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COVER NOTE

From:	General Secretariat of the Council	
To:	Delegations	
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Subject:	Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing a framework of measures for strengthening Europe's semiconductor ecosystem (Chips Act)	
	 Opinion of the European Committee of the Regions 	

Delegations will find attached copy of the above-mentioned opinion.

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OPINION

European Chips Act for strengthening the European semiconductor ecosystem

THE EUROPEAN COMMITTEE OF THE REGIONS

- insists that the success of the European Chips Act (ECA) is crucial for the EU as a whole, the Member States and all local and regional authorities, as securing industrial production in all regions of Europe depends on having a secure supply of semiconductors;
- recommends setting up a Knowledge and Innovation Community (KIC) on Semiconductors, and proposes creating a Semiconductor Academy, along the lines of the Battery Academy, involving industry and research institutions;
- takes the view that more, new money should be deployed for the implementation of the ECA, and therefore also calls on the Council, the Parliament and the Commission to provide the relevant EU and national subsidies and amend the Multiannual Financial Framework accordingly;
- believes that the EIB can make a decisive contribution to the success of the ECA;
- calls for LRAs to be included in the "semiconductor coordination mechanism", as they can
 make a valuable contribution to achieving the sought-after network through their local
 knowledge of research, industry and semiconductor clusters;
- suggests that instead of an "emergency toolbox", a "prevention toolbox" should be set up, since intervention in semiconductor production at short notice is not possible because of its complexity in terms of combinations of different ICs in the final products and of its widespread international supply chain, and is therefore unsuitable as a crisis response. Particular attention should be paid to maintaining semiconductor production and the necessary availability of precursors and sub-products;
- recommends the swift adoption and implementation of the ECA, and calls on the European Commission, the Council of the European Union and the European Parliament to take into account the CoR's recommendations.

Rapporteur

Thomas Gottfried Schmidt (DE/EPP) Minister for Regional Development, Free State of Saxony

Reference documents

Proposal for a Regulation of the European Parliament and of the Council establishing a framework of measures for strengthening Europe's semiconductor ecosystem (Chips Act) COM(2022) 46 final

Annex to the Proposal for a Regulation of the European Parliament and of the Council establishing a framework of measures for strengthening Europe's semiconductor ecosystem (Chips Act) COM(2022) 46 final, Annexes 1 to 3

Proposal for a Council Regulation amending Regulation (EU) 2021/2085 establishing the Joint Undertakings under Horizon Europe, as regards the Chips Joint Undertaking COM(2022) 47 final

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A Chips Act for Europe COM(2022) 45 final

Commission Recommendation on a common Union toolbox to address semiconductor shortages and an EU mechanism for monitoring the semiconductor ecosystem COM(2022) 782 final

Opinion of the European Committee of the Regions – European Chips Act for strengthening the European semiconductor ecosystem

I. RECOMMENDATIONS FOR AMENDMENTS

Proposal for a Regulation of the European Parliament and of the Council establishing a framework of measures for strengthening Europe's semiconductor ecosystem (Chips Act) COM(2022) 46 final

Amendment 1

Amendment to Recital 1

Text proposed by the European Commission	CoR amendment
Semiconductors are at the core of any digital	Semiconductors are at the core of any digital
device: from smartphones and cars, through	device: from smartphones, <i>electric bicycles</i> and
critical applications and infrastructures in health,	cars, through critical applications and
energy, communications and automation to most	infrastructures in health, energy, communications
other industry sectors. While semiconductors are	and automation to most other industry sectors.
essential to the functioning of our modern	While semiconductors are essential to the
economy and society, the Union has witnessed	functioning of our modern economy, the goal of
unprecedented disruptions in their supply. The	a green transition, and society, the Union has
current supply shortage is a symptom of	witnessed unprecedented disruptions in their
permanent and serious structural deficiencies in	supply. The current supply shortage is a symptom
the Union's semiconductor value and supply	of permanent and serious structural deficiencies
chain. The disruptions have exposed long-lasting	in the Union's semiconductor value and supply
vulnerabilities in this respect, notably a strong	chain. The disruptions have exposed long-lasting
third-country dependency in manufacturing and	vulnerabilities in this respect, notably a strong
design of chips.	third-country dependency in manufacturing and
	design of chips.

Reason

Industries and technologies that are key to the green transition require chips. For example, modern electric bicycles and photovoltaic inverters incorporate chips in their motors, controllers and displays. There will be no green transition without chips.

Amendment 2

Amendment to Recital 3

Text proposed by the European Commission	CoR amendment
This framework pursues two objectives. The first	This framework pursues two objectives. The first
objective is to ensure the conditions necessary for	objective is to ensure the conditions necessary for
the competitiveness and innovation capacity of	the competitiveness and innovation capacity of
the Union and to ensure the adjustment of the	the Union and to ensure the adjustment of the

industry to structural changes due to fast innovation cycles and the need for sustainability. The second objective, separate and complementary to the first one, is to improve the functioning of the internal market by laying down a uniform Union legal framework for increasing the Union's resilience and security of supply in the field of semiconductor technologies. industry to structural changes *in various sectors and affected regional ecosystems, taking into account the sustainability criteria (SDGs),* due to fast innovation cycles and the need for sustainability. The second objective, separate and complementary to the first one, is to improve the functioning of the internal market by laying down a uniform Union legal framework for increasing the Union's resilience and security of supply in the field of semiconductor technologies.

Reason

Compliance with the SDGs is a key aspect and should be included.

