



Council of the
European Union

**Brussels, 26 July 2018
(OR. en)**

11352/18

**COMPET 528
MI 545
IND 201
DIGIT 150
JUSTCIV 192
RECH 341**

NOTE

From: Presidency
To: The High Level Working Group on Competitiveness and Growth
Subject: Governance of the Artificial Intelligence Strategy for Europe

Delegations will find in Annex a Presidency discussion paper on Governance of the Artificial Intelligence Strategy for Europe, in view of the meeting of the High Level Working Group on Competitiveness and Growth on 7 September 2018.

The EU Communication on Artificial Intelligence

Europe has strong assets in Artificial Intelligence (AI) and the potential to boost its competitiveness with a rapid adoption of these technologies. However, other regions of the world are investing massively, with the risk of Europe lagging behind. In this context, the European Commission adopted in April 2018 a Communication on Artificial Intelligence for Europe¹. The communication was also accompanied by a Commission Staff Working Document on liability². In parallel, the Commission proposed legislation to open up more public sector data for re-use, and other measures to make data sharing easier³.

The proposed AI strategy for Europe aims at strengthening European AI capacity on the basis of three pillars:

- boosting the EU's technological and industrial capacity and AI uptake across the economy;
- preparing for socioeconomic changes,
- ensuring an appropriate ethical and legal framework.

It puts forward that Member States and the European Commission join forces and work together towards a coordinated plan on Artificial Intelligence by the end of 2018. The goal is to maximise the impact of investments at EU and national levels, encourage synergies and cooperation across the EU, including on ethics, exchange best practices, and collectively define the way forward to ensure that the EU as a whole can compete globally.

¹ European Commission, Communication on Artificial Intelligence for Europe (25.4.2018). <https://ec.europa.eu/digital-single-market/en/news/communication-artificial-intelligence-europe>

² Doc. 8507/18 ADD 1, SWD(2018) 137 final

³ European Commission, Communication "Towards a common European data space" (25.4.2018) <https://ec.europa.eu/digital-single-market/en/news/communication-towards-common-european-data-space>

Artificial Intelligence in the next multiannual financial framework

For the next multi-annual financial framework, the European Commission adopted proposals of complementary programmes to ensure R&I leadership and broad roll-out of Artificial Intelligence, with different instruments and targets:

- The **Single Market Programme** supports among other goals the "adoption of new technologies to efficiently tackle internal market challenges (e.g. block-chain, Artificial Intelligence, Mixed reality, Big Data Analytics) and ensuring that such technological progress benefits the internal market".
- The **Digital Europe Programme**⁴, the first pan-European programme dedicated to the digital transformation. Endowed with a proposed total budget of €9.2 billion, it will reinforce Europe's capacities in key digital technologies.

With €2.5 billion for Artificial Intelligence, it will notably support building up and strengthening core AI capacities in Europe, including data resources, repositories of algorithms and testing and experimentation sites. Moreover, the Commission proposes to reinforce the role of Digital Innovation Hubs and their networking as an instrument to deliver on the digital transformation of the economy and society.

In addition to Artificial Intelligence, the Digital Europe Programme will cover high performance computing, cybersecurity, advanced digital skills and interoperable solutions in areas of public interest.

⁴ https://ec.europa.eu/commission/publications/connecting-europe-facility-digital-europe-and-space-programmes_en

- The **Horizon Europe Programme**⁵ will mobilise research, technological development, demonstration, piloting, proof-of-concept and innovation on key digital technologies, including AI. It builds on Europe's leadership in Research and Innovation in digital technologies and complements the Digital Europe Programme⁶.
- The **InvestEU Fund**⁷ will provide access to finance with its four policy areas – sustainable infrastructure; research, innovation and digitisation; small and medium-sized businesses; and social investment and skills. InvestEU covers a broad range of activities and financial instruments such as loans, equity financing and guarantees, which can be used to finance the adoption of digital innovations by companies willing to digitally transform.

Joining forces at EU level

A thorough discussion between the Commission and Member States is needed to determine how national efforts could best be aligned and coordinated in order to ensure the necessary scale, speed and impact pertaining to AI-driven innovation in Europe.

