

SKILLMAN.EU

# CoVE

ISSUE 02  
NOV '19



NETWORK  
**Life**

initiatives in the field of  
EDUCATION and TRAINING

Asian

**4** countries

Skillman Alliance

+ **2** : events

SIF 2019

Curriculum design, Sectoral skills development and Ethical issues on Advanced Manufacturing sector

CoVEs **3**  
the research

Georgios Zisimos  
European Training Foundation



SPECIAL  
SIF  
2019

EUROPEAN VOCATIONAL  
SKILLS WEEK

HELSINKI 2019



**1** the Skillman  
DICES &  
EU COMMISSIONER

Marianne Thyssen

#DiscoverYourTalent

# SKILLMAN.EU INTERNATIONAL FORUMS

on "Curriculum design, Sectoral skills development and Ethical issues on Advanced Manufacturing sector"

Experts from around the world share information and knowledge about different aspects connected to Advanced Manufacturing and TVET



## Forum topics

All the Skillman Forums base their topics around "Curriculum design, Sectoral skills development and Ethical issues on Advanced Manufacturing sector".



## Expected Outcomes

Discussing and analysing the main challenges faced by the Advanced Manufacturing sector regarding:

Challenges and new approaches to design new innovative curricula

Interconnection and coherence of curricula and professional profiles with ECVET - EQF framework and ESCO classification

Advanced Manufacturing sector and responsibility according to the UNESCO 17 goals on Sustainable Development

social innovation, societal impact, societal challenges and ethical issues

policies and initiatives for sectoral skills development anticipating and matching skills and jobs



## Opportunities

discussing relevant issues in Advanced Manufacturing in relation to VET systems, public policies, research and good practices

keeping informed regarding publications and other sources

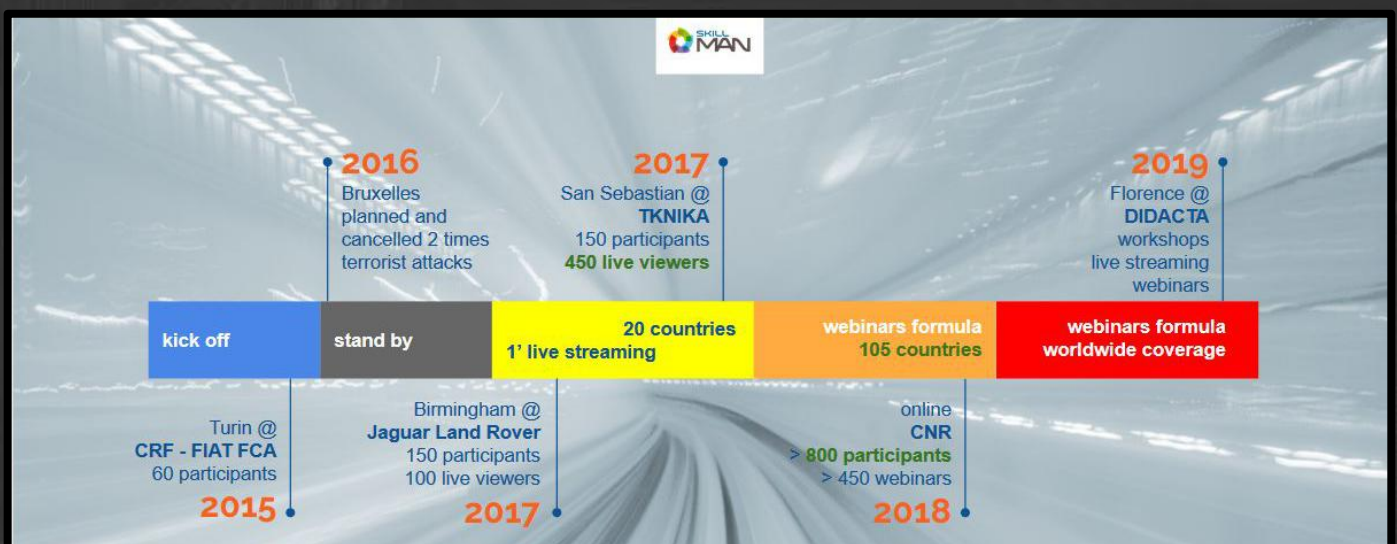
inquiring and share new ideas, materials, suggestions useful for their work

finding partners for international projects and cooperation

## Target participants

From Skillman members and from connected entities:

- government officials working in education, industry development, innovation, finance, and planning
- TVET organisations, schools and universities
- industries and SMEs
- NGOs and civil society organizations
- embassy and/or trade commissioners
- think-tanks, institutes, academia, and centers of excellence
- development partners
- experts and researchers



The forum is not an individual action but is part of a long journey where the participants work together to realise common goals to improve education and TVET.

The meeting has a strong intellectual and ethical components.

The participants are not just concerned with economical, but with also social issues.