Amendment 3

Amendment to Re	cital 13
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Text proposed by the European Commission	CoR amendment
In order to overcome the limitations of the	In order to overcome the limitations of the
current fragmented public and private	current fragmented public and private
investments efforts, facilitate integration, cross-	investments efforts, facilitate integration, cross-
fertilisation, and return on investment on the	fertilisation, and return on investment on the
ongoing programmes and to pursue a common	ongoing programmes and to pursue a common
strategic Union vision on semiconductors as a	strategic Union vision on semiconductors as a
means to realising the ambition of the Union and	means to realising the ambition of the Union and
of its Member States to ensure a leading role in	of its Member States to ensure a leading role in
the digital economy, the Chips for Europe	the digital economy, the Chips for Europe
Initiative should facilitate better coordination and	Initiative should facilitate better coordination at
closer synergies between the existing funding	and between all levels of government as well as
programmes at Union and national levels, better	closer synergies between the existing funding
coordination and collaboration with industry and	programmes at Union and national levels
key private sector stakeholders and additional	(including centrally managed EU programmes
joint investments with Member States. The	and EU programmes subject to joint
implementation set up of the Initiative is built to	<i>management</i>), better coordination and
pool resources from the Union, Member States	collaboration with industry and key private sector
and third countries associated with the existing	stakeholders and additional joint investments
Union Programmes, as well as the private sector.	with Member States. The implementation set up
The success of the Initiative can therefore only be	of the Initiative is built to pool resources from the
built on a collective effort by Member States,	Union, Member States, the regions, and third
with the Union, to support both the significant	countries associated with the existing Union
capital costs and the wide availability of virtual	Programmes, as well as the private sector. The
design, testing and piloting resources and	success of the Initiative can therefore only be
diffusion of knowledge, skills and competences.	built on a collective effort by Member States,
Where appropriate, in view of the specificities of	with the Union, to support both the significant
the actions concerned, the objectives of the	capital costs and the wide availability of virtual

Initiative, specifically the 'Chips Fund' activities,	design, testing and piloting resources and
should also be supported through a blending	diffusion of knowledge, skills and competences.
facility under the InvestEU Fund.	Where appropriate, in view of the specificities of
	the actions concerned, the objectives of the
	Initiative, specifically the 'Chips Fund' activities,
	should also be supported through a blending
	facility under the InvestEU Fund.

To include the regional dimension.

Amendment 4

Amendment to Recital 15

Text proposed by the European Commission	CoR amendment
The Initiative should build upon the strong	The Initiative should build upon the strong
knowledge base and enhance synergies with	knowledge base and enhance synergies with
actions currently supported by the Union and	actions currently supported by the Union, the
Member States through programmes and actions	Member States and the regions through
in research and innovation in semiconductors and	programmes and actions in research and
in developments of part of the supply chain, in	innovation in semiconductors and in
particular Horizon Europe and the Digital Europe	developments of part of the supply chain, in
programme established by Regulation (EU)	particular Horizon Europe and the Digital Europe
2021/694 of the European Parliament and of the	programme established by Regulation (EU)
Council with the aim by 2030, to reinforce the	2021/694 of the European Parliament and of the
Union as global player in semiconductor	Council with the aim by 2030, to reinforce the
technology and its applications, with a growing	Union as global player in semiconductor
global share in manufacturing. Complementing	technology and its applications, with a growing
those activities, the Initiative would closely	global share in manufacturing. Complementing
collaborate with other relevant stakeholders,	those activities, the Initiative would closely
including with the Industrial Alliance on	collaborate with other relevant stakeholders,
Processors and Semiconductor Technologies.	including with the Industrial Alliance on
	Processors and Semiconductor Technologies, as
	well as with the Smart Specialisation strategies
	at regional level.

Reason

To include the regional dimension.

Amendment 5

Amendment to Recital 19

Text proposed by the European Commission	CoR amendment
Integrated Production Facilities and Open EU	Integrated Production Facilities and Open EU
Foundries should provide semiconductor	Foundries should provide semiconductor
manufacturing capabilities that are "first-of-a-	manufacturing capabilities that are "first-of-a-

kind" in the Union and contribute to the security of supply and to a resilient ecosystem in the internal market. The qualifying factor for the production of a first-of-a-kind facility could be with regard to the technology node, substrate material, such as silicon carbide and gallium nitride, and other product *innovation* that can offer better performance, process technology or energy and environmental performance. A facility of a comparable capability on an industrial scale should not yet substantively be present or committed to be built within the Union, excluding facilities for research and development or small-scale production sites.

kind" in the Union and contribute to the security of supply and to a resilient ecosystem in the internal market. The qualifying factor for the production of a first-of-a-kind facility could be with regard to the technology node, substrate material, such as silicon carbide and, gallium nitride, indium phosphide, silicon nitride, and other *related* product and material innovations that can offer better performance, process technology or energy and environmental performance. A facility of a comparable capability on an industrial scale should not yet substantively be present or committed to be built within the Union, excluding facilities for research and development or small-scale production sites

Reason

Silicon nitride (SiN) is the ideal platform for photonic integrated circuit (PIC) applications, which have a vast spectral range and ultralow-loss waveguide. This makes them highly suited to detectors, spectrometers, biosensors, and quantum computers. For consistency reasons, it is better to also include indium phosphide.

Amendment 6 Amendment to Article 2.1 (10)

Text proposed by the European Commission	CoR amendment
'first-of-a-kind facility' means an industrial	'first-of-a-kind facility' means an industrial
facility capable of semiconductor manufacturing,	facility capable of semiconductor manufacturing,
including front-end or back-end, or both, that is	including front-end or back-end, or both, that is
not substantively already present or committed to	not substantively already present or committed to
be built within the Union, for instance with	be built within the Union, for instance with
regard to the technology node, substrate material,	regard to the technology node, substrate material,
such as silicon carbide and gallium nitride, and	such as silicon carbide, and gallium nitride,
other product <i>innovation</i> that can offer better	indium phosphide, silicon nitride and other
performance, process innovation or energy and	related product and material innovations that
environmental performance;	can offer better performance, process innovation
	or energy and environmental performance;

Reason

Silicon nitride (SiN) is the ideal platform for photonic integrated circuit (PIC) applications, which have a vast spectral range and ultralow-loss waveguide. This makes them highly suited to detectors, spectrometers, biosensors, and quantum computers. For consistency reasons, it is better to also include indium phosphide.

