The role of information and communications technology (ICT) in raising productivity and living standards is critical. The largest obstacle to harnessing the power of ICT is the shortage of digital skills. While demand for ICT practitioners is growing by around 3% a year, the number of fresh ICT graduates and skilled ICT workers is not keeping up. As a consequence, by 2020 Europe might face a shortage of almost 825,000 ICT professionals in Europe. Meanwhile about 25 million Europeans are currently unemployed. This is the digital skills gap.

To address this problem, the European Commission launched a Grand Coalition for Digital Jobs in March 2013. The Grand Coalition is a multi-stakeholder partnership that endeavours to help industry, education providers, and the public sector to collaborate to attract young people into ICT education and increase the supply of ICT practitioners in Europe.

To support the roll-out of this initiative, the European Commission established the Secretariat of the Grand Coalition in 2014 (through the EU-funded project “DIGITALJOBS”). Coordinated by DIGITALEUROPE, the Secretariat brought together 14 stakeholders from the demand and supply side committed to reducing the shortage of ICT practitioners in Europe.

Over two years, the Secretariat has contributed to boost the Grand Coalition programme through a six-pronged strategy for bridging the skills gaps.

1. ICT Training

One of the main goals of the Secretariat was to contribute to the dissemination of valuable industry and stakeholder-led initiatives to improve the level of digital skills in the labour force, with a view to increasing ICT employment. To do so, the Secretariat worked with existing ICT training providers to improve knowledge about their offering to young and unemployed people. In this context, the Secretariat developed the EU ICT Learning catalogue, which aims to collect ICT training and learning offers, that are currently available on the EU market in one single online platform. In line with the Grand Coalition’s goal to address the growing demand of ICT practitioners in Europe, the Secretariat also produced a collection of best practices related to industry-government cooperation policies and educational initiatives promoting the development of digital skills and ultimately aimed to enhance young people's employability.

Furthermore, in order to facilitate the matching between educational needs and industry requirements, the Secretariat identified the most sought after ICT job profiles, which have also been matched against the e-Competence Framework to test their applicability at European level.

Finally, as part of this work stream, the Secretariat produced a booklet presenting best practice examples of how SMEs acquire ICT skills through effective interventions, which make them use their new ICT skills in their business operations. The booklet titled “Digital skills for SMEs: get inspired now!” could be used to encourage the digitisation of European SMEs.
2. Mobility

Another part of the Secretariat’s strategy for addressing the digital skills gap was to increase mobility of skilled EU workers across Member States to avoid shortages and surpluses in different geographical areas. In this context research was conducted to identify regions with an existing gap between demand and supply and where solutions based on mobility could be envisaged in the short term. This research aimed also to understand what kind of ICT skills are available on the supply side and identify ICT vacancies on the demand side.

As a result, the Secretariat identified countries with high demand of ICT practitioners (Germany, UK/Scotland, Netherlands), and countries with high supply of ICT practitioners (Poland and Spain). Based on these findings, the Secretariat implemented two mobility pilots aimed to match the people with right skills from the supply side with the available ICT jobs in the demand side, either directly or through re-training.

The first mobility pilot was implemented in Spain through the organisation of the European Digital Jobs Fair. The event, that took place in Madrid on 20 November 2015, with the participation of 36 employers from Germany, Spain, The Netherlands and UK, and 350 job seekers from Spain with some ICT competences. More than 1,000 ICT-related job vacancies were offered at the event and advertised on the event platform (www.europeanjobdays.eu). The platform, managed by EURES, offered the possibility to additional 700 participants to participate in the online part of the event. The event, first of its kind, was a great success: 244 first interviews took place either onsite or online and 106 candidates were invited to continue the recruitment process afterwards.

The second mobility pilot was organised in Poland, through connection with the Erasmus+ programme, which provides grants for students and graduates to cover a traineeship period abroad. The aim of this pilot was to enhance the labour mobility of ICT students and graduates from the Krakow region (Poland) by offering them the opportunity to experience an ICT traineeship in a company abroad.

The results of the two mobility pilots were summarised in a detailed report, which also contains detailed guidelines and recommendations for stakeholders, who are interested to duplicate these pilots. This report will be shared with the National and Local Coalitions to help them duplicating these initiatives as part of their plans to close the digital skills gap in Europe.

3. Certification

The Secretariat worked to stimulate the adoption of a common language to describe and certificate digital skills across Europe. This was done through the promotion of the take-up of the e-Competence Framework (e-CF) through proactive engagement with all relevant stakeholders, including Industry, educational and training bodies, ICT professional associations, and public authorities. A leaflet with key information about the e-CF, its supporters, and the benefits for professionals, informatics associations and their members has been developed and circulated across Europe.