**1** the Skillman  
DICES &  
**EU COMMISSIONER Marianne Thyssen**  
looking the EU strategies @ the EU Skills Week in Helsinki - PAGE 4

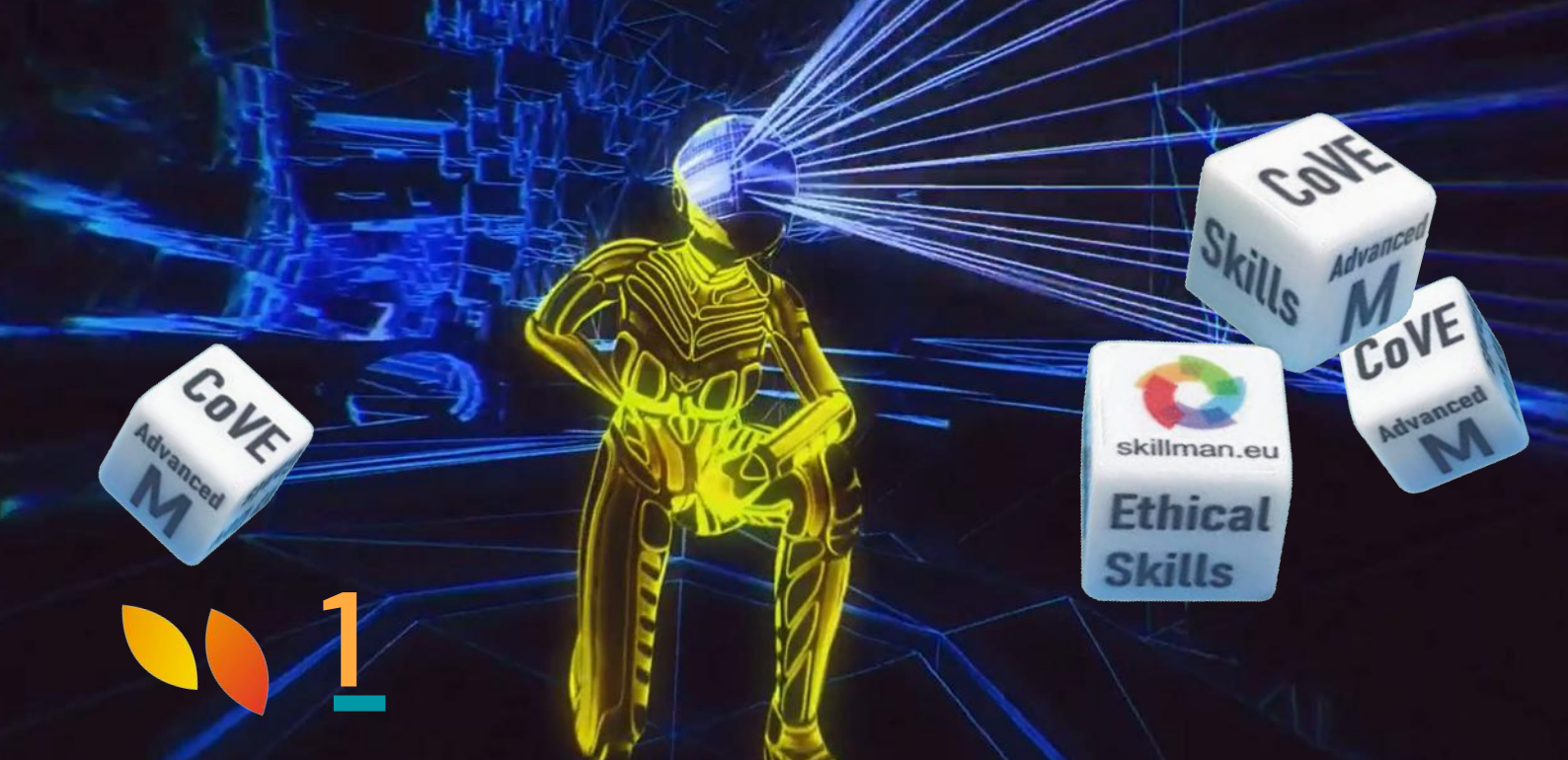
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**6** MEMBERSHIP  
**OPEN COMMUNITIES PRINCIPLES**  
Get your site at the worldwide network for skills in AM sector



the Skillman  
**DICES &**  
EU COMMISSIONER  
**Marianne  
 Thyssen**

**European Vocational  
 Skills Week 2019**  
 14-18 October 2019

#DiscoverYourTalent #EUVocationalSkills



The Skillman Secretariat has recently launched its new gadget to promote with an easy message, suitable for both the experts and the large public, the relevance of the skills for the future on advanced manufacturing and the social responsibility of the VET community.

The Skillman dices were presented to Commissioner Marianne Thyssen at the European Vocational Skills Week 2019 celebrations in Helsinki.

The Commissioner expressed appreciation and positive remarks for the Skillman promotional approach.

***‘With clear keywords, the dices have an immediate impact and allow to understand the most relevant activities and principles of the skillman network.’***

The skillman network brought to Helsinki its circular approach and global vision that are nowadays necessary for the skills foresight exercise and to develop curricula aligned with the industry and the society challenges.

Commissioner Marianne Thyssen remarked in her welcome speech that “VET is a first choice, not a plan B”. She added: “European Vet Skills week is already a continental showcase for VET talent. And this week, but especially today, we go global.”

The Skillman approach was very well in line with the Helsinki conference which began with the VET Expo exhibition, showcasing the introduction of new technology-based, educational tools and programmes in vocational education and training, such as the virtual and augmented reality which is one of the main important aspects that the network is promoting among its CoVEs members to make them concretely able in implementing the most advanced solutions available on the market.

During the EU Skills Week, Mr. Mika Tammilehto, Director of Vocational Education and Training, Ministry of Education and Culture, Finland, highlighted the crucial role of the VET in enabling young learners to enter the labour market by gaining new skills that is indeed one of the most important drives of the Skillman network too.

Skillman members agree also about a second concept that Mr. Tammilehto expressed stating that, at the same time, VET will need to respond to increasing needs for upskilling and reskilling of the adult population at all levels.

