EUROPEAN
— DATA SCIENCE —
ACADEMY

Project acronym:	**EDSA**
Project full name:	**European Data Science Academy**
Grant agreement no:	**643937**

D 5.1 The EDSI Charter

Deliverable Editor:	**Simon Bullmore (Open Data Institute)**
Other contributors:	**Leonard Mack (Open Data Institute)**
	Jean-Louis Lievin (idexlab.com)
Deliverable Reviewers:	**Elena Simperl (SOTON) / Aba-Sah Dadzie (OU)**
Deliverable due date:	**31/07/2016**
Submission date:	**31/07/2016**
Distribution level:	**Public**
Version:	**1.0**

Change Log

Version	Date	Amended by	Changes
0.1	16/05/2016	Simon Bullmore (ODI)	First draft and structure
0.2	20/06/2016	Leonard Mack (ODI)	First review and editing reflecting demand analysis
0.3	28/06/2016	Simon Bullmore (ODI)	Updated following Consortium discussions
0.4	08/07/2016	Simon Bullmore (ODI)	Finalised version for reviewers
0.5	21/07/2016	Leonard Mack (ODI)	Incorporated reviewers comments
0.6	25/07/2016	Simon Bullmore (ODI)	Finalised version for scientific review
0.7	28/07/2016	Elena Simperl (SOTON)	Scientific review
1.0	29/072016	Aneta Tumilowicz (OU)	Final QA

EUROPEAN DATA SCIENCE ACADEMY

Table of Contents

List of Tables

List of Figures

EUROPEAN DATA SCIENCE ACADEMY

1. Executive Summary

The supply of data science training across Europe has grown rapidly over the last few years. This also means that the market is a crowded and sometimes confusing place. The EDSA project will bring clarity to the market by connecting learners to the training they need. Learners and managers will be able to understand what skills are in demand. They will be able to make informed decisions about the best way to develop these skills. They will be able to access the high-quality, multi-modal learning solutions that EDSA is designing and delivering to meet industry demand for skills.

Connecting learners to high-quality learning has the potential to make a long-term impact on EU economies by building skills and capacity in data science. There is therefore value in making the EDSA approach viable beyond term of the project.

In the following pages we share initial insights into how EDSA can be a viable, long-term proposition, and a draft of an EDSA Charter that will be the agreed basis for cooperation between current and future EDSA partners.

The goal of the EDSA Charter is to describe the structures and relationships required to maintain EDSA's valuable offering beyond 2017. Early research, consultation with the market and industry input have suggested options for a minimum EDSA offer that could be sustained, along with ways that EDSA may evolve. The initial offer, or minimum viable product (MVP) should seek to maintain is the EDSA web presence, course portal and curriculum. As it evolves in 2018 and 2019 EDSA should build on this MVP, and explore options such as certifying skills and ongoing demand analysis.

Whatever structure is adopted EDSA will need governance and resources to be viable in the long term. The EDSA Charter is the principle document which lays out the business models, legal and governance structures, relationships, resource commitments and conditions that are necessary to ensure the sustainability of EDSA's activities after the end of the project, and it's ongoing evolution. It includes and builds on EDSA's foundational delivery and design values as well as evidence gathered through other deliverables and ongoing research, most notably the study and evaluation report ("demand analysis")[1]

Whilst some of these components, for example the design and delivery values are already well defined, for the Charter to be finalised, further work needs to be conducted, in particular the development of viable business, legal and governance models for EDSA. This will be the focus for this work package over the next 6-months.

---

[1] For further information, please see the demand analysis covered in the study and evaluation report 2 (D1.4). The document is currently under review and will be accessible via EDSA's deliverable website: http://edsa-project.eu/downloads/deliverables/

2. Introduction

This document has two sections. The first looks at the background to the Charter, and explains why it is needed and the background research that has gone into its development. The second section presents the Charter itself.

In **Section 1** we look at some key development questions:

- **Why is an Academy Charter Needed?** We consider why we need to ensure that EDSA continues to improve data science capabilities through the creation of a network of partners who provide high-quality training meeting industry needs. The purpose of the Charter will be to outline how partners will work together to achieve the goals of the Academy and the structures and business model that will make it possible.
- **What makes EDSA's services unique?** We look at the current landscape of data science initiatives, mapping core features of each, and considering the role EDSA should play.
- **What Should the Academy Offer Users?** Hosted on the EDSA project website, the Academy will help users understand what skills they need and provide a curated curriculum of approved courses and partners to help them meet their needs.
- **What Should the Academy offer Partners?** As an EDSA partner, training providers will gain brand exposure, sales and marketing opportunities.
- **The Options for Sustaining EDSA.** The minimum viable product (MVP) will include the need for a website, a maintained curriculum and course-listings which are continuously aligned to match market demand. We also look at what else EDSA may need to offer to be a viable and valuable long-term proposition.
- **Cost Implications.** We consider what costs will need to be covered for EDSA to be maintained as a viable offer and evolve in line with industry needs.
- **Timelines for how the EDSA structure will evolve.** A phased approach will be adopted to first launching EDSA's MVP then evolving it to meet market and user needs.
- **Legal Entity Implications.** We present options for EDSA's future incorporation as a legal entity.

Section 2 provides an outline of the charter itself. Specifically:

- **The Charter Summary.** The principles and commitments that constitute the core Charter elements
- **How partners will work together to develop the data science skills the EU needs.** The commitments that partners will be making towards the development of EDSA into a viable, commercial proposition that continues to address the demand for data science skills. This will include the exploration of additional EDSA options such as skills certification.
- **How partners are expected to adhere to the terms set-out in the EDSA Partner Agreement.** The EDSA Partner Agreement will set out more detailed terms relating to the duration of participation, use of brand and resource commitments required from EDSA partners. The partner agreement will also include subscription or other payments required of potential partners.
- **The requirement of Partners to follow guidance from the EDSA Steering Group.** The steering group will provide oversight of EDSA, in particular managing the development of the Charter to ensure it stays aligned to the changing needs of both EDSA Partners and users.

EUROPEAN DATA SCIENCE ACADEMY

- **The importance of maintaining EDSA Curriculum Design Values.** EDSA Charter Partners will need to commit to the courses they offer through EDSA, and that are published on the EDSA website, being designed to the high-quality standards as described in the curriculum values.
- **The EDSA Curriculum Delivery Values partners will need to follow.** Similarly, EDSA Charter Partners will need to commit that the courses they deliver through EDSA adhere to the core delivery values of multimodal and multi-platform approaches, are high-quality, and are underpinned by learning analytics and opportunities for learner reflection.

3. Section 1: Why is an Academy Charter Needed?

The EDSA project improves Europe's data science capabilities based on an analysis of the skills which organisations from different sectors and countries need and by providing a choice of training activities that meets these needs. To maximise impact over time, this offer needs to evolve with curriculum contents being adapted as the data science domain progresses. To ensure a long-lasting, sustainable impact of the project, we propose to establish The Academy, embarking on a mission to:

> *Bring together EDSA project members with external partners, to form a pan-European collaboration network that persists beyond the life of the project. EDSA Charter Partners will work together to find practical ways to develop the data science skills that create social and economic value for the European Union.*

To achieve this goal, the Academy builds on five crucial resources developed during the EDSA project. Together, these form the framework of excellence for our sustained offer and impact beyond the project end:
1. An impartial and scientific approach to matching data science skills needs with a flexible curriculum.
2. The Curriculum Design Values[2] the EDSA project uses to create high-quality training.
3. The Curriculum Delivery Values[3] that the EDSA project has identified as the basis for impact-driven training.
4. Learning Analytics[4] that help refine and improve training delivery.
5. The advice of the Industry Advisory Board[5], incorporating insights from industry leaders.

