

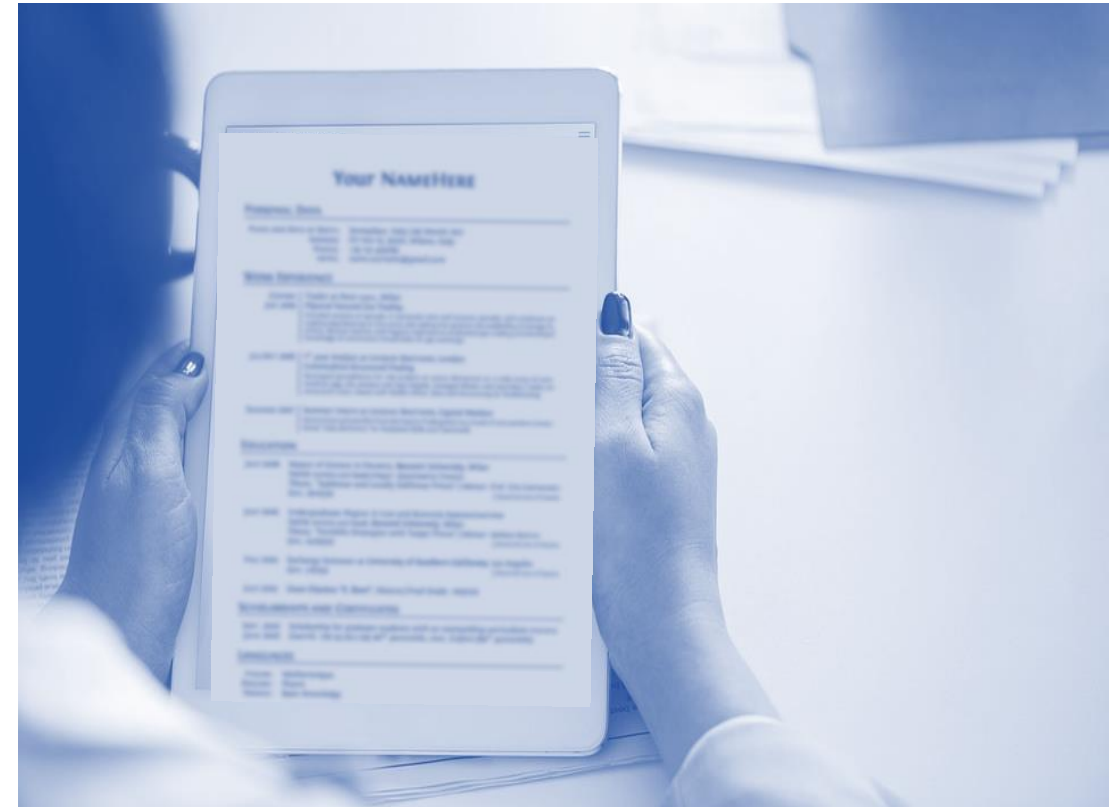


# Digitally-Signed Credentials Data Model

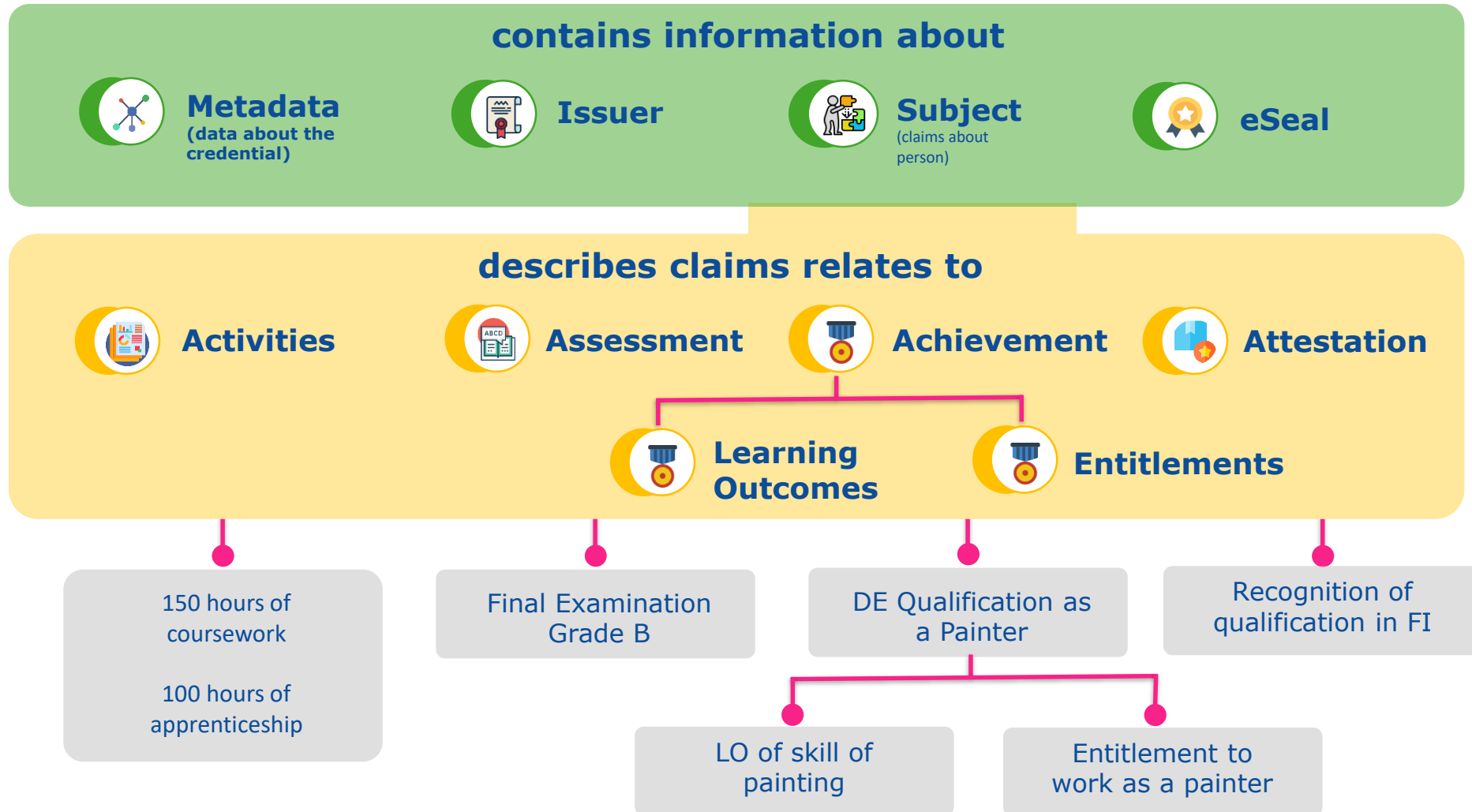
# Framework for digitally-signed credentials

