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PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL
COMMITTEE AND THE COMMITTEE OF THE REGIONS**

**An Integrated Industrial Policy for the Globalisation Era
Putting Competitiveness and Sustainability at Centre Stage**

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1. EUROPE NEEDS INDUSTRY

Now more than ever, Europe needs industry and industry needs Europe. The Single Market, with 500 million consumers, 220 million workers and 20 million entrepreneurs, is a key instrument in achieving a competitive industrial Europe. One out of four jobs in the private sector in the European Union is in manufacturing industry, and at least another one out of four is in associated services that depend on industry as a supplier or as a client. 80% of all private sector research and development efforts are undertaken in industry – it is a driver of innovation and a provider of solutions to the challenges our societies are confronted with.

It is essential to increase productivity in **manufacturing industry and associated services** to underpin the recovery of growth and jobs, restore health and sustainability to the EU economy and help sustain our social model. Industry is therefore at centre stage of the new growth model for the EU economy as outlined in the Europe 2020 Strategy.

The financial and economic crisis has refocused attention on the central importance of a **strong, competitive and diversified industrial manufacturing value chain** for the EU's competitiveness and job-creation potential. This communication sets out a strategic framework for a new integrated industrial policy that will stimulate economic recovery and jobs by ensuring a thriving world-class industrial base in the EU.

SMEs make up some 2/3 of industry's employment and a large share of EU industry's growth and jobs potential is to be found in its lively and dynamic SMEs. Promoting the creation, growth and internationalisation of SMEs thus has to be at the core of the new EU integrated industrial policy.

In the last decade the **global business environment** has changed radically¹. This results in both challenges and opportunities for European industry: industrial policy should help industry seize these opportunities. EU industry competes with China, Brazil, India and other emerging economies also on high-value products. Technology, ICT and skills are becoming increasingly important for international competitiveness. International value chains are becoming increasingly interlinked and there is increasingly strong competition for scarce energy and raw materials. EU industry must also take the lead in the transition to a low-carbon resource-efficient economy.

There are reasons to be confident about the ability of EU industry to overcome these challenges and to continue being the motor for growth in the EU economy. Up to the onset of the financial and economic crisis, **European industry** had fared rather well in this rapidly changing environment. It had successfully maintained its share of world trade over the last decade in the face of stiff pressure from new competitors. Manufacturing itself accounts for 75% of exports. Sectors such as pharmaceuticals and engineering developed strongly. The motor, chemicals, and aerospace industries were also expanding. Whilst the economic crisis initially triggered a **temporary collapse of manufacturing output**, a sharp recovery has followed as world trade growth resumed and as excess stocks were eliminated. Of course some sectors have been more substantially and durably affected than others.

¹ DG Enterprise and Industry: 'EU Manufacturing Industry: What are the Challenges and Opportunities for the Coming Years?'

A vibrant and highly competitive EU manufacturing sector can provide the resources and many of the solutions for the societal challenges facing the EU, such as climate change, health and the ageing population, and the development of a healthy, safe and secure society and thriving social market economy.

The necessary **transition to a more sustainable, inclusive and resource-efficient economy** will have to be supported by both horizontal and sectoral policies at all levels and will require strengthened European governance and social dialogue.

2. A FRESH APPROACH TO INDUSTRIAL POLICY

This Communication proposes a fresh approach to industrial policy that will put the EU economy on a dynamic growth path strengthening EU competitiveness, providing growth and jobs, and enabling the transition to a low-carbon and resource-efficient economy.

An ambitious strategy framework for a new industrial competitiveness policy must put the competitiveness and sustainability of European industry at centre stage. This requires that industrial policy is understood in its wider sense:

First, it is about those policies that have an impact on the cost, price and innovative competitiveness of industry and individual sectors, such as standardisation or innovation policies, or sectoral policies targeting e.g. the innovation performance of individual sectors.

Second, it is **necessary to consider the competitiveness effects of all other policy initiatives** such as transport, energy, environmental or social and consumer-protection policies, but also the single-market policy or trade policies. They are crucial components of the overall package as they can have an important influence on the cost, price and innovative competitiveness of industry.

This fresh approach is characterised by:

- **Bringing together a horizontal basis and sectoral application.** The existing challenges require demanding adjustment efforts and ambitious transition strategies by different economic sectors. **All sectors are important and the Commission will continue to apply a tailor made approach to all sectors.** Where relevant, the Commission will consider appropriate measures to inform consumers and promote industrial excellence in given sectors. **Coordinated, European policy responses.** The division of labour across the whole globe is intensifying and the concepts of national sectors or industries with little interaction with other sectors or the rest of the world are becoming less relevant.
- **The whole value and supply chain** must be considered, from access to energy and raw materials to after-sale services and the recycling of materials. And some parts of this chain are bound to be outside Europe; hence it is necessary for all industries to have a ‘globalisation reflex’.
- **The Commission will regularly report on the EU’s and Member States’ competitiveness and industrial policies and performance.** As many of the relevant framework conditions for a competitive and sustainable industry are set at Member State

level, the monitoring should not only cover competitiveness performance but also competitiveness policies².

The success of this new industrial policy will translate directly into increased growth and jobs and the improved international competitiveness of Europe's industry. Moreover resource and energy use and greenhouse gas emissions should be decoupled from output growth in line with the overall ambitions of the Europe 2020 strategy.

3. IMPROVING FRAMEWORK CONDITIONS FOR INDUSTRY

3.1. Competitiveness-proofing and implementing smart regulation

Despite a well-developed body of EU legislation and regulation, there is still significant scope for better regulation at the European and the national level. A further move towards **smart regulation**³ at all levels of regulatory intervention and across all of the different policy fields affecting industrial competitiveness is essential. This has two dimensions.

First, it is important to ensure that all policy proposals with a significant effect on industry undergo a thorough analysis for their impacts on competitiveness. Examples of such measures are new internal market legislation, major financial markets regulations that may affect access to finance, and new climate change or environmental legislation. **The analysis of impacts on competitiveness would be carried out through the existing impact assessment process** by:

- assessing and reporting the overall impacts of a proposal on competitiveness, including the investment, cost, price, and innovative implications for industry and individual sectors, as well as consumer satisfaction and taking particular account of the potential interactions between a policy proposal and other existing or planned legislation and regulation;
- ensuring the transparency of planned impact assessment work through the publication of roadmaps for all initiatives likely to have significant impacts, including in particular those on competitiveness;
- soliciting the opinion of businesses and other stakeholders in the preparation of significant legislative initiatives through stakeholder consultation and by encouraging them to make use of the roadmaps in preparing their inputs into the policy making process;
- continuing to ensure that all significant Commission proposals likely to have significant effects, including action plans (and trade negotiation mandates), undergo an impact assessment and are submitted to the Impact Assessment Board.
- indicating in the roadmaps accompanying the annual Work Programme which measures would undergo impact assessment.

The second element will be **ex post evaluation** of the effects of legislation on competitiveness. The systematic evaluations of legislation must become an integral part of smart regulation. Evaluation of the results will lead to more responsive, evidence-based and

² Commission Staff Working Document on Member States' competitiveness performance and policies SEC(2010) 1272. The key findings of this report regarding challenges that are shared by many EU Member States are highlighted in boxes in the text.

³ COM(2010) 543

transparent policy-making and help to identify new opportunities for improving the quality of legislation, including simplification and administrative burden reduction. Since legislation in the past naturally focussed on tackling primary objectives (such as ensuring Single Market regulation, meeting environmental objectives etc.), potential spillovers on industrial competitiveness and in particular the cumulative impact of legislation was not always fully evaluated. The Commission thus intends to complement evaluation of individual pieces of legislation with more comprehensive policy evaluations. These “fitness checks” will assess whether the regulatory framework for a policy area is fit for purpose and, if not, what should be improved. This process will aim to reduce excessive burdens and streamline layers of legislation built-up over time by identifying overlaps, gaps, inconsistencies and obsolete measures. The experience gained with the simplification of legislation in the context of the "New approach" for the Single Market for goods might provide valuable insights in this respect.

Despite substantial progress in recent years, the large majority of the Member States still face serious and identifiable challenges regarding smart regulation and the business environment, especially for SMEs. Increased and more systematic efforts need to be made by Member States to reduce administrative burden, to pursue better regulation and e-government policies, to apply the "think small first" principle and to simplify support schemes. The exchange of best practice among policy makers can allow policy objectives to be achieved in less burdensome ways.

It is also necessary to continue to improve the business environment especially for SMEs. In this respect, much progress has already been made under the Lisbon Strategy and the **Small Business Act** adopted by the Commission in June 2008⁴. However, further progress is essential through sustained application of the ‘think small first’ principle and through new initiatives to support SMEs’ competitiveness, such as access to eco-markets and eco-innovation, and cooperation between enterprises and internationalisation.