The Charter is a strategy document to guide and structure the further exploitation of these resources by The Academy after the end of the project. Specifically, the Charter will capture the working relationship, business structure, financial model, activities, goals and values that Academy partners must commit to.

Academy partners will benefit from their association with the EDSA's framework of excellence outlined above. This framework builds the foundation for the Academy's impartial guide to high-quality data science training. For this value to be sustained, Academy partners will need to make commitments to support, maintain and develop core EDSA assets and values. The Academy Charter

therefore describes:
1. The EDSA Partners' commitments to working together to find practical ways to develop the data science skills that will create social and economic value for the European Union.
2. The terms set-out in the EDSA Partner Agreement and the further guidance that will be provided by the EDSA Steering Group.
3. The partners' approach to continue developing and maintaining a curriculum of courses that meets the evolving demands of data scientists and their employers.

---

[2] http://edsa-project.eu/overview/edsa-values/
[3] http://edsa-project.eu/overview/edsa-values/
[4] http://edsa-project.eu/resources/learning-analytics/
[5] http://edsa-project.eu/members/advisory-board/

EUROPEAN DATA SCIENCE ACADEMY

4. The expected quality standards of courses published on the EDSA website; specifically, compliance with the quality standards of the EDSA Curriculum Design Values and EDSA Delivery Values.
5. The business and operational models that underpin EDSA

3.1 Which areas are current EDSA's competitors working in?

In the EU a number of private and public initiatives are working in the domain of data science skills development. Accordingly, it is crucial for EDSA to understand competitors and their offers; this information is foundational to make essential business and organisational development decisions - particularly, which niches exist for EDSA's product differentiation. Furthermore, the information also helps us to assess whether EDSA should aim to be integrated with another, existing initiative or proceed as an independent entity.

To provide the required insights, we conducted a survey of major European competitors for EDSA. Our sample represents a purposeful selection to represent the variety of European organisations, projects and associations that are currently working to improve the accessibility, delivery and exploitation of data science and skills development. Because the service profiles of the surveyed entities vary widely, we consulted industry experts in our network to understand which main service characteristics are most important for clients. Eventually, this led us to select and analyse 10 different service categories, which can be defined as follows:

- Courses & Training: This category assesses whether the entity offers its own or third party data science courses or training (either online, face-to-face or blended).
- Online Portal: This category explores whether the entity offers a portal function which collects, edits and represents information from diverse sources, in this case on data science.
- Dashboard: Dashboards are easily understandable, real-time user interfaces which visualize current and historical information relating to data science skills and their development.
- Tools & Solutions: This category evaluates whether entities offer structured, regularly updated information on specific data science tools and solutions, e.g. through a newsletter or blog.
- Certification: For entities that provide courses and trainings, this category analysed whether participants can receive certificates for completed training.
- Learning Analytics: This category indicates whether the entity collects detailed analytics on course interactions and completion from participants. This data allows training providers to gather feedback on the effectiveness of their courses and training in order to develop best practice approaches to training.
- Research: This category marks whether an entity conducts its own research into data science and skills development.
- Jobs: This category shows whether an entity offers users help to find data science jobs, e.g. though a job board.
- Consulting: This category evaluates whether the entity offers consulting, advisory or professional services relating to data science and skills development.
- Networking: This category explores whether entities offer networking opportunities for interested learners and data science professionals, e.g. through online communities or a membership network.

Table 1 presents the results of this analysis. Please also note, that appendix 2 contains summary information on the service models and offers of the reviewed entities; this information has been used to compile the assessments represented in table 1.

Table 1: Summary table of landscape analysis

Entity surveyed	Courses & Training	Online Portal	Dash-board	Tools & Solutions	Certifi-cation	Learning Analytics	Training metrics	Research	Jobs	Consult-ing	Network-ing
ODI	• (online, face-to-face)							•		•	•
BDVA								•			•
Academy Cube	•	•							•		•
EDF											•
NESSI				•				•			•
EIT Digital	• (face-to-face)							•			•
Fraunhofer Alliance	• (face-to-face)							•		•	
Edison Project					•			•			•
Data Science Central		•									•
EDSA	• (online & blended)	•	•	•		•	•				

As the analysis shows, no single entity provides at this stage a full coverage of the wide range of products, services and features included in our research. Nevertheless, some domains seem to be more populated than others. In particular, numerous entities offer their own training – however, most of these offers are limited to online training. Only a few providers such as Fraunhofer and EIT Digital offer face-to-face training; whilst blended learning is not included in the portfolio of any of the surveyed entities. Networking, research and consulting services are well represented.

Finally, none of the surveyed entities offer dashboards, updates on tools, solutions and learning analytics. In this specific niche (dashboards, updates on tools, solutions and learning analytics), EDSA could offer new services. Particular the integration of these services in a uniform offer from one provider would close a market gap. On this basis the establishment of EDSA as an independent entity would appear to be a rational decision, indeed this was the original proposal outlined in the EDSA project submission.

3.2 What Should the Academy Offer Users?
Hosted on the EDSA project website, the Academy will help users understand what skills they need and provide a curated curriculum of courses to meet needs. From a user perspective the Academy should as a minimum offer via the EDSA website:
- **Guidance**. Users should be able to understand their current skills level, what skills are in demand, and what skills they need to acquire.

EUROPEAN DATA SCIENCE ACADEMY

- **Curriculum**. Users will be able to identify ways to develop their skills consistently and continuously through a variety of methods.
- **News and insights**. The latest developments, innovations and ideas from data science will be curated using the website and social media
- **A selection of data science tools.** The Academy will profile and filter the available data science toolkit to ensure that users understand what tools are available and when to use them.

3.2. What Should the Academy offer Partners?

The demand analysis conducted by the EDSA project found that data science training is a thriving sector with a broad range of courses, content and companies. The study also found that the diversity of content and quality is baffling for both those wanting to learn about data science and managers who need to invest in the development of staff. Put simply there's a lot of choice in the market, and people don't know what courses offer the best value.

The Academy will cut through this complexity and be a trusted advisor for learners and managers to decide how to meet their needs. Carefully selected Academy partners will therefore have aligned their existing offerings, and created new courses to meet the needs identified in the demand analysis and ongoing needs of both industry and learners. They will benefit from:

- **Brand exposure.** A highly-ranked website will mean they will benefit from more people coming into contact with their brand and products.
- **Sales opportunities.** Aligning content to user needs provides a clear rationale for people to buy an EDSA training product.
- **Partnership opportunities.** In a connected world it is rare that a single organisation can offer everything to all clients, making partnerships important. Through EDSA partners will gain access to a network of high-quality collaborators. This network will also provide a basis for working with and engaging with key clients and institutions across the EU, ensuring that EDSA and by extension EDSA partners stay relevant.
- **Quality assurance.** Partners can benchmark their offerings against the design and delivery standards established by EDSA, providing a shortcut to creating high-quality products

3.3 What are the options for sustaining EDSA?

To sustain a minimum viable product offer, EDSA should:

- Maintain the EDSA website at http://edsa-project.eu
- Maintain EDSA's courses portal at http://courses.edsa-project.eu/
- Maintain a social media presence, for example the Twitter handle @edsa_project;
- List a curriculum of training aligned to industry needs, where the curriculum describes the topic areas and course types on offer in each topic area;
- List quality training offers from both existing EDSA partners and new partners;
- Assess and badge courses and training as "EDSA approved";
- Ensure that training is developed and delivered in line with EDSA values.