Another crucial topic of the EU Skills week event, very much relevant with the Skillman members activities was the understanding about how the VET can evolve to include the three key elements of **Excellence, Inclusion and Lifelong Learning**.

The participants discussed almost all of the main keywords of the skillman dices and reflected about the skills that are going to be needed in the near future and how VET can progress to properly address the critical skill gaps.

The Skillman dices include one face about the 17 Development goals, referring to the global responsibility of the VET. This aspect was also very much connected by many relevant speeches and keynotes as also underlined by Mr Joao Santos, Deputy Head of Unit, in his opening speech at the ‘VET In and For the World’ plenary conference’ on the fourth day of the conference, stating that **“The European Vocational Skills Week has become a forum to discuss and tackle global challenges”**.

Most of the participants remarked that in order to embody the three key elements of excellence, inclusion, and lifelong learning it’s necessary to enhance a model that skillman is in itself, with the partnership between VET and the world of work.

**TARGET**

**2 million VET learners  
 in Erasmus+  
 mobility programmes  
 in the next 7 years**

## 2 : events

# THE SIF 2019

## new challenges for the AM

Over the past years, several questions have been asked about the role of the advanced manufacturing in our future society and about the changes coming from the latest innovations and the so called 4.0 technologies, the artificial intelligence, the automation and the robotics that reshape industries and jobs.

The Skillman members have identified an increasing urgency to understand the new needs of skills related to the development of the manufacturing enabled by the digital technologies and by these latest advanced systems and processes and are aimed to discuss the impact and the characteristics of these changes.

Our young community of experts, academics and practitioners nurtures a simple but crucial reflection about how the TVET organisations, and the world of education in general could help to make the future workers, the today students, able to perform, understand and act like antibodies in protection against the possible misuse of these most recent technologies, of the increased capacity of calculation and communication and finally also of the facilitated access to relevant and concentrated energies and powers that altogether, with the presence of new materials, draw unexplored scenarios and create unknown risks.

I have personally identified, in the last years, at least two most relevant challenges that motivate me to contribute to the skillman mission and one great opportunity given by these two own challenges: by one side, we felt the need to make not leaving anyone behind in accessing to the AM skills, because this gap of a diffused knowledge and capacities promises to increase an evident distance among the more developed welfare society or developing countries and the last underdeveloped economies. The Skillman Secretariat, to bring to life this concept, has recently started

*A circular approach and a global vision is nowadays necessary for the skills foresight exercise and to develop curricula aligned with the industry and the society challenges*

Giovanni Crisonà  
Skillman Leader



## vision

## new challenges

### MISSION

various collaborations with Ministries of Education, Universities and TVET centers in Madagascar, Nigeria, Nepal etc.

In the other side, we have seen a relevant need to embed, with a solid and consistent arrangement, the ethical skills in the AM skills sets to distribute the power of control at the lower level. The Skillman Secretariat and its members are engaged for this purpose, to define standards for skill needs anticipation and deployment, working on a skills foresight model and on the continuous design of a set of skills, procedures and curricula through collaborations with various organisations and EU tools like the ESCO and ECVET Secretariats, the Cedefop, the Sefie and more other networks, national and regional authorities.

Given, for the TVET systems, the early nature of the Industry 4.0 skills scenario, the opportunity for the Skillman.eu members is to create and diffuse an innovative and sustainable model of intervention that is good for the future generations prosperity and that could represent the base for promoting a specialised ethical approach to the 4.0 skills development.

But the future generations

prosperity also depend by the availability of a decent employment, so our challenges and opportunities bring to several more questions:

what could be the consequences of a such TVET systems that would limit their intervention to just respond to the productivity demands, to the industrialization needs, to the modernity and consumption, without providing the future workers with the knowledge and the capacities asked for an equitable, peaceful and green society?

Who could pay the price of an army of workers willing to do whatever it takes to get a salary?

What could be the cost for such a society and what could be the ultimate consequence for the planet?

All the Skillman Forums base their central topics around the more technical aspects of the "Curriculum design, Sectoral skills development and Ethical issues on Advanced Manufacturing sector" and base, around these topics, the reason of a technical debate that tends to generate innovation and know how coherent with the 4.0 challenges for the skills of tomorrow and for a sustainable, green and ethical development.

(continue)

This year again our forum has taken a holistic approach to continue a concrete debate about the skills anticipation exercise and the way how these emerging skills can be developed and sourced in a continuous approach of lifelong learning. We are keen to analyse the different types of skills that employers are looking for and how the TVET, education and training systems are responding to these challenges.

*For our network, the SIF 2019 was again a great annual opportunity to reinforce and develop new partnerships and cohesion around our questions.*

Who are the ones who can identify the skills for the future, how these information can be circulated, how the skills can be acquired, what are the obstacles and the solutions available and many other questions are still on our table.

It's our conviction that it is good to foster the existing collaborations across countries to bring new ideas and solutions to life: our cross country approach, behind the EU borders, where the skillman.eu was born, it is at the heart of our mission and we look at a new way to improve our roles in the TVET systems engaging innovators, investors, companies, institutions and policy makers from every point of the global education chain, providing a platform for them to connect and work together for a more sustainable future.

We strongly believe that our multinational dimension, our cross-countries and cross-continent approach it is nowadays not an option, but an inevitable necessity.

At the end of the fifth year of the SIF, I am again particularly glad to thank all of the participants for their outstanding contributions and for the very engaging debate and interaction.

