# **Workshop on Digitising European Industry**



European Platform of national initiatives,
Digital Innovation Hubs (WG1)
Digital Industrial Platforms (WG2)

Workshop Report 27 June 2017, Brussels

# **Executive Summary**

In order to prepare the Autumn Roundtable on Digitising European Industry, a working-level workshop gathered in Brussels on 27 June 2017 the sherpas of the Roundtable representatives. Participation, at working level, also included representatives of the ministry(ies) in charge of the digitisation of industry, as well as representatives of the national initiatives for Digitising Industry already in place, industry, H2020 Public-Private Partnerships and European Associations. The <u>full list</u> of participants is available here.

The meeting discussed a wide range of issues relating to the progress of the Digitising European Industry initiative and the contributions that can be made by the European Platform of national initiatives. The full set of presentations is also available online.

In view of the forthcoming Autumn Roundtable and other developments within a similar timeframe, the meeting agreed preparatory actions as follows:

## **Action Points for Digital Innovation Hubs**

In relation to Digital Innovation Hubs, participants will:

- 1) Review the information of their country following the "guide".
  - Are the DIHs in the catalogue the right ones? Feedback to TNO (maurits.butter@tno.nl)
  - o Do your DIHs offer the right services for the industry you want to support?
  - For EU 13 countries: Would you like your DIHs to benefit from the training programme of PWC?
- 2) Make national plans on Digital Innovation Hubs more explicit, including foreseen investments.
- 3) **Consider whether Working Group 1 should continue**? If so, what should be the topics of discussion? Some suggestions:
  - How to network the Digital Innovation Hubs? What could be possible business models for DIHs to offer support to companies outside their territory?
  - What are the roles Digital Innovation Hubs can play to de-risk investments? Is there
    a need for a new investment fund at European level to facilitate the necessary
    investments (loans, equity, etc.) to support European companies in their digital
    transformation?
  - o How can Digital Innovation Hubs address training and skills development?

Deadline: End of July, send your DIH plans and other ideas to Anne-Marie.Sassen@ec.europa.eu and Alexandra.Tasigiorgou@ec.europa.eu.

## **Action Points for Digital Industrial Platforms**

In relation to Digital Industrial Platforms:

- 1) MSs will identify current **initiatives and investments** and those envisaged in the country in the next five years for programmes on digital industrial platforms, piloting and testbeds.
  - Review the report on WG2 to be published in July 2017
  - Fill in the survey on <a href="http://bit.ly/DEI-WG2-survey">http://bit.ly/DEI-WG2-survey</a>
  - Reflect on the need and possibilities for linking these programmes and activities on EU level.
- 2) MSs to focus on **common strategic projects** that address all four pillars: pilot development, large-scale piloting, ecosystem building and standardisation actions.

- 3) cPPPs will consider how they can play a **role in integrating** all relevant digital advances across technology silos.
- 4) All will reflect on the role of several sources of EU, national, regional and private **financing in scaling-up promising platform** initiatives and pilot projects?
- 5) All will reflect on the **need for a partnership instrument** to implement joint industrial digital strategies across the EU, that allows for pooling of substantial resources to tackle grand challenges, involving large industry and SMEs, startups, RTOs, and academia?

Deadline: End of July. Send your comments and ideas to Arian.Zwegers@ec.europa.eu and Rositsa.Georgieva@ec.europa.eu

#### **Action Points for Standardisation**

For the Workshop on 17 October on Standardisation, the following considerations apply:

- 1) Focus? Manufacturing/Industry 4.0 or more?
- 2) Are there any similar standardisation working groups in MSs, on bilateral or trilateral level between MSs, or on EU level similar to the German Industrie 4.0 Standardisation Council?
- 3) Concrete standardisation issues to be addressed on European level or through industrialists joining forces?
- 4) How should the bottom-up platform building approach be linked to more traditional standardisation approaches and the multi-stakeholder platform?
- 5) What role can/should European standardisation bodies play?