To understand additional priorities for developing the Charter, we gathered requirements from the EDSA demand analysis. This has been supplemented by discussions amongst consortium partners and feedback from EDSA's Industry Advisory Board. Outlined below are the features that this analysis suggests should be considered for inclusion into the EDSA offer, and by extension the Charter.

- **Certification of skills (accreditation)**: Students of EDSA's curriculum should have the chance to receive a certificate for their completed course work or certification of the skills they have attained. For this, EDSA's curriculum should also be accredited to reflect its compliance with educational standards.
- **Ongoing analysis of data science skills**: The Academy should develop a continuous approach to monitoring the data science skills demand in Europe.
- **Continuous curriculum review, development and engagement**: The curriculum for data science skills should evolve based on demand and drive continued course development. Courses should be evaluated and updated in regular intervals. To improve post-completion course engagement, participants of earlier courses should be notified about changes and be invited to join updated lessons. This provides the basis for the continuous learning experience that today's data scientists require.
- **Proactive community engagement and support:** The Academy should become an actively managed forum and access point for data science training. Data scientists and learning professionals should be encouraged to reach out to Academy partners and peers to discuss what training they need.
- **Delivering news and course updates**: The Academy should provide in-depth news on recent trends in data science, thereby targeting different data science audiences. As an option, course participants should be offered to receive personalised news, updating them on developments relating to courses they have completed through EDSA.
- **Certification of new providers and instructors**: The Academy should develop an open and transparent framework to certify third party course providers and instructors. This would allow EDSA to evolve into a standards setting service, which evaluates and compares data science training.
- **Individual Needs Analysis and Course Matching**. Users should be able to assess their current skills needs and navigate to solutions based on their level, location and language.
- **Skills and demand analytics**: The Academy should use advanced data analytics to help users understand how their existing data science skills match against market demand. Data on individuals' skills could be produced through an automated skills assessment, supplemented by individualised, but automatically produced skills development plans.

3.4 Cost Implications

At this stage, whilst the MVP for EDSA is yet to be defined, a fully resourced and budgeted business model has not been developed. However, early estimating exercises and analyses of resource requirements for establishing sustainability for EDSA have been conducted through consortium discussions and in EDSA plenary workshops. These early models identified growth in effort equating to approximately six-eight full-time equivalent (FTE) staff to eventually become sustainable. In addition to staffing, initial resource requirements are minimal (sub €3K), consisting mostly of web hosting and associated software services and subscriptions.

Initially it is expected that much of this effort could be provided in-kind, by founding EDSA partners, and additional resources such as web hosting covered by internal partner budgets, the network should consider options for being self-sustaining in order to protect itself from changes to partners' priorities and circumstances. Therefore, subscription and revenue share models should be considered. Some very preliminary numbers are set-out below.

EUROPEAN DATA SCIENCE ACADEMY

Table 2: The Cost breakdown

	EDSA Project		**EDS_Academy**	
	Definition		Phase 1 : Establishment	
Timing	to 02/2018		2018	
Offer	Definition phase (MVP)		MVP1.0	
Revenues	N/A		Subscriptions + Services	
Activities / Costs				Up to 8 FTEs
	Set-up	Covered by project	Governance	1 FTE
	Initial partners recruitment	Covered by project	Bus. Dev / Recruitment	2 FTEs
	Web site set-up, social media presence	Covered by project	Web site mgmt, social media	2 FTEs
	Courses development	Covered by project	Course review & content	2 FTEs
	Initial Business Model	Covered by project	Business Model Exploration	1 FTE

3.5 Timelines for Developing the EDSA Network

Outlined below are the potential development and delivery phases for the development of EDSA. At present, it is considered as very unlikely for the Academy to be self-sustaining on day one. Other funding sources need to be considered. Commitments of in-kind support from existing EDSA partners secured. Sustainable business models developed.

Table 3: Potential development and delivery phases for EDSA

Governing Project	EDSA Project	EDS_Academy	EDS_Academy	EDS_Academy
Phase	Phase 1: Definition	Phase 2: Establishment	Phase 3 : Development	Phase 4: Expansion
Timing	Up to 02/2018	2018	2019	2020

Offer	Definition phase (Minimum Viable Product – MVP)	MVP1.0	MVP2.0	MVP2.1
Revenues	EDSA Project Financing	Subscriptions + Services + Potential support from funders	Subscriptions + Services + Potential support from funders	Subscriptions + Services
Activities	Set-up	Governance	Governance	Governance
	Initial partner recruitment	Business Development / Recruitment	Business Development / Recruitment	Business Development / Recruitment
	Web site set-up, social media presence	Web site management, social media	Web site management, social media	Web site management, social media
	Course development	Course review & content	Course review & content	Course review & content
	Initial Business Model	Business Model Exploration	Certification	Certification

3.6 Legal Entity Implications

One of the important early decisions that EDSA project stakeholders will need to make is whether a formal legal entity is required for EDSA's continued development and for establishing EDSA as a sustainable entity. The first level of decision would be the decision regarding the incorporation of a legal entity. There are various legal entity options available for EDSA.   These include:

Public VS private legal entities. Non-profit VS for profit entities.
It should be noted that non-profit legal entities can be incorporated as an association or as foundations in many EU jurisdictions.

Governance of the legal entity.
The place of incorporation of the entity will also need to be considered. Specifically, which EU jurisdiction the entity should be located in, and by extension the legal system that governs it.

As with the rest of the charter development process the final business model and partnership agreements will dictate the legal entity and incorporation requirements for EDSA.

EUROPEAN DATA SCIENCE ACADEMY

4. **Section 2: The EDSA Academy Charter**

Outlined below is the first draft of the EDSA charter:

The Charter Summary

1. **We, the EDSA Charter Partners, commit to working together to find practical ways to develop the data science skills that will create social and economic value for the European Union.**
2. **We commit to adhering to the terms set-out in the EDSA Partner Agreement and to further guidance provided by the EDSA Steering Group.**
3. **We commit to developing and maintaining a curriculum of courses that meet the evolving demands of data scientists and their employers.**
4. **We commit to ensuring that the courses we offer through EDSA, and published on the EDSA website, are designed to the quality standards as described in the EDSA Curriculum Design Values.**
5. **We commit to delivering training and courses that follow the principles of the EDSA Delivery Values.**

The full charter is outlined below.

Working Together to Develop the Data Science Skills the EU Needs

As the demand for data science capacity increases across the EU, EDSA partners will work together to understand how needs are changing. Our goal is to identify the most effective ways to build the skills needed by people, communities, and organisations in the private and public sectors. We want to ensure that data scientists have the skills that are needed to drive impact in business, society and the environment.

We recognise that the exploration of future options and features is an important element of this partnership, in order to understand how data science capacities are best developed. Therefore, as EDSA partners, we will work together to investigate options for EDSA's evolution. These will include, but are not limited to:

- **Certification of skills (accreditation):** Students of EDSA's curriculum should have the chance to receive a certificate for their completed course work.
- **Ongoing analysis of data science skills**: The Academy should develop a continuous approach to monitor the data science skills demand in Europe.
- **Continuous curriculum review, development and engagement**: The curriculum for data science skills should evolve based on demand and drive continued course development.
- **Proactive community engagement and support:** The Academy should be an actively managed forum and access point for data science training.
- **Delivering news and course updates**: The Academy should provide in-depth news on recent trends in data science.
- **Certification of new providers and instructors**: The Academy should develop an open and transparent framework to certify course providers and instructors.
- **Individual Needs Analysis and Course Matching**. Users should be able to assess their current skills needs and navigate to solutions based on their language, location and level.
- **Skills and demand analysis** The Academy should use advanced data analytics to help users understand how their existing data science skills match against market demand. Data on

individuals' skills could be produced through an automated skills assessment, supplemented by individualised, but automatically produced skills development plans.

