[redacted]

Main messages

- Pillar 2 ('Security of supply') in the **EU Chips Act** is devoted to attracting investments in production facilities. '**First of a kind'** (FoaK) provides a path for **companies to receive financial support** when they make use of technologies not currently present in the EU.
- First-of-a-kind is open to the two main types of production facilities: "Integrated Production Facility" (IPF), manufacturing of chips by the semiconductor vendor, or "Open EU Foundry" (OEF), production of chips contracted by the semiconductor vendor.
- Semiconductor manufacturing in Europe is estimated to have **20-25% higher costs than in East Asia.** First-of-a-kind support **allows companies to offset this difference when investing in Europe** and remain competitive in a global basis.
- For 'First-of-a-kind' eligibility a broad scope is considered to assess the innovation level of the production technology (compared to existing facilities in the EU). This includes innovation regarding technology node, computing performance, level of security, safety or reliability, energy and environmental performance, substrate material, and production processes that lead to efficiency gains.
- Similarly, the FoaK obligation for companies to a sustainable investment (beyond the initial investment) ensuring technology evolution is open to different innovation dimensions as indicated above.

[redacted]

Main messages

- Enhancing resilience, accelerating the green and digital transitions, and strengthening Europe's open strategic autonomy in critical sectors were the key pillars of the Commission's New Industrial Strategy and its May 2021 Update. They continue to be relevant – even more so – for boosting the competitiveness of Europe's single market.
- The EU budget and NextGenerationEU, notably the **Recovery and Resilience Facility**, are there to speed up the recovery in Europe while reinforcing our commitment and steering investments in support of socially just/fair, green and digital transitions, leaving no one behind.
- The sizeable **unspent amount of the current multi annual financial framework** is to be strategically focused on these ambitions and leveraged to attract private investments.
- **Rule of law, innovation capacities and skills of the labour force** are major assets. We will continue to invest in them.

[redacted]

Main messages

- We need to scale up investments in telecom infrastructures in Europe to meet the Digital Decade targets of 2030, and we need to mobilise all possible sources of investment. In addition, public **funding will be indispensable to address market failure**, particularly in rural areas and probably also for **5G deployment along transport paths.**
- The preliminary findings of a study recently launched by the Commission estimates the future investment needs in Europe at around **EUR 114 billion** to achieve complete population coverage with **fibre** and **EUR 33 billion** to deploy high quality **5G networks** in all populated areas. A further **EUR 26 billion** would also be required to ensure full 5G coverage of **transport paths**.
- It is worth noting that significant **cost-savings can be achieved if fibre and 5G are deployed synergistically**. In this context, the Policy Programme "Path to the Digital Decade", which should enter into force at the end of the year, will provide a powerful policy platform for Member States and the Commission to **improve the framework conditions for investments and to coordinate public funding**. This is over and above the **infrastructure sharing and co-investment incentives** already included in the recent European Electronic Communications Code.
- In parallel, the telecom sector is undergoing probably the largest technological and structural evolution since the liberalisation of the market in the late 80's. This is both an uncertainty for investors but also an **opportunity to establish new investment models** attracting new telecom investments, as we can already see around Tower companies or the emerging Cloud and Open Internet Architectures.
- This is why the Commission will be launching soon a **public consultation on the future of the telecom sector** in order to better understand the expected market evolution and future investment dynamics.
- While we develop new investment paradigms, we still need to remain very attentive to meet our **high network security standards and to avoid creating new dependencies** that would threaten the EU's strategic autonomy.

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- Digital technologies are major consumers of energy. ICT is responsible for 5-9% of global electricity use and around 3% of greenhouse gas emissions[1]. This comes not only from data centres, but also from the extraction and processing of the materials needed to supply us with our short-lived consumer electronic devices. We need to work on both of these, particularly in the face of the energy crisis, and we are doing so. We announced our **circular electronics initiative** in the Circular Economy Action Plan, and we have already implemented several of its actions. We have also got the CEOs of most major ICT companies on board through the **European Green Digital Alliance** launched in March 2021.
- But the **potential of digital technologies to deliver savings** generally outweighs their negative impacts. This is obvious in things such as **smart metering**, but think also about how track and tracing (for example using the **Digital Product Passport**) could enhance the quality and quantity of recycling, enabling closed loop systems, increasing the purity of secondary raw materials, and enabling us to **identify and track critical raw materials** essential to our future renewable technologies, so they can be recovered and recycled.