⁴ COM(2008)394

The Commission will:

- *carry out a reinforced analysis of the impacts on industrial competitiveness for all important new policy proposals with significant effects on industry as part of the impact assessment process, and engage in ex-post evaluations and ‘fitness checks’ of EU legislation including industrial competitiveness issues (2011 onwards);*
- *review the Small Business Act in order to continue to improve the business environment for SMEs and address emerging issues such as access to eco-markets and eco-innovation, cooperation between enterprises and internationalisation. (2010)*

Member States are invited to:

- *ensure an assessment of the impacts on industrial competitiveness of their own major policy proposals, implement ‘fitness checks’ of their own legislation,*
- *implement the Small Business Act, make further improvements in the business environment, and ‘think small first’.*

3.2. Improving access to finance for businesses

It is essential to make **financial markets more resilient and efficient** and to ensure that they have the right incentives to finance the real economy and investment, rather than engaging in financial market speculation. Financial market regulation must avoid jeopardising the shorter-term financing needs of the real economy and the ability of companies to hedge risks.

Access to finance has been identified by most Member States as an important bottleneck especially for SME and innovation financing. Many countries have used the Temporary State Aid Framework to develop economic recovery measures. In particular, Member States have reinforced export credit, export insurance and SME bank loan guarantees schemes. Late payments by the public sector still remain a problem in the majority of countries and in some countries there is clear scope to substantially reduce payment delays.

In the wake of the financial and economic crisis, **access to finance** for businesses remains a major challenge, especially for SMEs. Credit availability is still not back to normal and financial markets remain risk averse. The Commission has established the SME Finance Forum with financial institutions and business representatives to assess and propagate best practices and find new innovative solutions to ensure access to finance for businesses, especially SMEs.

Modernising Europe’s industrial base and the infrastructure on which it relies will require substantial new investment, entailing **more private capital for productive investments**, in particular through venture capital markets. This applies especially to the financing of start-ups, dynamically growing firms and research and development and innovation that often cannot be financed out of cash-flow. Given the current very significant deterioration in the state of public finances in several Member States, new and innovative solutions should be explored, including schemes co-funded by EU Regional Policy and the CAP for the agri-food sector, in order to ensure efficient and effective financial support to help align public funding and incentive mechanisms with the strategic targets of the EU.

Large-scale private investment projects and infrastructure investment also rely on well-functioning financial markets. They can attract private and public capital from outside the EU, including **foreign direct investment** from sovereign wealth funds. It is essential that such funds operate in an open investment climate and adhere to certain standards with regard to transparency and governance, in line with the best practices established by the IMF and OECD.

The Commission will:

- *in line with the Communication on next steps in financial services reform⁵, will bring forward legislation to ensure that financial markets become more resilient and efficient, whilst ensuring that they do not jeopardise the financing needs of the real economy. Potential impacts on access to finance, especially for SMEs, will be evaluated and taken fully into account when preparing future legislation;*
- *will examine whether European financial instruments can be refocused in the next programming period post-2013 to help overcome market failures in financing small businesses and innovation;*

Member States are invited to develop and share best practices on governmental schemes for access to finance (2011/12).

4. STRENGTHENING THE SINGLE MARKET

4.1. Developing the Single Market and enforcing intellectual property rights

The single market has been one of the main motors of economic growth in the European Union over the last 20 years. It has provided EU industry with considerable reductions in cross-border trading costs, increased competition, and provided considerable economies of scale and scope from the availability of a Europe-wide market. Yet a number of barriers remain. They include divergent national rules, duplication of procedures and difficulties with accessing some market sectors. The Single Market Act aims to address these barriers and at the same time to renew confidence in the single market. The confidence of businesses, workers, investors and consumers that they will all benefit from a single market that gives rise to a highly competitive social market economy.

A substantial **approximation of law** has taken place in numerous fields of legislation relevant for economic activity. Nevertheless, European industry and citizens are typically still confronted with 27 very detailed different legal environments at national level, as well as the regional level. This hampers the efficient allocation of resources in Europe and the competitiveness of European industry. It is thus important to screen existing legislation and administrative procedures to **identify the scope for further efficiency-enhancing harmonisation**. Whilst some of this work has already started, in many areas work still needs to be undertaken.

Business-related services such as logistics, facility management, design, marketing and advertising are becoming ever more essential to modern manufacturing. They are both essential inputs and enhance the value of products. Whilst the implementation of the Services

⁵ COM(2010) 301.

Directive has removed administrative barriers to cross-border service provision, there are still other areas where barriers remain and where the functioning of the internal market for services needs to be improved. Industrial users of external services are thus confronted with a market which is heavily fragmented, non-transparent, and often lacking well-defined quality standards. Creating a thriving Single Market in business-related services requires these issues to be urgently addressed.

Improvements in the **European system of intellectual property rights** are essential and long overdue, especially an effective EU Patent and patent litigation system. More effectively assignment, management, and use of intellectual property rights are the key to unleash the R&D and innovation efforts that are crucial for lasting competitiveness. Moreover, the assignment of these rights must go hand in hand with effective enforcement. **Counterfeiting and piracy** in the Single Market and abroad affect an increasing number and variety of sectors and a wide range of individual businesses. The counterfeiting of goods such as pharmaceuticals, electronic equipment and auto parts can cause serious health and safety risks, as well as reducing industry profitability and the incentive to innovate.

The Commission will:

- *ensure the timely implementation of the Single Market Act;*
- *draw up a multi-annual EU action plan to develop EU market surveillance. Moreover, in cooperation with national customs and market surveillance authorities, develop guidelines for customs control in the area of product safety.*
- *screen EU legislation in selected areas, including in particular the free movement of goods, to identify where further harmonisation could significantly reduce the costs of doing business across borders;*
- *set up a High Level Group on Business Services to examine market gaps, standards and innovation and international trade issues in industries such as such as logistics, facility management, marketing and advertising (2012);*
- *will set out its future action to enhance the enforcement of intellectual property rights in November 2010, including in particular an initiative to strengthen the European Observatory on Counterfeiting and Piracy.*

The Council and European Parliament are invited to:

- *adopt urgently the proposals for an EU patent and a unified patent litigation system to allow the first patents to be issued in 2014;*
- *develop and share best practices and materials relating to market surveillance, customs, and general business support to improve the enforcement of intellectual property rights.*

4.2. Competition Policy

Functioning competitive markets contribute to the competitiveness of European industries in several ways. Competition drives innovation and efficiency gains and creates the incentives for firms to increase their productivity. By maintaining a level playing field, competition policy ensures access to the large and sophisticated EU internal market. Competitive markets

also increase the pressure to realise the necessary efficiency gains to become and remain competitive.

Moreover, competition rules provide specific frameworks to support the competitiveness of European industry and the transition towards a more resource-efficient industry. Through State aid, antitrust and merger control, the Commission ensures undistorted competition within the internal market. In addition, competition policy enforcement is an important tool to protect European firms from damaging practices for competitiveness, such as market sharing, capacity hoarding or prevention of cross-border activities, which lead to higher prices. This is in particular essential for input markets, such as industry-related services that are important for the cost competitiveness of European industries.

Furthermore, by enhancing innovation and productivity, competition policy is an efficient instrument for European firms to tackle emerging global competitiveness issues, including their position in international markets. In particular merger control is an essential tool to allow companies to restructure through mergers so as to expand their reach, whilst ensuring that European industrial customers and consumers are protected against price increases and other anti-competitive effects.

State Aid control is essential role to avoid distortion in the Single Market; moreover, the design of State aid rules contributes to promote the competitiveness of industry in Europe. State Aid rules provide a framework that directs Member States' investments to address identified market failures.

4.3. Improving infrastructure

The competitiveness of European industry crucially depends on the quality and efficiency of the **energy, transport and communication infrastructure services**. The upgrading and modernisation of these networks is essential. Transport networks need to be improved to overcome bottlenecks and improve cross-border connexions. Energy networks must be upgraded and modernised to incorporate smart grids, facilitate the integration of renewables, ensure a fully functional internal energy market and improve security of supply. Further efforts need to be made to upgrade infrastructure in the new Member States and less-developed regions. These improvements will require massive investments and the development of innovative financing solutions such as project bonds and private-public partnerships. The Digital Agenda flagship initiative illustrates the challenges and proposes policy remedies in the field of communication. Similarly, the upcoming Communication on energy infrastructure and the White paper on sustainable transport will address this issue in the context of energy and transport infrastructure. The European Regional Development Fund (ERDF) and the Cohesion Fund play a significant role in the development and upgrade of this infrastructure.