Adhering to the terms set-out in the EDSA Partner Agreement

The EDSA Partner Agreement sets out more detailed terms relating to the duration of participation, use of brand and resource commitments required from EDSA partners. The EDSA Partner Agreement can be found in the Appendix.

Following guidance from the EDSA Steering Group

The EDSA Steering Group is constituted by the founding partners of EDSA. The steering group provides oversight of EDSA, in particular managing the development of this Charter to ensure it stays aligned to the changing needs of both EDSA Partners and users. The Steering Group consists of representatives from the following institutions:

- The Open University
- The University of Southampton
- Jožef Stefan Institute
- KTH Royal Institute of Technology
- Persontyle
- Fraunhofer IAIS
- Open Data Institute
- Technische Universiteit Eindhoven
- ideXlab

EDSA Curriculum Design Values

EDSA Charter Partners commit that the courses we offer through EDSA, and that are published on the EDSA website, are designed to the high-quality standards described below. Courses should:

1. **Be industry aligned**. The curriculum is designed in accordance with the expectations of EU industrial sectors connected to data science, providing industry-standard scenarios and tools.
2. **Be based on industry standard tools**. Using open source data science tools that offer learners experience with tools customary to the industry and their specific sector.
3. **Use real data**. Learners utilising this curriculum have access to a number of large-scale open datasets to practice their learned data-science skills, enabling real-world data science on real-world data.
4. **Be open by design**. Our curriculum is designed through an open process, involving user, research, industry and professional recommendations and feedback from all across the EU, ensuring that the curriculum meets the needs of industry, academia and the wider market.
5. **Be based on the insights, skills and experience of experts**. Our curriculum is designed by world-class professional and academic experts in data science.
6. **Be modular**. Our curriculum is flexible and adaptable to both educator requirements and the needs of their learners.
7. **Be transferrable**. Skills learned through the EDSA curriculum can be utilised across a range of data science roles, occupations and countries throughout the EU.
8. **Follow concise learning goals**. All EDSA courses are aligned with clear learning goals, depicted by a specific aspect of the data science role. Learning pathways are provided to enable learners to navigate through the content, selecting what is useful to them.

EDSA Curriculum Delivery Values

EUROPEAN DATA SCIENCE ACADEMY

The curriculum delivered by EDSA partners will be:

1. **Multilingual**. Delivered across a number of European languages to extend the reach of our course materials and enable non-English speakers to use our curriculum.
2. **Multimodal**. Provided in a number of modes to facilitate a host of learning styles, skill levels and format preferences, such as MOOCs, eBooks and slide decks.
3. **Multi-platform**. Utilising a wide range of platforms in order to remain accessible and available to a large body of data science learners.
4. **Cutting-Edge Quality**. Materials are subject to a series of design iterations that encapsulate the latest research and professional practice, prior to their launch.
5. **Reflective and Quantified**. Materials are delivered with data and analytics in mind, providing all learners quantified measures and analytics to reflect on their aptitude, skills and strengths.

5. Conclusions

In this deliverable, we present the EDSA Charter and the role it plays in sustaining EDSA's activities in the long-term, after the project's end. We propose that project partners and third parties commit to developing and delivering services through a Europe-wide data science network. This suggestion is based on initial exploratory research into the current landscape of data science skills provision, insights gained from the demand analysis conducted as part of EDSA, competitor analysis and advice from the industry advisory board and additional industry experts,
The EDSA Charter will need to support any approach for a viable, long-term Academy. It will need to underpin an Academy value proposition that is appealing to both the market and to Academy partners. This will require both careful scoping of what EDSA will offer and an understanding of what the market needs. The current version of the Charter described in this report is based on exploratory research that has indicated where the Academy may sit in the market, the market needs the Academy might address and the structures that will support the Academy offer.

Key elements of the charter are already in place. EDSA's Design and Delivery Values provide the basis for maintaining EDSA's high quality standards. Similarly the Charter describes the formation of a Steering Group that will guide the Academy's development. This group will consist of the original consortium partners in order to build on the connections and expertise gathered through the project's course. Signatories to the Charter can also expect to commit themselves to continuously explore pathways to further develop data science training in order to best accommodate industry needs.

However further research, planning and market engagement is needed before finalising the scope and structure of EDSA, and by extension finalizing the Charter document. In particular business models and supporting legal structures need to be defined and agreed by both current EDSA consortium members and potential EDSA partners, with support and input from EDSA's Industry Advisory Board and the Commission.

6. Appendices

Appendix 1 – Draft EDSA Partner Agreement

Version: v1.1 2016

This Agreement is made on _____ (**the "Effective Date")** between:

1. [**Organisation Name**], a company registered in [**T**erritory, with company number [**Number**], whose registered address is [**Organisation Address**] ("you, "Partner"), and

2. The EDSA Steering Group, the organising group of EDSA.

collectively 'the parties' and each a 'party'. The parties agree the following:

Common Purpose Both parties shall work in good faith to promote and implement the EDSA Charter, which embodies the values of EDSA and the commitment to working together to find practical ways to develop the data science skills that will create social and economic value for the European Union.

Definitions & Interpretation The following definitions apply to this agreement.

Partner Contact: means the person detailed in Schedule 1 or as otherwise notified by you from time to time.
EDSA Activities: means the activities detailed herein.
EDSA Brand Guidelines: means the brand policy at http://edsa-project.eu/
EDSA Charter: means the vision at http://edsa-project.eu/
EDSA Global Registry: means the publicly available information contained in the registry at http://edsa-project.eu/
EDSA Governance: means the policy at: http://edsa-project.eu/
EDSA Curriculum Design Values: means the values at http://edsa-project.eu/overview

EDSA Curriculum Delivery Values: means the values at http://edsa-project.eu/overview/edsa-values/

EDSA Contact: means the person detailed in Schedule 1 or as otherwise notified by us from time to time.EDSA Network: means EDSA and all partners within the network from time to time as found at http://edsa-project.eu/members/
EDSA Programmes: means the EDSA programmes of work at http://edsa-project.eu/
EDSA Products: means the products listed at http://edsa-project.eu/
EDSA Trademark License: means the licence agreement at http://edsa-project.eu/
Policies: means the policies listed herein as in force from time to time.
Term: means the term of this agreement as defined herein.

In the event of any conflict or inconsistency between this agreement and any referenced document, the terms of the EDSA Trademark License shall prevail, followed by the terms of the main body of this agreement, over the terms of all other Policies and referenced documents.

3. You;

1. agree to adopt and materially comply with the EDSA Charter and Policies throughout the Term;
2. agree to design and deliver training with a high standard of skill and care and in accordance with the EDSA Curriculum Design Values and the EDSA Curriculum Delivery Values;
3. agree to provide us with such information as we may reasonably require from time to time in relation to your operations and activities that relate to EDSA;
4. agree to inform us immediately in the event that you experience any change of control, or any event which risks bringing us or the EDSA Network into disrepute;
5. agree to name a Contact within your organisation to manage and represent you as an EDSA Partner, and keep this information up-to-date;
6. agree to participate in working together to find practical ways to develop the data science skills that will create social and economic value for the European Union.
7. agree to engage in joint communications that work to positively reinforce the values of EDSA and the interests of developing an effective EDSA Partner offering and EDSA Network,
8. agree to adopt, and update with relevant content, your website within 14 days of this agreement, and maintain it with up-to-date content;
9. agree to substantively observe all material laws and regulations which apply to you;
10. agree to use the EDSA branding in relation to all EDSA related Activities;
11. agree to use reasonable effort in achieving the EDSA Partner Metrics
12. warrant and represent that you are an entity with independent legal personality and are registered as such in your jurisdiction and will provide us with any evidence we may reasonably require to evidence your legal status.