Amendment 7

Amendment to Article 3(1)

Text proposed by the European Commission	CoR amendment
(1) <i>The</i> Initiative is established for the duration	(1) As a first step, the Initiative is established for
of the Multiannual Financial Framework	the duration of the Multiannual Financial
2021-2027.	Framework 2021-2027. An extension under
	the Multiannual Financial Framework
	2028-2034 is required.

Reason

The period until the end of the current MFF in 2027 is not sufficient to achieve the objectives set out in the ECA itself. An extension should already be laid down here.

Amendment 8 Amendment to Article 4 (2) point (b) 1

Text proposed by the European Commission	CoR amendment
strengthening technological capabilities in next	strengthening technological capabilities in next
generation chips production technologies, by	generation chips production technologies, by
integrating research and innovation activities and	integrating research and innovation activities and
preparing the development of future technology	preparing the development of future technology
nodes, including leading-edge nodes below two	nodes, including leading-edge nodes below two
nanometres, Fully Depleted Silicon on Insulator	nanometres, Fully Depleted Silicon on Insulator
(FD-SOI) at 10 nanometres and below, and 3D	(FD-SOI) at 10 nanometres and below, and 3D
heterogeneous systems integration and advanced	heterogeneous systems integration and advanced
packaging;	packaging; this shall include the production of
	chips that are more than 10 nanometres in size,
	for which there is demand from the EU user
	industry;

Reason

The Commission's focus on chips that are below 10 nanometres in size is too narrow and fails to meet the needs of the EU user industry.

Amendment 9

Amendment to Article 8(2), point (d)

Text proposed by the European Commission	CoR amendment
facilitating the transfer of expertise and knowhow	facilitating the transfer of expertise and knowhow
between Member States and regions encouraging	between Member States and regions encouraging
exchanges of skills, knowledge and good	exchanges of skills, knowledge and good
practices and encouraging joint programmes;	practices, encouraging joint programmes, and
	improving cooperation among universities as
	well as between universities, businesses, and

education and research institutions, for example
through an EU-wide system for exchanges
between researchers and laboratories, in order
to train and retain teaching and professional
staff;

The European network of competence centres for semiconductor technology should also cover the issues of training and teaching.

Amendment 10

Amendment to Article 8(3)

Text proposed by the European Commission	CoR amendment
Member States shall designate candidate	Member States shall designate candidate
competence centres in accordance with its	competence centres in accordance with its
national procedures, administrative and	national procedures, administrative and
institutional structures through an open and	institutional structures through an open and
competitive process. The Commission shall, by	competitive process involving regional and local
means of implementing acts, set the procedure for	authorities. The aim shall be to achieve
establishing competence centres, including	synergies with the European Digital Innovation
selection criteria, and further tasks and functions	Hubs and to support the creation of competence
of the centres with respect to the implementation	centres in the regions of the EU. These should
of the actions under the Initiative, the procedure	be integrated into their regional industrial
for establishing the network as well to adopt	ecosystem, provide access to all relevant players
decisions on the selection of entities forming the	across the EU, and enable enhanced
network. Those implementing acts shall be	interregional cooperation. The Commission
adopted in accordance with the examination	shall, by means of implementing acts, set the
procedure referred to in Article 33(2).	procedure for establishing competence centres,
	including selection criteria, and further tasks and
	functions of the centres with respect to the
	implementation of the actions under the
	Initiative, the procedure for establishing the
	network as well to adopt decisions on the
	selection of entities forming the network. Those
	implementing acts shall be adopted in accordance
	with the examination procedure referred to in
	Article 33(2).
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Reason

All SMEs and start-ups in the EU should have access to these centres. This can be facilitated by the regional level, which supports regional industrial ecosystems.

Amendment 11

Amendment to Article 9(1)

Text proposed by the European Commission	CoR amendment
The components listed in points (a) to (d) of	The components listed in points (a) to (d) of
Article 5 under the Initiative may be entrusted to	Article 5 under the Initiative may be entrusted to
the Chips Joint Undertaking referred to in	the Chips Joint Undertaking referred to in
Council Regulation XX/XX amending Council	Council Regulation XX/XX amending Council
Regulation (EU) 2021/2085 and implemented in	Regulation (EU) 2021/2085 and implemented in
the work programme of the Chips Joint	the work programme of the Chips Joint
Undertaking.	Undertaking. Member States shall be required to
	include relevant semiconductor regions in the
	Chips Joint Undertaking.

Reason

Self-explanatory.

Amendment 12

Amendment to Article 10(2) – new point (e)

Text proposed by the European Commission	CoR amendment
	<i>e) it supports industrial supply chains in the EU.</i>

Reason

Integrated production facilities should contribute to strengthening EU industry; the semiconductor needs of industry should play a role here.

Amendment 13

Amendment to Article 11(2) – new point (e)

Text proposed by the European Commission	CoR amendment
	e) it supports industrial supply chains in the
	EU.

Reason

Open production facilities should also contribute to strengthening EU industry; the semiconductor needs of industry should play a role here.

Amendment 14

Amendment to Article 12(1), new second sentence

Text proposed by the European Commission	CoR amendment
(1) Any undertaking or any consortium of	(1) Any undertaking or any consortium of
undertakings ('applicant') may submit an	undertakings ('applicant') may submit an

application to the Commission to recognise the applicant's planned facility as an Integrated Production Facility or Open EU Foundry. application to the Commission to recognise the applicant's planned facility as an Integrated Production Facility or Open EU Foundry. *This shall also apply to businesses that are indispensable for the manufacture of semiconductors or that produce novel precursors or production units. The criteria set out in Articles 11 and 12 shall apply mutatis mutandis.*

Reason

In order to achieve the objectives of the ECA, the manufacture of precursors, such as wafers, or of production units in the EU should also be considered eligible. The criteria should be applied mutatis mutandis.