Competition, the efficiency of public and private services, and infrastructure are important determinants of industrial competitiveness in Member States. In many Member States, increasing competition in the network industries remains a challenge. In some Member States, road transport and energy infrastructures need attention. Lengthy permitting procedures and public acceptance also constitute important bottlenecks to the development of infrastructure.

Certain European network services are often provided at a **relatively high price**. European electricity prices are on average high by international standards. Thus there is a need for effective internal market implementation in the energy sector, and the recently adopted Third

Energy Package will be a major tool in this exercise.. A stronger enforcement of competition rules in the sector is necessary to reduce competition distortions such as abuses of dominant position by market players. Failure to address this issue would increase the risks of relocation.

Finally, the different energy, transport and communication **networks must become more integrated** to allow the provision of new competitive services. At the same time, **this integration would also provide new sources of growth and innovation.**

The Commission will:

- *take concrete actions to further develop an efficient internal market in road, air, rail and waterborne transport (forthcoming White Paper on Transport Policy) and overcome transport bottlenecks through the upcoming revision of the TEN-T guidelines based on a new methodology for TEN-T planning structured around the creation of a core network;*
- *adopt an energy infrastructure package to support inter alia the development of an internal energy market by addressing missing infrastructure links of European significance and proposing the tools necessary to ensure their timely realisation;*
- *step up its efforts to liberalise EU energy markets in order to enhance competition in the energy sector and avoid putting the EU's manufacturing industry at a significant disadvantage in the global markets;*
- *develop, together with the EIB Group, an infrastructure funding strategy including the creation of EU project bonds and fostering the use of public private partnerships.*

Member States are invited to

- *put particular emphasis on addressing identified transport bottlenecks and cross-border inter-connection of energy grids.*
- *promptly implement the Third Internal Energy Market Package.*

4.4. Standardisation

One key policy for gaining economic benefits from harmonisation and economies of scale is **standardisation**, be it at European, international or at national level. Also markets themselves often generate factual standards through technological leadership, market agreements, and/or market dominance.

European standards already play an important role in facilitating the market penetration of innovative goods and reducing production costs. A competitive standard-setting process, whereby various technology providers compete on merits, supports industrial policy by ensuring that industrial customers, and ultimately consumers, benefit from standards where technologies are not priced at supra competitive levels. For manufacturing industries, the overall goal in the decade to come is to develop a **standards system for Europe** that will meet the expectations of both the market players and European public authorities. This needs to be achieved in a rapidly changing world and society, and should preferably also promote European influence beyond the single market in the globalised economy. Europe must also take additional measures to maintain its strategic position in international standardisation.

Besides this, standards need to be adapted to help European policy address the ‘big issues’ such as climate change, sustainability, ageing, and innovation in general. Standards need to become an integral part of research and policy development from the outset. By driving the development of European or international standards for these newly emerging tradable goods and technologies (such as nanotechnology and other key enabling technologies, electric cars, health technologies, energy-efficient products, renewables, and other environmental technologies, and business services) Europe can create a competitive advantage for its companies and facilitate trade. If standards are to play this role as an enabler of innovation, as described in the EU flagship initiative Innovation Union, Europe needs to develop more flexible methods for working with standardisers and ask them in turn to use the whole range of deliverables (specifications, workshop agreements) to support European policies in way that is ‘fit for purpose’. This will allow more flexible and faster development of standards in innovative areas.

The efficiency and effectiveness of European standardisation must be optimised, by fostering stronger structures for harmonised standards, improved standard setting processes at all levels and rapid adoption of the best available global standards, where global standard making practices are well established such as in the ICT sector. Standards should not create an additional burden, e.g. to SMEs. Instead, they should lead to efficiency gains and act as an incentive for innovation. The ultimate aim should be convergence of standards at world level.

The Commission will:

- *In early 2011, present through a standardisation communication and legislative proposal a strategy to promote a stronger role for European standard setting in a rapidly changing world and society. This will include speeding up standardisation processes, inter alia the ICT sector, broadening the involvement of SMEs and other stakeholders, and developing standards for services. The Communication will also examine options for ensuring, in a longer term perspective, that the standardisation system is able to adapt to the quickly evolving environment and contribute to European strategic internal and external objectives, including through an independent review.*

5. A NEW INDUSTRIAL INNOVATION POLICY

5.1. Industrial innovation

Meeting the challenges of global competition and increased sustainability requires the achievement of excellence in innovation. Innovation is a key driver for productivity, increased energy and material efficiency, the improved performance of goods and services, and the generation of new markets. However, Europe is not good enough at turning its excellence in ideas into marketable goods and services. A new industrial innovation policy is needed to encourage the much faster development and commercialisation of goods and services and to ensure that EU firms are first onto the market. Without such innovation, Europe’s industry will be unable to compete successfully in the global market, both in technology-driven and traditional industries.

The Innovation Union flagship initiative outlines the overall approach for a successful and distinctive European innovation model. There is an urgent need for better coordination of education, R&D and innovation efforts, more coherence in science, technology and innovation cooperation with the rest of the world, a global approach to societal challenges, the

establishment of a level playing field for R&D and innovation, an enhanced access to finance and risk capital, and an appropriate focus on both competitiveness and societal challenges.

A key challenge is to urgently develop and bring to market Europe's research strengths in emerging technologies. **Key enabling technologies**⁶ such as industrial biotechnology, nanotechnology, advanced materials, photonics, micro- and nano-electronics, and advanced manufacturing systems can provide the basis for a wide variety of new processes and goods and services, including the development of entirely new industries over the next decade. Europe has a leading position in scientific research, but the timely deployment and take-up of these technologies throughout EU industry, including by SMEs, needs to be ensured. Closer cooperation on technology policies and programmes, better access to financing, and strengthened support for pilot and demonstration projects are essential to accelerate the development of commercial technologies. Timely internal market legislation, faster standard-making, addressing consumer concerns early, and commercial and pre-commercial public procurement are needed to create a vibrant Single Market for innovative goods and services. Innovation Union announced a mid-term review of the state aid guidelines for R&D and innovation, clarifying which forms of innovation can be supported, including for key enabling technologies and innovations addressing major societal challenges, and their best use by Member States.

Member States with above-average innovation performance were proactive in response to the economic crisis, particularly using additional temporary measures to stimulate research and innovation. This was not generally the case for the countries below the EU average, indicating the likelihood of a widening gap in R&D and innovation performance. The need to improve skills and strengthen the share of technology and skill-intensive activities is even more important in their case.

European industry must also strengthen its **knowledge base** to remain competitive, investing in research and innovation for a smart, sustainable and inclusive economy. Since 2004, that Commission has supported the creation of European Technology Platforms to bring industry stakeholders together at EU level, develop a shared vision on R&D, and encourage feedback on EU policies. Joint Technology Initiatives have been set-up to further research at a European level in areas with high innovation potential. The Commission also launched three Public-Private Partnerships as part of the European Economic Recovery Package: 'Factories of the future', 'Energy-efficient buildings' and 'Green cars', to support medium and long-term research and development to respond to the urgent competitiveness and sustainability challenges in major industrial sectors. The Knowledge and Innovation Communities of the **European Institute of Innovation and Technology** integrate at EU level the entire innovation chain from education and research to commercialization, with a focus on strong governance, and provide role models for stimulating innovation.

Improved use of **ICT for industrial competitiveness, resource optimisation and innovation** will be essential for future competitiveness too, as set out in the Europe 2020 **flagship on the Digital Agenda**⁷. EU business is likely to face increasingly severe shortages of ICT specialists and advanced ICT users. In parallel, a more innovative use of ICT throughout industrial value chains needs to be encouraged to streamline business transactions,

⁶ COM(2009) 512

⁷ COM(2010) 245.

for example by e-invoicing, and boost overall competitiveness through demonstration projects to promote the integration of enterprises, especially SMEs in global digital value chains.

For effective innovation policy, we need better insight into **sectoral innovation performance** and future potential. The Commission's Sectoral Innovation Watch has identified key challenges in a number of sectors and illustrated major differences between countries and sectors. It is essential to improve the design of EU policy instruments to support structural change and innovation, especially in mature industries. Moreover, closer cross-sectoral cooperation can boost creativity and innovation in companies. This requires companies to look beyond their own sectors, so new mechanisms are needed to ensure the cross-fertilisation of ideas and business models. The potential for these contacts between different sectors needs to be further explored and translated into policy responses.

