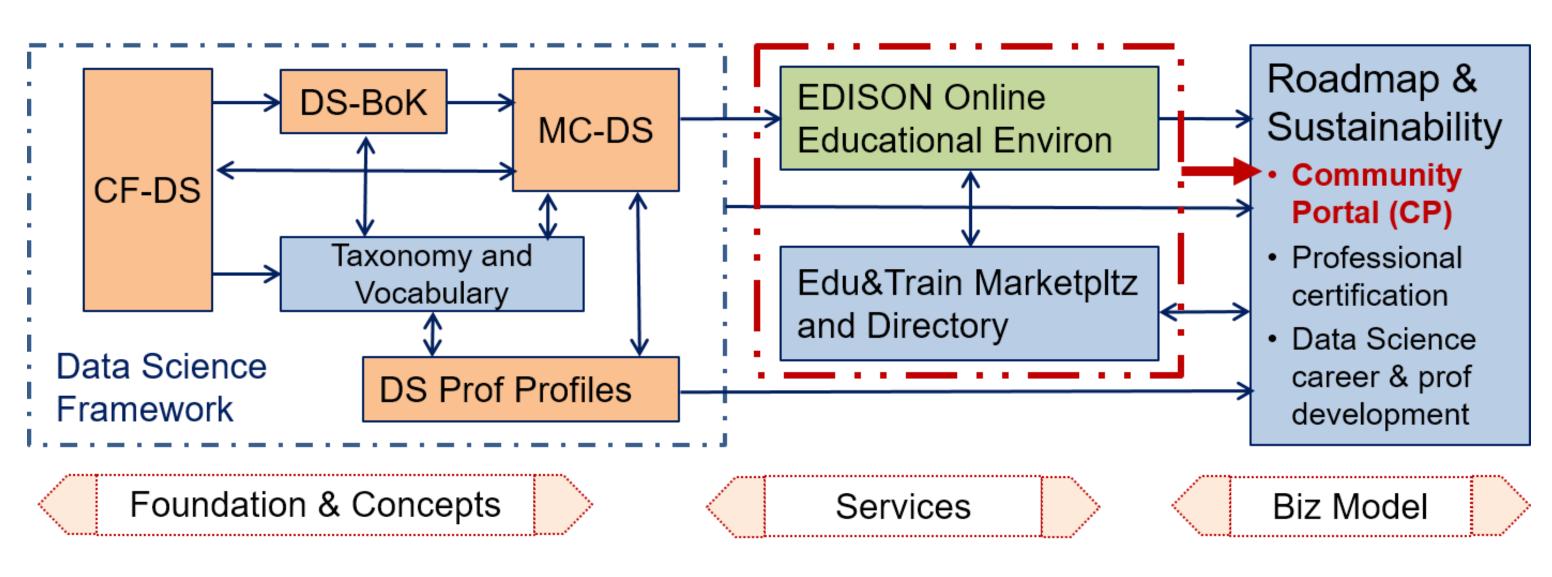


# EDISON Data Science Framework (EDSF): Customising Education and Training for Career Development and Capacity Building

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# **EDISON** Data Science Framework (EDSF)