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Main messages

- The **European Green Deal is our growth strategy**, we remain committed to it as the basis for our post-pandemic recovery, and as the best way to meet the **challenges of our energy and materials dependencies**, which have been recently thrown into relief.
- The need to move towards renewables and energy efficiency is clear, but we must also consider the embedded energy in the materials that we use. Using recyclates (**secondary raw materials**) massively **reduces the related energy consumption**, reducing both input costs for business and environmental impacts. For example **energy use for recycled steel and aluminium are about 5% of the amounts needed to extract and process virgin**.
- So we need to **improve both the quantity and quality** of those recyclates. And by making products and assets last longer, and by using them more intensively and optimally, we reduce the need to replace them and duplicate them: "what you don't waste you don't need to replace".
- Circular business models are no longer a niche for disruptive companies working in re-use, remanufacturing, repair and recycling. The Circular transition is about **moving the mainstream towards circular delivery models**. For example Philips have been applying the "products-as-a-service" model by **selling light instead of lightbulbs** to commercial clients. This not only provides an in-built incentive to reduce energy consumption, but it leads to longer lasting light bulbs, better maintenance and a continued relationship with the customer that does not end in the light bulb shop.

[1] 2022 Strategic Foresight Report Twinning the green and digital transitions in the new geopolitical context, COM(2022) 289 final of 29.06.2022

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Main messages

- DG COMP to provide
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Main messages

- DG COMP to provide

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Main messages

- Industry is critical to the green and digital transitions. And green transitions will be critical to industrial competitiveness and resilience. The great acceleration in global resource use has taken place over the last 50 years with a tripling of global consumption of materials, but it is much more recently that our own vulnerabilities as a resource-weak continent have been really highlighted. There has been a confluence of the interests of the environment, industry and strategic autonomy in decoupling our growth and wellbeing from material and energy use. Industry has to be part of the solution, but how?
- Increasing **resource efficiency** - materials constitute more than 45% of input costs of German manufacturing companies[2]: more than twice as much as labour. Yet we continue to talk about productivity as a synonym for labour productivity. **We need to get more added value per tonne of materials**, not only more added value per man-hour. As global pressure increases on materials, companies that invest in **industrial symbiosis, 3D printing, secondary material use and closed loop systems** will be more resilient.
- At the other end of the product life-cycle, **we need to get more value out of our waste**. From packaging to electronics, from building products to cars, all should be designed for easy dismantling and recycling. In that way we can build not only the quantity of recyclates available for industry, but also – and crucially – their **quality.**
- We need to make sure that **products last as long as possible and are used optimally**. Once a product becomes waste it has lost all of its functionality and the vast majority of its value. Industry has to look beyond sales, to consider how it can capture profits from the services needed to keep products functional for longer. This can mean retaining ownership of the product and selling it as a service. Alternatively it could mean providing post-sales services such as up-grading, take-back or remanufacturing.
- In most cases – whether in the field of mobility, agriculture, construction or consumer goods, the two transitions go hand in hand. Whether this comes from the ability to **track and trace** the product, to develop a **digital twin for predictive maintenance**, or **3D printing** of spare parts.
- Transitions are disruptive, but if they are predicted and investments are made early enough and in the right direction, we can make the "creative destruction" more creative and less destructive. This is particularly important if we are to ensure just transitions. We will need to match **early investments** with making sure that the right **skills** are developed and available.
- Through the **European Green Deal we are creating the right legislative framework and economic incentives for the transitions**. Giving clarity and predictability for investors.
- In practical terms I would encourage all of you to actively engage in the European Green Digital Coalition we helped establish in March 2021; and for those of you already signed up (including Accenture, Eriksson, IBM and Vodafone) to deliver on the pledges you made at its outset.