## definition of a digitally-signed credential

- A credential, in its most essential form, is a **documented statement** containing claims made about a person.
- A Europass **learning credential** describes that the owner has certain skills or has achieved certain learning outcomes through formal, non-formal or informal learning context.
- A **digitally-signature (e-Seal)** guarantees the origin and integrity of the a document.



# A Europass credential



# Framework for digitally-signed credentials

## Stacking and Combining Credentials

Issuer: University of Nantes  
Claim: **Achievement** of Bachelors  
Degree in Nursing

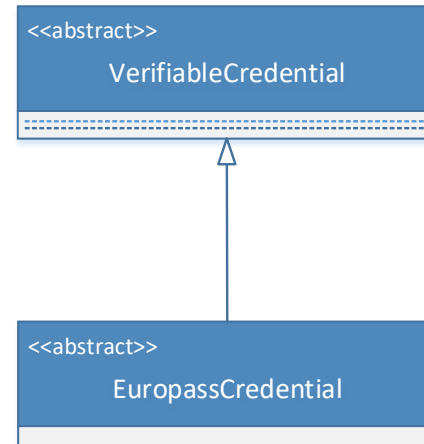
Issuer: University of Nantes  
Claim: Achievement of 90 ECTS in  
Nursing

Issuer: University of Malta  
Claim: Achievement of 30 ECTS in  
Nursing (Erasmus)

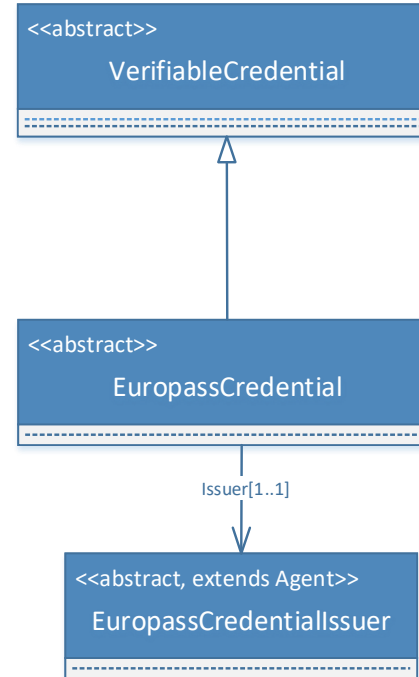
Issuer: Tampere Teaching Hospital  
Claim: Activity of 600 hours of  
Nursing Practice

## Data Model version

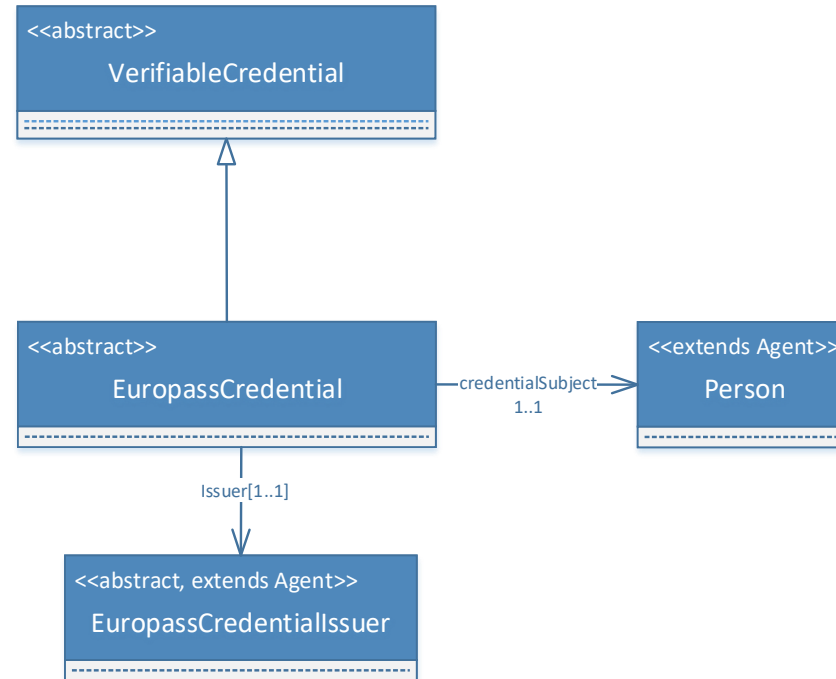
- **v0.2.0:** describes the basic data structure of a Europass Credential
- v0.3.0: will model Learning Opportunities and authorisation of NQF Qualifications. It will also link these concepts to the Common Information Mode.
- v0.4.0: will incorporate the Europass Supplements
- v0.5.0: will describe credential revocation, detailed display properties.



A **Europass Credential** is a **type** of **W3C Verifiable Credential**.



