The Secretariat of the Grand Coalition for Digital Jobs

Final report
March 2016

European Commission

**Grand Coalition
for Digital Jobs**

Grand Coalition for Digital Jobs

Statement of Originality

This document contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

Grand Coalition for Digital Jobs

About the Secretariat of the Grand Coalition

The role of information and communications technologies (ICT) in raising productivity and living standards is critical. The largest obstacle to harness 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 the 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 and 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:

PARTNER NAME	CONTACT PERSON	E-MAIL
DIGITALEUROPE	Jonathan Murray Giusy Cannella	jonathan.murray@digitaleurope.org giusy.cannella@digitaleurope.org
BRAINPORT DEVELOPMENT	Yvonne van Hest	Y.vanhest@brainportdevelopment.nl
CLOSE PARTNERS (CIONET)	Frits Bussemaker	frits.bussemaker@cionet.com
DI ITEK	Henrik Valentin Jensen	HJN@DI.DK
ECDL Foundation	Fiona Fanning	fiona.fanning@ecdl.org
European Centre for Women and Technology	Eva Fabry	eva.fabry@womenandtechnology.eu
European CIO Association	Paul Costelloe	paul.costelloe@costelloe.co.uk
EMPIRICA	Werner B Korte	werner.korte@empirica.com
The Tech Partnership	Helen West	Helen.West@thetechpartnership.com
European Schoolnet	Tommaso Dalla Vecchia	tommaso.dallavecchia@eun.org
Malta Information Technology Agency	David Sant	david.sant@gov.mt
National University of Ireland Maynooth	Clare Thornley	clare.thornley@nuim.ie
PIN-SME	Sebastiano Toffaletti	s.toffaletti@pin-sme.eu
Telecentre Europe	Laurentiu Bunescu	laurentiu.bunescu@telecentre-europe.org

Grand Coalition for Digital Jobs

The activities of the Secretariat

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. Furthermore, in order to facilitate the matching between educational needs and industry requirements, **the Secretariat identified the most sought after ICT job profiles[1]**, which have also been matched against the e-Competence Framework to test their applicability at European level.

In line with the Grand Coalition's goal to address the growing demand of ICT practitioners in Europe, the Secretariat has also worked to identify best practices in relation to educational and training programmes that could contribute to increase the supply of digital technology experts in Europe. As result of this work two reports were produced:

- **a collection of best practices ICT training and placement programmes for graduates and job seekers which can help them to gain the required skills.**

- **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.

These catalogues were produced to help European Member States to duplicate similar initiatives in their countries.

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 entitled "Digital skills for SMEs: get inspired now!" could be used to encourage the digitisation of European SMEs.

This work stream was led by DI ITEK. The activities were implemented in collaboration with EUN and MITA, and with the support of DIGITALEUROPE, NUIM and PIN-SME.

---

[1] Developer, Systems Architect, ICT Consultant, Project Manager, Big Data Specialist.

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).

In order to identify features of possible mobility package solutions for these regions, the Secretariat has also established a network of experts on labout mobility. With their help, the Secretariat identified best practice initiatives aimed to promote cross-border mobility of ICT practitioners.

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**, gathered 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. 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 results of this successful event are summarised in an infographic produced by the Secretariat.

The **second mobility pilot was organised in Poland**, in 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.

Based on the experiences of the two mobility pilots an infopgraphic has been produced for stakeholders, who are interested to duplicate these pilots. These infographics could 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.