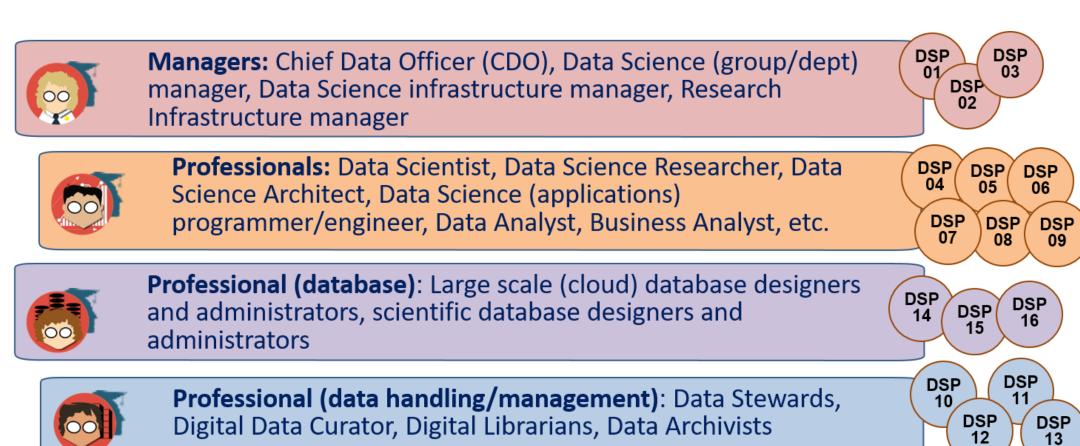
#### **EDISON** Data Science Framework (EDSF) provides conceptual basis for the Data Science profession

- CF-DS Data Science Competence Framework
- DS-BoK Data Science Body of Knowledge
- MC-DS Data Science Model Curriculum
- DSPP Data Science Professional Profiles
- Data Science Taxonomy and Scientific Disciplines Classification Service and operational components of the Data

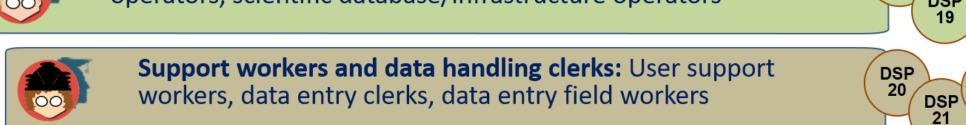
### Science professional ecosystem

- Community Portal (CP) including
  - EOEE EDISON Online Education Environment
  - **Education and Training Marketplace and Directory**
- Professional certification and career development support

## **Data Science Professional Profile Groups**







DSP profiles defined in compliance with the European Skills, European Competences, Qualifications and

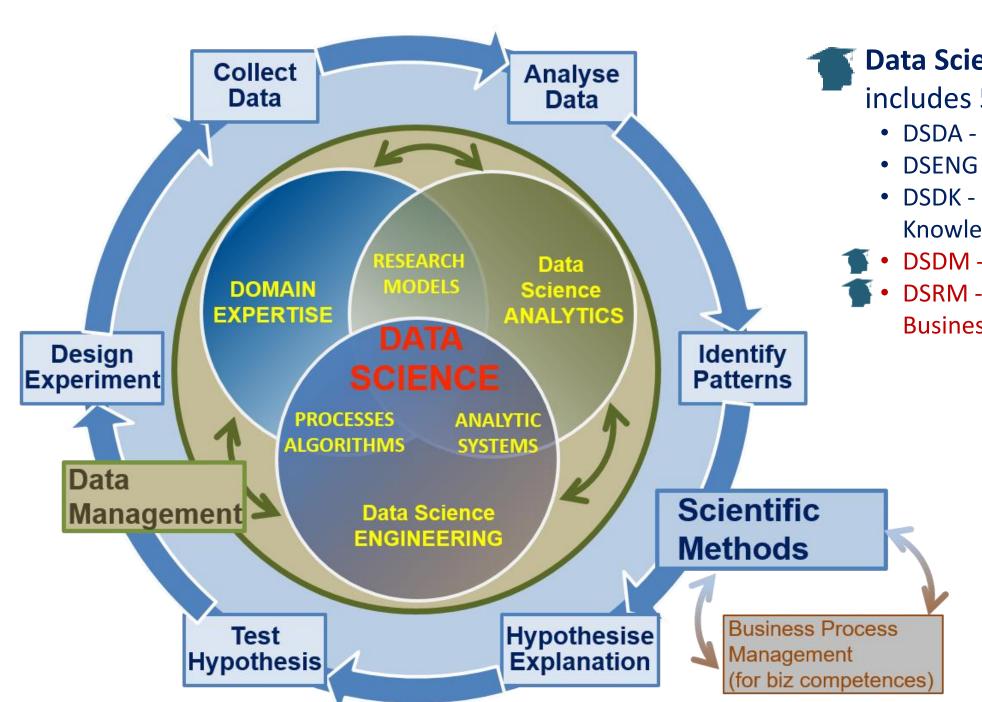
#### Occupations (ESCO) Taxonomy and CWA 16458 (2012) European ICT Professional Profiles Family Tree. **Building the Data Science Team** Data Science **Data Steward Applications Developer** Data Engineer, **Data Steward** Database Developer Data Entry/ Support Data Scientist Researcher Data Analysis (Scientific domain) Data Analyst/ **Business Analyst Data Science Group** Data Facilities Data Science Manager, Operator Applications Developer Data Science Architect Data Scientist **Data Steward** )ata Scientist Data Science Researcher Data Steward **Business Analyst**