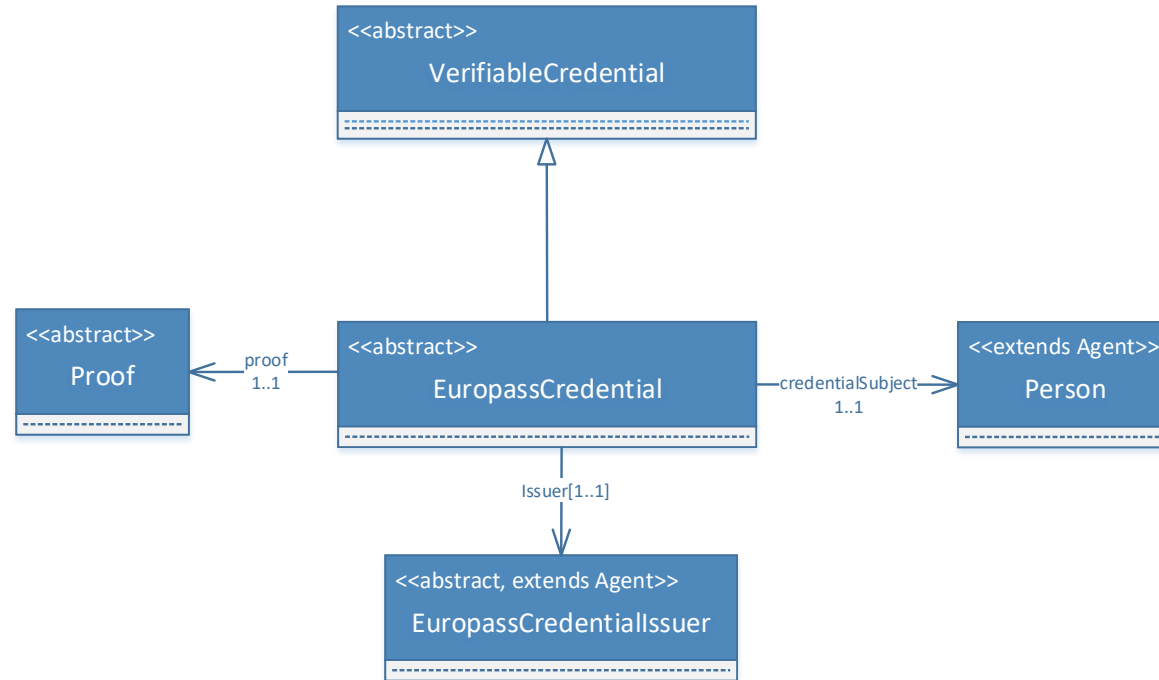
It contains **Information about the Issuer**, such as names, legal identifiers, and other identifiers such as those used in Erasmus without Paper, and quality assurance information.



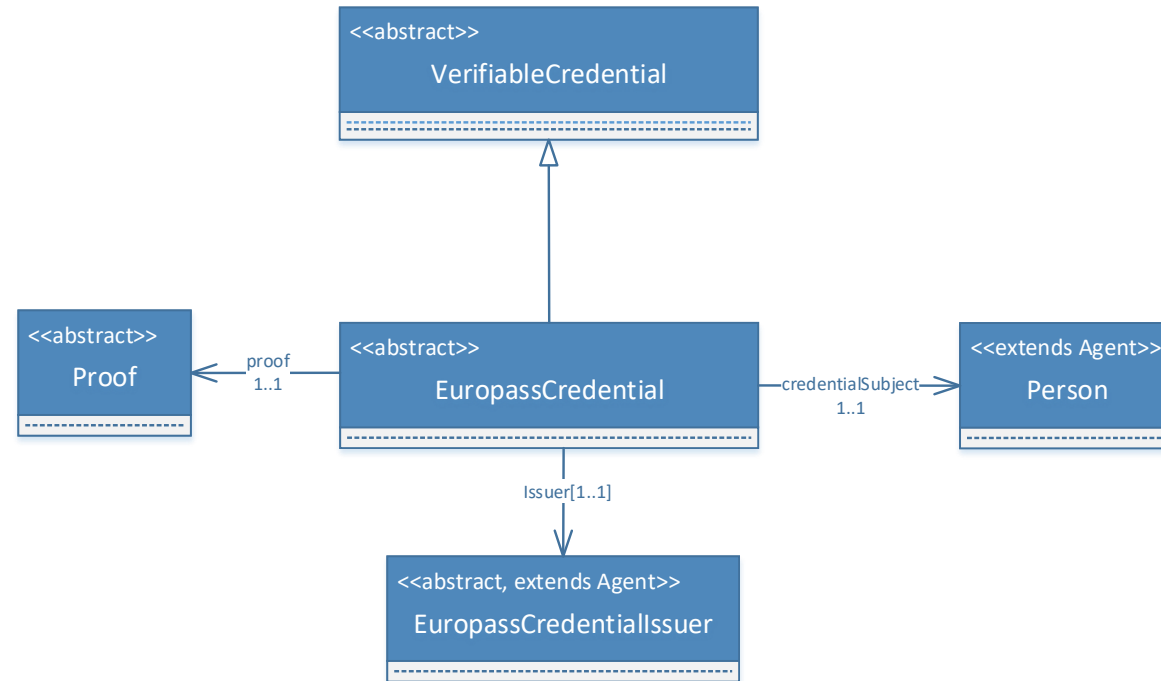
It contains **Information about the Person**, including:

- Data about the person, such as name, date of birth, student ID identifiers
- **Claims about the person**