Deadline: End of July. Send your comments and ideas to Emilio.Davila-Gonzalez@ec.europa.eu, Antonio.Conte@ec.europa.eu and Rositsa.Georgieva@ec.europa.eu

## Action Points for Preparation of the Roundtable

In the next three months up to the high-level meeting, sherpas will:

- 1) Identify national (and regional) measures, best practices, repositories, ... sharing and reflection on how to apply nationally some practices
- 2) Identify further work items, and approach (position statements, workshops, working groups, ...)
- 3) Propose Working Groups, objectives and scope•Composition, steer: communicate your interest!

Deadline: End of July. Send your comments and ideas to Yves.Paindaveine@ec.europa.eu

# 1. Introduction: Objectives and Expectations

Welcoming everyone to the meeting, Dr. Max Lemke, Head of Unit A2, DG CONNECT (Digital Industry – Technologies & Systems for Digitising Industry) noted that the European Platform of National Initiatives, which had been launched at the Digital Day in Rome in March 2017, was an important development. It has the keen support of the new Commissioner, Ms Mariya Gabriel, who will take over responsibility for the Digital Economy and Society portfolio in early July. The Digital Single Market Strategy Mid-term Review, published in May, noted the positive effects of Commission policies in this area and provides impetus to go further.<sup>1</sup>

The Commission will work with the 15 national initiatives currently within the platform to add value, continuing the efforts begun under the Digitising European Industry (DEI) initiative in 2016 and welcoming new initiatives as they develop. Commitments have already been made under the Horizon 2020 and COSME work programmes for 2018-20, as would be explained in subsequent presentations. This workshop was about taking stock and so as to prepare the ground for the next Roundtable of high-level representatives to be held in the autumn. Further information is available in the agenda and background document circulated before the meeting. The full set of presentations is also available online.

Welcoming participants on behalf of DG GROW, Ms Kirsi Ekroth-Manssila noted that many European companies are adopting digital technologies. The Digital Scoreboard 2017 shows that 75% of companies consider digital as an opportunity and 64% report positive outcomes from investments made so far. But large disparities remain, so although the potential of digital transformation is recognised, it is still a work in progress. With value chains dispersed across Europe, cooperation at European level is more essential than ever. The first European Industry Day held in February demonstrated how digital technologies are being mainstreamed into European initiatives and the event will be repeated next year.

# 2. Digital Innovation Hubs Action Line

A series of presentations outlined the outcomes of the Working Group on Digital Innovation Hubs (DIHs) set up under the Digitising European Industry Roundtable (known as WG1).

Introduction to Digital Innovation Hubs' role in the regions by Anne-Marie Sassen, DG CONNECT.

As is well known, the level of digitisation differs according to size of company, sector and region. DIHs should help all companies in Europe who are not yet benefiting from digital technologies, in whatever sector they operate and wherever they are located. A DIH is a one-stop-shop providing services to companies in the region through a multi-partner cooperation. A wide range of services may be provided, from creating awareness and assessing needs for digital technologies, through to providing access to specialist expertise and infrastructure, training and mentoring, and business services, including access to funding and investment. The <a href="WG1 report">WG1 report</a> includes a guide for DIHs to follow in assessing and meeting regional needs.

Funding opportunities for DIHs are being made available under H2020<sup>2</sup> as well as the European Structural and Investment Funds. Both require Hub applicants to be deeply rooted in their regional/national context.

<sup>&</sup>lt;sup>1</sup> COM(2017) 228

<sup>&</sup>lt;sup>2</sup> Specifically: support of €300m under the H2020 work programme 2018-2020, focus area "Digitising and transforming European industry and services", focusing on networking Digital Innovation Hubs and highly innovative cross-border experiments. Topics addressed: photonics, robotics, big data, Smart Anything Everywhere including "widening", I4MS.

Snapshot of set of information available for each country by Alexandra Tasigiorgou, DG CONNECT.

Examples of the data collected on digitising industry activities was shown, focusing on the case of Spain. The data has been extracted from Digital Scoreboard 2016 and other sources relevant for decisions about Digital Innovation Hubs. Snapshot reports are available for all 28 Member States and could serve as a basis for prioritising and mobilising national and regional investments.

Presentation of the <u>Digital Innovation Hubs Catalogue</u> by Maurits Butter, TNO.