Clusters and networks improve industrial competitiveness and innovation by bringing together resources and expertise, and promoting cooperation among businesses, public authorities and universities. Regional, national and EU cluster policies should aim to overcome existing market failures and funding gaps, especially to supply the bridge between companies and research institutions. The EU's Regional Policy and the research Framework Programmes assist regions to adopt 'smart specialisation strategies' to strengthen their competitiveness through developing innovation niches. Building upon existing successes, there is a need to develop more globally competitive clusters and networks for both traditional and R&D and innovation clusters. Through local clusters that are connected Europe-wide, a critical mass can be achieved for R&D and innovation, skills, funding, the cross-fertilisation of ideas and entrepreneurial initiatives. However, the various cluster initiative need to be consolidated and streamlined.

The current community framework for State Aid for Research and Development and Innovation provides a bonus in aid intensities for collaborative R&D and innovation projects, i.e. projects are carried out in at least 2 Member States or involving collaboration with SMEs. It also allows Member States to notify aid to promote the execution of important projects of common European interest under Article 107(3)(b) TFEU. Member States could be encouraged to make use of this instrument.

The Commission will:

- *launch an initiative to promote the wide and timely deployment, take-up and commercialisation of competitive Key Enabling Technologies;*
- *promote industrial research, development and innovation on advanced manufacturing technologies, building on the ‘Factories for the Future’ initiative, in order to facilitate the modernisation of the EU industrial base and providing a response to societal challenges like energy efficiency, climate change and resource scarcity;*
- *promote initiatives bringing together higher education and businesses to improve Europe's highly skilled workforce, such as an e-skills initiative focused on advanced ICT users in industry, and the Universities-Business Forum pilot action funding Knowledge Alliances between universities and businesses;*
- *promote new business concepts and related manufacturing technologies focused on the development of sustainable, user-driven design-based products in the textile and clothing sector as well as other large consumer markets;*
- *develop policy approaches to foster the potential for greater cross-fertilisation between sectors, including traditional manufacturing sectors and SMEs;*
- *present a new Strategy for globally competitive Clusters and Networks including specific action to promote globally competitive clusters and networks in both traditional and emerging industries (2011);*
- *encourage the parallel notification of Aid to cross-border collaborative R&D&I projects .*

Member States are invited to:

- *foster closer cooperation between policies for key enabling technologies to maximise synergies and complementarities in technology deployment;*
- *promote ‘smart specialisation’ through EU Regional policies to develop clusters and improve the innovation performance of regions .*

5.2. Skills base

Modernising Europe’s skills base will be one of the main aims of the **flagship initiative ‘An Agenda for new skills and jobs’**. It will help support Europe's industrial base by proposing action to improve the functioning of our labour markets and to ensure our workforce has the right skills. Although there is high unemployment, European industry is still struggling to find employees possessing the skills needed to fill their vacancies. These skills mismatches are projected to increase once the shrinking of the active labour force due to demographic change is taken into account. Modernising industrial structures will call for new skills, new working conditions, and more frequent career shifts. Workers need support to manage these processes successfully through flexicurity in lifelong learning. Closer coordination between national, regional and local governments with a strong involvement of the social partners is necessary. The role of the European Social Fund must be reinforced to support the implementation of active labour market policies and better matching between workers and jobs. Close coordination between the public sector and industrial partners is needed in **education and**

training policies. In particular, it is essential to increase the number and quality of science, technology, engineering and maths graduates. The number of medium-skilled workers also needs to match the demands from fast-growing industries such as the environmental and energy sectors. EU-level policies can have significant added value, particularly through helping to share information and best practice.

The Commission will:

- *encourage the networking of Member State industry, education and employment authorities to share information and best practice on labour markets and skill strategies;*
- *propose guidance principles on framework conditions for job creation, including on investment in the development of graduates in science, technology, engineering and maths.*

Member States are invited to:

- *increase their usage of the European Social Fund for skills upgrading and restructuring.*

6. CAPITALISING ON GLOBALISATION

6.1. Trade and international regulation

Successful trade liberalisation through, *inter alia*, multi- and bilateral agreements and falling transport and communication costs have helped create a vibrant global marketplace and rapid growth in new markets for EU exports. The newly emerging economic heavyweights such as China, India and Brazil are **rapidly bridging the still existing productivity and innovation gap** with the industrialised world. Hence the need for industry to continue to benefit from those market opportunities through transforming and modernising to maintain its competitive advantage. Clear benefits have been derived for EU industry from these new trends in the post-crisis upturn, when emerging markets have provided for significant growth. The ‘**Communication on Trade Growth and World Affairs**’⁸ sets out the Commission’s new trade policy approach as part of the Europe 2020 strategy

Particular efforts should also be made to ensure that this rising competitive pressure from emerging economies is not based on **growth strategies relying heavily on protectionist measures** to promote exports and discriminate against imports. Indeed, tendencies have been observed towards the undue use of non-tariff barriers to trade, hidden subsidies, discriminatory public procurement, forced technology transfer, managed exchange rates, and poor enforcement of social and environmental protection. It is therefore essential to continue to monitor closely such state interventions that distort competition and to take appropriate action. The EU **market access strategy** is an important tool to address the different kinds of trade barriers which European companies are facing in third country markets. In reinforcing the strategy, particular attention will have to be paid to areas such as public procurement, foreign direct investment, and restrictions on raw material exports. Likewise, effective protection and enforcement of intellectual property rights and geographical indications in third countries are crucial to enable European businesses, notably those in innovative sectors, to enter and compete in third markets.

⁸ COM(2010) 612.

Trade defence instruments are also essential for the protection of EU industry from unfair practices. They need to be made more accessible, especially for SMEs. More generally, continued efforts should be paid to implement, monitor and enforce multi- and bilateral agreements concluded.

Success in the intensively interacting new world economy depends on **enterprises' ability to access international markets and exploit global value chains**. The current multilateral rules-based system which offers reliable prospects of effective enforcement and dispute settlement would greatly facilitate this; as would closer global convergence of regulation and standards for traded goods and services that should be extended and strengthened. Furthermore this multilateral system should be complemented by regional and bilateral agreements. New areas including competition policy, state aid and foreign direct investment should be addressed.

In the regulatory domain, a particularly urgent need is for globally compatible rules and standards for **newly emerging tradable goods, services and technologies**. Rules and standard-setting should be based on better regulation principles and thus be as cost-effective as possible. The ultimate aim is the convergence of rules and standards at the international level whenever possible. Where this cannot be achieved, the mechanisms offered by the WTO agreement on Technical Barriers to Trade (TBT) should be used. The EU will also seek to prevent the creation of new non-tariff barriers and promote good regulatory practice in its bilateral regulatory dialogues with major partners.

In case where European legislation imposes **traceability requirements**, they contribute to product quality and safety and apply to imports as well goods produced in the EU. In some cases, the EU may find it worthwhile to propose their extension to our trading partners. The EU has a particular interest in seeking **closer economic integration with neighbouring countries** through the European Neighbourhood Policy. Agreements on Conformity Assessment and Acceptance of industrial products (ACAAs) based on alignment with the EU can ensure the free movement of goods. The closer economic integration of neighbouring countries in certain Single Market areas can provide concrete advantages for both parties and can strengthen trade and investment. The EU will also target a greater share of funds available under the European Neighbourhood and Partnership Instrument to capacity building and good economic governance in partner countries.

Internationalisation of value and supply chains offers significant growth potential, but it also poses particular challenges for SMEs. Only 25% of SMEs currently export to markets inside and outside the EU⁹. To **help SMEs go international**, they need the right information and support in markets outside the EU. Some Member States and business organisations already provide this kind of support, but there remains substantial potential for greater synergies between the efforts of the EU, Member States and these organisations. The Enterprise Europe Network has already played an important role in mentoring and facilitating international business cooperation, especially with the Mediterranean countries, and its international assistance to SMEs should be further developed. Building on the experience with the China SME IPR Helpdesk, the Commission will further reinforce support for the protection and enforcement of intellectual property rights with special attention to other key third-country markets. As regards trade defence investigations, the special situation of SMEs - as importers, users, complainants or exporters - will be addressed.

⁹ DG Enterprise and Industry 'Internationalisation of SMEs', 2010.