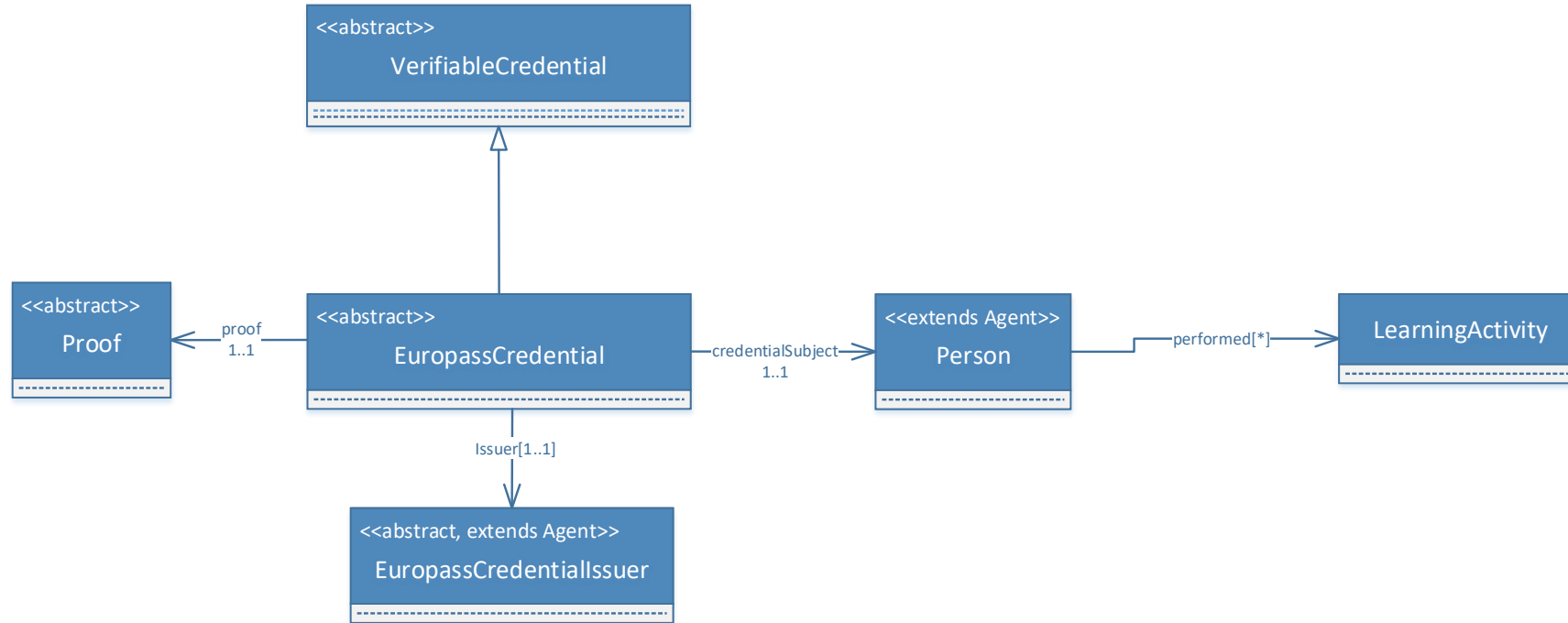




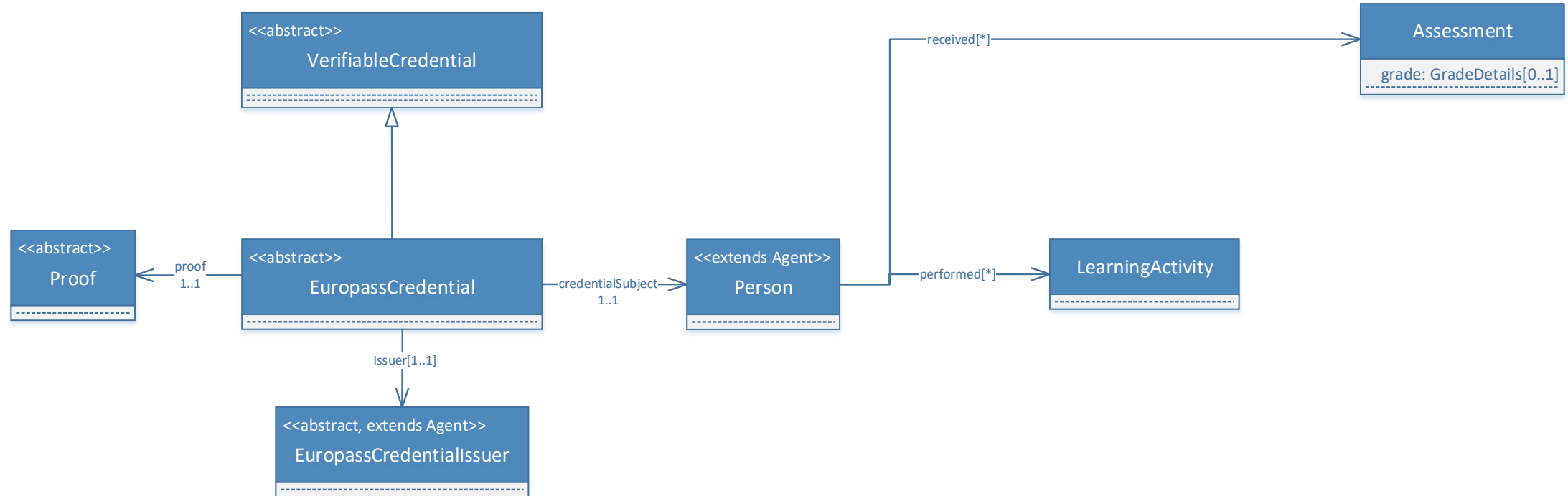
The authenticity of a Europass Credential is proven through the addition of an **eIDAS compliant eSeal** as a **proof**.



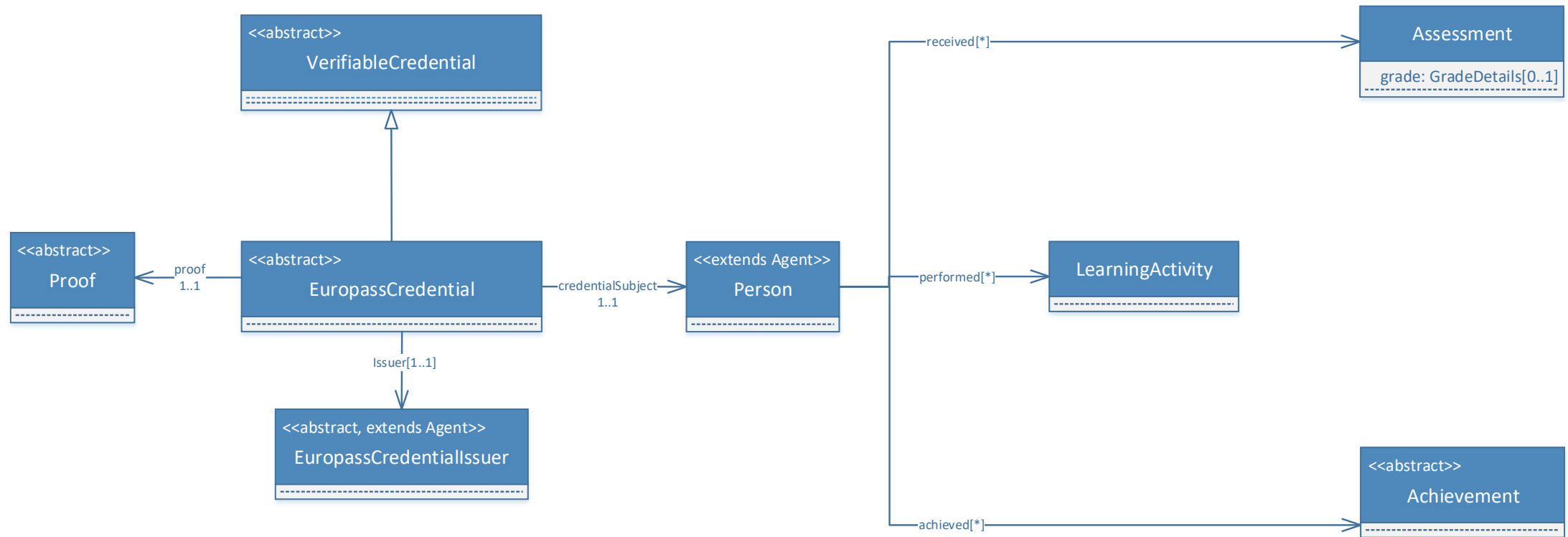
**A Europass Credential can be used to make three types of claim about a person.**