4. We;

1. will list you in the EDSA Global Registry within 14 days of this agreement or whenever your partner website is updated, whichever is the latter;
2. will provide you with an EDSA Contact, who will represent EDSA and assist you in accordance with the terms of this agreement;
3. will provide you with an EDSA website listing service, to present and market your EDSA branded activities and products.

5. Scope of products and activities

1. We permit the usage of EDSA branding on your website for the purposes of promoting training that meets both the EDSA mission and is consistent with EDSA Curriculum Design Values and EDSA Curriculum Delivery Values.
2. Without explicit written approval in advance, we do not permit the franchising, adoption, copying or promotion of any activities of other EDSA partners' Products or Services
3. You may be eligible to be contracted by, or to receive funding from, EDSA although there is no guarantee or commitment on our part that you will receive any such funding.
4. You are permitted to use EDSA branding in accordance with the terms of this agreement.

EUROPEAN DATA SCIENCE ACADEMY

5. You are entitled to use the EDSA mark in accordance with the conditions of the EDSA Trademark Licence.

6. Fees

1. We will charge you fees for trading as an EDSA Partner. Fees are comprised of both an annual administration fee
2. Annual Partner administration fees depend on the size of your organisation
   i. 1,000+ employees: 250 Euros per annum
   ii. 250-999 employees: 180 Euros per annum
   iii. 100-249 employees: 120 Euros per annum

7. Payment terms

1. We shall raise an invoice for your fee amount to you, on a yearly basis.
2. You shall pay invoices within 28 days of submission. Late payment may result in a financial penalty, suspension and/or termination of this agreement.

8. Term

1. This agreement shall commence on the Effective Date of this agreement and continue, unless terminated, until the next December 31st.
2. Upon the expiry, but not termination, on December 31st, this agreement shall automatically renew for a period of one year at a time on a rolling basis unless and until terminated by either party.
3. Within three months of the Effective Date you agree to work towards meeting the requirements as set out in this Agreement, including with respect to your compliance with the EDSA Charter and other targets that we mutually define and agree including, but not limited to, the reporting of EDSA Partner Metrics.
4. You may propose changes in the terms of this agreement or the way we collaborate directly to us, as we develop the relationship.
5. The parties will discuss the effectiveness of the collaboration, what can be improved, how it can be improved, whether there are any necessary remedial actions to take and agree the best way to proceed ("the Review").

9. Termination

1. Either party may terminate this Agreement by not less than three months' written notice to the other party.
2. We may terminate this agreement on one month's notice if we are of the opinion that you have not managed to materially meet the agreed Commitments.
3. At our sole discretion, we may terminate this agreement if you fail to meet any of the Metrics.
4. At our sole discretion, we may immediately terminate this agreement in the event that we believe you have materially breached one or more substantive terms of this agreement or if your continued membership is detrimental to the EDSA Network and/or its community.
5. Upon Termination all provisions of this Agreement are terminated, although this does not affect any accrued rights or obligations up until the date of termination, including, but not limited to:

      i.   you will cease to be a member of the EDSA Partner network;
     ii.   you will be removed from the EDSA Global Registry; and
   iii.   you will cease to have the right to use our name or trademarks, in accordance with the terms of EDSA Trade Mark Licence.
   iv.   you will cease to have the right to sell, market or deliver EDSA branded products

10. Suspension

1. As an alternative to termination or in the event of a dispute in accordance with clauses herein, at our sole discretion, we may suspend the benefits whilst an investigation is conducted and the dispute is resolved.

11. Policies

1. The following are Policies under this agreement:
    i.   EDSA Brand Guidelines;
    ii.   EDSA Curriculum Design Values
    iii.   EDSA Curriculum Delivery Values
    iv.   EDSA Products policy
    v.   EDSA Governance policy:
    vi.   The Policies will be re-confirmed and/or updated by us on 1st January each year of the Term and may be updated by reasonable notice in writing at other times at our discretion in the interests of developing an effective EU wide EDSA Partner Network.

12. Disputes

1. In the event of a dispute between the parties arising out of or in connection with this Agreement, the parties will attempt to resolve it by negotiation.
2. If a dispute is not settled by negotiation within 21 days of a notice of dissatisfaction by either party, either party may, by giving the other notice in writing, refer the dispute to the Centre for Effective Dispute Resolution ("CEDR") for mediation in accordance with CEDR's model mediation procedure.
3. The commencement of mediation will not prevent the parties commencing or continuing court proceedings.

13. Limitation

1. The EDSA limits its liabilities under this agreement to repayment of the current year's Partner Fee, except in respect of death, personal injury, fraud and fraudulent misrepresentation.

14. Boilerplate

1. This agreement replaces any previous agreement between you and us relating to operation as a Partner, and constitutes the entire agreement between the parties. Each party acknowledges that, in entering into this agreement, it has not relied on, and shall have no right or remedy in respect of, any statement, representation, assurance or warranty (whether made negligently or innocently) other than as expressly set out in this Agreement, unless made fraudulently.
2. This agreement shall only be varied by way of a signed written agreement by both parties.

EUROPEAN DATA SCIENCE ACADEMY

3. Any notice served by either party under this agreement will be served by e-mail to the current e-mail address of the other Contact and shall be deemed to have been received within 24 hours of being sent.

4. You agree to maintain a separate corporate identity to us and you agree not to describe your organisation as a partner, joint venturer, agent or representative of EDSA or to pledge our credit or to bind us in any way. Both parties acknowledge that they will not hold themselves out as an agent, partner or co-venturer of the other and that this agreement is not intended and does not create any agency, partnership, joint venture or any other type of relationship except the contract relationship established hereby.

5. You acknowledge that damages are not the only sufficient remedy for breach of this agreement by you and we reserve the right to seek an injunction against you for breach of the terms of this agreement, including the terms of the EDSA Trademark License.

6. This Agreement is personal as between the parties and shall not be transferred, assigned, subcontracted, or changed, directly or indirectly, all or in part, by either party without the prior written consent of the other party.

7. Nothing in this agreement shall confer any enforceable right or benefit upon any third party.

8. This Agreement is legally binding and is governed by the laws and statutes of TBC. You and we both agree that the courts of TBC will have exclusive jurisdiction over any dispute between the parties arising out of or in connection with this Agreement.

Signed:

_____

by: [Name of signatory]
Position: [Position in organisation of signatory]
for and on behalf of: [Organisation]
On: [date of (first) execution]

Signed:

_____

by:
Position:
for and on behalf of:
On: [date of (last) execution]

Schedule 1

Partner Name:

Partner Metrics:

Partner Fee: [£Amount in numbers] ([Amount in words)].

Partner website:

Partner email:

Partner Contact/s
Lead person:
>   Name:
>>   Position:
>>   Phone (inc Int Dial):
>>   Email:

Additional team members: [ADD FURTHER CONTACTS IF REQUIRED]
>   Name:
>   Position:
>   Phone (inc Int Dial):
>   Email:

EDSA Lead Contact:
>   Name:
>>   Position:
>>   Phone (inc Int Dial):
>>   Email:

Appendix 2 - Competitor Analysis

The below section summarises the competitor analysis conducted by the project Consortium, which enabled the completion of the Summary table of landscape analysis (Table 1). For each entity, we consider their main purpose and remit ('Overview'), their services, products, legal and financial frameworks.