## SIF 2019 PREMIERE

The official launch in Lisbon, 12th of June 2019

The official presentation of the SIF 2019, held the 28th of June at the Lisbon Congress Center was attended by citizens, authorities, entrepreneurs and industry experts. The event was organised by the national representative of the Skillman network for Portugal, the Italian Chamber of Commerce for Portugal, led by its president Santi Cianci and the director Marcello Menichetti. Fadia Khraisat, representing Skillman Spain also participated. The four operational goals of the SIF 2019 were presented after the welcome message of the Italian Ambassador Uberto Vanni D'archirafi



## PROJECTS @ SIF 2019

The CARONTE team, driven by the Italian national Research Centre of Bologna members has presented the Caronte project results and has actively engaged the SIF participants with concrete exercises and a training offer.



The CARONTE representatives held an interactive workshop titled: "Information literacy competencies as transversal skills for VET learners, young entrepreneurs and future innovators" and led the reporting policy inputs during the final plenary session addressed to about 120 participants.

Joining the CARONTE workshop the participants increased their knowledge and capacity to drive innovation based on a comprehensive knowledge of the state of the art of science and technology.

The workshop also helped to understand how the CARONTE tools and solutions helps to learn how to identify scientific and technical information relevant for business and to determine how innovation may be applied to business in order to evolve products or services and to transform the business models, anticipating the future of knowledge.



MeMeVET is a transnational project involving 15 partners from five different European countries, to create a common curriculum with optional subjects in the fields of mechatronics and metallurgy.

The main goal is to encourage the mobility of students and workers in Europe. Currently, there is no single European certification for the recognition of metallurgical and mechatronic skills.

MeMeVET, which is one of the European SSA (Sector Skills Alliances) projects, aims to create strong relationships between education and business sectors and to match labour market demand with relevant training supply. Based on the analysis of the status quo of the curricula as well as on the assessment of specific skills required by metallurgical and mechatronic companies in the project countries, the MeMeVET consortium has developed common training modules and teaching materials to be used. These have been presented and discussed at the SIF 2019 workshop. The next step will be the creation of an electronic card and a Europe-wide recognition of skills.

SIF 2019

**official signature of the  
MOU with the Institution  
of Diploma Engineers  
Bangladesh**

Georgios Zisimos of the ETF presented its work on Centres of Vocational Excellence CoVEs and driven a participative workshop addressed to focus the future way as the Skillman network will understand and develop the excellence in VET.

The research suggests that there are two kinds of driver for the development of CoVEs: firstly, there is the pressure to make skills provision more responsive to the changing needs of industry, which typically favours more specialist skills providers that are deeply and extensively tied to the world of work, and secondly, there is the need to improve the performance of the whole skills provider network, which places emphasis on coordination, cooperation and strategic development of that network.

The ETF analysis confirms that different countries are using CoVEs to pursue different strategies and it can help policy-makers to consider some of the choices and trade-offs they must confront.

## European Training Foundation



## CoVEs the research 3

Georgios Zisimos

Senior Specialist in EU Education and Training Policies

'Excellence' is a contested term. Vocational excellence usually refers to high quality of training and education but also to relevance to the world of work and to the attractiveness of the educational offer to learners and to employers. Vocational excellence may also imply an enlarged, more comprehensive and inclusive conceptualisation of skills provision - addressing innovation, pedagogy, social justice, life-long learning, transversal skills, organisational and continuing professional learning and community needs.

The speaker has highlighted his attention on the concept about the Centres of vocational excellence (CoVEs) which are often represented as the institutions that embody vocational excellence underlining that, however, the purpose, structure and functions of CoVEs vary greatly from one context to another. Differences and similarities are often disguised by the use of specific terminologies and that which is lost in translation. CoVEs are assigned different roles in policy-making and enjoy different levels of political commitment and prioritisation of resources.

The ETF's paper, "Centres of Vocational Excellence - an engine for VET Development?", presented at the SIF 20\19, tries to do justice to the contested understanding of vocational excellence, to the diversity of institutions that present themselves as CoVEs and to the varied and dynamic policy-making contexts where CoVES are developing.

## SINERGIES: ECVET Secretariat

The European Credit System for Vocational Education and Training principles, application & outlook

The workshop on ECVET held by Monika Auzinger of the ECVET Secretariat, discussed how ECVET principles, and the use of units or groups of learning outcomes in particular, can be used to support qualification and curriculum design, with a view to ensuring flexible and adaptable vocational education and training (VET) systems that are fit for the future.

ECVET is the European Credit System for VET officially implemented by Skillman members. It is a framework for the transfer, recognition and accumulation of acquired and assessed learning outcomes with a view to achieving a qualification.

Today's VET systems need to respond to a number of challenges, including to adapt better and faster to changing labour market needs, to equip learners with the right set of skills for today's labour market and with the groundwork for a successful career, and to make VET more learner-centred, inclusive, and attractive overall. This calls meets the requirements for flexibility from the labour market and individuals themselves. Individuals want to get their learning outcomes recognised, independent of how and where they were achieved.



Monika Auzinger - ECVET Secretariat

ECVET principles are used to assist the design of VET qualifications and curricula by offering a way of structuring VET qualifications. Qualifications should be composed of units or groups of learning outcomes that are capable of being assessed and validated separately. A close involvement of labour market stakeholders into the design of VET qualifications and curricula is key. ECVET seeks to contribute to the development of a common language shared by all VET stakeholders, making qualifications more outcome-oriented instead of input-driven. These concepts have been central to reforms of VET systems across Europe. One of the key success factors when transitioning to outcome-based and unit-based approaches in VET is to make sure that these approaches lead to flexible and adaptable pathways not only in theory but in practice.