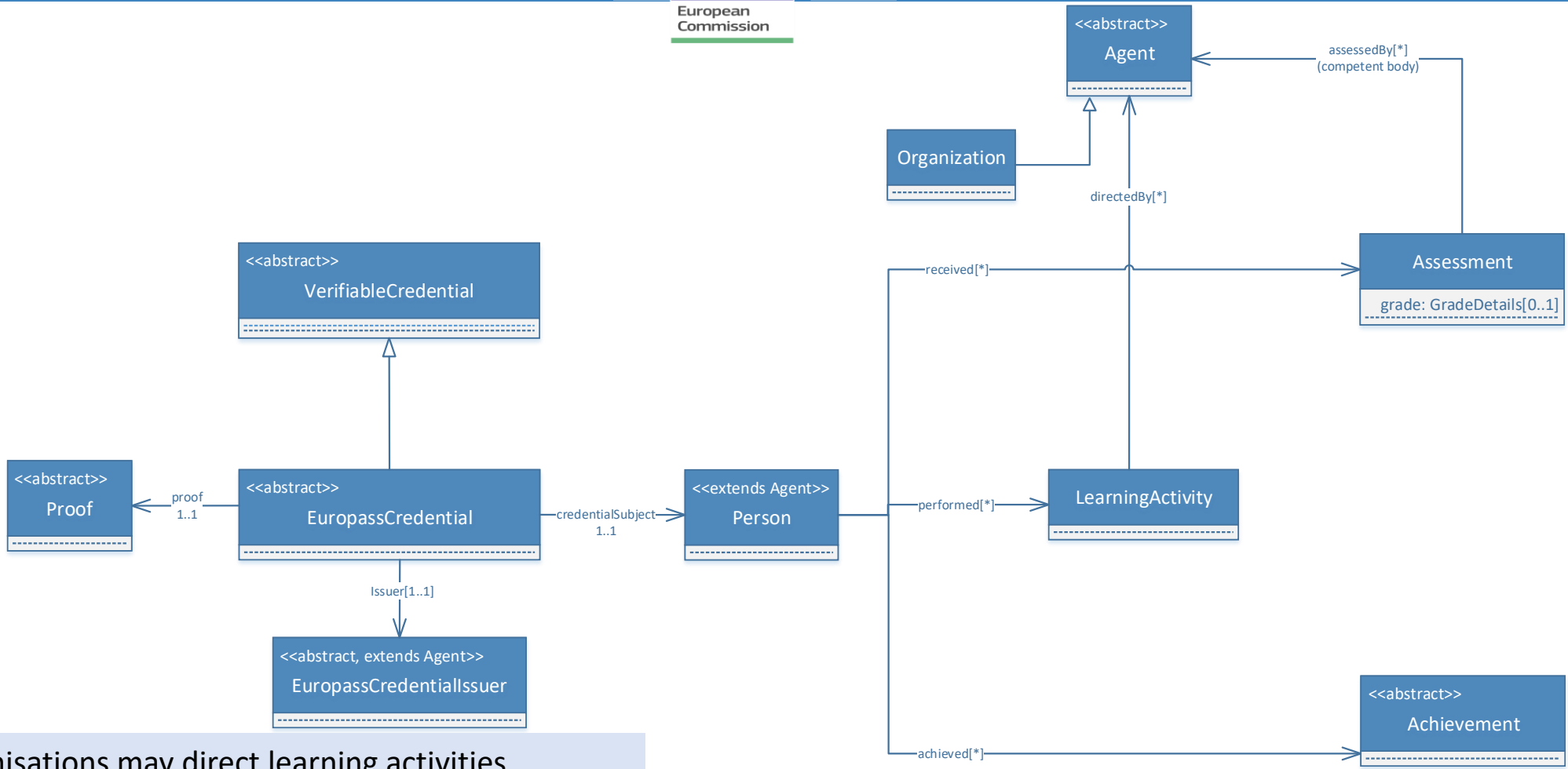
A **Learning Activity** describes any process which **leads to** the acquisition of knowledge, skills or responsibility and autonomy.