The Open Data Institute (ODI)

Overview
The ODI 'connect, equip and inspire people around the world to innovate with data by:

- Providing leadership and helping to develop strategy
- Researching and innovating
- Developing language and shaping policy
- Giving training
- Supporting and encouraging startups
- Creating global networks
- Bringing the voice of business to UK government'[6]

Services and Products
The ODI offer a number of services and products [7], including:
- Courses and Training - Learning consultancy services, F2F, online and blended learning, Registered Trainer and Learning Associate programmes
- Boutique data consultancy for Governments and organisations
- Individual and organisational membership
- Global Node Network (see Legal and economic framework below)
- Research services
- Innovative technologies, tools, standards, and techniques
- Startup accelerator programme

Legal and Economic Framework
'The ODI has secured £10 million over five years from the UK Government (via the UK innovation agency, the Technology Strategy Board), and $2.6 million from Omidyar Network, and is working towards long-term sustainability through match funding and direct revenue.

Income may comprise, for example, corporate sponsorship, memberships, contributions in kind, research grants and other paid work.'[8]

The Nodes are franchises of the ODI, and are existing organisations that are both for-profit and non-

---

[6] http://theodi.org/about

[7] http://theodi.org/get-involved/

[8] http://theodi.org/faq

profit, based around the world. The Node adopts and agrees to guiding principles and rules under which to operate. Organisations are charged a fee to join the network by the ODI.

Nodes may work with the ODI on projects and services, if pre-agreed. The performance of the Nodes are reviewed annually. [9]

Big Data Value Association (BDVA)

Overview
'The main role of the Big Data Value Association will be providing the Big Data Value strategic research agenda (SRIA) and its regular updates, defining and monitoring the metrics of the cPPP and joining the European Commission in the cPPP partnership board.
The objectives of the Association are to boost European BIG DATA VALUE research, development and innovation and to foster a positive perception of BIG DATA VALUE. It aims at:
- strengthening competitiveness and ensuring industrial leadership of providers and end users of BIG DATA VALUE technology-based systems and services;
- promoting the widest and best uptake of BIG DATA VALUE technologies and services for professional and private use;
- establishing the excellence of the science base of creation of value from BIG DATA.

The Association shall carry out acts, take steps and commit to all activities that are deemed appropriate or useful in view of achieving its Objectives. This is to include:
- collaborating with the European COMMISSION (including to establish a Public-Private Partnership, and to develop and implement a strategic roadmap for research, technological development and innovation in the BIG DATA VALUE and other ICT domains);
- developing strategic goals of European BIG DATA VALUE research and innovation and supporting their implementation;
- improving industrial competitiveness of Europe through innovative BIG DATA VALUE technologies, applications, services, solution;
- strengthening networking activities of the European BIG DATA VALUE community;
- promoting European BIG DATA VALUE offerings and organisation;
- reaching out to existing and new users;
- contributing to policy development, education and technology ramification in the widest possible sense and addressing ethical, legal and societal issues'[10]

Services and Products
- Events and networking opportunities
- Technologies, applications and solutions services
- Contribute to policy development and education

Legal and Economic Framework
The Big Data Value Association a fully self-financed, non–for-profit organisation, which sits under

---

[9] http://theodi.org/nodes

[10] http://www.bdva.eu/?q=about

EUROPEAN DATA SCIENCE ACADEMY

Belgian law. [11]

There are 24 founding members from industry and research. The BDVA shall present an industry-led contractual counterpart[12] to the European Commission. The governance of the BDVA is outlined in the below figure.
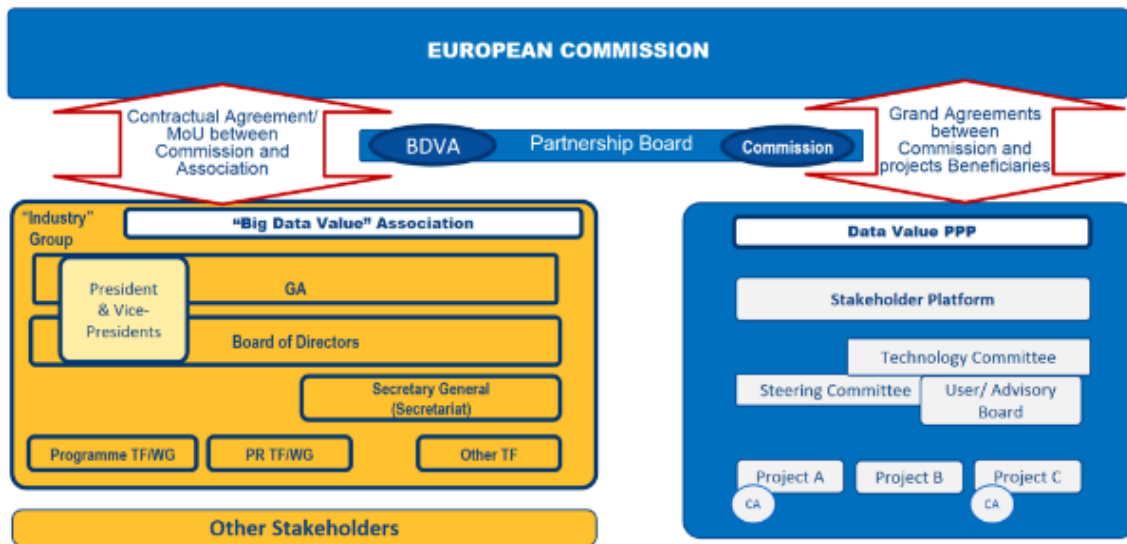

Figure 1: BDVA Governance Structure

(http://www.bdva.eu/?q=PPP_governance)

Partners

BDVA membership is divided into categories, with varying levels of commitment and investment (from both a resource and financial perspective)[13]:

BDVA interested party
Low level engagement. On BDVA mailing OR contribute to sector issue identification. Interest in participating on some BDVA projects

Associate member
Expected to attend workshops and/or the General Assembly. In areas of interest, would help to develop focus of BDVA work.

Full member

---

[11] http://www.bdva.eu/?q=FAQ

[12] BDVPPP contractual arrangement:
http://www.bdva.eu/sites/default/files/BDVPPP_Contractual_Arrangement_.pdf

[13] http://www.bdva.eu/?q=membership-categories

Expected to commit resources to forward the work of the BDVA. Engagement is monitored by the BDVA and the European Commission. Attendance at 4-5 General Assemblies, participation several in task force activities, with additional work.

Academy Cube

Overview
'Academy Cube combines e-learnings with the job hunt. It has been developed by leading global companies to strengthen tomorrow's workforce and to open the door to new opportunities in the international labor market for motivated talents. Academy Cube connects students, graduates and professionals with companies and it could pave the way to your dream job.
The initiative was introduced in 2013 at CeBIT by Neelie Kroes, European Commissioner for the Digital Agenda, and Jim Hagemann Snabe, former Co-CEO of SAP SE. In the interim, it has grown to become one of the most successful platforms for targeted recruiting, job search, and further education in the world.