This work stream was led by Brainport Development. The activities were implemented in collaboration with DIGITALEUROPE and with the support of CIONET, DI ITEK, ECWT, empirica, EuroCIO and PIN-SME.
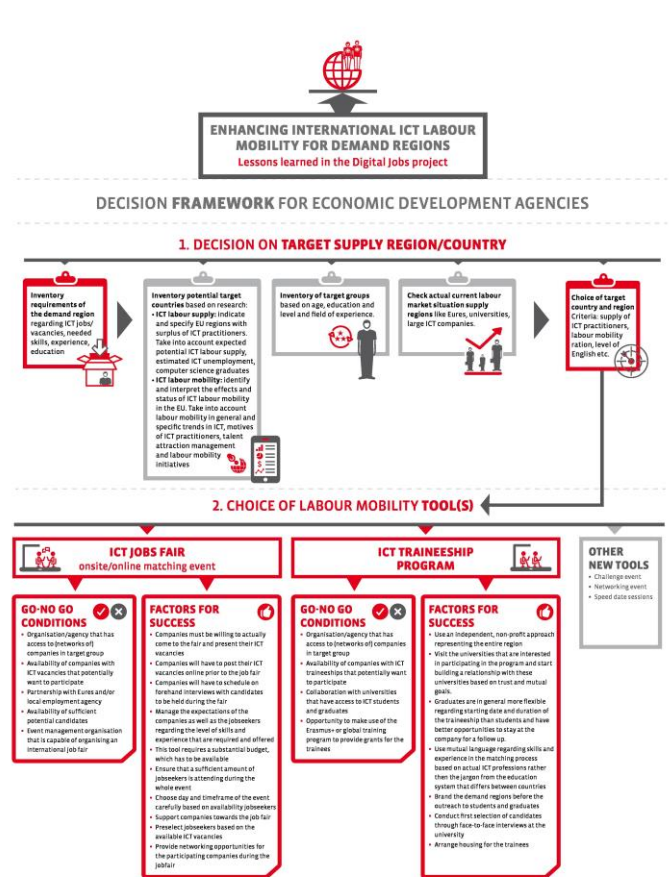
3 Certification

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 through the establishment of the e-CF platform. 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[2])** 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.

Furthermore, a European IT Professionalism Network has been established in 2016 as part of the sustainability efforts of the Grand Coalition Secretariat. The European IT Professionalism Network will focus on the promotion and development of IT professionalism in Europe including the e-CF, and become the "home" of the European discussion on the subject.

This work stream was lead by ECDL. The activities were implemented in collaboration with EuroCIO and empririca and with the support of DIGITALEUROPE and Telecentre Europe.

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

---

[2]The ICT in Education Module is available at http://www.ecdl.org/programmes/index.jsp?p=2928&n=3036
The ICT Trouble Shooting and the Digital marketing modules are currently under finalisation and will be published at the ECDL website.

Grand Coalition
for Digital Jobs

Coalition. The **value proposition is both available in digital and booklet format, entitled** "**Grand Coalition for Digital Jobs: get involved now!**".
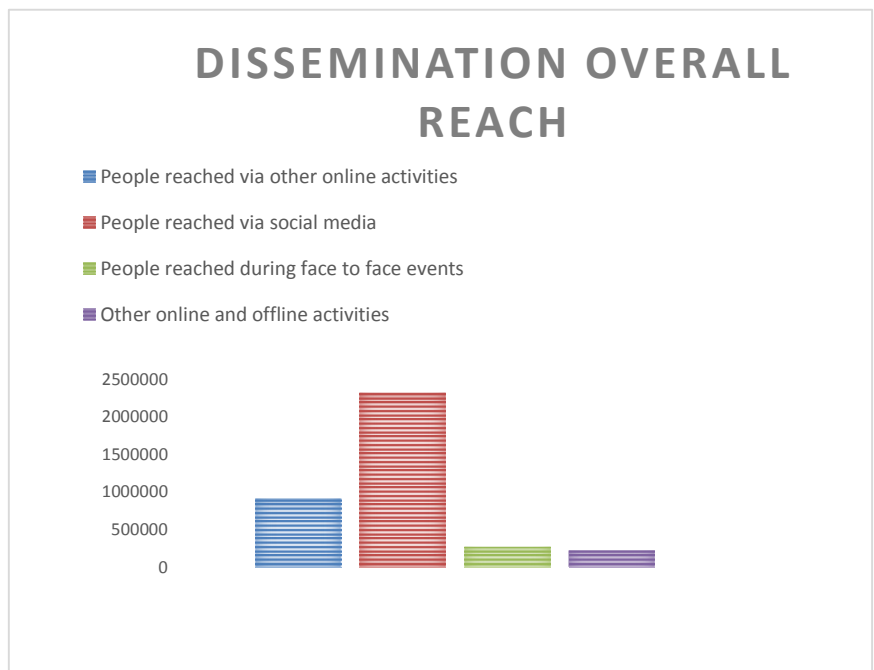
The purpose of these activities was to ensure that more stakeholders get engaged in the Grand Coalition through pledges to the Grand Coalition at both EU and national level, and participate in the setting up of National and Local Coalitions for Digital Jobs.