A Catalogue of existing DIHs in the Member States is being created, providing: a platform for Competence Centres and DIHs to advertise their expertise to potential customers and showcase their activities; policymakers with information about state of play of EU DIHs; and identification of networks in the field of digitalisation in industry. Information is being collected proactively by the partners and through an <u>online survey</u> which is open **until 15 July**. The final catalogue will be available in November and targets fishing up to 500 DIHs. In the meantime, support from the Member States is to validate and expand on the candidate lists. Further information on the catalogue is available here.

Presentation of the DIH training programme in EU 13 countries by Giovanna Galasso, PwC.

The project, which was launched in June 2017, will support the European Commission with implementing Digital Innovation Hubs across 13 EU Member States of Central and Eastern Europe. It will: identify institutions which can become DIHs in the EU-13; provide methodology to select the most appropriate DIHs for implementation; help the chosen DIHs reach their potential by mentoring and coaching activities; and develop policy recommendations for improvement. A call for expression of interest (EOI) will be launched in August/September and will include guidelines for potential applicants. National contact points can assist by promoting the initiative in their countries.

Outcomes of the Seminar on Digital Innovation Hubs for Agriculture by Ana Cuadrado, DG-AGRI.

EIP-AGRI organised the seminar "Digital Innovation Hubs: Mainstreaming Digital Agriculture" in Kilkenny, Ireland on 1–2 June 2017. Around 150 participants from 24 EU Member States plus Serbia attended. Key conclusions and priority actions arising from the meeting were:

- 1) Identify local/regional needs and specialisations to develop DIHs that can deliver integrated services adapted to the context.
- 2) Mapping of existing initiatives.
- 3) Based on the "interactive innovation model".
- 4) Solid business model for DIH sustainability.
- 5) Nurture the entrepreneurial ecosystem and foster participation.
- 6) Fostering the collaboration between DIHs across Europe (mutual learning/technology transfer).

Substantial support will be available under H2020 (WP 2018-2020) to take these actions forward.

#### Discussion

Asked how a DIH should be defined, the Commission emphasized that this issue was dealt with at length in the WG1 Report. In essence, the aim is not to be too rigid: a hub is whatever configuration of services and partners is necessary to meet the needs of (mainly SME) users in the regions concerned. An open structure has been adopted that allows the national digitisation strategies to define what should be funded under their own national/regional initiatives. As a minimum, hubs are expected to offer services within three broad competence areas – technology development, business development, and ecosystem development – and may not be supported

solely by private funding. The DIH Catalogue will include existing initiatives, such as the EIT-KICs and the Key Enabling Technology (KETs) Centres.

It was noted that public reinvestment in the infrastructure represents one of the biggest challenges here: how can we keep hubs up to date in infrastructure terms? For example, the Frascati Manual on RDI expenditures does not foresee business model development. Similarly for skills and training, where high demand is being experienced. It is crucial therefore for hubs to find a sustainable business case, with public or private compensation and investments. While investment is certainly an important issue, one of the principles underlying DIHs as a European network is that hubs are not reliant on facilities within their region but are able to access the best DIHs across Europe.

Asked how this linking would be achieved, the Commission explained that H2020 will be utilised: investments have already been made in building a network of hubs and will be expanded further. Most of the foreseen investment for 2018-20 is networking oriented. H2020 can only add value on top of national and regional investments (subsidiarity principle). For high-end innovation, it may be necessary to look at new ideas, an issue that will be raised at the Roundtable. Should we do more than currently available within the Member States? For example, do we need a separate digital innovation fund for hubs to offer to their clients?

It is interesting to note in this context that the Open Innovation hubs being setup by DG RTD are similar to DIHs but target different technologies: they will also face similar challenges.

Discussion on next steps and expectations on the Autumn meeting by Ronan Burgess, DG CONNECT.