Its USP is a matching system that proposes courses based on a job-seeker's self-assessment to teach the specific qualifications required by a job profile. Through this approach, Academy Cube offers practical course content with proven relevance for companies.'[14]

Services and Products
For employees:
- Career platform - An intelligent matching system that shows talents from the Science, Technology, Engineering and Mathematics fields and which qualifications they are missing to enter the labour market.
- eLearning platform - Online courses and curricula
- Online networking with employers

For employers:
- Online networking with employees
- Advertising

Legal and Economic Framework
'Academy Cube gGmbH is a global non profit company based in Berlin, Germany'[15]

Partners
Partnership is offered at four levels by Academy cube to companies and organisations[16]. The below figure outlines the main partners options and services:

---

[14] http://www.academy-cube.com/about-us/

[15] http://www.academy-cube.com/about-us/

[16] http://www.academy-cube.com/partners/

EUROPEAN DATA SCIENCE ACADEMY

Figure 2: Academy Cube, partner services available

Partners are categorised as[17]:

- Universities and Research Companies
- Office in your country
- Associations and Foundations
- Corporations

Universities and Research companies

Figure 3: Academy Cube Universities and Research Companies

---

[17] http://www.academy-cube.com/our-partners/

Office in your country

Figure 4: Academy Cube Offices in your country

Associations and Foundations

Figure 5: Academy Cube Associations and Foundations

Corporations[18]

Figure 6: Academy Cube Corporations

European Data Forum (EDF)

Overview

The European Data Forum (EDF) is a meeting place for industry, research, policy makers and community initiatives to discuss the challenges of Big Data and the emerging Data Economy and to develop suitable action plans for addressing these challenges. Of special focus for the EDF are Small and Medium-sized Enterprises (SMEs), since they are driving innovation and competition in many data-driven economic sectors. The range of topics discussed at the European Data Forum ranges from novel data-driven business models (e.g. data clearing houses), and technological innovations (e.g. Linked Data Web) to societal aspects (e.g. open governmental data as well as data privacy and security).[19]

The annual event is hosted at locations across Europe.

Services and Products
- Event series (annual)

Legal and economic framework
The EDF event series is governed by a set of principles and rules[20]. These rules include guidance on:
- Event Mission principles
- Organisation - Including Chairs and Committee members

---

[18] http://www.academy-cube.com/our-partners/

[19] http://www.data-forum.eu/

[20] http://data-forum.eu/sites/default/files/Rules_of_EDF_conference_series_20140113.pdf

- Governance - The EDF Steering Committee acts as board of the EDF event series
- Financial organisation - including contributions by the local host organiser, industry and EU project support.

Partners

The EDF event series is monitored and guided by the Steering Committee. The committee consists of; the chairperson from each of the last four events, the head of the data value chain unit (who appoints an additional representative of the unit), two co-chairs of the EDF Steering Committee (who are approved by the majority of the steering committee). There are also further members, who are selected by the majority of the Steering Committee.

Additionally, there is an Industry Advisory Board. They are appointed by the Steering Committee and provide advice on aligning the event to industry. [21]

Networked Software and Services Initiative (NESSI)

Overview

NESSI is formally recognised by the European Commission in its communique "SWD(2013) 272 final" as a European Technology Platform (ETP) and as such should:

- Develop Strategies and a coherent business-focused analysis of research and innovation bottlenecks and opportunities related to societal challenges and industrial leadership actions: strategy function
- Mobilise industry and other stakeholders within the EU to work in partnership and deliver on agreed priorities: mobilising function
- Share information and enable knowledge transfer to a wide range of stakeholders across the EU: dissemination function[22]

Services and Products
- Information channel (newsletter, website)
- Position and white papers
- Strategic Research and Innovation Agenda
- Partner of the European Commission
- Platform for networking and organizing projects and initiatives

Value for members:
- Software and service technology challenges
- Access to key industry stakeholders
- Organisational visibility in the EU research arena[23]

---

[21] http://data-forum.eu/sites/default/files/Rules_of_EDF_conference_series_20140113.pdf

[22] http://www.nessi-europe.eu/default.aspx?Page=about_us

[23] http://www.nessi-europe.eu/default.aspx?Page=benefits

EUROPEAN DATA SCIENCE ACADEMY

Legal and economic framework

As a European Technology Platform, NESSI is self-organising. In terms of resource, time and/or finance, is from the following main sources:

- In-kind activities: Contribution by NESSI Partners Contribution by NESSI
- Members Collaborative activities: Potential support through NESSI related projects Potential support through European agencies[24]

There is a governance framework for NESSI – 'setting the parameters and providing guidance for coordinating its activities'[25]

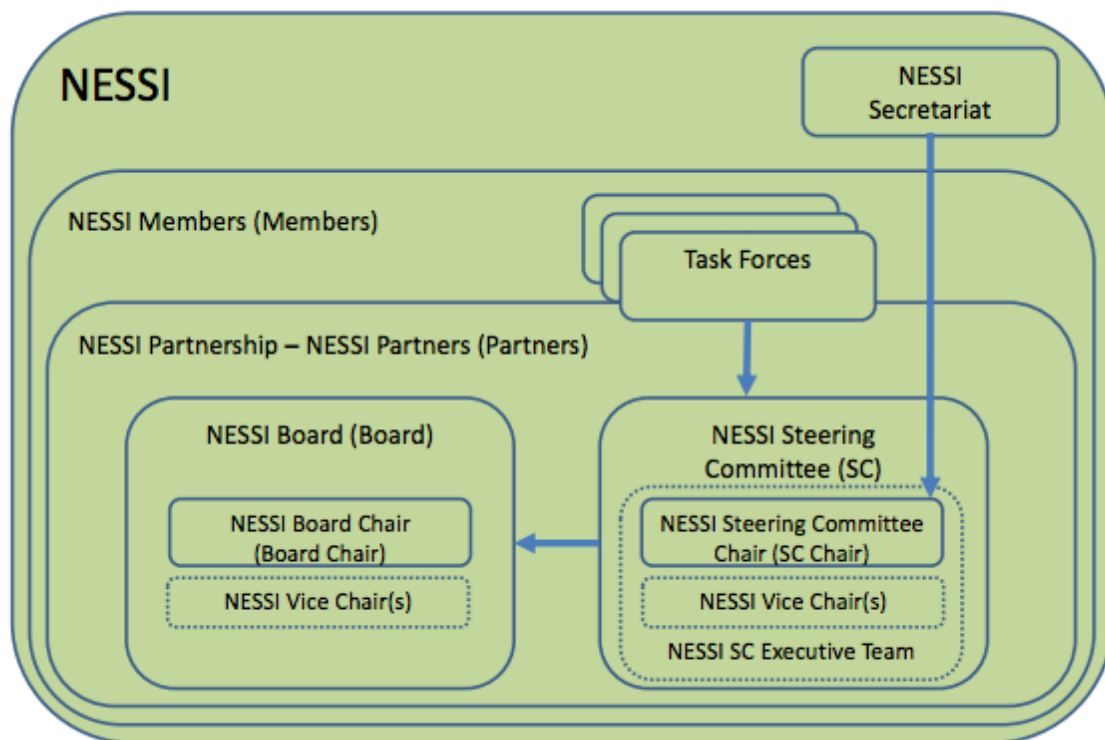The NESSI governance structure can be see in the figure below

Figure 7: The NESSI governance structure

[24] http://www.nessi-europe.eu/Files/Docs/NESSI%20Governance_final_2013.pdf

[25] http://www.nessi-europe.eu/Files/Docs/NESSI%20Governance_final_2013.pdf

List of NESSI Partners

Figure 8: List of NESSI partners

There are 22 NESSI partners, that coordinate the activities of the initiative. All partners are represented on the board. The board set the strategic vision. The NESSI Steering Committee is responsible for defining and monitoring the activities. Below are the 22 NESSI members [26]

NESSI has over 450 Members, from SMEs, research institutes and academia in the ICT domain.