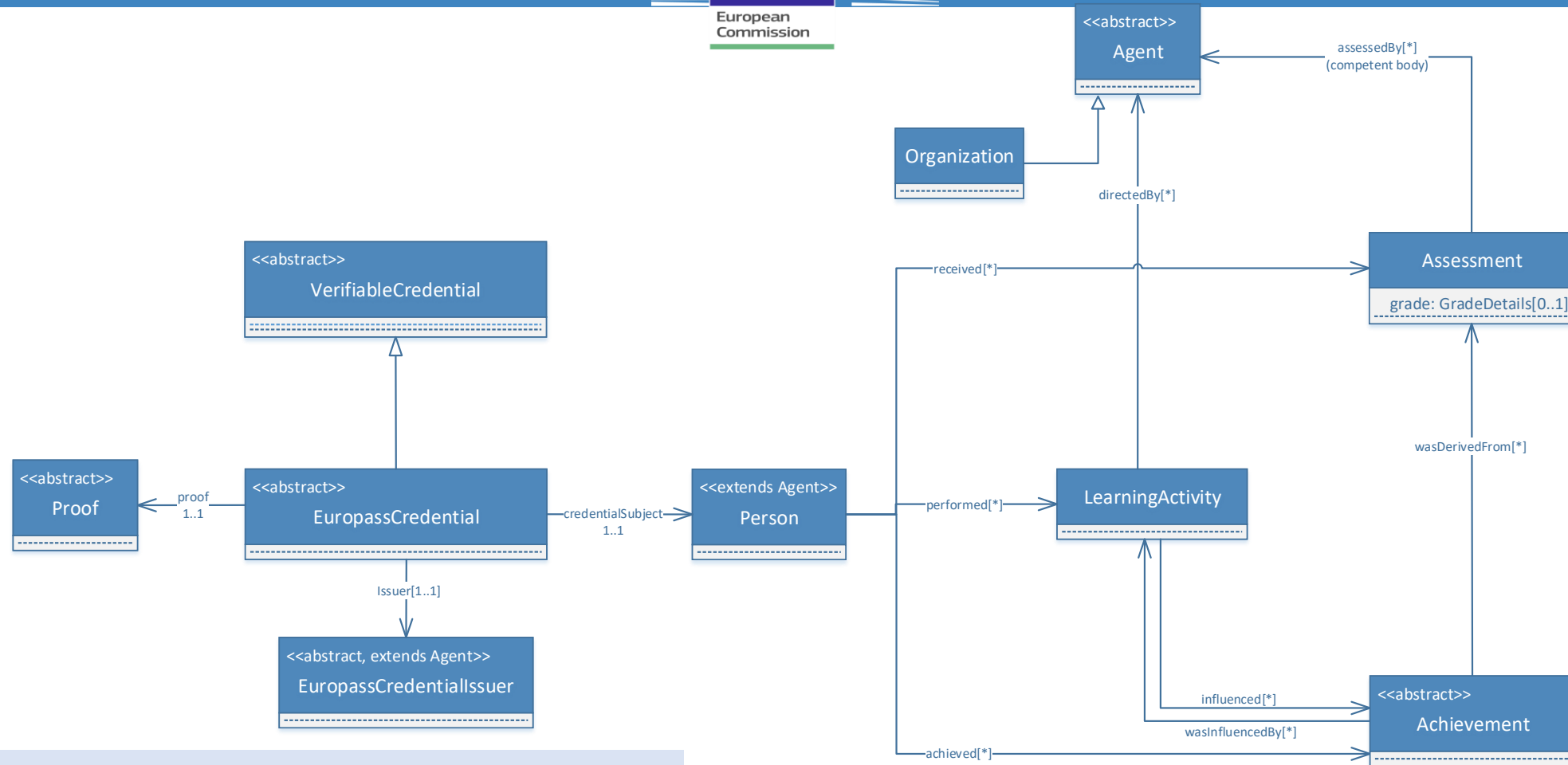
An **assessment** describes the result of a process of establishing the extent to which a learner has attained particular knowledge, skills and competences against criteria such as learning outcomes or standards of competence.



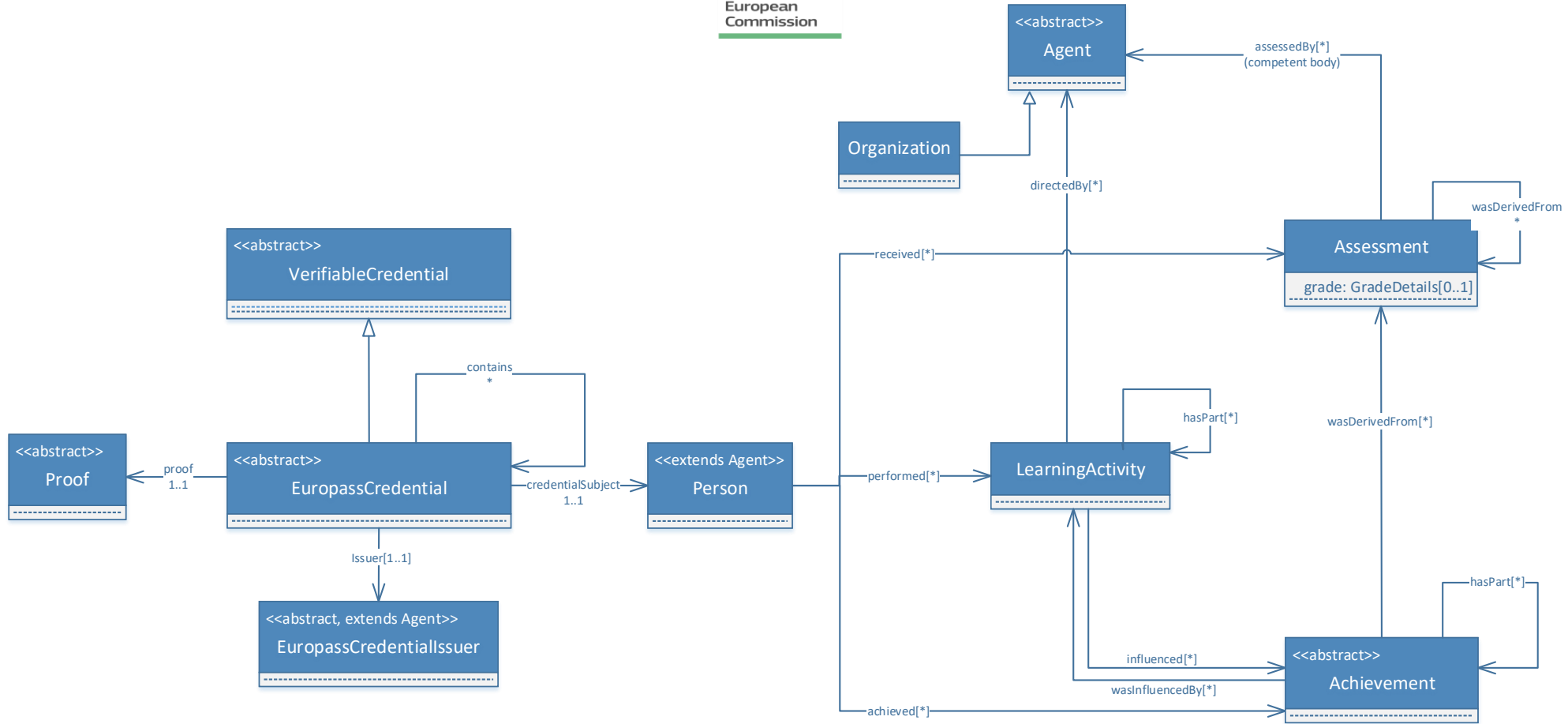
An **achievement** describes the **earnings of a person** as the result of a learning process and/or assessment in formal, non-formal or informal settings.