As the previous presentations demonstrated, substantial activity is underway to map the landscape for DIHs and prepare the ground for a European Platform of National Initiatives in this area. Member States can greatly assist in this process, in particular through the following actions:

## **Action Points**

- 1) Review the information of your country following the "guide".
  - i. Are the DIHs in the catalogue the right ones?
  - ii. Do they offer the right services for the industry you want to support?
  - iii. For EU 13 countries: Would you like your DIHs to benefit from the training programme of PWC?
- 2) Make your plans on Digital Innovation Hubs more explicit. Reference them in your national digitisation strategy, including foreseen investments.
- 3) Open your plan for discussion during the Autumn Roundtable, in order to share best practices and solve common problems.

Discussion of the DIH implementation plans at the next high-level meeting will help to focus attention on issues that may require further discussion in the working groups. These could be:

- How to network the Digital Innovation Hubs? What could be possible business models for DIHs to offer support to companies outside their territory?
- What are the roles Digital Innovation Hubs can play to better balance the risks of an SME going through a digital transformation? Is there a need for a new investment fund at European level to facilitate the necessary investments (loans, equity, etc.) to support European companies in their digital transformation?
- How can Digital Innovation Hubs address training and skills development?

# 3. Digital Industrial Platforms Action Line

Presentation of the <u>Outcome of the Working Group on Digital Industrial Platforms</u>, by Rositsa Georgieva and Joel Bacquet, DG CONNECT.

Digital technologies are game-changers in the industrial context, bringing opportunities to create value in many sectors. Industrial platforms are like operating systems that bring together different technologies, applications and services. They open up data (for example from the machines, products and operators on a shop floor), make it accessible (for example to monitoring applications), and allow third-parties to develop applications on top and connect different stakeholders, such as users and application developers. There are many examples of platforms: community-led sector-specific (i.e. 'vertical'), community-led technology-specific (i.e. 'horizontal'), proprietary with open interfaces, etc.

Working Group 2 (WG2) has considered next-generation digital platforms across the vertical sectors: Connected Smart Factories, Smart Agriculture, and Digital Transformation of Health and Care; and for the horizontal topics Industrial Data Platforms, and Internet of Things. WG2 has defined characteristics and requirements for the next-generation industrial platforms in each of these areas, together with recommendations. In addition to platform building, WG2 considers large-scale piloting, ecosystem building, and standardisation essential. The final WG2 report is currently being finalised and will be published by the end of July; an earlier version is available <a href="here">here</a>.

In H2020, €300m is being made available under Work Programme 2018-20 for activities related to platforms and pilots across these five themes, together with a further €200m from other EU initiatives.<sup>3</sup> The aims are threefold: i) ensure future global standards and platforms are **driven by the interests of EU actors**; ii) enable EU actors to **join forces around common interests**; and iii) facilitate European industry to come to **agreements on functions and interfaces** for those platforms, reference architectures and interaction protocols that have the potential to create markets and market opportunities leading to ecosystems and standards.

Summing up, Max Lemke emphasized that the aim is for a small number of well-focused projects with strong European coverage. All such projects should: develop and integrate platforms and provide interoperability frameworks; pilot and mature the platform; grow the ecosystem; and provide support through standardisation. Proposals must be strategic, addressing all four of these aspects. They must also demonstrate a united approach. EU investment will be the linking-pin which, leverages and brings together existing efforts under a common European agenda.

#### Discussion

The highly fragmented position in relation to IoT was noted. At events such as the Hannover Fair all of the big players (including from outside of Europe) are represented, each claiming their own platform offers the best solution within the fast-emerging IoT space. In a Commission study, more than 360 IoT-related platforms were identified; clearly, then will be winners and losers. Yet, this situation creates an interesting opportunity for Europe to drive data transmission along non-food value chains, as part of the so-called Circular Economy. This type of interoperability will be essential to avoid vendor lock-in, as well as to enable the creation of standardised, back-to-back services across all non-food value chains.

Investments alone will not be enough to bring companies together; we must aim towards open platforms and reference implementations. This need not exclude commercial platforms provided

<sup>&</sup>lt;sup>3</sup> As a preparatory activity, a further €1m is available to define a digital platform for the construction sector.

they are open. We need strong, viable integration frameworks, while also protecting the business models of existing players.

Industrial Data Space (IDS) was seen as an important model that is now concerned with convergence, rather than competition with commercial platforms. Having begun in Germany, IDS now has support from several countries and proposals for membership will be published next year.