These actions included the exploitation of the partners' main communication channels - including websites, blogs, social media, newsletter, publications – face to face events, stakeholders' networks and communities.

Each partner addressed the specific audiences of pertinence and network members with tailored messages and events. Some examples of the awareness raising activities deployed are:

- **Promotion of the Grand Coalition** via partners' websites, social media, newsletter, networking and direct mailing

- **High level workshops** around the 5 key areas of the Grand Coalition involving policy makers, industry, teachers and ICT practitioners

- **Presentation of the Grand Coalition** during all relevant internal and external meetings (distribution of the booklet)

- Production of several i**nfographics** around the 5 key areas of the Grand Coalition

- **Outreach to both ICT and non-ICT companies**

- **Social media campaigning** and exploitation of established target audience **communities** and **networks**

The graphic below provides an overview of the overall outreach of all Secretariat partners through the different dissemination activities:

DISSEMINATION OVERALL REACH

- People reached via other online activities
- People reached via social media
- People reached during face to face events
- Other online and offline activities

2500000
2000000
1500000
1000000
500000
0

Grand Coalition
for Digital Jobs

Overall Consortium dissemination reach out:

- **2.308.885 people via social media specifically** (including Facebook, Twitter, LinkedIn, YouTube, Ning etc.)

- **262.458 people during face to face meetings and events** (including DIGITALJOBS events, partners' own events, meetings, presentations to third parties' events, workshops, etc.)

- **217.912 via other activities and channels** (including TV broadcasts, interviews, webinars, newspapers and magazines articles, etc.)

The aggregated impact of the dissemination and communication actions undertaken by the Secretariat partners is considerable not only for the number of people reached, but also for the variety of means used and network and channels exploited.As a result of these activities, the Grand Coalition for Digital Jobs has become a strongly recognised initiative attracting a large number of stakeholders at both European and national level. To give an example, 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.

This workstream was lead by European Schoolnet. The dissemiantion activities were implemented in collaboration with all partners of the Grand Coalition's Secretariat.

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

Grand Coalition for Digital Jobs

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.

Furthermore, based on extensive consultations with education, training, industry and civil society representatives carried out by the Secretariat to identify and exchange Members States best practice in teaching and learning about ICT in primary and secondary schools, the Secretariat has developed **a set of recommendations to foster teaching and learning of digital competences in Europe**.

This workstream was lead by European Schoolnet. The activities were implemented with the support of DIGITALEUROPE, ECWT and empirica.

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.

In addition to the Toolkit, the Secretariat provided national stakeholders with peer-to-peer support in the setting up of new Coalitions. This support included the following actions:

- Advise on the formation process;

- Support in identifying interested partners at national or local level;

- Support to the development of action plans, including:

  o Provision of templates to facilitate the preparation of the Coalitions' action plans;

  o Sharing of best practice examples to inspire Coalitions in the preparation of their action plans;

  o Review of the draft actions plans;

- Support with the organisation of launch events and promotion;

- Ensuring endorsement of the initiative by the European Commission.

Since the beginning of the Secretariat's activities, new National and Local Coalitions have been launched in 11 Member States, including Belgium, Bulgaria, Croatia, Cyprus, Greece, Italy, Northern Ireland, Portugal, Romania, The Netherlands and the UK.

This workstream was lead by Telecentre Europe. The activities were implemented in collaboration with DIGITALEUROPE and European Schoolnet, and with the support of all partners of the Grand Coalition Secretariat.

More information about the Grand Coalition and the activities of its Secretariat can be found on the European Commission website where all materials produced by the Secretariat will be published soon: https://ec.europa.eu/digital-single-market/en/grand-coalition-digital-jobs.