Amendment 15

Amendment to Article 15(2)

Text proposed by the European Commission	CoR amendment
Member States shall invite the main users of	Member States shall invite the main users of
semiconductors and other relevant stakeholders	semiconductors and other relevant stakeholders,
to provide information regarding significant	including those from like-minded countries, to
fluctuations in demand and known disruptions of	provide information regarding significant
their supply chain. To facilitate the exchange of	fluctuations in demand and known disruptions of
information, Member States shall provide for a	their supply chain. To facilitate the exchange of
mechanism and administrative set-up for these	information, Member States shall provide for a
updates.	mechanism and administrative set-up for these
	updates.

Reason

An assessment of the situation on the basis of European and US data alone is incomplete and therefore inconclusive. Businesses from like-minded countries in Asia should therefore be included.

Amendment 16

Amendment to Article 19(2)

Text proposed by the European Commission	CoR amendment
The Commission may, after consulting the	Based on the results of the European
European Semiconductor Board, limit the	Semiconductor Board consultation, the
measures provided for in Articles 21 and 22 to	Commission shall be required to limit the
<i>certain</i> critical sectors the operation of which is	measures provided for in Articles 21 and 22 to
disturbed or under threat of disturbance on	those critical sectors the operation of which is
account of the semiconductor crisis.	disturbed or under threat of disturbance on
	account of the semiconductor crisis.

Any intervention measures undertaken by the Commission should always be kept to the bare minimum.

Amendment 17

Amendment to Article 19(4)

Text proposed by the European Commission	CoR amendment
The use of the measures referred to in paragraph	The use of the measures referred to in paragraph
1 shall be proportionate and restricted to what is	1 shall be proportionate and restricted to what is
necessary for addressing serious disruptions of	necessary for addressing serious disruptions of
vital societal functions or economic activities in	vital societal functions or economic activities in
the Union and must be in the best interest of the	the Union and must be in the best interest of the
Union. The use of these measures shall avoid	Union. The use of these measures shall avoid
placing disproportionate administrative burden on	placing disproportionate administrative burden on
SMEs.	SMEs. These measures may only be applied
	selectively and as a last resort.

Reason

The emergency toolbox poses the significant risk of hampering investment and the establishment of new businesses. The European Commission must clearly state that these measures are intended as a last resort and will be avoided as far as possible.

Amendment 18

Amendment to Article 21(1)

Text proposed by the European Commission	CoR amendment
Where necessary <i>and</i> proportionate to ensure the	Where necessary, proportionate and technically
operation of all or certain critical sectors, the	feasible to ensure the operation of all or certain
Commission may oblige Integrated Production	critical sectors, the Commission may oblige
Facilities and Open EU Foundries to accept and	Integrated Production Facilities and Open EU
prioritise an order of crisis-relevant products	Foundries to accept and prioritise an order of
('priority rated order'). The obligation shall take	crisis-relevant products ('priority rated order').
precedence over any performance obligation	
under private or public law.	

Reason

It is almost impossible to adapt semiconductor production at short notice. The decisive criterion should therefore be feasibility. The article on priority contracts should also be drafted in such a way that it does not discourage potential investors from investing in the EU. In addition, there are doubts as to the extent to which this would be legally enforceable.

Amendment 19

Amendment to Article 24(1)

Text proposed by the European Commission	CoR amendment
The European Semiconductor Board shall be	The European Semiconductor Board shall be
composed of representatives of the Member	composed of representatives of the Member
States and shall be chaired by a representative of	States with the appropriate professional
the Commission.	competence and shall be chaired by a
	representative of the Commission.

Reason

The Semiconductor Board should be a specialised body and not a purely political body.

Amendment 20

Amendment to Article 24(2)

Text proposed by the European Commission	CoR amendment
Each national single point of contact, referred to	Each national single point of contact, referred to
in Article 26(3), shall appoint a <i>high-level</i>	in Article 26(3), shall appoint a specialist
representative to the European Semiconductor	representative to the European Semiconductor
Board. Where relevant as regards the function	Board. Where relevant as regards the function
and expertise, a Member State may have more	and expertise, a Member State may have more
than one representative in relation to different	than one representative in relation to different
tasks of the European Semiconductor Board.	tasks of the European Semiconductor Board.
Each member of the European Semiconductor	Each member of the European Semiconductor
Board shall have an alternate.	Board shall have an alternate. The Member
	States shall be obliged to involve regions with
	semiconductor ecosystems. The European
	Committee of the Regions shall appoint a
	representative to the European Semiconductor
	Board.

Reason

Given their role in supporting regional industrial ecosystems, including SMEs, as well as science and research, regions with relevant semiconductor ecosystems (e.g. the members of Silicon Europe) and the European Committee of the Regions should be involved in the work of the Board.

Amendment 21

Amendment to Article 26(6)

Text proposed by the European Commission	CoR amendment
Member States shall ensure that national	Member States shall ensure that national
competent authorities, whenever appropriate, and	competent authorities, whenever appropriate, and
in accordance with Union and national law,	in accordance with Union and national law,
consult and cooperate with other relevant national	consult and cooperate with other relevant

authorities, as well as with relevant interested	national, <i>regional and local</i> authorities, as well
parties. The Commission shall facilitate the	as with relevant interested parties. The
exchange of experience between national	Commission shall facilitate the exchange of
competent authorities.	experience between national competent
	authorities.

To include regional and local authorities.

Proposal for a Council Regulation amending Regulation (EU) No 2021/2085 establishing the Joint Undertakings under Horizon Europe, as regards the Chips Joint Undertaking COM(2022) 47 final