A query was raised as to why new media and content sectors, which are increasingly evident in manufacturing, were not considered. Augmented reality, for example, is a key technology in many areas of design. It was explained that while creativity is central to all of the themes being studied, the platforms themselves do not address technology in significant detail. EU investments, too, will be technology agnostic: the driving factors will be access, uptake and outputs.

Finally, it was noted that other initiatives, such as the European Innovation Partnerships on Active & Healthy Ageing (EIP-AHA) and on Smart Cities (EIP-SC) also offer potential vehicles to pursue the platform approach.

#### **Action Points**

In preparation for the Roundtable, participants were asked to consider:

- 1) (for Member States) Which **initiatives and investments** do you envisage in your MS in the next five years for programmes on digital industrial platforms, piloting, and testbeds? Do you see needs and possibilities for linking these programmes to activities on EU level and by other MSs?
- 2) (for cPPPs): cPPPs are organised by digital technology focus. How do you see your role in integrating all relevant digital advances in vertical/sector-specific platform initiatives which cut across technology silos?
- 3) Do you see any **promising platform initiatives** and **pilot projects** that should be scaled up to full deployment, with enlarged ecosystems? For such scale-ups, how do you see **the role** of several sources of EU, national, regional and private **financing**?
- 4) Do you see the need for a partnership instrument to implement joint industrial digital strategies across the EU that allows for pooling of substantial resources to tackle grand challenges, involving large industry and SMEs, startups, RTOs, and academia.

More generally in relation to digital industrial platforms, Member States were invited to:

- Provide specific support to start-ups, SMEs and mid-caps.
- Reinforce national/regional activities and link them to EU activities.
- Promote the approach of open platforms and piloting towards standardisation.
- > Trigger co-investment.

## 4. Standardisation

<u>Presentations on ICT standardisation activities</u> by Antonio Conte (DG GROW) and Emilio Davila (DG CONNECT).

Accelerating the development of interoperable industrial platforms and their standardisation is a key objective of the DEI initiative. The DEI package released in April 2016 included a Communication on ICT Standardisation Priorities under the DSM strategy. The Joint Initiative on Standardisation launched in June 2016 aims at bringing many European and international

-

<sup>&</sup>lt;sup>4</sup> COM(2016) 176

standardisation players together. Under this Initiative is Specific Action 14: building bridges for standardisation in support to Digitisation of European industry, led by CEN, CENELEC and ETSI.

In IoT, especially, the SDO and alliances landscape is hugely complex and needs to be rationalised. The Alliance for Internet of Things Innovation (AIOTI), a European initiative, is important in this context, bringing together key players from both the public and private sectors. AIOTI's Working Group 3 has made an extensive study of standardisation issues in relation to IoT and is therefore a key contact for Member States on this issue. The Big Data Value PPP also has a task force on standards. The Commission is supporting projects under both of these umbrellas.

What more can we do to federate the outputs from these many platforms? This question will be addressed at a workshop to be held in Brussels on 17 October 2017. National initiatives are invited to participate in order to help build a European ecosystem on standardisation for digitisation of industry and propose a European approach with concrete actions.

#### Discussion

The issue of fairness and non-discriminatory access was raised. It was thought that guidance might not be enough here, for example in view of the debate on standard essential patents. Markets naturally contain divergent economic interests but the supply and demand sides both need each other. We need open platforms in which the interests of both sides are fairly represented – perhaps taking inspiration from the field of collective bargaining – in order to overcome possible issues in deploying digital solutions effectively. The speakers agreed with these comments and confirmed that openness was at the heart of the Commission's approach.

The approach of the Standardisation Council Industrie 4.0 in Germany is also an interesting approach.<sup>5</sup> It has two prongs: firstly, to identify specific use cases and gaps, and then proposing to business leaders (not research departments) which SDOs or standardisation consortium to select to handle the standardisation process. It started only recently, about one year ago, there is still a lot of expectations on how effective it is, especially in the long second stream of actions. It may serve as a useful model to be discussed in the October workshop.