⁵ https://ec.europa.eu/commission/publications/research-and-innovation-including-horizon-europe-iter-and-euratom-legal-texts-and-factsheets_en

⁶ Proposal on establishing the specific programme implementing Horizon Europe – the Framework Programme for Research and Innovation states that "the completion of the Digital Single Market and the growing opportunities from the convergence of digital and physical technologies requires a stepping up of investments. Horizon Europe will contribute to these efforts with a substantial increase of spending in main digital research and innovation activities compared to the Research and Innovation Framework Programme Horizon 2020. This should ensure that Europe remains at the forefront of global research and innovation in the digital field." EUR 13 billion are spent in main digital activities under Horizon Europe.

⁷ https://ec.europa.eu/commission/publications/investeu-programme_en

The AI strategy for Europe foresees the launch of a coordinated plan on Artificial Intelligence with Member States and a series of high-level meetings by the Member States' Group on Digitising European Industry (DEI) and AI to develop such a plan. Moreover, a close dialogue with the Council is planned to be established mainly via close cooperation between the Member States' Group on Digitising European Industry (DEI) and AI and the High-Level Working Group of Competitiveness and Growth, as well as related Council meetings (roadmap of AI-related events in Annex).

First discussions in the context of the implementation of the EU's AI Strategy have already taken place as part of the existing Member States' Group on Digitising European Industry (DEI) and AI on 18 June 2018. This meeting, attended by more than 60 national representatives from all EU28, launched work on a coordinated plan, and identified preliminary shared priority areas.

Building on the various strands of work, the following priorities emerged:

1) AI applications need to be championed by all, in academia, industry, services and the public administrations.

A coordinated plan should target key sectors such as health care, finance, agriculture, advanced manufacturing, automated driving and fighting climate change. The use of health data in compliance with the General Data Protection Regulation (GDPR) will play a key role to improve predictive medicine to the benefits of European citizens. In the manufacturing sector, there is also a whole ecosystem to be developed to smarten the vast installed base of machine tools with sensors and AI.

2) Shift in Public Sector services

In order to reap the benefits and truly develop AI-based economy, we need our public sectors to change the way they service citizens. AI can enable the creation of real-world users of public services. However, in order to ensure that, we first need to know that the public sector leads by example. Servicing the citizens needs not only to become digital but also AI enabled whenever feasible. The use of AI in the public sector encourages the introduction of new technologies in the private sector. Additionally, our legal system should enhance and not restrict innovation. The flexibility of the public sector and regulations is important, as the full potential of the evolving technologies is not clear at the beginning.

Therewith, we must find ways to develop practical applications, whereas low-hanging fruits from public sector can be a quick example. Public sector can direct innovation through public procurement and by designing public sector processes, so that those processes where technology makes the work of a person can be done by AI. These processes can be for example in the areas of data sourcing, control of compliance with conditions, frequent communication with citizens.

Furthermore, sharing practical solutions and experiences between the Member States, and policy development experiences and solutions of using AI in the private sector, are essential. We should support and stimulate public and private pilot projects for the development of AI, and it is important to define priority pilot projects from the European Union.

3) The development and broad roll-out of AI requires excellence in research and world-class innovation infrastructures, such as the Digital Innovation Hubs.

Investing in research and innovation along a coordinated agenda and together with schemes allowing for disruptive innovations will be essential for the future of Europe. New ways of collaboration will be needed to test and experiment AI in new applications and to build up an investor community that triggers higher private investment into this technology. The European Commission announced to maintain and even increase the investments in Artificial Intelligence in the future Horizon Europe Programme. (see above)

Broad roll-out requires availability of testbeds, not only for AI, but also for digital technologies which enable its deployment such as High Performance Computing (HPC), 5G, cybersecurity and data platforms, which will be particularly important to pool data from various sources and handle access and use rights.

It is also critical to make AI available to SMEs, to allow them to reap the potential benefits this technology can bring. Member States supported the critical role played by Digital Innovation Hubs in the delivery of the digital transformation of the economy, by approaching and supporting SMEs in their digital transformation.

Pilot financing schemes under the current financial framework in preparation to the InvestEU Fund could be explored. These schemes could form a pipeline of projects for an investment platform for the digital transformation of the economy, notably in the further development and adoption of Artificial Intelligence by SMEs.

4) Changing work environment, education, training and up-skilling remains a challenge.

Developing, training, keeping and attracting the best digital talents worldwide are key for a sustained growth of the European economy. Training should not cover only specialists but also all the workforce so that they can seize the digital opportunities and particularly AI as outlined in the Digital Europe Programme.