[2] VDI Zentrum Ressourceneffizienz - ein Kompetenzzentrum des BMUV (ressource-deutschland.de)

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Main messages

- As the latest annual ENISA Cybersecurity Threat Landscape demonstrates, **state sponsored actors are among the most prominent threat actors.** Indeed, Russia's military aggression against Ukraine has been accompanied by malicious cyber activities, such as the attack on the VIASAT satellite network, which carry the risk of spillover into the EU. EU Member States, as well as our neighbours, have also been targeted by pro-Kremlin actors in retaliation for their solidarity with Ukraine. As a result, the EU and its Member States have been exercising constant vigilance and cooperating closely.
- The revised **Network Information Security (NIS) directive** was agreed this year by the Parliament and Council. It will boost the overall level of cybersecurity in the EU by ensuring Member States' preparedness and cooperation, as well as a culture of **security across sectors that are vital for our economy and society** and that rely heavily on ICTs, such as energy, transport, water, banking, financial market infrastructures, healthcare and digital infrastructure.
- The new directive also formally creates the CyCLONe network, composed of Member State cybersecurity authorities and the Commission. The purpose of the network is the **coordinated management of large-scale cybersecurity incidents and crises at operational level,** and to support information exchange between Member States and EU institutions, bodies and agencies.
- Also this year, the Commission adopted in September its proposal for a **Cyber Resilience Act.** It is an unprecedented set of rules for **mandatory cybersecurity requirements for manufacturers and developers of products with digital elements**, throughout their whole lifecycle, in order to address the ever-expanding attack surface presented by the growth of connected devices.
- **Cooperation with the private sector is indispensable**. At a European level, this is already taking place notably through the EU CyberNet (the **EU's Cyber Capacity Building Network**) and the **Global Forum on Cyber Expertise** (GFCE). Developing ties with the private sector can act as an amplifier of public capacities, in particular in a context of **skills shortages across the EU**, and identifying and coordinating these private partners could make a difference in the event of large-scale incidents.
- In particular, the **private sector has provided pivotal cybersecurity support to Ukraine**, in the form of hardware, software and expertise. We are keen to learn lessons from this experience.

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Main messages

- The establishment of the **Trade and Technology Council (TTC) with India** marks the importance the EU attaches to cooperating with India given its technological strengths and possibilities to unleash an important untapped growth potential for trade. A **high-level Digital Investment Forum** to be organised in the context of the TTC could serve as a platform for business stakeholders on both sides to discuss related challenges and opportunities.

- India's policies of promoting locally-based manufacturing and development of a home-grown digital industry could potentially undermine regulatory convergence and complicate market access. **Keeping businesses and other stakeholders closely involved in tackling these issues** will be essential to use the leverage they can exert on government players.
- EU and Indian businesses can also **share their market and opportunities knowledge**, access to finance, facilitation schemes, etc., specific to digital universe
- Business leaders from both sides could also discuss **concrete opportunities for digital cooperation**, raise issues of concern and foster innovation/start-up cooperation
- **Adhering to international standards and eliminating barriers to trade** would help create a "no-surprise" business approach, which would foster trade and investment, and ultimately strengthen the EU-India partnership.

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Main messages

- DG COMP to provide

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Main messages

- **Resilience is first and foremost the responsibility of economic actors**. But we are living in exceptional times due to the Russian aggression in Ukraine. Exceptionally high and volatile energy prices as well as brutal supply chain disruptions in critical raw materials supply chains are putting at risk many industries.
- We need to get the balance right between fostering open, competitive markets in the EU and globally, *and* supporting EU industry in the green and digital transitions.
- The context is difficult, and we need to work together to ensure that our actions are complementary and also pass consistent messages.
- We need to support the industry intelligently, considering our position internationally and reactions from trading partners. There is **no margin in the EU budget for strategic investments that are not well targeted.**
- Trade policy contributes to the competitiveness of EU industry and to supply chain resilience by fostering open undistorted trade and investment, diversifying sources of supply, opening export markets and providing tools to respond to the weaponisation of trade.
- The **EU is very active in accompanying industry's resilience effort**: we have launched the **Chips Act**, mobilising vast resources to ensure that at least a fifth of global semiconductor production will take place in Europe. The Chips Act will mobilise more than **EUR 43 billion** of public and private investments and set measures to prevent, prepare, anticipate and swiftly respond to any future supply chain disruption.
- The Commission will put forward a **Critical Raw Materials Act**, for Europe to tilt the balance of power in such critical supply chains, focusing on strategic applications, building on the exiting network of national raw materials agencies.
- We are speeding up the decarbonisation of our economy while **reinforcing energy security**. In parallel we are reinforcing our relationship with likeminded countries always favouring international cooperation to solve global problems.