# SIF 2019 ITALY

## skills club

workshops held by experts

Ralph Hippe  
JRC - Joint Research Centre  
European Commission



SELFIE is a new self-reflection tool developed by the European Commission with a large number of international education experts. It was launched in October 2018 and is an action of the Digital Education Action Plan of the European Commission.

The tool is available for primary, secondary and post-secondary non-tertiary education levels. In particular, SELFIE is available for upper-secondary VET schools.

The European Commission is now also considering developing the tool for work-based learning systems (WBL) in VET, i.e. in which the learner spends part of the training time in the VET school and part in a company. The workshop will seek to discuss the specific requirements and characteristics of WBL systems and provide concrete recommendations how to adapt SELFIE to these contexts.



## SINERGIES SELFIE

The European Commission's  
self-reflection tool

## Getting Skills Right - OCDE Adapting to changing skill needs

The world of work is changing. Digitalisation, globalisation and population ageing are having a profound impact on the type and quality of jobs that are available and the skills required to perform them. These changing skill needs have resulted in significant skills imbalances across OECD countries. The extent to which individuals,

firms and economies can reap the benefits of these changes will depend critically on the readiness of VET and adult learning systems to help people develop and maintain relevant skills over their working careers. To be effective, these systems need to be inclusive and provide high-quality training that is responsive to labour market needs.



Marieke Vandeweyer  
Labour Market Economist  
OCDE - Organisation for Economic  
Co-operation & Development

[cedefop.europa.eu/TEL-toolkit](https://cedefop.europa.eu/TEL-toolkit)

## The Cedefop's VET toolkit for tackling early leaving



Irene Psifidou  
Expert  
CEDEFOP - Department for  
Learning and Employability

Irene Psifidou presented the toolkit at the SIF 2019. The toolkit is a web resource of tools, guidelines, tips, publications, statistics, good practices and quick wins aiming to support policy makers and VET practitioners in Europe to give effective responses to counteract early leaving from education and training.

Skillman members believes that the toolkit and its 200+ resources of best practices, interventions, publications, tools, statistics and quick wins is a valuable source of support to policy makers and VET practitioners in Europe. Cedefop's toolkit aims to develop a European culture of policy evaluation supporting the design of evidenced-based policies.

The tools promote reflection and dialogue among policymakers and practitioners on current strategies to tackle early leaving from VET, allowing to identify the strengths and weaknesses in their country (region or local community) and develop an action plan to counteract this phenomenon.

Skillman members thinks that the toolkit shows still an important limitation as it is only available in English and the users with no good command of English language may not benefit from its rich resources.

Thus, the Skillman members believes that the translation of the toolkit in all European languages is indispensable for ensuring the wide use of the toolkit and its equal access for all, especially if the toolkit is to support learning providers, regional and local policy makers.



# SIF 2019 ITALY

## skills club

Speakers



Kristina Dervojeda  
Leader PwC Innovation Research Centre

### Advanced curricula for advanced manufacturing towards future-proof pan-European curriculum guidelines

How should the current curricula be reshaped, and what new models need to be introduced in order to match the requirements of the new age? In 2017, EASME and DG GROW of the European Commission launched a two-year pan-European initiative on developing "Curriculum Guidelines for Key Enabling Technologies (KETs) and Advanced Manufacturing Technologies (AMT)", with an objective to collect and disseminate key principles and good practice examples, and to promote better cooperation between industry and education and training providers. The presentation highlighted the key findings of this initiative, and specifically addressed the need for a holistic and agile approach towards organising education & training for manufacturing professionals. Special attention was paid to the topics of future-proof Strategy, Collaboration Mechanisms and Learning Environment.



Luca Marcolin - Senior consultant EY Advisory Spa

### Blueprint for Sectoral Cooperation on Skills

#### Towards a common vision on addressing SMEs skills needs in the automotive sector:

strengthening the development of upskilling and reskilling strategies. Overview of the key trends and challenges currently impacting the automotive sector with particular regard to SMEs, what they mean in terms of needs for skills and competences, and possible ways forward towards a common vision for Europe

### MeMeVET

A framework at European level for a common recognition of technical and soft skills should be created to guarantee fast track integration into labour market and increase mobility of students and workers in mechatronic and metallurgy in Europe.

Vincenza D'Ambrogio  
Senior Project manager of ITKAM and MeMeVET project coordinator

Future technological trends and skills revolution panel of international experts



Carlo Alberto Tenchini, Marketing Director Sharp  
Maurizio Caon, Professor and Head of the Digital Business Center, University of Western Switzerland  
Georgios Kouklakis, Founder & CEO Asset Technology  
Yasser Hannan, Engineer project manager, University of Southern Denmark



Marco Bentivogli  
General Secretary FIM CISL

The work of the future represents a "megatrend" in which many complexities and variables play a role. But almost everything will depend on us, on how we imagine the world of tomorrow.



# SIF 2019 ITALY

## skills club



Sif 2019 reinforced the ongoing collaborative relationships of the Skillman.eu Network with the most important institutes and instruments of the European Commission, including the SELFIE team, the Cedefop, the European Training Foundation for activities in neighbouring and candidate countries, and other non-European supranational bodies such as the ADB - Asian Development Bank, the intergovernmental body CPSC - Colombo Plan Staff College based in Manila and others.