The European Commission also set up a high-level expert group on the impact of the digital transformation on EU labour markets⁸ to analyse, advise and explore policy options.

5) Free movement of data as an enabler of new technologies and AI

Most future successful business-models are likely to be data-driven. The widespread adoption of AI will further deepen this approach, as it is, in fact, the explosion of data, that will enable AI to advance. At this point, the principle of free movement of data is becoming of utmost importance.

⁸ <https://ec.europa.eu/digital-single-market/en/news/call-expression-interest-high-level-group-impact-digital-transformation-eu-labour-markets>

To be more specific, the real use of AI requires the availability, sharing, reciprocal cross-usage of data. In cooperation, we need to further develop the free movement of data, which would allow AI to be developed across borders. Furthermore, in this context, we should consider the possibilities of pooling data sources.

6) Adequate ethical and regulatory frameworks are a precondition to roll-out AI which embeds and respects European values.

The recently launched High Level Expert Group on Artificial Intelligence (AI HLG)⁹ and its outreach to a broad range of stakeholders through the European AI Alliance¹⁰ will build and echo the ongoing development of ethical standards in several countries. At this point, Member States are not adopting new regulations, but are focusing on national strategies in order to see where AI should be placed in the national legal order in the first place. Member States are rather interpreting existing legislation in the light of AI and adopting norms and guidelines for businesses. For example, Estonia has allowed testing of autonomous vehicles on the roads under the existing road regulations. It is however key that companies further experiment with digital technologies, and for that Member States may need to verify that existing regulations do provide the required legal certainty for them. Thus, numerous Member States are currently in the process of drafting national strategies on AI, or have already done so. It is clear that in order to benefit from new technologies, we have to make the legal environment fit for them. Furthermore, it is clear that in order to ensure highest level of consumer protection, we need to introduce some new principles regarding liability, consent, transparency, ethics, etc.. It would be worthwhile to explore how regulatory sandboxes could provide the required legal certainty within the current regulatory frameworks.

⁹ <https://ec.europa.eu/digital-single-market/en/high-level-group-artificial-intelligenceA>

¹⁰ <https://ec.europa.eu/digital-single-market/en/european-ai-alliance>

The European Commission appointed an expert group on liability and new technologies which will examine whether existing EU legislation in the area of product liability is suitable for new technologies such as AI, advanced robotics, and the Internet of Things (IoT). It will also assist in developing principles that could serve as guidelines for adapting applicable EU and national laws to new technologies. By mid-2019 the Commission will issue guidance on the interpretation of the Product Liability Directive in the light of technological developments, to ensure legal clarity for consumers and producers in case of defective products.

Questions for the discussion

- *What should be the areas for shared priorities and collaboration to agree on for a coordinated plan on AI?*
- *What role could the ongoing and future EU programmes and national initiatives play to boost private and public investments and diffuse the benefits of digitalisation to all businesses and administration in the EU?*
- *Specifically, what are Member States doing to establish AI-focussed Digital Innovation Hubs?*

Annex to ANNEX

Work strands on Artificial Intelligence

Introduction

Last year, the Tallinn Digital summit, organized by the Estonian Presidency, brought together EU heads of state or government to debate plans for digital innovation enabling Europe to stay ahead of the technological curve and be a digital lead in the global world in the years to come. It sent a clear message on the need for a stronger and more coherent Digital Europe.

In the conclusions of the European Council meeting of 19 October 2017 Member States then agreed that, to build a Digital Europe, a series of a priorities needed to be addressed, out of which the rise of artificial intelligence. The importance to have a bold approach to artificial intelligence was confirmed with the signature of a declaration of cooperation signed on 10 April.

Further to the request of the European Council, the Commission proposed a European approach to artificial intelligence in a communication published on 25 April 2018. The distinguishing trait of the proposed European strategy is an integrative effort, tackling competitiveness, ethical, legal and socio-economic issues together.

Europe has world-class researchers, laboratories and start-ups in the field of AI. The EU is also strong in robotics and has world-leading transport, healthcare, energy and manufacturing sectors that should adopt AI to remain competitive. However, fierce international competition requires coordinated action for the EU to be at the forefront of AI development. In order to avoid fragmentation and ensure sufficient scale, the Commission initiated a cooperation at EU-level through the Digitising European Industry platform, with the objective to develop a coordinated plan on AI with Member States.