Different organisations may direct learning activities, assessments and achievements.



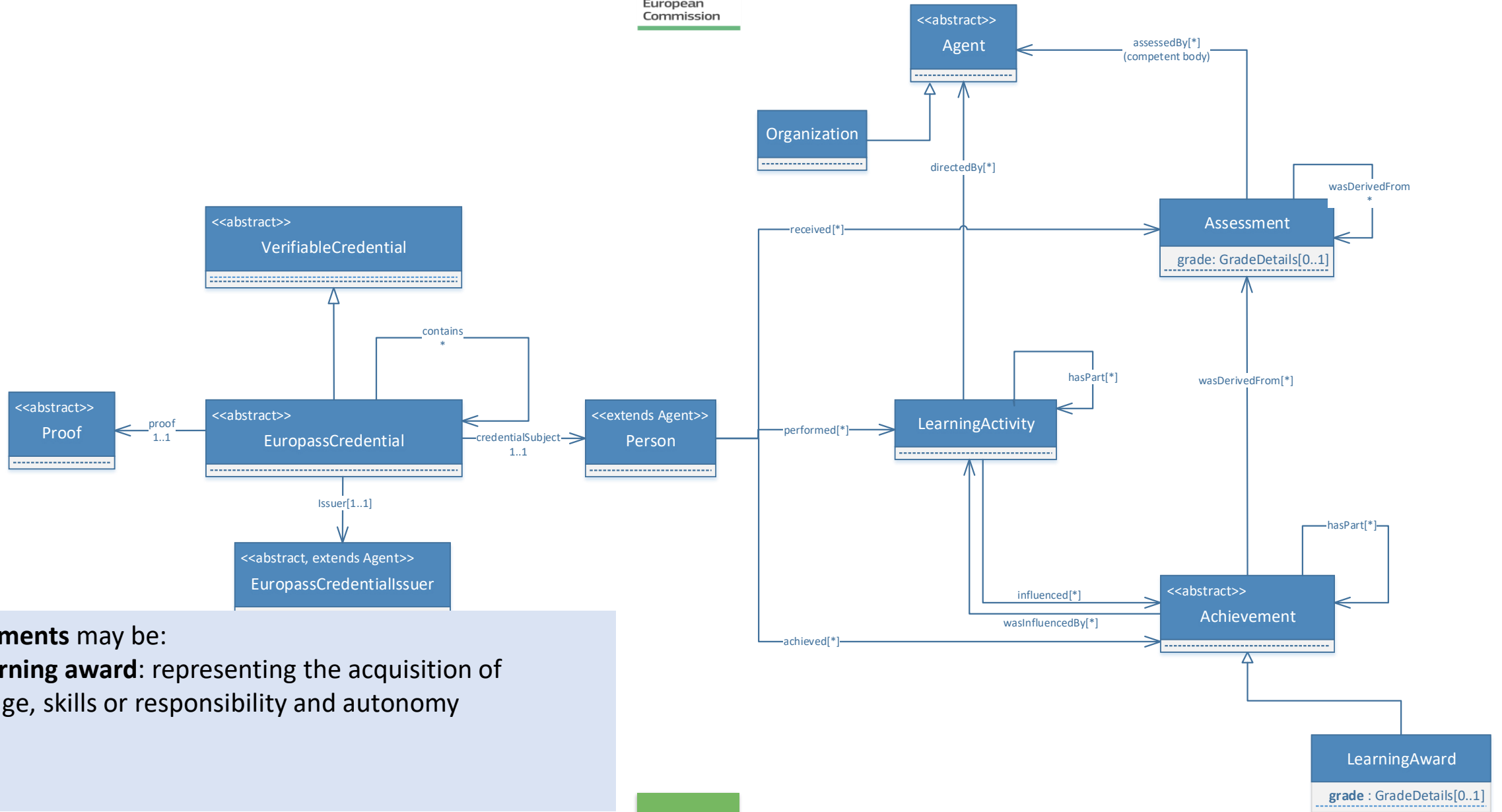
**Achievements** may be influenced **by learning activities** and **derived from assessments**.