Amendment 22

Amendment to Recital 7

Text proposed by the European Commission	CoR amendment
The activities funded by the Chips Joint	The activities funded by the Chips Joint
Undertaking should be covered in one single	Undertaking should be covered in one single
work programme, which should be adopted by	work programme, which should be adopted by
the Governing Board. Before each work	the Governing Board. Before each work
programme is prepared, the Public Authorities	programme is prepared, the Public Authorities
Board, taking into account the advice of the	Board, taking into account the advice of the
European Semiconductor Board and input from	Private Members Board and the European
other relevant stakeholders, including as	Semiconductor Board and input from other
appropriate, roadmaps produced by the Alliance	relevant stakeholders, including as appropriate,
on Processors and Semiconductor Technologies,	roadmaps produced by the Alliance on Processors
should define the part of the work programme	and Semiconductor Technologies, should define
related to capacity building activities and	the part of the work programme related to
research and innovation activities, including their	capacity building activities and research and
corresponding expenditure estimates. For this	innovation activities, including their
purpose, the Public Authorities Board should	corresponding expenditure estimates. For this
include only the Commission and public	purpose, the Public Authorities Board should
authorities from Member States. Subsequently,	include only the Commission and public
on the basis of this definition, the Executive	authorities from Member States. Subsequently,
Director should prepare the work programme	on the basis of this definition and the Strategic
including capacity building and research and	<i>Research and Innovation Agenda</i> , the Executive
innovation activities and their corresponding	Director should prepare the work programme
expenditure estimates.	including capacity building and research and
	innovation activities and their corresponding
	expenditure estimates. The budget for the
	research and innovation activities of the Chips
	Joint Undertaking should be at least equal to
	the estimated budget for the Key Digital
	Technologies Joint Undertaking. The same
	scope and working methods should also be

adopted.

Reason

The Public Authorities Board should not determine the research and innovation agenda in advance, as this would limit the decision-making powers of the Governing Board. The Chips Joint Undertaking should maintain the same research activities, functioning and budget of the Key Digital Technologies Joint Undertaking.

Amendment 23

Amendment to Article 1(7), point (a)

Text proposed by the European Commission	CoR amendment
(7) Article 126 is amended as follows:	(7) Article 126 is amended as follows:
a) (a) In paragraph 1 point (b) is replaced by	a) (a) In paragraph 1 point (b) is replaced by
the following:	the following:
"(b) Establish Union scientific excellence	"(b) Establish Union scientific excellence and
and innovation leadership in emerging	innovation leadership in emerging
components and systems technologies,	components and systems technologies,
including in activities related to lower	including in activities related to lower TRLs;
TRLs; and promote the active	and promote the active involvement of
involvement of SMEs, which shall	SMEs, which, in terms of research and
represent at least one third of the total	innovation actions,
number of participants in indirect actions	shall represent at least one third of the total
and at least 20 % of public funding	number of participants in indirect actions and
dedicated to research and innovation	<i>receive</i> at least 20 % of public funding;
actions should go to them;	

Reason

It is not realistic for SMEs to make up one third of the participants in capacity building activities, as described in the new points (g) to (j) of Article 126(1). The SME share of one third of the number of participants should therefore only apply to the portion dedicated to research and innovation actions, the same as for the 20 per cent share of public funding.

Amendment 24 Amendment to Article 1(7), point (c)

Text proposed by the European Commission	CoR amendment
c) In paragraph 2 point (f) is replaced by the	c) In paragraph 2 point (f) is replaced by the
following:	following:
"(f) establish coherence between the	"(f) establish coherence between the
Strategic Research and Innovation	Strategic Research and Innovation
Agenda of the Chips Joint Undertaking	Agenda of the Chips Joint Undertaking
inputs from other relevant stakeholders,	and Union policies so that electronics
including as appropriate, roadmaps	components and systems technologies
produced by the Alliance on Processors	contribute efficiently."

and Semiconductor technologies and
Union policies so that electronics
components and systems technologies
contribute efficiently."

The Chips Joint Undertaking is not in a position to ensure the required consistency with the activities of third parties.

Amendment 25

Amendment to Article 1(9)

Text proposed by the European Commission	CoR amendment
(9) In Article 129 paragraph 3 is replaced by the	(9) In Article 129 paragraph 3 is replaced by the
following:	following:
"3. By way of derogation from Article 28(4),	"3. By way of derogation from Article 28(4),
the private members shall make or arrange	the private members shall make or arrange for
for their constituent and affiliated entities to	their constituent and affiliated entities to
make a financial contribution of at least	make a financial contribution of up to
EUR 26 331 000 for administrative costs of	EUR 26 331 000 for administrative costs of
the Chips Joint Undertaking. The share of the	the Chips Joint Undertaking. The share of the
total contribution on an annual basis for	total contribution on an annual basis for
administrative costs of the Chips Joint	administrative costs of the Chips Joint
Undertaking by the private members shall be	Undertaking by the private members shall be
35%."	a maximum of 35%."

Reason

The wording could lead to serious ambiguities. It is not clear which limit prevails: the lower limit of at least EUR 26 331 000 or the upper limit of a maximum of 35%. Meanwhile, the Commission has confirmed that the words "at least" in the Commission's proposal were a clerical error. This error was corrected in the compromise text of the Council Presidency of May 25.

Amendment 26 Amendment to Article 1(13)

Text proposed by the European Commission	CoR amendment
(13) The following Article 134a is inserted	(13) The following Article 134a is inserted
Article 134a Additional tasks of the Executive Director	Article 134a Additional tasks of the Executive Director
In addition to the tasks listed in Article 19, the Executive Director of the Chips Joint	In addition to the tasks listed in Article 19, the Executive Director of the Chips Joint
Undertaking shall prepare and, after having taken into account the definition of the Public	

Authorities Board referred to in Article 137(f), as	Authorities Board referred to in Article 137(f),
well as the inputs from relevant stakeholders	submit for adoption to the Governing Board the
including as appropriate, roadmaps produced by	work programme for the joint undertaking, to
the Alliance on Processors and Semiconductor	implement the Strategic Research and Innovation
technologies, submit for adoption to the	Agenda.
Governing Board the work programme for the	
joint undertaking, to implement the Strategic	
Research and Innovation Agenda.	

These contributions are already taken into account when the Public Authorities Board sets its part of the work programme and therefore do not need to be submitted again.