In the next multi-annual financial framework investments in AI-related research and innovation are expected to continue through Horizon Europe. The Commission also proposes a new Digital Europe Programme to build up and strengthen core AI capacities in Europe, including data resources and repositories of algorithms. The Digital Europe Programme will reinforce and network digital innovation hubs in the Member States with a focus on testing and experimentation. This will be complemented by investments in High Performance Computing, Cybersecurity, digital capacities, interoperability and skills.

I. Implementation of the EU strategy proposed by the Commission

1. Context

The European Council of 19 October 2017¹¹ pointed out a sense of urgency to address emerging trends including artificial intelligence and invited the Commission to put forward a European approach to artificial intelligence by early 2018. It called on the Commission to take the necessary initiatives for strengthening the framework conditions with a view to enable the EU to explore new markets through risk-based radical innovations and to reaffirm the leading role of its industry.

The conclusions of the COMPET Council¹² on 12 March 2018 stressed that, in order to operate in a data economy, companies need a continued focus on the innovative development and take-up of key forward looking trends including Artificial Intelligence. The Council called for strengthening efforts and the rapid implementation of policy priorities in respect of the digitalization of industry with a special emphasis on reinforcing initiatives like Digital Innovation Hubs and other initiatives under the European platform on digitising industry supporting small and medium-sized enterprises (SMEs) in their digital transformation.

¹¹ <http://www.consilium.europa.eu/media/21620/19-euco-final-conclusions-en.pdf>

¹² <http://www.consilium.europa.eu/en/press/press-releases/2018/03/12/eu-industrial-policy-strategy-council-adopts-conclusions/>

In response to the call from the European Council, on 25 April, the European Commission adopted a Communication on Artificial Intelligence for Europe¹³. The European strategy is based on a holistic approach, tackling research and industrial deployment, ethical, legal and socio-economic issues. It was accompanied by a Commission Staff Working Document on liability¹⁴. In parallel, the Commission proposed legislation on data, to open up more public sector data for re-use, and other measures to make data sharing easier¹⁵.

The proposed AI strategy for Europe aims at strengthening European AI capacity on the basis of three pillars:

- boosting the EU's technological and industrial capacity and AI uptake across the economy,
- preparing for socioeconomic changes,
- ensuring an appropriate ethical and legal framework.

The European approach on AI proposes that the Commission and the Member States join forces and work together towards a coordinated plan on Artificial Intelligence by the end of 2018. The goal is to maximise the impact of investments at EU and national levels, encourage synergies and cooperation across the EU, including on ethics, exchange best practices, and collectively define the way forward to ensure that the EU as a whole can compete globally. Discussions will take place as part of the existing Member States' Group on Digitising European Industry (DEI) and AI. The first meeting took place on 18 June 2018.

¹³ European Commission, Communication on Artificial Intelligence for Europe (25.4.2018). <https://ec.europa.eu/digital-single-market/en/news/communication-artificial-intelligence-europe>

¹⁴ Doc. 8507/18 ADD 1, SWD(2018) 137 final

¹⁵ European Commission, Communication "Towards a common European data space" (25.4.2018) <https://ec.europa.eu/digital-single-market/en/news/communication-towards-common-european-data-space>

The European Council on 28-29 June 2018 highlighted that in order to build a European data economy, further action is needed to improve the efficient use of data across the EU, reiterating that high-quality data are essential for the development of Artificial Intelligence. It invited the co-legislators to swiftly examine the latest data package and asked the Commission to work with Member States on a coordinated plan on Artificial Intelligence, building on its recent communication.

2. Member States' Group on Digitising European Industry (DEI) and AI

On 18 June, the national Directors-General of the Member States' Group on Digitising European Industry (DEI) and AI¹⁶ firstly met with representatives from the 28 Member States, Norway and Switzerland responsible for fostering artificial intelligence (AI).

The meeting proved Member States' full commitment to make Artificial Intelligence a success for Europe. EU Member States are adopting new strategies for strengthening the efficient use of AI in line with the Declaration of Cooperation on Artificial Intelligence signed by 28 Member States and Norway. The launch of national strategies with significant investments¹⁷ is a strong sign that Europe is willing to lead the development of AI for businesses and citizens.

In her discussion with Member State representatives, Commissioner Gabriel stated her ambitions of a timely coordinated plan, with concrete actions which meet the needs of the European economy and society.