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Main messages

- Building on the successful experience of the EU Digital Covid Certificate that positioned the EU as a standards-setter in the area of digital health data, the European Health Data Space will set a **stable and reliable legal framework for the exchange of health data with third countries**, subject to the EU law requirements, thus promoting strong cooperation.
- The European Health Data Space will address international cooperation both on **primary and secondary** use of health data.
- On **primary use**, **third countries have the possibility** to become part of the MyHealth@EU infrastructure. To do this, they must show that they have built systems that demonstrate **full compliance with all our requirements**.
- When third countries are connected this way, sharing of e.g. patient summaries will work the same way as it will inside the EU/EEA.
- For **secondary use**, there are two possibilities:
  - One is that **data users from third countries can apply for data access** for secondary use for research and innovation purposes, under the same conditions as data users from the EU/EEA.
  - The other possibility is **that third countries (or international organisations) may apply to become authorised participants in the HealthData@EU infrastructure**. This would work in a similar manner as for third countries joining the MyHealth@EU infrastructure for primary use, including reciprocity.

[redacted]

Main messages

- Technologies are expected to play a key role in achieving climate neutrality, reducing pollution and restoring biodiversity. By measuring and controlling inputs, and with increased automation, technologies like robotics and the internet of things could improve **resource efficiency** and strengthen the flexibility of systems and networks.
- Energy-efficient, blockchain-based data management across the lifecycle and value chain of products and services could galvanise the **progress towards a more circular economy and competitive sustainability.**
- The proposed **Ecodesign for sustainable products regulation** intends to ensure that in 2050, all products on the European market are sustainable, it also aims to keep products in use as long as possible via improved design, production and processes and improved reuse, repair, disassembly, and durability of products.
- A key element of this proposal are **digital product passports (DPP)** that enable enhanced material component and end-to-end traceability and make data more accessible. This is essential for viable circular business models.
- The **DPP are foreseen in the Batteries Regulation** and will also be relevant for the end of life of batteries, for the appropriate dismantling and recycling of components and materials.

[redacted]

Main messages

- The EU is currently discussing with the US on the foreseen impact of the IRA. While US climate and industrial objectives are legitimate, the Commission believes that these **should not come at the expense of international trade rules** (as the IRA is largely based on local content requirements) and the level playing field between partners. A **US-EU Inflation Reduction Act Taskforce** was launched last week to address EU concerns.
- Investment opportunities for industries' green transition also exist in Europe. The EU offers a comprehensive and holistic approach by **focusing on both supply and demand with non-discriminatory financial incentives and industrial cooperation.**
- Not only is the EU **boosting its domestic production** (through Industrial Alliances and IPCEIs), but it is also **diversifying its sources of supplies** through international cooperation to make EU supply chains and industries more resilient.
- EU Industrial Alliances and Partnerships have also proven to be effective frameworks for driving innovation and manufacturing excellence in strategic sectors.
- The European Commission recent**ly cleared over EUR 10 billion in State aid for hydrogen projects.** We will soon see the first large scale projects take shape.
- Thanks to the **European Battery Alliance**, we will increase the manufacturing capacity of the EU to **70% of European demand in 2025 and 90% in 2030**. In just five years we went from a virtually non-existing industry to the current 10 gigafactories, with 20 more in the pipeline.
- And we aim to replicate this success for **biomethane and solar energy**, as the industrial Partnership on Biomethane was launched on 28 September, and on 9 December we will be officially launching the European Solar Photovoltaic Industrial Alliance, which will help **scale up an innovative and value-creating industry in Europe, and lead to job creation here.** This will increase the resilience of the EU energy sector, the competitiveness of EU industry and the security of supply for green energy.
- While we realise the potential negative effects of the IRA on the EU industry and on the energy transition, we are **looking carefully at what aspects of IRA could reasonably be applied to the EU, while respecting WTO rules. at**. We are starting to implement a series of additional countermeasures including on **green public procurement** to support our renewable energy manufacturing chain, in particular on **wind energy where we are global leaders**, and an **EU Raw Materials Act** is being drafted (a public consultation is currently ongoing).

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Main messages

- To be provided by DG COMP

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Main messages

- To be provided by DG COMP