Amendment 27

Amendment to Article 1(15), point (a)

Text proposed by the European Commission	CoR amendment
(15) Article 137 is amended as follows:	(15) Article 137 is amended as follows:
a) The following points (f) and (g) are	a) The following points (f) and (g) are
added:	added:
"(f) before each work programme is	"(f) before each work programme is
prepared, define the part of the work	prepared, define the part of the work
programme related to capacity building	programme related to capacity building
activities and research and innovation	activities, including the corresponding
activities, including the corresponding	expenditure estimates, taking into
expenditure estimates, taking into	account the advice of the Private
account the advice of the European	Members Board and the European
Semiconductor Board and input from	Semiconductor Board and input from
other relevant stakeholders, including as	other relevant stakeholders, including as
appropriate, roadmaps produced by the	appropriate, roadmaps produced by the
Alliance on Processors and	Alliance on Processors and
Semiconductor Technologies;	Semiconductor Technologies;
(g) select proposals corresponding to	(g) select proposals corresponding to
capacity building activities in accordance	capacity building activities in accordance
with Articles 12(1) and 17(2), point (u);"	with Articles 12(1) and 17(2), point (u);"

Reason

The Public Authorities Board should not determine the research and innovation agenda in advance, as this would limit the decision-making powers of the Governing Board. However, the Public Authorities Board should take into account the advice of the Private Members Board on capacity building in order to ensure industrial policy relevance.

II. POLICY RECOMMENDATIONS

THE EUROPEAN COMMITTEE OF THE REGIONS

Importance of the European Chips Act

- 1. insists that the success of the European Chips Act (ECA) is crucial for the EU as a whole, the Member States and all local and regional authorities, as securing industrial production in all regions of Europe depends on having a secure supply of semiconductors; therefore expressly advocates the EU having a clear position within global competition;
- 2. welcomes the Commission's proposal for an ECA as a crucial step towards strengthening the EU, its industry and its security. It is important for the Chips Act to address issues of EU strategic autonomy and technological leadership. The EU must remain a global player in the field of semiconductors. The ambitious target of increasing the EU's market share in semiconductors from the current 10% to 20% by 2030 is therefore the right one;
- 3. shares the objectives of reducing the main strategic dependencies in semiconductor production, supply chains, and the supply of raw materials and precursors through a process of expansion and diversification, by developing semiconductor production in Europe, and by maintaining and strengthening the EU's leading role in research and development. At the same time calls for the production of chips that are more than 10 nanometres in size, for which there is demand from the EU user industry, to be included in the scope of Regulation COM(2022) 46 final; underlines in this respect the importance of know-how protection and patent protection, so that individual countries are not put at a disadvantaged position;
- 4. also welcomes the proposal for an ECA with a view to ensuring swift and consistent implementation of the European Green Deal: without reliable semiconductors, the EU's ambitious environmental and climate targets, increased energy sovereignty and targets for the development of renewable energy cannot be achieved;
- 5. points out that strengthening semiconductor production must at the same time be accompanied by steps to reduce energy and resource consumption and harmful environmental impact right along the value chain, as well as steps to ensure compliance with the sustainability criteria (SDGs) and to mainstream the use of renewable energy sources and mechanisms for the efficient use of water resources in production facilities. In this regard, believes that special attention should be given to these energy and environmental effects in innovative nextgeneration technologies, such as integrated photonics and dedicated heterogeneous systems;
- 6. points out that, in addition to securing the supply of critical raw materials, it is necessary to fully harness the potential of the circular economy. The recovery of raw materials and materials from devices and installations is essential. This must already be taken into account when developing products using semiconductors. The appropriate skills should be developed in the regions and eligibility criteria should be designed accordingly;
- 7. Points out that the EU's disadvantage compared to third countries in terms of natural resources, makes the EU heavily dependent on non-EU suppliers for imports of critical raw materials; encourages the European Commission to address this strategic dependency by intensifying its

work and requirements on chips circularity, notably in design and re-use of material, and to further deepen the EU's trade relations with key international partners;

- 8. in line with its opinion on the *Critical Raw Materials Action Plan*, welcomes new mining activities in the EU with a view to tapping into existing reserves of critical raw materials: stresses that new mining of high technology raw materials in the EU must be based on R&D plans for innovative low-impact mining;
- 9. notes that local and regional authorities (LRAs) have a strong shared interest in having a secure supply of semiconductors due to their local economies' high, indirect dependence on them; therefore, given their proximity to semiconductor ecosystems, LRAs should be given a key role in implementing the ECA; notes, moreover, that all regions will benefit from the ECA, irrespective of whether or not they have semiconductor businesses located within them;
- 10. points out, in the light of current events, the importance of the semiconductor industry having a secure energy supply; this concerns, in particular, the necessary quantities of electricity and grid stability; these are a factor in choice of location for existing installations, but above all for setting up new ones;

Europe's strategic objectives in the field of semiconductors

- 11. calls on businesses to take greater account of their semiconductor needs and the necessary supply chains in an ever-changing geostrategic environment, and to avoid one-sided dependencies, in order to spread risks; the EU needs to better highlight its benefits as a "safe harbour" within the international context;
- 12. calls on the Commission, in the upcoming negotiations with the Council and the European Parliament, to clearly emphasise the importance of the ECA in securing Europe's industrial base, and to demand additional financial contributions from the Member States and the economy;
- 13. suggests that the funding available through the ECA be used strategically to expand existing semiconductor clusters and semiconductor ecosystems, both small-scale and large scale, including by linking them through networks. The chances of the EU holding its ground on the global semiconductor market in the future are greatest if it draws on and builds on its existing strengths, thereby limiting itself to *inter*-dependence on "like-minded countries" and in turn reducing unilateral dependencies on third countries;
- 14. welcomes the establishment of the European Chips Fund; notes that Pillar 2 of the ECA should in principle be open to all kinds of technology and that the funding must be mobilised as soon as possible;
- 15. reiterates that, as a very successful tool, the IPCEIs continue to play an important role in the ECA; points out, however, that the EU and the Member States must act more swiftly in all areas, particularly in the area of permits and support, in order to be able to support industry, including SMEs, in line with its needs;