The Commission will:

- *once negotiations are concluded, prepare for the Council and the Parliament an economic analysis of consequences of the proposed deal for the EU, prior to signature;*
- *make an annual report on trade and investment barriers for the Spring European Council, including ‘beyond the borders’ measures and industrial policy practices and identifying priorities for market access strategy and enforcement action. (2011 onwards);*
- *develop international regulatory co-operation initiatives with a view to urge our major trading partners to adhere to any new or existing international scheme and to develop globally compatible rules and standards. In that respect, our trade agreements should also promote the use by our partners of international rules and standards, as well as of trade-friendly conformity assessment procedures.*
- *seek closer economic integration with neighbouring countries by extending the benefits of the European Single Market in selected areas through the European Neighbourhood Policy, and give greater priority to market institutions and economic governance in relations with development partners (Communication on trade and development in early 2011);*
- *present a strategy for support for the internationalisation of SMEs with concrete measures building on policies set out in the Small Business Act (Communication in 2011);*
- *integrate traceability requirements for third country in Commission proposals where relevant*

The Commission invites the Council and the Parliament to:

- *accelerate the adoption of the Commission’s proposal on the indication of the country of origin of certain products imported from third countries.*

6.2. Ensuring access to raw materials and critical products

Secure, affordable, reliable and undistorted access to raw materials is essential for industrial competitiveness, innovation, and jobs. Security of supply is less a question of import dependency, but rather of the degree of diversification of suppliers and their reliability, wherever they are located. **Well-functioning global markets** for raw materials and commodities are essential for an efficient allocation of global resources and to enable technological progress. However, short-term movements in these prices necessitate hedging of substantive risks, while at the same time the rise of the emerging market countries in the world economy has increased global competition for such resources.

To address these issues, the Commission notably launched the **Raw Materials Initiative** in November 2008 and a detailed analysis of the demand and potential scarcity of key raw materials in June 2010. These initiatives have prepared the ground for an EU strategy on raw materials underlining the concept of “added value chain” which will continue to follow the 3-pillar strategy to: (i) ensure a level playing field in access to resources in third countries; (ii) foster sustainable supply of raw materials from European sources, and (iii) reduce consumption of primary raw materials by increasing resource efficiency and promoting recycling.

New rules and agreements on **sustainable international management and access to raw materials** are needed at multilateral level, as well as policy actions to address export restrictions and unjustified constraints on exploration and extraction by third countries, in particular strategic partner countries and Africa. Vigorous application of the EU's existing competition rules in cases of anti-competitive agreements or market concentration threatening to endanger access to raw materials is also essential. There is also a need to promote **mining and processing technologies** leading also to resource efficiency, recycling, substitution and the increased use of renewable raw materials to reduce the critical dependence of the EU on primary raw materials, and improve the environmental balance, inter alia through increased use of secondary raw materials (scrap), end of life electronic equipment and vehicles exported to third countries; enforcement of the Waste Shipment Regulation; reuse or recycling of products and materials based on agreed minimum standards. The framework conditions for a **sustainable supply and management of raw materials within the EU** also need to be addressed through boosting the efficient use of EU's own resources, recycling and increased substitution. Increased investment in discovery of new EU deposits of raw materials can be promoted through the exchange of best practices in the area of land use and maritime spatial planning and administrative conditions for exploration and extraction, while ensuring sustainability. Promotion of investment in new and more efficient exploration and extractive technologies is also essential. In sectors such as food sector, competitive local sourcing of sustainable raw materials is addressed by EU agricultural policy.

The Commission will:

- *present a Strategy on Raw Materials including proposals on fostering better framework conditions for sustainable supplies of domestic primary raw materials, increased recycling, and finding substitutes for other raw materials (2010).*

7. PROMOTING INDUSTRIAL MODERNISATION

7.1. Resource, energy and carbon efficiency

EU industry must speed up its transition to the low-carbon, resource- and energy-efficient economy. Combating climate change and increasing resource efficiency can achieve cost reductions and reduced environmental impact from enhanced resource and energy use. These are increasingly essential both to deliver sustainable growth and jobs and to gain competitive advantage in response to increasing global competition for resource and environmental constraints. The forthcoming flagship initiative on **Transition to a Resource Efficient Europe** will provide a framework to deliver a smooth and ambitious decoupling of carbon and resource use from economic growth. Likewise, there is a need to develop specific longer-term measures on energy efficiency in order to tap the energy savings potentials in the industrial, energy and transport systems. The EU roadmap for a low-carbon economy by 2050, including milestones for 2030, will highlight pathways for technological improvements and structural change in the industrial, energy and transport systems that are critical to stimulate innovation, boost growth and job creation, and strengthen the EU's energy security.

A concrete and realistic longer-term strategy is thus needed to **stimulate carbon and energy- and resource-efficient investment throughout industry**. Private and public research and innovation are needed, along with smart and market-based environmental regulation effectively and equitably implemented across the Single Market. New regulation must reflect the need for transition to a resource-efficient economy whilst taking into account the potential

short-term costs or burdens. Carbon leakage and other competitive disadvantages arising for EU industry must be avoided to avert a delocalisation of production and jobs outside the European Union. In the context of international climate negotiations, the EU is currently working on improving the scale and effectiveness of the international carbon markets, and stimulating international investment flows for R&D and innovation in low carbon technologies. Moreover, the EU is developing policies that can reduce the cost of long-term climate and energy strategies through large-scale carbon capture and storage and other innovative renewable projects.

In the framework of National Energy Efficiency Plans, all Member states have implemented actions to assist enterprises in reducing their energy intensity. Some Member States have also developed concrete action plans to encourage eco-technologies and/or improve the environmental performance of specific industries. However, only a few Member States have yet developed more general resource efficiency strategies.

In a world of smart regulation, economy-wide resource efficiency can boost EU industrial competitiveness whilst delivering on EU environmental objectives. Legislation must be **predictable and proportionate** and provide the **legal certainty** required for longer-term investments. New policies should encourage innovation and take into account life-cycle cost-effectiveness, investment lives, and purchase decisions of enterprises and consumers. With use of forward-looking smart regulation, achievement of environmental ambitions and industrial policy goals can be mutually consistent. Environmental and industrial policies must go hand in hand. A careful assessment of the economic and social impacts of environmental legislation and other costs and benefits to society are part of the Impact Assessment accompanying Commission regulatory initiatives and should also be done at Member State level. In this way, environmental regulation can act as a beneficial lever for innovation and industrial development, rather than as an impediment.

In this context, the EU's **sustainable industrial policy** focuses explicitly on opportunities for sustainable growth and job creation while making the transition to more resource efficiency across industry as a whole. Other policies include product policy through a life-cycle perspective that goes beyond the production phase; the use of instruments such as the Eco-design directive, the energy labelling of household appliances and the European Ecolabel. Encouraging voluntary industry initiatives and wider adoption of best environmental management practices through the European Eco-Management and Audit Scheme (EMAS) and ISO14001 schemes are also essential. Close monitoring of progress will help to measure progress and identify delivery gaps.

In order to develop the EU market for **environmental goods and services**, the EU needs to ensure a fair and transparent internal market that rewards innovation, with improvements to standardisation and certification schemes, a more harmonised implementation of the *acquis* (e.g. Waste Framework Directive), wider use of green public procurement and the development of the eco-design directive and inclusion in Free Trade Agreements.

Successfully negotiating the constraints of global resource scarcity, including environmental constraints will require numerous breakthrough technologies to successfully penetrate global markets. However, incremental but massively deployed innovation will have to deliver in the short to medium run. In particular, an innovative approach needs to be taken to **environmental technologies** on similar lines to that adopted for key enabling technologies and the Strategic Energy Technologies (SET) plan. The future Eco-innovation Action Plan will put in place the tools to identify development and deployment requirements for key

environmental technologies, enhance coordination and cooperation between the EU and Member States in developing and deploying these technologies and generate awareness of the potential of new technologies. Barriers to cross-border enterprise activity would need to be addressed by establishing an appropriate regulatory framework and ensuring more uniform implementation of the existing regulatory frameworks.

The Commission will:

- *in line with the forthcoming EU roadmap for a low carbon economy by 2050, develop the long-term sectoral industrial strategies and policies needed to assist the transition to a low-carbon, resource and energy-efficient economy;*
- *monitor sustainable competitiveness, including EU industry's voluntary initiatives aimed at resource sustainability;*
- *review the Sustainable Consumption and Production / Sustainable Industrial Policy and consider the possible extension of the Eco-design Directive to new products (2012);*
- *launch an Eco-innovation Action Plan to ensure the commercialisation and deployment of key environmental technologies.*

Member States are invited to:

- *foster closer coordination between policies for environmental technologies to maximise synergies and complementarities in technology deployment, including policies for boosting demand, in particular in eco-innovation.*

7.2. Structural excess capacities

An important priority of the new industrial policy must be to help EU industry to **recover swiftly and to make the necessary adjustments after the economic crisis**. In particular, the emergence of structural excess capacities in some industries requires tailor-made responses at company level, ranging from engaging in new business models and products to definite market exit. Companies and social partners have the primary responsibility for restructuring to ensure their future competitiveness and viability, since experience has shown that competitive-driven structural adaptation is quickest and most efficient.

The Rescue and Restructuring aid guidelines allow for aid only if it results in restructuring capable of restoring the long-term viability of the beneficiaries without further support, ensures appropriate contribution of the beneficiary to the costs of restructuring, and is accompanied by measures to address the resulting competition distortion. Lessons learnt in the crisis will feed into the revision of the Rescue and Restructuring Aid Guidelines.