120 participants from 28 countries  
24 speeches, 2 panels, 10 workshops, 2 pitch tables

The 5th edition of the yearly SIF – SKILLMAN.EU INTERNATIONAL FORUM was focused on “Curriculum design, Sectoral skills development and Ethical issues on Advanced Manufacturing sector” and was held in October 10th and 11th 2019



## established WORLDWIDE

Currently skillman is joined by more than 350 members including new affiliated industries, notable universities and research centres as well NGOs, public bodies and other umbrella organisations and companies.



SIF 2019 was held in Florence, Italy, in the Fortezza da Basso, an exhibition area within a true Renaissance architectural masterpiece, during the national fair on education **DIDACTA**, promoted by INDIRE, the National Institute for Documentation, Innovation and Educational Research, of the Italian Ministry of Education's.



**Cristina Martelli**  
University of Florence - UNIFI  
Prof. Martelli, of the Department of statistics, computer science and applications held the workshop addressed to the ESCO topic:

## The ESCO db and its application within the skills foresight technologies

the multilingual classification of European Skills, Competences, Qualifications and Occupations. The ESCO db identifies and categorises skills, competences, qualifications and occupations relevant for the EU labour market and education and training, The Skillman network members embed the ESCO data in the curricula development and source the ESCO db with their own contributions

## EXTERNAL support

A 'specialistic speeches' session was also held with six relevant presentations by international experts belonging, in most of the cases, to the EU Commission or to other supranational bodies and international organisations.

Two rounds of workshops was also held for a total of ten parallel sessions.

The forum ended with an overview of initiatives and topics related to the Asian countries hosting relevant experts from Asian countries.



The senior advisor of the SIF 2019 - Prof. Rupert Maclean AO, Ph.D, former founder of UNESCO's UNEVOC Centre in Bonn, Education University of Hong Kong, UNESCO Chair on TVET and Sustainable Development, Consultant of Belt & Road Alliance for International Applied Education and Training China.

In committing to the realization of its mission the Skillman Network recognized that the dignity of the individual is fundamental and that the Agenda's Goals and targets should be met for all nations and people and for all segments of society. Furthermore, the members of the Skillman network endeavoured to reach first those who are furthest behind.

ECVET – EQF framework and ESCO classification

CBL CURRICULUM DESIGN  
competence based learning

SECTORAL SKILLS FORESIGHT  
TECHNOLOGY skills anticipation  
lifecycle

AM sector and responsibility  
according to the  
UNESCO 17 goals

SELFIE Self-reflection on Effective  
Learning by Fostering Innovative  
Educational Technologies

VET toolkit for tackling  
early school leaving

## DISCOVERY skills in Italy

The SIF 2019 provided also one on site visit and two presentations about the Italian VET system.

The topic 'Insights on Italian VET & education' was organised with a 'Guided visit to Marco Polo TVET institute in Florence'; The 'Expert insights on Italian VET & education' was deployed instead with two presentations: 'Trends in the Italian VET system, progress towards the Bruges Communiqué' and 'Tuscany Region VET system'.

## SPEECHES and experts

For the 'Introductory speeches and welcome messages', the SIF offered ten speeches and one panel of experts.

A team building activity was also provided organising two networking meetings and pitch tables where all participants were supported to present their relevant projects and to facilitate the collaboration for their own initiatives.

become a Skillman Member  
**LEAVE NO ONE BEHIND**



# PRESS CONFERENCE

## Italian Minister of Education Lorenzo Fioramonti

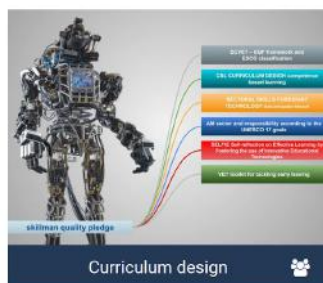
The 19th September 2019 @ the MIUR headquarters in Rome, the Italian Minister of Education held the press conference to launch DIDACTA ITALIA, the event that hosted the SIF 2019 in Florence. The meeting with the press was attended by prof. Giovanni Biondi, President of Indire, prof. Wassilios Fthenakis, honorary president of Didacta International, Gabriella Grieco, Councilor for Education, Training and Work of the Tuscany Region. The Skillman network was represented by Mr Giovanni Crisonà.



Filippo Chiarello  
Texty s.r.l.  
University of Pisa

**Skills 4.0 for digital transformation**  
To respond to the requests of Industry 4.0, it is necessary to collect information from various sources and to understand the trends of the skills.

Filippo Chiarello presented an adaptable and flexible instrument for identifying and mapping the new digital skills and making them usable to the system of the companies, the labour market and vocational training and education.



CPSC, the Colombo Plan Staff College for Technician Education has recently joined the Skillman Alliance. CPSC is a very important institution as such, one of the main intergovernmental organisations (IGOs), which consistently addresses issues related to technical and vocational education and training in the Asia-Pacific region. The Colombo Plan Staff College was represented at the SIF 2019 by his Director Prof Ramhari Lamichhane. CPSC became operational in 1974 with the Republic of Singapore serving as the first host Government and moved later to the Philippines upon the invitation of the Philippine Government.