- 16. emphasises the key importance of new technologies for the further development of the EU as a major centre for semiconductors, in order to remain globally competitive in the area of technology: when implementing the ECA, it will be important to react openly and quickly to the use of new materials, such as gallium nitride, indium phosphide, silicon carbide and silicon nitride, as well as to the use of new processes, in order to enable the development and production of next generation chips; this includes, for example, photonic chips, essential for building an autonomous and sustainable network for data-, tele- and quantum communication, and for autonomous driving, and quantum chips, allowing analyses of far larger amounts of data, performing more powerful calculations in a faster way and performing detailed simulations, as well as hybrid chips and heterogeneous systems where the integration of photonic functions on electronic ICs is one of the critical issues for the future of the semiconductors industry;
- 17. considers it necessary for the EU to place additional emphasis on designing semiconductors and thus to build up its own design capabilities;

Funding for the Chips Act

- 18. criticises the financial envelope proposed for the ECA as being far too low; has doubts as to whether the overall package will be sufficient to enable the EU to compete on the international market for establishing new production facilities; underlines that new initiatives deserve new financial resources and regrets the re-directing of funds from successful programmes, such as Horizon Europe and the Digital Europe Programme;
- 19. calls on the Commission to ensure transparency with regard to the ECA's financial envelope and to ensure adequate funding for all three pillars; in doing so, the Commission should draw on similar initiatives worldwide;
- 20. takes the view that more, new money should be deployed for the implementation of the ECA, and therefore also calls on the Council, the Parliament and the Commission to provide the relevant EU and national subsidies and amend the Multiannual Financial Framework accordingly; as the ECA's strategic objectives extend beyond 2030, the semiconductor sector must be considered a high priority in the revision of the MFF as well as the next multiannual financial framework (MFF);
- 21. considers it necessary to create further incentives to ensure that, in addition to money from the EU, Member States and regions, as well as businesses, provide the necessary funding; points to the importance of the Commission facilitating support in accordance with EU law; the funding must be tied to compliance with environmental, social and governance (ESG) criteria;
- 22. calls on regions and businesses to involve the European Investment Bank (EIB) in financing new projects along the entire value chain; believes that the EIB can make a decisive contribution to the success of the ECA;

Funding and EU State aid rules from a regional perspective

23. calls on the Commission, when assessing and approving in accordance with Article 107(3)(c) TFEU, to interpret the "first of a kind in Europe" criterion generously, as in the case of

semiconductors there is no traditional competitive situation that is relevant to competition in the single market;

- 24. asks the Commission to consider further forms of relief, such as the granting of tax write-offs, in addition to changes to and simplifications in State aid law and procedures, in order to make it easier to set up businesses along the entire semiconductor value chain in Europe;
- 25. considers it necessary, under the "first of a kind" principle, to enable support not only for production facilities, such as the Integrated Production Facilities (IPF) and the Open EU Foundries (OEF), but also for the production of precursors, such as wafers or production units, which are equally relevant when it comes to achieving the objectives;
- 26. welcomes the arrangements provided for in Article 14 aimed at speeding up national planning and approval procedures in favour of integrated production facilities and open EU manufacturing facilities;
- 27. points out that, in order to ensure the supply of semiconductors, not only the production facilities for semiconductors themselves, but also upstream and downstream production facilities, are relevant, with the result that these too must be included when focusing on facilitating and speeding up procedures, in order to avoid bottleneck effects;

Research and development from a regional perspective

- 28. advocates giving the EU a broad approach to R&D by involving customers and users, and avoiding basing development and innovation objectives solely on the further miniaturisation of node structures;
- 29. shares the concerns of the research and higher education sectors that the redeployment of funding under the Horizon Europe and Digital Europe programmes, as provided for in the Chips Act, weakens other areas, thus increasing competition for the remaining funding; therefore expects the funding redeployed from Digital Europe and Horizon Europe to be made available to the programmes again in the course of the funding period;
- 30. draws attention to the fact that national and regional co-financing of projects leads to administrative problems, and calls on the Commission to ensure that this does not constitute an obstacle to participation in research projects; in particular, framework conditions should be designed in such a way as to allow flanking support for projects from national or regional programmes, in the form of co-financing;
- 31. calls on the regions with relevant clusters to actively participate in the Chips Joint Undertaking as a successor to the Key Digital Technologies (KDT) and the Electronic Components and Systems for European Leadership (ECSEL) Joint Undertakings;
- 32. calls on the Commission to define the term "pilot line" more precisely. Access to the pilot lines must be broad and open in order to enable clusters, educational and research institutions, and businesses, particularly SMEs, to participate; SMEs' access to the pilot lines could be achieved both through the Horizon Europe programme and in a decentralised way through national and

regional bodies with experience in supporting start-ups and SMEs in their creation, growth and consolidation, such as regional development agencies;

- 33. calls for existing networks, such as the Industrial Alliance for Processors and Semiconductor Technologies, to be closely integrated into the semiconductor coordination mechanism. All networks should be open to new players, as networks such as the Vanguard Initiative or the network of EU digital innovation hubs can also make an important contribution;
- 34. suggests examining to what extent it is possible to ensure that know-how developed in the EU can be safeguarded, e.g. through extended patent protection, and what measures can be taken to this end; safety aspects should also play a role here;

Securing skilled workers and education and training

- 35. calls on the Member States, LRAs and businesses to place much more emphasis on securing skilled workers: qualified education and training makes a significant contribution to the EU's success as a major centre for semiconductors and is a key criterion for investment decisions; general and vocational education and training in the regions play a crucial role; more women and girls should be encouraged to pursue training in the area of semiconductor technology;
- 36. believes, therefore, that securing skilled workers is one of the keys to success. A coordinated strategy is needed to train younger generations and to retain teachers at universities and research institutions; therefore encourages greater exchanges of researchers between universities, research institutions and businesses, as well as the sharing of laboratory infrastructure across the EU;
- 37. highlights that local and regional authorities have strategic capacities to promote synergies between R&D, education, upskilling, reskilling and training policies that will be vital to attract and uphold a talented workforce;
- 38. recommends creating a traineeship programme dedicated to the semiconductor industry, to be jointly run and financed by industry, the Member States and the EU, with a bursary system and an obligation to work in the industry in Europe for a minimum period of time; additionally, recommends that the Commission consider developing dedicated human capital programmes to attract skilled workers from third countries with an advanced semiconductor industry;
- 39. recommends setting up a Knowledge and Innovation Community (KIC) on Semiconductors, and proposes creating a Semiconductor Academy, along the lines of the Battery Academy, involving industry and research institutions;
- 40. notes the importance of sustaining successful start-ups for the development of semiconductor ecosystems so that they can evolve and know-how is not lost;
- 41. recommends, furthermore, having specific support for the development of innovative chip designs under the Horizon Europe programme, for example within the "Digital, Industry and Space" cluster, so that the EU can maintain its leadership in the design of innovative chips and next generation technologies while reducing its interdependencies with other parts of the world;