Member States also need to support reallocation of labour, within the framework of a flexicurity system. Better **anticipating and managing restructuring** would help employees and companies to adapt to transitions imposed by excess capacities as well as by modernisation and structural adjustment. Existing State aid rules offer Member States ample possibilities to use state aid to accompany change, e.g. through training or R&D&I aid, or support to risk capital. At the European level, the Regional and Cohesion Funds can stimulate investment and innovation to strengthen the resilience of local economies. The ERDF has increasingly focused on investments facilitating shifts up the value chain by both hi-tech and

traditional sectors through investments in R&D, innovation and ICT, whilst the Cohesion Fund invests in particular in EU transport priorities which can improve physical accessibility as well as environmental infrastructure in the less-developed Member States. Such investments facilitate regions to develop their own innovation niches based on smart specialisation.

An expanded **European Globalisation Adjustment Fund** could also improve the ability of Member States and regions to manage the fall-out of the crisis and help provide retraining and other active labour market measures for redundant workers.

Management and workers' representatives are the key players to agree on restructuring strategies at the company level. Policy interventions should accompany such restructuring to avoid social hardship and promote new skills and jobs, thus avoiding mass layoffs and the decline of entire regions or the delocalisation of entire industries and facilitating economic reconversion and professional transitions. The ETUC, Business Europe, CEEP and UEAPME agreed on 'Orientations for reference in managing change and its social consequences' in 2003. These orientations need to be revisited to integrate knowledge subsequently accumulated on the best ways to anticipate and manage restructuring and to take into account the experience of the economic and financial crisis. Updated orientations on restructuring can be very useful in reinforcing the capacity of businesses and workforce to adapt to a fast-changing economic environment.

The Commission will:

- *review Community support for re-integrating redundant workers into new jobs including through the review of the European Globalisation Adjustment Fund (EGAF) regulation (2011);*
- *launch a consultation of European social partners on a European framework for restructuring. (2011);*
- *review the Rescue and Restructuring Guidelines for State Aid (2012);*
- *support Member States and regions through Cohesion Policy in the diversification of existing industries, upgrading industrial capacity, stimulating investment and innovation to re-develop and strengthen the resilience of local economies;*
- *present proposals to accelerate the implementation and improve the focus of European Structural Funds through the Fifth Cohesion Report (2010) and in the new Cohesion policy regulatory framework (2011).*

7.3. Building on Corporate Social Responsibility

Corporate social responsibility can contribute to the competitiveness and sustainability performance of European industry. It helps to strengthen trust in business, which is important for the creation of a business environment in which industry can thrive. The financial crisis showed a new approach is needed to the **balance between short-term profit maximisation and sustainable value creation in the longer run**. European companies need to take into account their contribution to sustainable growth and job creation and consider the interests of the employees and citizens affected by business decisions. Sound business ethics and values can contribute to the recovery from the crisis.

Corporate social responsibility can position European companies as leaders in markets that are putting an increasing premium on social and environmental issues. EU industry has already launched a number of significant initiatives aimed at resource sustainability, including the chemical industry's Responsible Care initiative, the Global e-sustainability initiative, and the Materials Stewardship Policy of the International Council on Mining and Metals.

Encouraging sustainable growth implies giving consumers the information they require to purchase environmentally friendly goods and services. This should include information on the ecological footprint of products and services. The Commission will work on a common European methodology for assessing environmental impacts associated with consumer products, based on life-cycle analysis and objective criteria.

The Commission will:

- *put forward a new policy initiative on corporate social responsibility addressing emerging issues such as business and human rights, and company disclosure of environmental, social, employment-related, and governance information (2011);*
- *monitor EU industry's voluntary initiatives aimed at resource sustainability. (2011 onwards);*
- *examine before 2012 the possibility of an initiative on the Ecological Footprint of Products.*

8. THE SECTOR-SPECIFIC DIMENSION — A TARGETED APPROACH

As all sectors are important, the Commission will continue to apply a targeted approach to all sectors. Some sector-specific initiatives could be taken for certain types of sectors:

- a sectoral industrial policy for **space** based on the new competences given by the Lisbon Treaty.
- Motor vehicles and transport equipment industries will play a major role in developing the solutions for **sustainable mobility**.
- Sectors which are most promising in meeting the **other future societal challenges of climate change, health, and security** (for example healthcare, environmental goods and technologies, energy supply industries, and security industries).
- **Sectors where value-chain considerations are particularly important** (for example chemicals, engineering, transport-equipment manufacturers, agro-food, and business services).
- **Energy-intensive sectors** exposed to international competition need the advantages of competitive energy markets, which offer favourable framework conditions that will enable them to prosper in the EU (access to energy and raw materials at competitive prices, level playing field on the global market, etc.).

The theme of all the following initiatives and demonstration projects is to promote industrial innovation. Indeed, sustained competitiveness of European industry and all its sectors can only be achieved if industry improves its ability to innovate. In this context, innovation should

be understood in its wider sense, i.e. going beyond technology and also comprising business and organisational models. All sectors must improve their innovation performance, be they traditional or low-tech sectors, or new or high-tech sectors. This ability should be supported by policy in cases where the market alone does not deliver. These actions will be carried out by making use of available financial resources.

8.1 Space: a driver for innovation and competitiveness at citizens' service

The space manufacturing industry is a high-tech, high-risk and investment intensive industry. It is highly subsidized in all space-faring nations where it mainly depends on institutional programmes. Europe already has a large, hi-tech space industry that supplies a significant part of the world's commercial requirements for satellite manufacture, launch and services. European industry delivers systems and services in the fields of telecommunications, navigation and Earth observation which guarantee security for the EU, address major societal challenges such as climate change, and boost the competitiveness of European industries.

In an increasingly competitive environment, with the emergence of new space powers, Europe needs to build on its achievements to foster a solid and balanced industrial base. The European space industrial policy should cover the whole supply chain, including SMEs, to ensure greater international competitiveness and non-dependence in strategic sectors (such as launchers) and the development of a market for space products and services, notably new satellite-enabled services from GNSS (Global Navigation Satellite Systems), GMES (Global Monitoring for Environment and Security) and satellite communications infrastructures.

Space policy is driven by three main imperatives: societal (the benefits for citizens well being that can be derived from space exploration and use), economic (space generates knowledge and is a driver for innovation) and strategic (space contributes to the European Union's projection as a global actor). Article 189 of the Treaty on the Functioning of the European Union confers a shared competence to the Union in space policy with the specific aim of promoting scientific and technical progress, industrial competitiveness and the implementation of its policies.

To achieve these objectives while capitalising on investments made and maximising space innovation potential, the Commission will pursue the achievement of Galileo/EGNOS (European Geostationary Navigation Overlay System) and GMES and space and security.

Galileo/EGNOS and **GMES** are well established programmes whose completion and continuation beyond 2013 will be the subject of legislative proposals in 2011 in line with overall proposals for the Multiannual Financial Framework. The Commission remains committed to complete the Galileo constellation and put in place a new governance scheme.

GMES is the main space contribution of the Union to tackle **climate change**. It is therefore necessary to complete the space observation infrastructures that are designed for land, ocean, atmosphere and air quality monitoring, as well as emergency response and security, in order to deliver on the "climate change" service of **GMES**.

Space applications are an essential tool for the **security of the citizen**. These security needs may be covered by either national capacities used in a coordinated manner or by the development of common capacities. The Union must reinforce its partnership with Member States in order to ensure that security missions do not depend on third countries' assets and guarantee the continuity of missions undertaken by Member States themselves.

Space infrastructures are critical infrastructures, which contribute to citizens' security and well being. They must be protected against risks such as those posed by debris or solar radiation. Member States' existing protection capacities must be developed so as to establish a reliable European **space situational awareness system**. The Union should define the organisation and governance of such a system taking into account its dual nature and the need to ensure its sustainable exploitation.

Space is an important component of the Union's **research and innovation policy**. Support for space research will be defined during the preparation of the next Framework Programme for Research and Technological Development.

Satellite communications is a key space sector from both an economic and technology stand point. It contributes to the Digital Agenda for Europe, and notably to closing the broadband gap. The Commission proposal for radio spectrum policy programme is an important milestone in this endeavour.

In order to implement these actions, an **improved governance scheme** needs to be implemented. Firstly, the European Union needs to strengthen the partnership with the Member States and, in line with Article 189 of the Treaty, coordinate the efforts needed for the exploration and exploitation of space. Secondly, the Lisbon Treaty commits the Union to "establish any appropriate relations with the European Space Agency". The European Union's growing involvement in space requires a re-evaluation of its relations with ESA and, in return, it requires a gradual evolution of ESA. Thirdly, greater coordination across EU programmes and between these and ESA and Member State programmes must be ensured.