Work on the coordinated plan on AI will continue with working meetings of Sherpas nominated by the members of this Group, as well as with two additional meetings of the Member States' Group on Digitising European Industry (DEI) and AI.

¹⁶ <https://ec.europa.eu/digital-single-market/en/news/high-level-governance-meeting-digitising-european-industry-forum-focus-artificial-intelligence>

¹⁷ France will dedicate €1.5 billion for take-up of AI by SMEs, Finland committed €160 million for AI platforms, Sweden presented a 10-year plan and several hundred millions to build academic and industrial competences; and the UK announced an AI sector deal of €1 billion covering investments from technology to skills. And these are just a few examples, as most other countries are also making progress on their own AI initiative.

The coordinated plan on AI will develop along the three pillars of the Communication. In order to integrate the development of the expert groups, joint meetings are also planned.

3. High-Level Expert Group on Artificial Intelligence (AI HLG)

Pursuant to a call for experts launched on 9 March 2018, the Commission has set up a High Level Expert Group on Artificial Intelligence ("AI HLG") to support the implementation of the strategy on AI. Almost 500 applications were received, and 52 experts have been selected to carry out the AI HLG's mandate.

The experts will focus on two main deliverables:

- (1) **(draft) AI ethics guidelines**, which will offer guidance on how to implement ethical principles when developing and deploying AI, building on the work of the European Group on Ethics in Science and New Technologies and the European Union Agency for Fundamental Rights; and
- (2) **mid- and long-term policy recommendations on AI-related challenges and opportunities (the so-called AI policy and investment recommendations)**, which will feed into the policy development process, the legislative evaluation process and the development of a next-generation digital industrial strategy.

The first meeting of the AI HLG took place on 27 June. Further targeted workshops will be organised between September 2018 and January 2019.

The outcomes of these workshops will feed into the AI ethics guidelines and into the policy policy and investment recommendations report.

The next two meetings of the AI HLG are planned on 8-9 October in Helsinki and on 22 January 2019 in Brussels. These will be (partially) joint meetings with the Member States' Group on Digitising European Industry (DEI) and AI, in order to ensure close cooperation between both. The AI HLG will use the input received from the MS in its deliverables. Ultimately, the success of the AI HLG's work depends on the input and support granted by Member States to this initiative.

4. European AI Alliance

The AI HLG serves as the steering group of the European AI Alliance, a broad multi-stakeholder forum aiming to stimulate reflection on AI's challenges and opportunities by all concerned and interested parties. With the establishment of the Alliance, the Commission aims to mobilise a diverse set of participants, including businesses, consumer organisations, trade unions, and other representatives of civil society bodies in order to share best practices and encourage private investment and activities related to the development of AI. The European AI Alliance is hosted on an online platform which was launched mid-June, and which now already counts more than 1000 members.

5. Expert group on liability and new technologies

As announced in the AI Communication and in the Staff Working Document on "liability for emerging digital technologies" of 25 April, the European Commission has appointed in June **an expert group on liability and new technologies** which will examine whether existing EU legislation in the area of product liability is suitable for new technologies such as AI, advanced robotics, and the IoT (Internet of Things). The call for expression of interest can be found here: <https://ec.europa.eu/digital-single-market/en/news/call-experts-group-liability-and-new-technologies>.

It will also assist the Commission in developing principles that could serve as guidelines for adapting applicable EU and national laws to new technologies. The expert group has two formations: a **Product Liability Directive (PLD)** formation and a **New Technologies (NT)** formation.

The PLD formation has a total of 45 experts (including MS representatives, stakeholders and legal experts)¹⁸. Its first meeting took place on 8 June. The PLD formation will assist the European Commission with expertise on the applicability of the Product Liability Directive to traditional products, new technologies and new societal challenges. It will help produce interpretative guidance for the PLD and possibly also recommendations for a revision / recast of the PLD. The timing for the interpretative guidance is June 2019.

The NT formation has a total of 16 experts composed of law professors. It will assist the European Commission in developing principles that can serve as guidelines for possible adaptations of applicable laws at EU and national levels relating to new technologies. The first meeting of the NT formation took place on 26-27 June. This formation should produce a report by mid-2019 (*to be confirmed*).

