevance and impact of monitoring in enabling to e.g., provide early warnings. If implemented, the data requirements should be minimized to reduce the burden on companies and MS administrations and sensitive company data should be avoided. Likewise, the tools suggested for the crisis situation should be re-examined. Common purchasing or priority-rated orders might be applicable for face masks, but less so with complex B2B products.

If a governing structure European Semiconductor Board is established, it should have industry representatives as full members. Its proposed advisor role towards the Commission requires knowledge and competence from the industry.

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Technology Industries of Finland represents Finnish technology industries and has over 1,800 member companies, sizes varying from small SMEs and start-ups to world leading MNEs. The technology industry is comprised of five subsectors: electronics and the electrotechnical industry, mechanical engineering, metals industry, consulting engineering and information technology. Technology industry is the most important export industry in Finland, with operations constituting over 50% of all Finnish exports and responsible for 70% of all private investments.