Due regard must be paid to **international cooperation**, which is key for space, including to its development potential, notably for Africa.

The Commission will:

- *propose measures in 2011 to implement the priorities of the Space policy based on Article 189 of the TFEU;*
- *pursue a Space Industrial policy developed in close collaboration with the European Space Agency and Member States.*

8.2. Sustainable mobility

Developing and deploying **clean and energy-efficient vehicle** technologies are an opportunity to have a substantial impact on greenhouse gas emissions, air pollution and noise, and reinforce the market leadership of Europe's automotive sector. Going beyond the strategy announced in April 2010¹⁰, substantial financing of investments in infrastructure will be needed, including pilot projects to demonstrate breakthrough technologies in specific cities and regions. EU industrial leadership in key technologies will need to be developed, especially on battery technologies and potential replacements for lithium. The potential for new types of goods and services will also need to be investigated.

The ELECTRA Report drew attention to the potential for the deployment of **rail energy** storage and automatic train supervision technologies to substantially increase energy

¹⁰ 'A European strategy on clean and energy efficient vehicles' - COM(2010)186, 28.4.2010.

efficiency, including through the hybridisation of diesel traction and a system approach for onboard and track-side storage systems for electrical traction. The sector would benefit from more investment in research, simulation and testing of technologies aimed at further harmonisation of standards within the EU and beyond. High-speed trains are a market with major competition from extra-EU competitors. Greater cooperation between European companies in developing high-speed trains could have advantages: this possibility needs to be assessed. Undistorted competition in the European market should in any case be ensured.

The **aerospace industry** and some parts of the **maritime industries** are highly competitive and globally successful components of EU industry. Efforts will be necessary to increase efficiency and reduce environmental impacts. Substantial support is already available for research and innovation in green aircraft through the Clean Sky Undertaking. Continuous innovation will be necessary to develop greener aircraft and low emission ships and to respond to environmental challenge. Alternative fuels, the implementation of the Single Sky and further aircraft noise reduction are high on the existing well-established policy agenda. An important business opportunity for EU shipbuilding is their involvement in the construction and reliable operation of offshore wind platforms and necessary support vessels.

The Commission will:

- *propose a Clean and Energy-efficient Vehicles platform, bringing together Member States, industry, and other stakeholders to ensure infrastructure investments, including pilot projects, and to launch research initiatives on key technologies and materials (2012);*
- *launch a Strategic Transport Technology Plan (2011), including a strategic initiative on Clean Transport Systems and an e-mobility package to enhance the efficiency and the safety of the transport sector;*
- *undertake a feasibility study on demonstration projects on rail energy storage and the hybridisation of diesel traction, enabling demonstration and further research projects to increase energy efficiency and strengthen competitiveness (call for proposals in 2012/13);*

8.3. Tackling societal challenges

The EU's **pharmaceutical and healthcare** related, including **medical devices**, industries are world-leading sectors that play an essential role in finding new medical treatments and medicines and improving the health and quality of life of EU citizens, in particular of the ageing population. In this context, there is a need for a partnership between private and public sectors, building on corporate responsibility to enable accelerated access to medicines and treatments, and greater transparency, whilst rewarding innovation and enhanced industrial competitiveness. The Innovative Medicines Initiative Joint Undertaking implements such a public-private partnership with the aim to deliver faster and safer drugs. Furthermore, more transparency and better coordination between Member State pricing and reimbursement systems would help avoid unnecessary market access delays and improve the functioning of the internal market for medicine. Furthermore, the Commission will launch a pilot European Innovation Partnership on active and healthy ageing¹¹.

¹¹ COM(2010) 546.

The EU **security industry** faces a highly fragmented internal market and a weak industrial base. National regulatory frameworks differ widely and the market for security products is highly diversified, ranging from cameras to complex scanner systems. To provide a security system, manufacturers, system integrators, and service providers have to work closely together with clients. It is essential to develop a fast-track system for approval of priority technologies; to make substantial further progress on harmonisation, standardisation; to consider coordinated public procurement; and to accelerate research on security technologies including dual-use. On the latter the Commission will coordinate with the European Defence Agency.

The **construction sector** can also make a substantial contribution to responding to climate change and other environmental and societal changes. The revised Directive on energy performance in buildings sets the ambition of the transition to nearly zero energy buildings in Europe as of 2021, whilst the reinforcement of the energy performance requirements will set new standards for buildings. This is an opportunity for the construction and renovation sector.

The **bio-based markets** with high demand and favourable legislative framework could make a substantial contribution to the EU's transformation into a more sustainable economy. The right legislation and framework conditions will however be needed to encourage uptake of renewable raw materials for industrial use (e.g. wood and paper, but also bio-plastics, bio-lubricants, pharmaceuticals)) and ensure sustainability; technological innovation needs to be stimulated through demonstration projects; and European and international standards developed for new technologies. Existing work needs to continue on specific product labels (e.g. eco-labelling) and public procurement guidance documents and networks.

The Commission will:

- *develop a Healthcare and Pharmaceuticals process involving Member States, industry and other health stakeholders to promote corporate responsibility, improve access to medicines, and strengthen the competitiveness of the pharmaceutical industry. To facilitate the functioning of the internal market for medicines, it will also take the opportunity to review Directive 89/105/EEC on the transparency of pricing and reimbursement procedures;*
- *present a Security Industry initiative, including a fast-track system for approval of priority technologies, setting priorities for harmonisation and standardisation and considering coordinated public procurement, and setting up a European Security and Dual-use Platform (2012 onwards).*
- *develop a strategy for the Sustainable Competitiveness of Construction to ensure appropriate framework conditions for the Internal Market of construction products and services, improve resource efficiency and environmental performances of construction enterprises, and promote skills, innovation and technological development to meet new societal needs and climate risks (2011);*
- *put in place conditions to create bio-based markets, improving relevant legislation and framework conditions for industrial use, promoting innovation through demonstration projects, and developing European and international standards (2012).*

8.4. Re-invigorating the competitiveness of the EU through the value-chain

The EU needs to pay greater attention to the manufacturing value-chain. As described above, industry is increasingly dependent on inputs of raw material and intermediate goods, and is also crucially dependent on the business services industries that add value and help to design and market new goods and services. This new perspective requires a different approach to industrial policy that takes increased account of the interlinkages.

The chemicals industry is a good example of the new approach that is needed. Despite the economic crisis, the **chemicals industry** remains highly competitive and is one of the motors of the EU manufacturing industry. It is a successful international player with a 24% share of the world market, but faces increasing competition from China, India, and the Middle East. As an intermediate goods industry, the sector has enormous potential to improve both the competitiveness and environmental performance of other downstream industries through innovation in substances and materials. The High Level Group on Chemicals highlighted a number of potential contributions of the industry to finding solutions for the critical societal challenges facing the EU, such as increasing use of renewable materials, increasing energy efficiency, and reducing water usage etc...

The entire European food supply chain has entered a period of adjustment as a result of changing consumer preferences, resource scarcity, demographic, health, and environmental factors, and customer concerns about food safety, health and prices. The **EU Agro-Food Industry** is highly competitive and represents 2% of Europe's GDP and 13.5% of total manufacturing employment. However, it urgently needs to address these issues as well as imbalances in bargaining power between agro-food producers and retailers and improve the efficiency of supply structures and facilitate their restructuring.

The EU **textile, clothing and leather industry has undergone structural change** for over 20 years. Technological developments, combined with traditional strengths in design and quality also find their way into large consumer markets beyond the sector, such as outdoor sportswear; luxury products, or footwear. As a result mass-customised consumer goods are increasingly becoming commonplace, providing new market opportunities for European manufacturing. High added value speciality products represent already a substantial portion of the sector's activities, with an increasing share of the production and added value generated to provide tailored solutions to other sectors such as healthcare, civil engineering or aerospace. Significant efforts in R&D and innovation have strengthened the knowledge content and sustainability of the sector, making this possible. It is essential to promote new business concepts and related manufacturing technologies focused on the development of sustainable, user-driven design-based products in the textile and clothing sector as well as other large consumer markets.

In particular, the **cultural and creative industries** are important drivers of economic and social innovation in other sectors. Design, architecture, and advertising play an important role in supporting investments e.g. in construction, new consumer technologies, environmentally friendly solutions and the digital economy. Likewise mobility and logistic services are becoming increasingly important to sustain value chains and enable just-in-time production. Closer collaboration between such industries and EU, Member state, regional, and local policy makers will promote their contribution to the economy as a whole.