## **Action Points**

It is clear that we need more and better cooperation in the field of standardisation for digitising industry and participants were invited to reflect on the following issues:

- 1) What **standardisation issues** addressed in the national Working Groups would benefit from **being lifted up to the European level**?
- 2) What aspects could be supported through large-scale pilots, including through national efforts?
- 3) How can we build **international cooperation** whilst ensuring appropriate EU representation?
- 4) What common actions for standardisation are required under the DEI?
- 5) What **further issues and/or speakers** should be proposed for the workshop on 17 October?

# 5. Regulations fit for the Digital Age

Data economy overview and access to data by Jiri Pilar, DG CONNECT.

<sup>5</sup> See Standardization Council Industrie 4.0, <a href="https://sci40.com/de/">https://sci40.com/de/</a> and <a href="mailto:background article">background article</a>.

The Communication on Building a European Data Economy, published in January 2017, aims to unleash the potential of the data economy in Europe. It sets out proposals for making more data available for innovative products and services to be developed by the greatest number of players. In order to make such data accessible, the Communication covers five guiding principles: (i) improve access to anonymous machine-generated data; (ii) facilitate and incentivise the sharing of such data; (iii) protect investments and assets; (iv) avoid disclosure of confidential data; (v) minimise lock-in effects.

An online consultation was launched on possible policy and legal solutions for a European data economy, focusing on free flow of data and "emerging issues" relating to data: access, portability, liability and experimentation. Around 380 replies were received, mainly from businesses and organisations. The results are currently being analysed and a synopsis report will be published in July 2017. Preliminary results show that:

- A large majority agrees that wider data sharing should be facilitated and incentivised.
- Almost half of business respondents declare that they depend on data generated by others, and report difficulty with respect to data access.
- Most respondents do not favour regulatory intervention but prefer soft measures (increased use of APIs, non-binding guidance, sharing best practice, etc.)
- Extra-contractual liability is a concern for manufacturers, suppliers, and for users of IoT/robotics devices. A majority favours a risk-management approach (i.e. the party that is best placed to minimise or avoid the realisation of the risk).
- Services allowing the portability of non-personal data are in demand, mainly because of the
  possibility to switch providers. However, portability services are not necessarily offered by
  businesses.

A structured dialogue is underway to explore these results, with events being held in several Member States. Proposals relating to the European Data Economy were also highlighted in the DSM Strategy Mid-Term Review, published in May 2017.<sup>7</sup>

#### <u>Free flow of data and portability</u> by Luis C. Busquets Pérez, DG CONNECT.

Data localisation is a significant issue in the EU and creates huge uncertainty for businesses, who are afraid to move data across borders. Data localisation requirements may be justified and proportionate in particular contexts (e.g. public security). Unfortunately, the trend, both globally and in Europe, is towards more unjustified data localisation, an approach often based on the misconception that localised services are automatically safer than cross-border services. This can prevent data-driven services, in particular start-ups and SMEs, from scaling-up their activities (e.g. by having to invest in data centres in 28 Member States). These barriers should be avoided in a Digital Single Market. In autumn 2017 the Commission will bring forward legislative proposals intended to overcome barriers to data-based innovation. At its heart will be principles of: free flow of data within the EU, porting non-personal data, and availability of certain data for regulatory control purposes.

#### Discussion

An EFFRA representative confirmed that the presentations well reflected industry's views. We need to continue and intensify the discussion and EFFRA will be pleased to contribute. However, too much emphasis may be being placed on data localisation; there are other pinch-points as well. The 'rules' are just the tip of the iceberg; a key issue is the legal uncertainty, for example around machine-generated data and M2M communication. Manufacturers have not focused on this yet.

<sup>&</sup>lt;sup>6</sup> COM(2017) 9

<sup>&</sup>lt;sup>7</sup> COM(2017) 228

Another participant thought that insufficient attention was being given to data transit, which is just as important as localisation. For example, much of the traffic between Europe and China is routed through the US. Developments such as Europe-China cooperation and a new transatlantic cable via Brazil were noted.

It was queried whether competition law had been an issue in the consultation. Commission speakers said that several respondents had raised the issue of competitiveness: the full picture would be available in the synopsis report. It was also stressed that, even though the formal consultation has closed, it is still possible to feed back in relation to market competitiveness and other issues addressed in the consultation on a direct basis.