## The Colombo Plan Staff College

It currently has 26 member countries classified as charter and current members. Colombo Plan Staff College has all the requirements to be a relevant member of the Skillman.eu Consortium, thanks to its strong experience in designing and conducting programs and in developing and enhancing the technician education systems of the Colombo Plan state members. Actually, the know-how of the organization, its expertise in Technical and Vocational

Education & Training, as well as its leadership in acting as a hub for networking will be extremely important for Skillman. On the other side, the participation in the network will provide the Inter-Governmental Agency with the opportunity to access better to the latest innovation in the field of the skills development for the advanced manufacturing at international level and will create new occasions of partnerships for the colleges' members of the CPSC circuit.



**Vittorio Calaprice - European Commission - Representation in Italy**  
**Policy analyses and institutional relations at the EU Commission in Italy**



**MOU - official Signature with the Institution of Diploma Engineers Bangladesh**



**UNESCO's 17 goals and promoting the Skillman presence in Asian countries**  
**Panel of experts coordinated by Rupert Maclean**



A K M A Hamid - President  
 Institution of Diploma Engineers  
 Bangladesh

Tariqul Kabir - Director  
 Development Project Design  
 and Services Limited  
 Bangladesh

Mahir H. Majeed - The dean of the  
 Technical Institute of Karbala, Irak





**Sabine Hafner Zimmermann**  
FIT4FoF Project Manager Regionale  
Zukunftsstrategien und Innovation

we think that to optimally support both workers in their future development and at the same time enable employers to upskill their personnel in a targeted way will be the major challenge of European manufacturing industry during the coming years. Only by addressing this challenge actively we can enable European manufacturing companies to stay competitive, innovative and survive in the fierce global competition of today.

## speakers



**Md. Enamul Haque**  
Research Fellow - SIYB Trainer  
Institution of Diploma Engineers

### STRENGTHEN COLLABORATION ON TVET FOR STRATEGIC WORKFORCE PLANNING OF ASIA PACIFIC

- Emerging Issues and Challenges
- Global employment and skills mismatches
- Trends of the Workforce Employment Pattern
- About Asia And The Pacific
- Global Knowledge Economy Ranking
- Strategic Workforce Planning for Asia Pacific
- Build Skills Asia Pacific : the way forward



**Concetta Fonzo - Researcher**

Vocational excellence usually refers to high quality of training and education but also to relevance to the world of work and to the attractiveness of the educational offer to learners and to employers. Vocational excellence may also imply an enlarged, more comprehensive and inclusive conceptualisation of skills provision – addressing innovation, pedagogy, social justice, life-long learning, transversal skills, organisational and continuing professional learning and community needs.

## SKILLMAN ALLIANCE MEMBERS IVETA



### International Vocational Education and Training Association

**Julian Ng**  
Vice President IVETA  
with Skillman's Chair Stefania Capogna



**Alessandra Rinaldi**  
University of Florence

Design and Smart Manufacturing: which skills for the next designers' generation?



## SKILLMAN ALLIANCE MEMBERS

### CUMULUS / DESIGN

The global association of Universities and schools of design

Urban-Agriculture, providing new paradigms for management of natural resources, challenges the interfaces between productive activities, ecological systems and societies.

**Massimiliano Leoncini**  
Skillman Counselor

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**SKILLMAN ALLIANCE MEMBERS**  
**EARLALL / POLICY MAKERS**  
 The network of regions



**SKILLMAN ALLIANCE MEMBERS**  
**EAPRIL** The European Association for  
 Practitioner Research on Improving Learning



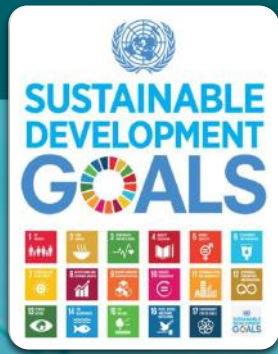
**SKILLMAN ALLIANCE MEMBERS**  
**EPIC** The European  
 Photonics Industry Consortium



The alliance recently established with other networks of which the Skillman.eu is leading a policy making initiative at European level.

This new action, sourced by Education, Audiovisual and Culture Executive Agency of the EU Commission, is called Skillnet and is planned for 2020 and 21.

The Alliance gather the demands from companies and VET and address national and international policies related to the manufacturing sector.



# 4 CATEGORIES

## Organisations and Individuals

# 20 WINNERS





# Ethical Skills Award

**Skillman gives a sense to learning**

## EXAMPLES OF EXCELLENCE

The Skillman Ethical Skills Awards recognizes and celebrates examples of excellence in activation of ethical skills in the field of the advanced manufacturing across environments and cultures.

Each year, award recipients comprise a showcase demonstrating through ideas and concrete cases how successfully activation of ethical skills is possible. Entry to the Awards is open to all schools, companies, individuals and students until 20th of September of each year. Participation is free of charge. The Skillman Scientific Committee selects the best ideas and concrete examples. Selected entries are publicly awarded during the Skillman International Forums and become a permanent part of the Ethical Skills Awards Yearbook.

# EXAMPLES OF EXCELLENCE

## Awarded ideas



**SORA Match**  
**Juan Dalisay Jr.**

The first example of excellence rewarded by the Skillman Scientific Committee was addressed to SORA Match, a system designed by Mr. Juan Dalisay Jr. aimed at addressing a critical challenge: provide market-driven education to urban-poor out-of-school youth in the Philippines.

To solve the problem, the AI-based matching system has put together apprentices and companies based on their preferences. SORA match drew inspiration from the Adam's Smith's work "The Labor Theory of Value" that considered the idea that the modern world is the result of a decline in ethics and fellow-feeling. Thus, Adam Smith suggested a system of morality that would help people act by the book and value ethical behaviours in different scenarios.