'Being a Member of NESSI is free of charge, if the following criteria is met:

- being a legally established corporation, individual firm, partnership, university or research institution (further referred to as organization);
- having a legal presence in the European Union member states or associated countries for a purpose other than sale, distribution, or maintenance of products engineered and manufactured outside of the European Union;
- making a statement of support for the mission and vision of NESSI through a provided Letter of Intent; and
- belonging to one of the following four categories: ICT SME (in accordance with EC rules on SME definition), ICT Large, Academic & Research, Users

The NESSI operations are organised through the NESSI Governance, and membership requires the signature of the letter of intent.'[27]

---

[26] http://www.nessi-europe.eu/default.aspx?Page=partners

[27] http://www.nessi-europe.eu/default.aspx?Page=joining

EUROPEAN DATA SCIENCE ACADEMY

European Institute of Innovation and Technology (EIT)

Overview

'The EIT is an independent body of the European Union set up in 2008 to spur innovation and entrepreneurship across Europe to overcome some of its greatest challenges. It brings together leading higher education institutions, research labs and companies to form dynamic cross-border partnerships – Knowledge and Innovation Communities, KICs - that develop innovative products and services, start new companies, and train a new generation of entrepreneurs'.[28]

Services and Products

- 'EIT's Knowledge and Innovation Communities (KICs) - partnerships for businesses, research centres and universities that spur:
    - innovative products and services to be developed
    - new businesses to start
    - Education programmes'[29]

Legal and economic framework

'*The EIT is a body of the European Union based in Budapest, Hungary. It was established by Regulation (EC) No 294/2008 of the European Parliament and of the Council of 11 March 2008 and became operational in 2010 at the EIT Headquarters. The EIT currently employs approximately 60 members of staff and its Interim Director since 1 August 2014 is Martin Kern'*[30]

Each KIC is a legal entity with an appointed CEO – a first for an EU initiative. The KICs 'define their legal status, internal organisation and working methods, and the KICs have been conceived so that they are able to react in an effective and flexible way to new challenges and changing environments' [31]

'The EIT funding model seeks to align, pool and eventually leverage the KICs' innovation investments. In order to meet these objectives, the EIT applies a funding model where the EIT's financial contribution does not exceed 25% (on average) of a KIC's overall resources over the KIC's lifetime. A KIC should attract further funding beyond their partners' own revenues and resources, such as private and/or public funding at national, regional and EU level, particularly the European Structural and Investment Funds and the Horizon 2020 programme.

The EIT's financial contribution to the KIC is provided in the form of a grant for action, where the EIT funding rate for the specific grant may be up to 100% of the total eligible costs of KIC added-value activities (those activities that contribute to the integration of the knowledge triangle and the overall objectives of the EIT, including the establishment, administrative and coordination activities of the KICs). The EIT incentivises KICs to co-finance added-value activities from other resources, supporting their way towards financial sustainability. Other KIC activities not financed by the EIT grant, known as

---

[28] https://eit.europa.eu/eit-community/eit-glance

[29] https://eit.europa.eu/activities/education

[30] https://eit.europa.eu/eit-community/eit-glance

[31] https://eit.europa.eu/activities/innovation-communities

KIC complementary activities, must contribute to the implementation of the strategy of the KIC. Such activities must be linked with added-value activities to increase impact.
Alignment with the mission of the EIT is a prerequisite to being eligible for EIT funding.'[32]

'Relations between the EIT and the KICs, as the beneficiaries of the EIT grant, are laid down in agreements that set out their respective rights and obligations, ensure an adequate level of coordination, and outline the mechanism for reporting, payment and control arrangements, monitoring and evaluating KIC activities and outcomes.

These comprise two types of agreements:
- The long-term cooperation between the EIT and each KIC will be formalised within a seven-year Framework Partnership Agreement (FPA). This agreement specifies the general rights and obligations of each party. The FPA can be renewed, subject to the EIT Governing Board's approval.
- The Specific Grant Agreement is the contractual instrument through which the EIT implements 'specific grants' – typically on an annual basis – to finance KIC added value activities ('specific actions') implemented by the KIC.' [33]

Fraunhofer Big Data Alliance

Overview
The Fraunhofer Big Data Alliance is an independent big data process chain adviser providing technological support to businesses in business processes, in production and logistics and research and development.[34]
'The Fraunhofer Big Data Alliance consists of 28 institutes bundling their cross-sector competencies. Their expertise ranges from market-oriented big data solutions for individual problems to the professional education of data scientists and big data specialists.'[35]

Services and Products

The Fraunhofer Big Data Alliance offer services to organisations in:

- Big data strategies
- Software packages
- Data protected big data systems
- Training specialists and managerial in data science

Legal and Economic Framework

---

[32] https://eit.europa.eu/eit-funding-model

[33] https://eit.europa.eu/eit-and-kic-contractual-relations

[34] http://www.bigdata.fraunhofer.de/en/about-the-alliance.html

[35] http://www.bigdata.fraunhofer.de/en.html

EUROPEAN DATA SCIENCE ACADEMY

The Fraunhofer Big Data Alliance is a constituent entity of the Fraunhofer-Gesellschaft. It does not have separate legal status.[36]

Partners

The Fraunhofer Big Data Alliance is made up of 22 institutions, and is overseen by a Steering Committee.[37]

EDISON

Overview

EDISON is a 2-year project funded by the European Union's Horizon 2020 research and innovation programme with a focus on 'accelerating the creation of the Data Science profession'.[38] 'EDISON has been structured to deliver a collection of specific products that will have a positive and marked influence on the establishment of the data science profession and provide a basis for coordinated work between the demand and supply sides. The core of this collection is three packages that will have captured the key elements of the platform that connects the suppliers of trained data scientists with the organisations that have need of such professionals. These publically available documents will formally define the data scientist profession through a Data Science Competence Framework (CF-DS) that will provide a methodological basis for designing the Data Science curriculum for universities and professional training institutions based on a Data Science Body of Knowledge (DS-BoK) and a Data Science Model Curriculum (MC-DS).'[39]

Services and Products
- Data Science Competence Framework (CF-DS)
- Data Science Body of Knowledge (DS-BoK)
- Data Science Model Curriculum (MC-DS)
- EDISON Liaison Groups (ELG)
- Education and Training platform - supporting Universities setting up courses and virtual labs

Legal and Economic Framework

'The EDISON project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 675419.'[40]

Partners
- Engineering - Ingegneria Informatica s.p.a – IT
- European Grid Initiative (EGI.eu) – NL

---

[36] http://www.bigdata.fraunhofer.de/en/impressum.html

[37] http://www.bigdata.fraunhofer.de/en/about-the-alliance.html

[38] http://edison-project.eu/

[39] http://edison-project.eu/frequently-asked-questions#what-is-the-edison-project

[40] http://edison-project.eu/frequently-asked-questions

- Inmark Estudios y Estrategias S.A - ES
- Research Institute for Telecommunication and Cooperation (FTK) – DE
- University of Amsterdam – NL
- University of Stavanger - NO
- University of Southampton – UK

Data Science Central

Overview

'Data Science Central is the industry's online resource for big data practitioners. From Analytics to Data Integration to Visualization, Data Science Central provides a community experience that includes a robust editorial platform, social interaction, forum-based technical support, the latest in technology, tools and trends and industry job opportunities.'[41]

Data Science Central is a self-funded, data-focused start-up which supplies the data science community with topical forums and resources for a variety of tasks ranging from analytics to visualisations. Data Science Central's revenue comes from advertising, and lead generation.

Services and Products

- Online training
- Community channels

Legal and Economic Framework

Data Science Central is a LLC (Private) company[42]

---

[41] http://www.datasciencecentral.com/

[42] http://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=292179015

EUROPEAN DATA SCIENCE ACADEMY