6. High-level expert group on the impact of the digital transformation on EU labour markets and the future of work

A [high-level expert group on the impact of the digital transformation on EU labour markets and the future of work](#) is being set up by the European Commission (but not yet established), to analyse and advise the Commission on the impact of the digital transformation on EU labour markets and explore policy options. This expert group is composed of nine persons acting in a personal capacity, under the chairmanship of Professor Goos. A first meeting is planned in September 2018. The group is expected to produce a report, with policy recommendations, by March 2019. Five meetings of the HLEG-FoW expert group have been planned at regular intervals.

¹⁸

<http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=3592&NewSearch=1&NewSearch=1>

More information online: <https://ec.europa.eu/digital-single-market/en/news/call-expression-interest-high-level-group-impact-digital-transformation-eu-labour-markets>

7. International dimension of AI

International cooperation on AI should be implemented on the basis of the strategy defined in the AI Communication. It should look in particular at protecting EU's interests but also ensuring that cooperation is established with international partners that are like-minded countries sharing EU's fundamental values, such as the respect for human dignity, pluralism, non-discrimination and protection of privacy. The EU AI Alliance should be the main vehicle to associate other non-EU countries especially when it comes to the AI ethics guidelines.

In terms of future activities, at bilateral level, a Commission-Japan Ministerial meeting on AI is considered and could take place in April 2019 in Japan with the objective to deepen mutual understanding on EU and Japan AI initiatives and in particular to converge on AI ethics principles. Possible outcomes would feed into the G7 and G20 discussions. At multilateral level, a G7 multi-stakeholders conference on AI will take place in Montreal (Canada) early December 2018. This one-day event will build upon the objectives outlined in the G7 Innovation Ministers' Statement on AI and the Charlevoix Common Vision for the Future of Artificial Intelligence, bringing together industry, research institutions and civil society stakeholders with a focus on how we can enable environments that foster societal trust, maximize growth, and realize inclusive development. A G20 Digital Economy/Trade Ministers' meeting will be organised on 8 and 9 June 2019 in Tsukuba (Japan). Japan did not provide yet information on areas that will be covered but it is expected that AI and digital trade will be on the agenda.

II. Competitiveness Council AI-related work tracks

1. General overview

The Austrian Presidency has presented its priorities¹⁹. The Competitiveness Council will operate under the umbrella of the Presidency goal of "Securing prosperity and competitiveness through digitalisation". The roadmap of the Presidency Council meetings will therefore pursue boosting industrial competitiveness for the EU as a whole, leveraging opportunities that come with digitalisation. This includes the promotion of innovation, such as with respect to Digitising European Industry, through Research and Innovation investments and demand side measures, which overall improve Europe's competitive position internationally. A new, **holistic and strong European Industrial Policy Strategy** shall take full advantage of current and future developments such as digital transformation, the potential of AI and the need for skilled labour. The Presidency aims to deliver input related to two key elements – besides the issue of the necessity of skills:

Artificial Intelligence and Robotics: Artificial Intelligence is a topic of high importance for the competitiveness of the European economy. It will be crucial to highlight the benefit of Artificial Intelligence and Robotics for the industrial sector. By pooling our resources and working closely together, we will be able to seize the competitive advantage of AI for a reindustrialisation of Europe. This topic will be discussed from different angles during the Informal COMPET Council, the HLG CompCro in September and the COMPET Council in September.

¹⁹ <https://www.eu2018.at/agenda-priorities/programme.html>

Council Conclusions on “Future EU Industrial Policy Strategy” **and Presidency Report**: The Austrian Presidency intends to prepare conclusions to be adopted by the Competitiveness Council on 29 November, focussing on **monitoring, governance** and **mainstreaming** of the EU industrial strategy. **Mainstreaming** of the industrial policy is important for an effective implementation of the strategy: therefore, a clearer **governance structure for industrial policy** must be developed, involving COM, MS and important stakeholders; high priority should be given to an integrated approach to competitiveness within the Competitiveness Council and between Council formations (Mainstreaming-Approach). An indicator framework as the first piece for a fully-fledged monitoring mechanism has been elaborated by the HLG CompCro and will be finished during the Austrian Presidency. The ideas for a **Governance structure** by better highlighting the tasks of the existing institutions/fora and better linking them will be presented by a presidency Paper accompanying the Council Conclusions.