To serve his purpose, Mr. Dalisay Jr. adopted Adam Smith's apprenticeship method, with the aim of matching candidates and companies and acknowledging the importance of youngsters to be educated and employed at the same time, bypassing the expensive university system.

After evaluating candidates on both sides, conducting interviews and some quantitative research,

SORA was able to match applicants to their best counterpart possible. This was achieved thanks to the impartial help of the AI-based machine, which was critical in preventing inequalities and disproportions.

The successful experiment drew the attention of many Education Centres around the world and allowed Mr. Duan Dalisay to be the recipient of many awards.

Currently, SORA is a complete economic system that can be implemented in several applications: jobs, apprenticeships, agriculture, disaster relief, renewable energy, markets, trade and even marriages.



**Smart bins**  
**Dimitrija Angelkov**

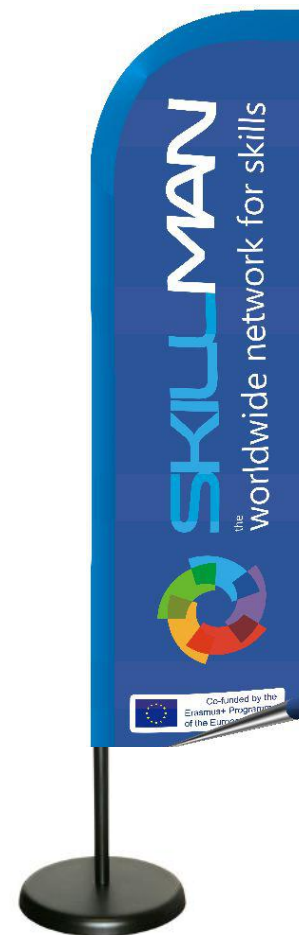
An Ethical Skills Award was also awarded to the "smart bins" idea, conceived by Macedonian Professor Dimitrija Angelkov, founder of Interactive Future Company.

He implemented this idea to solve a crucial issue in Macedonia: a poor recycling system. Indeed, only 16% of plastic bottles are collected and handled to be processed, resulting in higher levels of environment

pollution. Dimitrija's smart bins are a cheap and smart solution to the problem, encouraging plastic bottles recycling. The total cost of one piece is less than 200 Euros, and it has low energy consumption, being supplied by a solar panel fixed on top. The company also provides a 24 hours service, maintenance and support to users.

People are motivated to use the bins because they generate encrypted codes that convert into points. When they have earned enough points, they receive rewards, making a profit out of their waste.

This closed system already operates in schools and kindergartens throughout the cities of Macedonia. Smart bins are safe because the portable motor that opens the door is 0.5 watts. They offer flawless safety zero emissions. Bins are of different designs depending on the place of installation. They are based on micro electronics and extremely low cost sensors.



# Membership



Area  
Coordinator



National  
Coordinator



International  
Board Member



Counselor



Ambassador



Editorial  
Board Member

**No fee subscription**

**Put your face here**

## Skillman composition for active members

The following roles are the options you can select for you or for your organisation. Some role must be validated by the skillman.eu central coordination. You can indicate your wishing within the subscription form. Application is fully free of charge. For each role there are standard activities asked within a yearly base (except the Ambassadors that don't need to repeat their information):

### Area Coordinator

The Skillman Area Coordinator is a Member engaged in animating the network implementing the following activities on year base:  
At least four posts/articles to be published in the skillman website and publishing  
Organisation of a minimum of one meeting online among local members  
Participation to a minimum of one meeting online among Area Coordinators  
Organise and lead at least one webinar  
Contribution to organise and participation to one annual conference (online or onsite upon board decision)

### National Coordinator

The Skillman National Coordinator is a Member engaged in animating the network implementing the following activities on year base:  
Four posts/articles to be published in the skillman website and publishing;  
Organisation of a minimum of one meeting online among members in the country;

Participation to a minimum of one meeting online among National Coordinators;  
Organise and lead at least one webinar;  
Contribution to organise and participation to one annual conference (online or onsite upon board decision)

### International Board Member

The International Board Member is a Member engaged in animating the network implementing the following activities on year base:  
leadership of one project proposal per year that involves all the other members organisations;  
at least four posts/articles per year to be published in the skillman website and publishing;  
participation at minimum two meetings online;  
organise and lead at least one webinar per year;  
contribution to organise and participation to one annual conference (online or onsite upon board decision)

### Skillman Counselor

The Skillman Counselor is a Member engaged in animating the network implementing the following activities on year base:  
At least two posts/articles per year to be published in the skillman website and publishing;  
Organise and lead at least one webinar per year;  
Contribution to organise and participation to one annual conference (online or onsite upon board decision)

### Skillman Ambassador

In order to raise awareness and attractiveness of the Skillman Network, those actors and stakeholders who document a concrete contribution in terms of adopting the outcomes and deliverables of the Network within their local or international context, within the partner countries and beyond, are entitled to become part of the special Ambassadors Club. Awards of Ambassadors are issued within the framework of the Annual International Conferences. The Ambassadors provide their profile, picture and authorization for publishing on skillman.eu and provide a video interview.

[skillman.eu/register](http://skillman.eu/register)



SKILLMAN.EU

The worldwide network addressed to introduce skills, competences and innovative curricula for the advanced manufacturing sector.

We connect industry and training providers with civil society and give support services that drive growth and effectiveness for our members.

[secretariat@skillman.eu](mailto:secretariat@skillman.eu)

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# The Worldwide Network for skills in Advanced Manufacturing



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