The Secretariat undertook also a landmark research to produce and assess an up-to-date picture of the actual e-competences of ICT professionals across Europe. Over 2,200 ICT professionals across Europe participated in this research, which was carried out using the CEPIS e-Competence Benchmark, an online assessment tool that is powered by the e-CF. The results of this Pan-
European initiative provides an insight into the level of professional competence and a snapshot of the profession in each country as well as an aggregated European perspective and recommendations for action to mature the profession and bridge the digital skills gap.

A report summarising best practice processes to stimulate the uptake of e-CF mapped certifications has been developed. The report identifies the key target communities (such as professional associations, training providers, networks, and recruitment consultants) and the communication channels through which they can be reached, and it proposes the business case and marketing collateral most appropriate for targeting these respective audiences. The promotion of the e-CF included also the deployment of new innovative certification programme structure across Europe (New ECDL Modules) and the development, implementation and operation of an e-skills Quality Label for ICT industry training and certification.

The intense promotional activities conducted by the Secretariat around the e-CF successfully contributed to the recognition of this framework as a European standard, as from April 2016.

4. Awareness raising

In order to ensure a successful roll-out of the Grand Coalition at both national and local level, the Secretariat has launched a series of awareness raising activities aimed at enlarging participation to as many stakeholders as possible.

During 2014 and 2015, all Secretariat partners were engaged in intense dissemination activities reaching out to different audiences namely: industry stakeholders from ICT and ICT-using sectors, schools and teachers, Ministries of Education and policy makers, telecentres, ICT practitioners, SMEs and VET providers. These actions included the organisation of face-to-face meetings, workshops, high level events, and the exploitation of the partners’ main communication channels - including websites, blogs, social media, newsletter, publications.

To support the dissemination of the main messages and activities of the Grand Coalition, the Secretariat developed a value proposition articulating the benefits of participation in the Grand Coalition. The value proposition is both available in digital and booklet format, entitled “Grand Coalition for Digital Jobs: get involved now!”. The purpose of these activities was to ensure that more stakeholders engaged in the Grand Coalition at both EU and national level through pledges to the Grand Coalition, and in the setting up of National and Local Coalitions for Digital Jobs.

Since the beginning of the activities of the Secretariat, 10 additional pledges have been made to the Grand Coalition (Adobe, BBC, CA Technologies, Certiadria, CSR Europe, Digitaljobs.com, EMC, ETUCE, the National College for Digital Skills and Ubiqum code academy).

The Secretariat has also supported the work of the pledgers not only by helping them to assess their impact towards the European Commission, but also by coordinating with many of them a letter to new-elected President Juncker to ask a continued commitment to the Grand Coalition.

5. New forms of digital education

Aiming to increase the supply of ICT professionals in Europe, the Secretariat promoted collaboration between industry and education providers to offer more aligned degrees and curricula at vocational and university level education.
To stimulate structural changes in the educational system, the Secretariat promoted computer science education in primary and secondary schools via innovative teaching and learning practices. Part of this strategy included the development and implementation of training courses for teachers to better equip them with the skills needed to teach computer science in an engaging and inspiring way. Thanks to the increased collaboration between industry and education providers, the Secretariat developed three MOOCs on computer science education, one for teachers from primary school, one for teachers from secondary school, and another one on introducing computing into the classroom with a cross-curricular approach.

The Secretariat also promoted best practices in coding and programming education to encourage policy makers and stakeholders to join forces on the promotion of this subject and ultimately stimulate structural change in educational systems. Resources for teaching and learning how to code have been promoted via the European Schoolnet communication channels dedicated to teachers, the European Coding Initiative, the inGenious portal, and the eSkills for Jobs campaign website. A face to face teacher training session on how to teach coding was organised at the Future Classroom Lab in Brussels during the EU Code Week in October 2014, and replicated in October 2015.

6. National and Local implementation of the Grand Coalition

Since its establishment the Secretariat has worked to encourage the setting up of National and Local Coalitions for Digital Jobs to facilitate action towards enhanced digital skills at national, regional or local level. For this purpose, the Secretariat launched Toolkit for National and Local Coalitions. The Toolkit defines the role of National and Local Coalitions and clarifies the support available from the Secretariat. Information about available funding opportunities to develop the activities of National and Local Coalitions are also provided in the Toolkit. Thanks to the guidelines and best practices examples provided in the Toolkit, stakeholders involved in the Grand Coalition for Digital Jobs now benefit from a clear set of guidelines and recommendations on how to implement successfully the Grand Coalition in their country.

Since the beginning of the Secretariat activities, National and Local Coalitions have already been launched in 10 Member States, including Belgium, Bulgaria, Croatia, Cyprus, Greece, Italy, Portugal, Northern Ireland, Romania, Spain, The Netherlands and the UK.