A policy debate is planned at the COMPET Council on 27 September on the topic of "Rethinking European Industry: Artificial Intelligence and Robotics". This debate will build on the outcome of discussions at informal meeting of Competitiveness ministers which will address digitisation of industry with a special focus on AI, skills and investments, notably for innovation infrastructures such as Digital Innovation Hubs.

Two meetings of the High-Level Working Group on Competitiveness and Growth (HLG CompCro) are also planned on 7 September and 8 November to provide guidance from Member States on the coordinated plan on Artificial Intelligence which will be finalized by the **Member States’ Group on Digitising European Industry (DEI) and AI** at the end of 2018.

Planning AI – COMPET Council activities

- Informal meeting of EU Competitiveness Ministers: 16 July
- **High Level Working Group Competitiveness and Growth: 7 September**
- **COMPET Council: 27 September**
Rethinking European Industry: Artificial Intelligence and Robotics (Policy debate)
- **High-Level Working Group Competitiveness and Growth: 8 November**
- **COMPET Council: 29 November**
Information on the HLG CompCro input for the coordinated plan on AI
- **COMPET Council February 2019**

2. Linking up work tracks

Following the publication of the Commission Communication on AI, the first exchange between Competitiveness ministers on this topic will take place during the informal meeting on 15-16 July, in Vienna. Ministers will discuss the challenges and opportunities that Artificial Intelligence brings to European industries, and they will reflect on the appropriate policy response taking into account the Commission proposals on Artificial Intelligence, the data package and the next multiannual financial framework.

The HLG CompCro is mandated to provide concrete and timely input on new initiatives to the Commission and to Member States for the preparation of the COMPET Council (via COREPER). Furthermore, its role is to contribute to discussions in the COMPET Council by linking new developments and deepening its discussions.

In the current HLG CompCro programme covering the period July 2017 – December 2018, it is underlined that as a strategic think tank, the HLG CompCro should look at developments that characterize and affect the future of our industry. Digitalisation and digital innovation are part of the major challenges for all sectors. Therefore HLG CompCro work will provide relevant input on shaping a common view on the importance of a strong industrial base for innovation, creating synergies between R&D&I, industry and other sectors so that any industry, SME and start-up in whatever location in the European Union can fully benefit from digital innovation.

The priority determined in 'Pillar II – Industry and Business Climate' for the period falling under AT Presidency is "digital transformation of industry and innovation ecosystems: chances and challenges." The HLG CompCro meeting of 7 September will discuss "governance for Artificial Intelligence", which, together with the output of the Informal COMPET Council, will feed into the Competitiveness Council policy debate "European Industry: Artificial Intelligence and Robotics" planned for 27 September. This policy debate could provide formal feedback from the Council on the strategy proposed by the Commission, take stock of the progress achieved on the development of a coordinated plan on AI at EU level, and focus on the role of digital innovation hubs and EU programmes in the implementation of the EU AI strategy.

The topics identified by Member States through the Member States' Group on Digitising European Industry (DEI) and AI further to the meeting of 18 June and at the informal COMPET Council of 16/7 should serve as a basis for the discussions at the upcoming meetings of the HLG CompCro. This is reflected in the Presidency discussion paper for the HLG CompCro meeting of 7/9 which is under preparation and includes feedback from the Commission work tracks.

The discussions could notably cover efforts to increase investments in AI, research and innovation infrastructures such as digital innovation hubs and excellence research centres, how to best prepare for future EU programmes (pipelines, pilot projects), joint priorities and collaboration actions which could be undertaken in the coordinated plan on Artificial Intelligence as announced in the AI Communication and called for by the European Council Conclusions of June.

Participation from one or a few member(s) of the High-Level Expert Group on Artificial Intelligence (AI HLG) and Member States' Group on Digitising European Industry (DEI) and AI established by the Commission in the HLG CompCro as well as participation of the HLG CompCro Chair in the Member States' Group on Digitising European Industry (DEI) and AI and High-Level Expert Group on Artificial Intelligence (AI HLG) could also allow to link the work of the three groups.

Taking into account the outcome of the COMPET Council meeting of 27 September, where a mandate could be given to HLG CompCro to deliver input for the coordinated plan on AI to the Member States' Group on Digitising European Industry (DEI) and AI, the HLG CompCro meeting of 8 November can be used to discuss first findings of the Member States' Group on Digitising European Industry (DEI) and AI (covering notably investment aspects) which then could be discussed by the COMPET Council meeting in early 2019.