# 6. European Platform of National Initiatives

<u>Presentation of the European Platform and expectations for the Autumn Roundtable</u> by Yves Paindaveine.

Digitisation is taking hold in Europe, with strong national commitments to develop measures which meet industry needs. So far national digitisation policies have been launched in 15 Member States and more are being planned.

The proliferation of national initiatives means there is benefit in cooperation at European level. With this in mind, at the Digital Day in Rome in March 2017 high-level representatives and industry leaders pledged to work jointly within the EU Platform of National Initiatives. Also at this meeting, representatives committed to: build and deploy the next generation of computing and data infrastructures in Europe; deploy cross-border smart mobility corridors; and participate in a pilot project to boost cross-border digital work experiences.

The next high-level meeting of the European Platform will take place in October 2017 (date to be decided). Its objectives will be threefold:

- i) Take stock of the achievements of the national initiatives.
- ii) Take stock of the outcome of the Working Groups: WG1 Digital Innovation Hubs; and WG2- Digital Industrial Platforms.
- iii) Prepare the next steps, in particular: level of ambitions for the European Platform; future of existing Working Groups; and future Working Groups on specific topics.

The coordination framework, including governance arrangements, will also be considered.

In preparation for the high-level governance meeting, the Commission is undertaking further analysis of existing national DEI initiatives. Three independent experts have been appointed to monitor and report back on the development of national initiatives in the Member States. In particular, the experts will compare what is happening now to the actions proposed in the DEI Communication to assess whether they are comparable and identify gaps. The experts will be contacting the authorities concerned and Member States are invited to cooperate with them to facilitate their work.

Presentation of the reports of the <u>Digital Transformation Monitor and key lessons from national industry 4.0 policy initiatives in Europe</u> by Bertrand Pedersen, PwC.

<u>Under contract with DG GROW</u>, <u>PwC published a Digital Transformation Monitor which include</u> a series of policy reports on industry digitisation. Covering ten national initiatives to date, the reports provide concise information on the digitisation of industries and enterprises covering: policy

<sup>&</sup>lt;sup>8</sup> Namely: Mr Jan Larosse for BE, NL, FR, DK, LU; Mr Oscar Lazaro for ES, IT, PT, HU, CZ; and Mr Walter Mattauch for DE, AT, SE, PL, LI.

objectives, drivers, challenges, budget, implementation, and lessons learnt. The reports provide policy-makers with hints and priorities for potential future gaps and highlight synergies between national policies, as well as information on the set of measures of the Digitising European Industry initiative.

#### Presentation on Digital Skills and Job Creation by Heidi Cigan.

Skills are essential to realise the benefits of the digital economy but the latest Digital Economy and Society Index (DESI) underlines again that Europe faces a crucial skills gap.<sup>9</sup>

The Digital Skills and Jobs Coalition is one of ten actions in the New Skills Agenda for Europe.<sup>10</sup> It is a network that brings together Member States, companies, social partners, non-profit organisations and education providers in order to take action to tackle the lack of digital skills in Europe. The Coalition works across four target areas: ICT professionals, labour force, citizens, and education.

In the context of the Coalition, **Member States have been asked to**: develop comprehensive national digital skills strategies by mid-2017; establish national digital skills coalitions connecting public authorities, business, education, training and labour market stakeholders; and develop concrete measures to bring digital skills and competences to all levels of education and training. To date there are 17 national coalitions and emerging initiatives where partners collaborate on issues such as increasing industry-led training, certifying skills, improving school and university curricula, and raising awareness about ICT careers.<sup>11</sup>

The development and implementation of national skills strategies is supported by a sub-group on Digital Skills, comprising experts nominated by the DSM Strategic Group. It has developed a Shared Concept model for tackling digital skills challenges in Europe and developing a digital skills strategy.

Future actions by the Coalition will include to reorient and promote better use of EU funds, for example through a Digital Opportunity for Internships scheme and sharing of best practices.