The Commission will:

- *follow up the High Level Group on the competitiveness of the chemicals industry, notably its potential contribution to providing solutions to critical societal challenges through Innovation Partnerships;*
- *use the High Level Forum on the Food Industry to ensure better functioning of the food supply chain;*
- *propose strategic initiatives following the Green paper on Unlocking the potential of cultural and creative industries, including a Communication on key aspects of the competitiveness of the fashion industry, launching a European Creative Industries Alliance and a European Mobile and Mobility Industries Alliance to bring together policy makers and industry representatives (2011).*

8.5. Addressing concerns of energy-intensive industries

Europe also needs to improve its international competitiveness by being able to speed up **transition to a low-carbon and resource-efficient economy** in the energy-intensive industries such as steel, non-ferrous metals, paper, and the chemicals industry. This will be done in coordination with the forthcoming flagship initiative on 'Resource efficiency' and the SET-Plan. Investments in carbon-efficient production provide the energy intensive industries with a strong capability to increase their competitiveness and make them less dependent on future energy prices.

Energy-intensive industries provide an important part of the value chain of the manufacturing industry in the EU and have become one of the world leaders in energy efficiency. They form an integral part of the industrial value chain and manufacture a good part of industrial products with CO₂-reducing effect. Therefore, energy-intensive industries must find

conditions for competitive production in Europe in the future. This means that the risk of carbon leakage for energy-intensive industries must be taken into account, including in the context of possible indirect impacts by emission trading-related increases of electricity prices.

New **low-carbon production technologies and techniques** for energy-intensive material processing industries are being developed through Technology Platforms and Lead Market Initiatives. However, appropriate framework conditions and further public-private collaboration are needed to ensure the timely deployment and commercialisation of these innovations across energy-intensive sectors.

The Commission will:

- *bring forward the adaptations to State aid rules allowing for an appropriate compensation for indirect ETS costs such as those passed on through electricity prices, while ensuring a level playing field in the Single Market and the attainment of the Community objectives in the light of international commitments on emission reduction;*
- *bring forward a Sustainable Industry Low Carbon Scheme (SILC) to coordinate framework conditions, funding actions, data collection, and other activities by the EU and Member States to promote the development and uptake of low carbon technologies in coordination with the SET-Plan (2011 onwards);*
- *in the context of the discussion on future research Public-Private Partnerships, consider an Energy-intensive Industries Low Carbon Implementation initiative, bringing together the relevant technology platforms with the EU and Member States, to ensure the appropriate R&D, financing and deployment strategies for low-carbon production;*
- *in partnership with Member States and industry, promote demonstration projects and uptake for ultra-low carbon production technologies, including industrial carbon capture and storage, while avoiding distortions to competition (2011-16).*
- *further explore in the context of the Europe 2020 strategy, the opportunities to bring in further innovative incentive mechanisms linked to the carbon market, namely for fast movers.*

8.6 An enhanced sectoral approach

In addition, the Commission will in 2011 consult with stakeholder on the best way to use and strengthen the industrial dimension of Joint Technology Initiatives and European Innovation Partnerships as announced in the Innovation Union Initiative, and on priorities in this respect.

9. CONCLUSIONS: A NEW EU GOVERNANCE FOR INDUSTRIAL POLICY

Whilst the economic and financial crisis shifted the focus of industrial competitiveness policies towards short-term rescue and recovery actions, in the future the attention of policy makers has to focus on long-term structural challenges, in particular maintaining global competitiveness, climate change, energy, population ageing, skills and knowledge. In the context of fiscal consolidation, competitiveness strategies cannot be built on major spending programmes, but are more likely to address structural reforms in areas such as improving the business environment, modernising public administrations, improving companies' ability to

innovate or enhancing energy efficiency. At the same time, policy measures may be needed to accompany ongoing structural change within and across industries.

Delivering the new industrial policy also calls for more effective European governance. The concepts of national sectors and national industries with little interaction with other sectors or the rest of the world are becoming less relevant. It is now increasingly important to identify strategic European industrial interests, and uncoordinated **national policy responses must give way to coordinated, European policy responses.**

This improved and ambitious European governance has two separate strands:

- a holistic and better coordinated vision of policy-making at European level, involving the Commission and European Institutions, notably the Council and European Parliament. It is essential to improve the co-ordination and interaction of the different policies affecting competitiveness, including the ‘competitiveness proofing’ of new policy proposals;
- closer co-operation with Member States and monitoring the success and competitiveness performance of policies at the European and Member State level. This can now be based on the new Lisbon Treaty’s TFEU Article 173 on industrial policy in the context of the Europe 2020 framework, the enhanced economic policy coordination and notably with the new "European semester" that, *inter alia*, should contribute to better design national reform programmes¹².

As part of the Europe 2020 strategy, the Commission will thus regularly report on EU’s and Member States’ competitiveness and industrial policies and performance..

Indeed, as many of the relevant framework conditions for a competitive and sustainable industry are set at Member State level, the monitoring should not only cover competitiveness performance but also competitiveness policies, including factors such as the business environment, the innovation system, conditions of competition, infrastructure, the efficiency of public administration, and progress towards energy and resource efficiency. A first analysis of Member States’ competitiveness performance and policies demonstrates that there is room for improvement across the board. This analysis will continue to be refined to include better coverage of industrial sustainability, notably in the light of the forthcoming Resource Efficiency flagship. The policy framework at the EU level – Europe 2020 strategy with its flagship actions and Article 173 TFEU on industrial policy – provides a range of means to encourage Member States to step up their efforts to bring about such improvements, thus contributing to a more competitive European industry and economy and the Commission will use them to the full.

A review of Member States’ industrial and business policies could lead to **better coordination and pooling of the use of available resources**, and legal instruments could generate more value for money. This is the more important the less resources are available, and the more comprehensive and fragmented policy frameworks have become in recent decades.

This type of monitoring will be organised via the Competitiveness Council and the European Parliament and will be further developed through peer reviews and exchanges of good practices. It is fully consistent with the Europe 2020 framework,

¹² COM(2010) 250.

It will feed into the **overall monitoring of Europe 2020** but with a specific focus on Member States' competitiveness performance and the possibility of mutual learning. This in turn should contribute to improve national policies as monitored through the national reform programmes¹³.

The following areas are particularly suitable for the exchange of best practice: the reduction of administrative burden and the assessment of impacts on competitiveness, "fitness checks" and "think small first" in national legislation, policies to facilitate access to finance, key enabling technologies, enforcement of intellectual property rights, the development of skill strategies in connection with industrial needs and in the design of national industrial policies, especially as regards individual sectors and the involvement of stakeholders. Closer cooperation can bring forward synergies, complementarities and better use of resources especially in developing and deploying key enabling technologies and environmental technologies but, also, in some specific skill areas, where national demand may not justify a fully fledged curriculum. Finally, while the rationale for exchange of best practice and cooperation is stronger at the level of individual actions, peer reviews are more beneficial for more integrated and complex policies.

These actions can be of variable geometry as national needs and circumstances vary. The Commission will discuss with Council and Member States in the coming months the principles and the modalities under which they should be organised as well as their scope and hierarchy of priorities. Moreover, the Commission will monitor and report annually on the competitiveness and industrial policies and performance of Member States. This will include industrial aspects of more policies serving more general objectives such as education, research, protection of the environment or climate change. Particular emphasis will be put on developments regarding the best practice exchange and cooperative actions. The Europe 2020 Strategy is also of importance for the EU enlargement countries' reform agenda. Candidate and potential Candidate Countries should therefore also start pursuing the proposed objectives of the new integrated industrial policy.

Implementing the fresh approach to industrial policy should help businesses and investors engage in profitable, sustainable and job-creating industrial production in Europe and improve international competitiveness in productivity and cost terms. EU industry would therefore benefit from the fast-growing world market provided by globalisation. In other words, Europe would see rising industrial output, employment and incomes over the coming decade, while significantly decreasing industry's carbon and resource footprint.

The following indicators of success will be thus monitored closely:

- The improvement in international competitiveness, comparing both the EU's productivity and cost developments with those of its competitors.
- The number of new jobs created in industry and industry-related services, with particular reference to the number created in SMEs;
- The rate at which manufacturing output rises, particularly output in the eco-industries;
- The share of medium- and high-technology manufacturing sectors in total manufacturing value-added and employment

¹³ COM(2010) 250.

The Commission will, under TFEU Article 173:

- *Implement the actions outlined in this Communication to strengthen the European policy framework for industrial policy, working closely with the Council and European Parliament;*
- *report to the Council and the European Parliament on the EU's and Member States' industrial competitiveness and related policies and performance on an annual basis;*
- *initiate peer reviews and exchanges of good practices with Member States to improve cooperation on industrial policies across the EUs.*

Member States are invited to:

- *co-operate and where appropriate coordinate their industrial policies;*
- *engage in peer reviews and exchanges of good practices.*