### **Growing demand for Data Steward profession from Data Intensive Science**

#### Acknowledgement

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# **Data Science Competence Framework (CF-DS)**



**Data Science Competences** includes 5 areas/groups

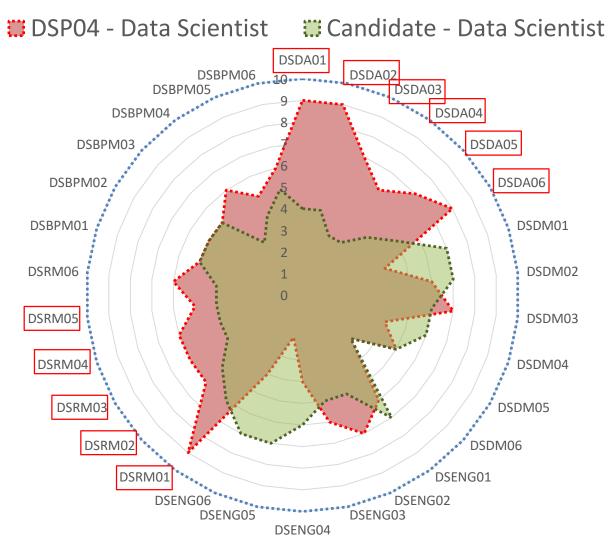
- DSDA Data Analytics
- DSENG Data Science Engineering
- DSDK Domain Knowledge/Expertise
- DSDM Data Management
- DSRM Scientific Methods (or **Business Process Management)**

#### Scientific Methods

- Design Experiment
- Collect Data
- Analyse Data
- Identify Patterns
- Hypothesise Explanation
- Test Hypothesis

CF-DS is defined in compliance with the European e-Competence framework for ICT (e-CFv3.0 - 2015)

#### **MATCHING – COMPETENCE PROFILES**



**Individual Education/Training Path** based on Competence benchmarking

Red polygon indicates the chosen professional profile: Data Scientist (general) Green polygon indicates the candidate or practitioner

competences/skills profile

- Insufficient competences (gaps) are highlighted in red
  - DSDA01 DSDA06 Data Science Analytics
  - DSRM01 DSRM05 Data Science Research Methods

Can be use for team skills match marking and organisational skills management

[ref] For DSP Profiles definition and for enumerated competences refer to EDSF documents CF-DS and DSP Profiles.

#### For more information refer to EDISON documents

EDSF - http://edison-project.eu/edison-data-science-framework-edsf CF-DS: <a href="http://edison-project.eu/data-science-competence-framework-cf-ds">http://edison-project.eu/data-science-competence-framework-cf-ds</a>

DS-BoK: <a href="http://edison-project.eu/data-science-body-knowledge-ds-bok">http://edison-project.eu/data-science-body-knowledge-ds-bok</a>

MC-DS: <a href="http://www.edison-project.eu/data-science-model-curriculum-mc-ds">http://www.edison-project.eu/data-science-model-curriculum-mc-ds</a>

DSP Profiles: http://www.edison-project.eu/data-science-professional-profiles-dsp





und Kooperation