Impact of the Chips Act on cities and regions

- 42. notes that, in the event of new businesses being established, considerable input will be required from LRAs and they will need a reliable framework and support from the Member States and the Commission;
- 43. calls on the Commission to keep in mind the impact that the inward movement of businesses has on LRAs; the creation of a framework for the establishment of businesses and the implementation of supporting measures should be understood as regional development and co-financing from the ERDF and the ESF should be made possible;
- 44. notes that this will, in particular, allow Member States with proportionally more limited national resources to achieve a relevant leverage effect. It should also be possible to support the development of existing fabs;
- 45. calls for the ECA to be operationally linked to other key EU policies and projects, such as the REACH Regulation, the Action Plan on Critical Raw Materials, the New Industrial Strategy, the Circular Economy Action Plan and the AI Strategy. Regions should play an important role and be closely involved in this process;
- 46. points out that technological openness and the use of certain hazardous chemicals are necessary for the production of semiconductors and that their production, import or use is regulated by EU chemicals legislation. In the risk assessment referred to in Article 16, it is important to take into account to what extent European economic operators can overcome the legal hurdles associated with chemicals and substances remain securely available on the EU market;

Resilience and Crisis Response

- 47. notes that designing and producing semiconductors in the EU can also contribute to the security and resilience of critical infrastructure in LRAs (energy networks, medical care, transport, administration, public institutions);
- 48. suggests that instead of an "emergency toolbox", a "prevention toolbox" should be set up, since intervention in semiconductor production at short notice is not possible because of its complexity in terms of combinations of different ICs in the final products and of its widespread international supply chain, and is therefore unsuitable as a crisis response. Cooperation and coordination should always take precedence over intervention. Particular attention should be paid to maintaining semiconductor production and the necessary availability of precursors and sub-products;
- 49. calls on the Commission to define the crisis situation, the rights of intervention provided for and the specific action to be taken in the event of a crisis in a more precise and legally certain manner, given the many different causes that may give rise to shortages and delivery problems, and to make it clear that this can only be applied as a last and proportional resort; is concerned that the proposed crisis response mechanism could discourage investment;

- 50. suggests that greater focus should be placed on securing the availability of certain types of semiconductors and the (where appropriate, joint) purchase of critical raw materials (e.g. palladium, neon, C4F6, lithium, gallium, silicon) and precursors (e.g. wafers) necessary for this purpose;
- 51. calls for LRAs to be included in the "semiconductor coordination mechanism", as they can make a valuable contribution to achieving the sought-after network through their local knowledge of research, industry and semiconductor clusters;
- 52. calls for care to be taken, when appointing the Semiconductor Board, to ensure that it is a specialised body and not a political body. The acceptance of the Board and its work largely depends on the trust placed in its members. The industry and the CoR should therefore also be represented with appropriate expertise;
- 53. supports the objective of creating an overall picture of semiconductor value chains, dependencies and requirements in the semiconductor sector; has doubts, however, as to whether the resulting amounts of data can be processed in a safe and targeted manner; draws attention to the fact that, without valid data from non-European players, it will not be possible to get a meaningful picture;
- 54. recommends the swift adoption and implementation of the ECA, and calls on the European Commission, the Council of the European Union and the European Parliament to take into account the CoR's recommendations, and to reach an agreement under the Czech presidency;
- 55. welcomes that the Commission has executed a subsidiarity analysis for the proposal for a Chips Act and agrees that the objectives of the proposal cannot be achieved by Member States acting alone, as the problems are of a cross-border nature, and not limited to single Member States or to a subset of Member States. The CoR therefore supports the European Commission's analysis that action at Union level can clearly best drive European actors towards a common vision and implementation strategy.

Brussels, 12 October 2022

The President of the European Committee of the Regions

Vasco Alves Cordeiro

The Secretary-General of the European Committee of the Regions

Petr Blížkovský

III. PROCEDURE

Title	European Chips Act on strengthening Europe's
	semiconductor ecosystem
Reference(s)	COM(2022) 46 final
	COM(2022) 46 final, Annexes 1 to 3
	COM(2022) 47 final
	COM(2022) 45 final
	COM(2022) 782 final
Legal basis	Article 307(4) TFEU
Procedural basis	Rule 41(b)(i) RoP
Date of Council/EP referral/Date of	
Commission letter	
Date of Bureau/President's decision	N/A
Commission responsible	Commission for Economic Policy (ECON)
Rapporteur	Thomas Gottfried Schmidt (DE/EPP)
Analysis	25 March 2022
Discussed in commission	12 May 2022
Date adopted by commission	8 July 2022
Result of the vote in commission	Majority
Date adopted in plenary	12 October 2022
Previous Committee opinions	Action Plan for Critical Raw Materials
	ECON-VII/011 COR-2020-04292-01
	Updating the 2020 New Industrial Strategy:
	Building a stronger Single Market for
	Europe's recovery
	ECON-VII/017 COR-2021-02688-00-00
	New Circular Economy Action Plan
	ENVE-VII/006 COR-2020-0
	Safe and sustainable chemicals for a toxic-free environment in Europe's cities and regions ENVE-VII/014 COR-2020-
Date of subsidiarity monitoring	N/A
consultation	