Finally, it was noted that **skills is closely linked to the role of digital innovation hubs**. In essence, competence building in companies is the same as skills development for individuals. The experts will look into how much skills development is undertaken within existing initiatives, taking a broad definition that includes working directly with companies.

Presentation of the <u>Structural Reform Support Service</u> and how it could support the national efforts by Kyriacos Kyriacou, DG SRSS

The Structural Reform Support Service, SRSS, is a service of the European Commission with a mandate to: i) support Member States with the preparation, design and implementation of growth-enhancing reforms; ii) focus on tailor-made support, on the ground; iii) steer and coordinate technical support provided by the Commission. At the request of a Member State, the SRSS: engages in a dialogue to discuss technical support needs; agrees on a "cooperation and support plan" with the Member State; and provides financing for the technical support and coordinates the necessary expertise. With a budget of €142.8m (2017-2020), the Structural Reform Support Programme (SRSP) will be a significant factor for future SRSS engagements with Member States.

Digital Society is one of many policy areas where the SRSS is able to offer assistance working in association with the relevant policy DG, in this case DG CONNECT. In the context of digitising industry, the SRSS effectively offers bridge money to initiate the transformation process.

#### Discussion

In response to a request to clarify 'technical assistance', Mr Kyriacou explained that it covers a broad spectrum and depends on the Member State's requirements. A wide range of activities qualify: from theoretical activities such as policy studies and analyses, to more applied ones, such as

<sup>&</sup>lt;sup>9</sup> See <a href="https://ec.europa.eu/digital-single-market/en/desi">https://ec.europa.eu/digital-single-market/en/desi</a>

<sup>&</sup>lt;sup>10</sup> See http://ec.europa.eu/social/main.jsp?catId=1223

<sup>&</sup>lt;sup>11</sup> See https://ec.europa.eu/digital-single-market/en/digital-skills-jobs-coalition-initiatives

site visits, sharing of best practices, development of roadmaps and recommendations. The SRSS will refer to the policy DG in the relevant area and invite them to contribute their expertise, provided it is practical to do so.

Digitisation touches more than just skills, it is also about the quality of jobs. This aspect should be addressed more explicitly, involving social actors such as trades unions. These are already involved in some countries, notably Germany, Austria and Sweden. In Austria, trades unions have even been involved from an early stage and in Italy they are also represented in a sub-committee of the national initiative.

The need to share information on skills and training at national level was noted. This could be the subject of a follow-up to the WG1 and/or of a separate, new working group. The topic of cooperation with DIHs had also been discussed at the recent meeting of the Digital Coalition in Malta, where it was recognised that hubs could be key actors for skills development.

#### **Action Points**

In the **next three months** up to the high-level meeting respondents were requested to consider:

- 1) Identification of national (and regional) measures, best practices, repositories, ... sharing and reflection on how to apply nationally some practices.
- 2) Identification of further work items, and approach (position statements, workshops, working groups, ...).
- 3) Proposal for Working Groups, objectives and scope. Composition, steer: communicate your interest!

#### 7. Conclusion and Actions for the Next Roundtable

This was a useful meeting where much valuable information was shared. Participants appreciated the comprehensive picture of what is happening at European level and expressed the desire to share information on national initiatives as well. Good practices should be addressed not just from a quantitative point of view but also qualitatively, for example through **use cases**, so as to evaluate the impact on individual companies. The **impact on the digital maturity of industry** as a whole should also be considered, which would be a hugely valuable outcome.

It is important to remember that the focus here is on implementation. Although DEI is important within the broader narrative of competitiveness and sustainability challenges, these discussions should continue within other fora. The work of the high-level governance meeting of the European Platform (previously known as Roundtable) is focused on implementing what has already been decided in relation to DEI and to propose approaches to facilitate further the digitalisation of all businesses. It also aims at taking forward the European Platform of National Initiatives. This in itself represents a significant challenge. There are investments from the EU to this objective —to be complemented by the national and regional levels and by industry-, an established and growing base of national initiatives, and a willingness to share and learn from others. We have to continue working together and show that DEI can deliver for Europe.

<u>Action points for participants</u> for the next high-level governance meeting are set out in the sections above and reiterated in the Executive Summary at the front of this report.