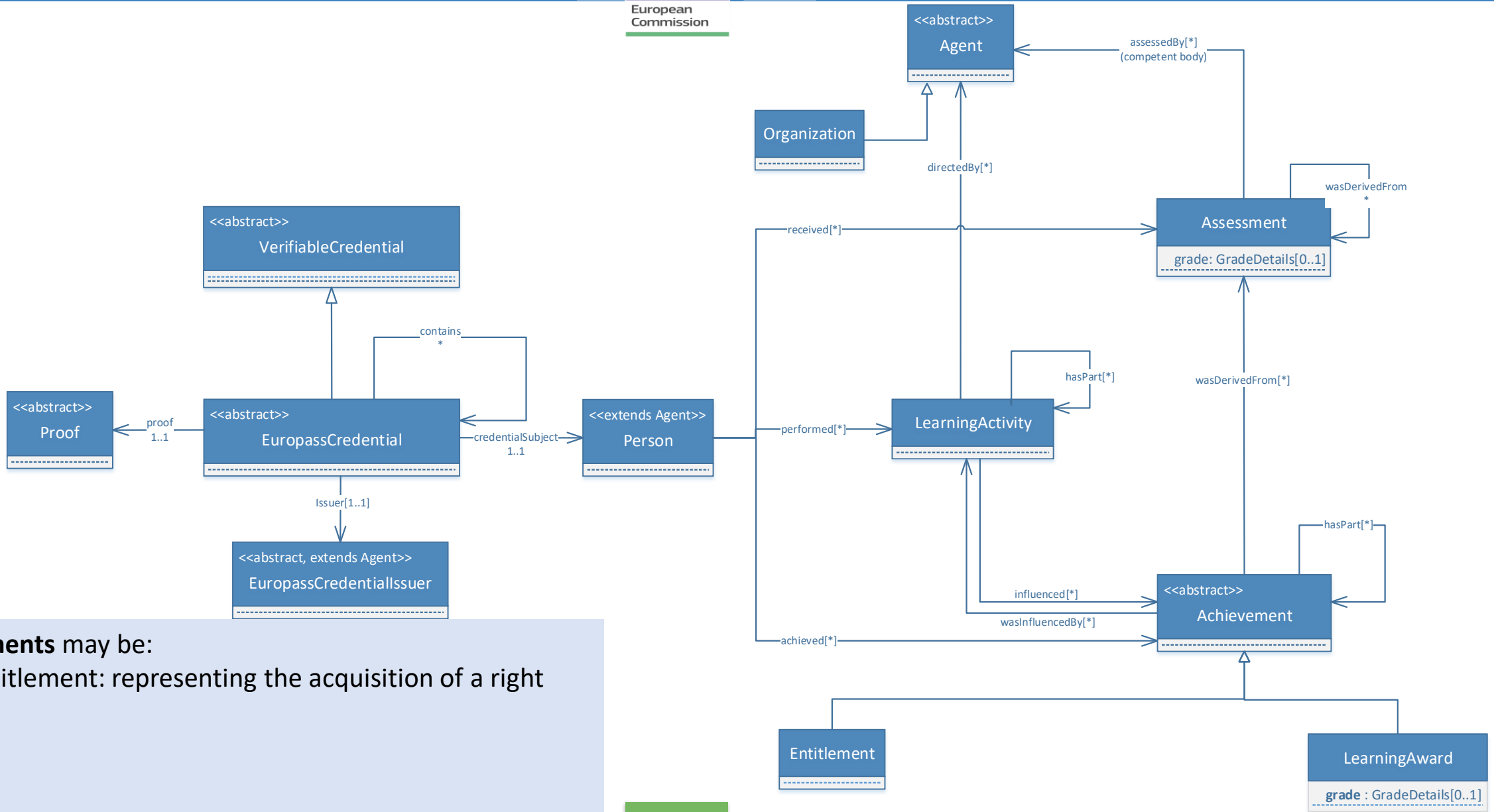
Credentials may contain sub-credentials.

Activities, Assessments and Achievements may also be made up of sets of sub-activities, sub-assessments and sub-achievements respectively.

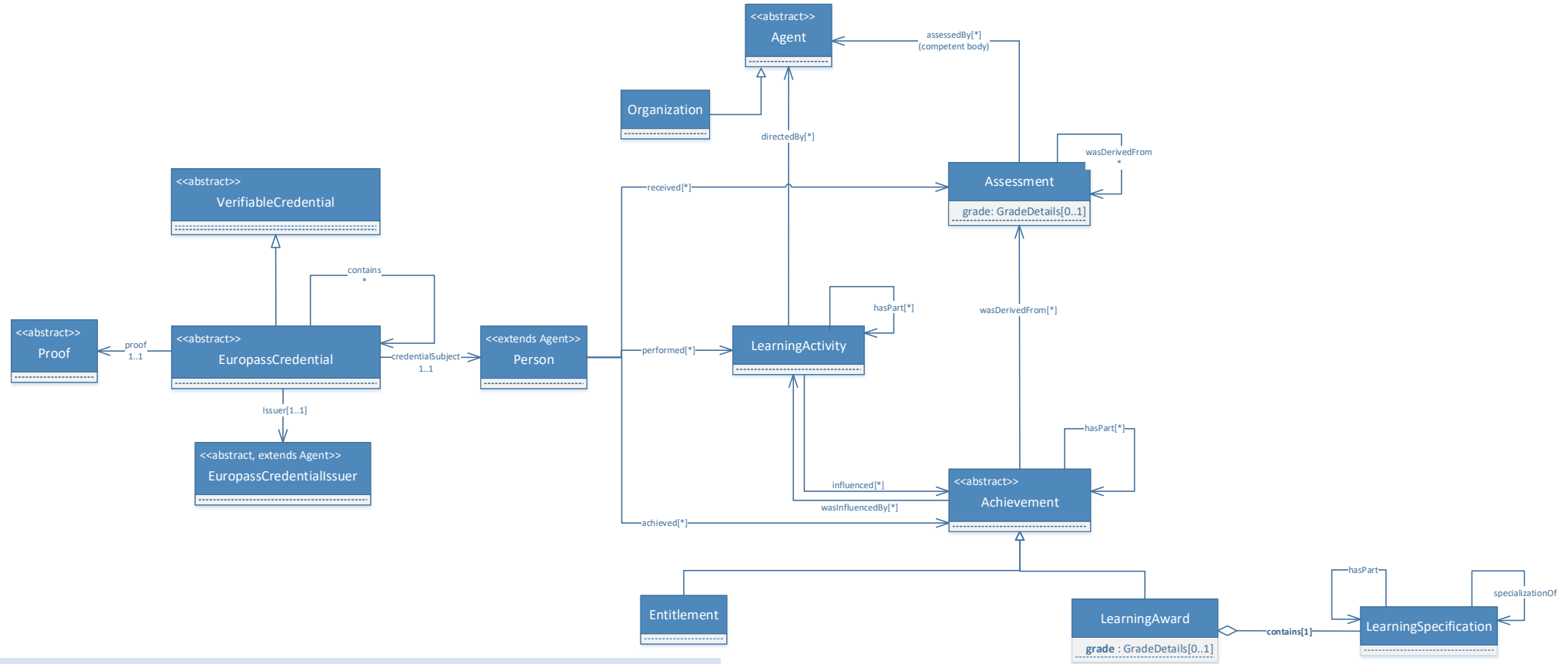




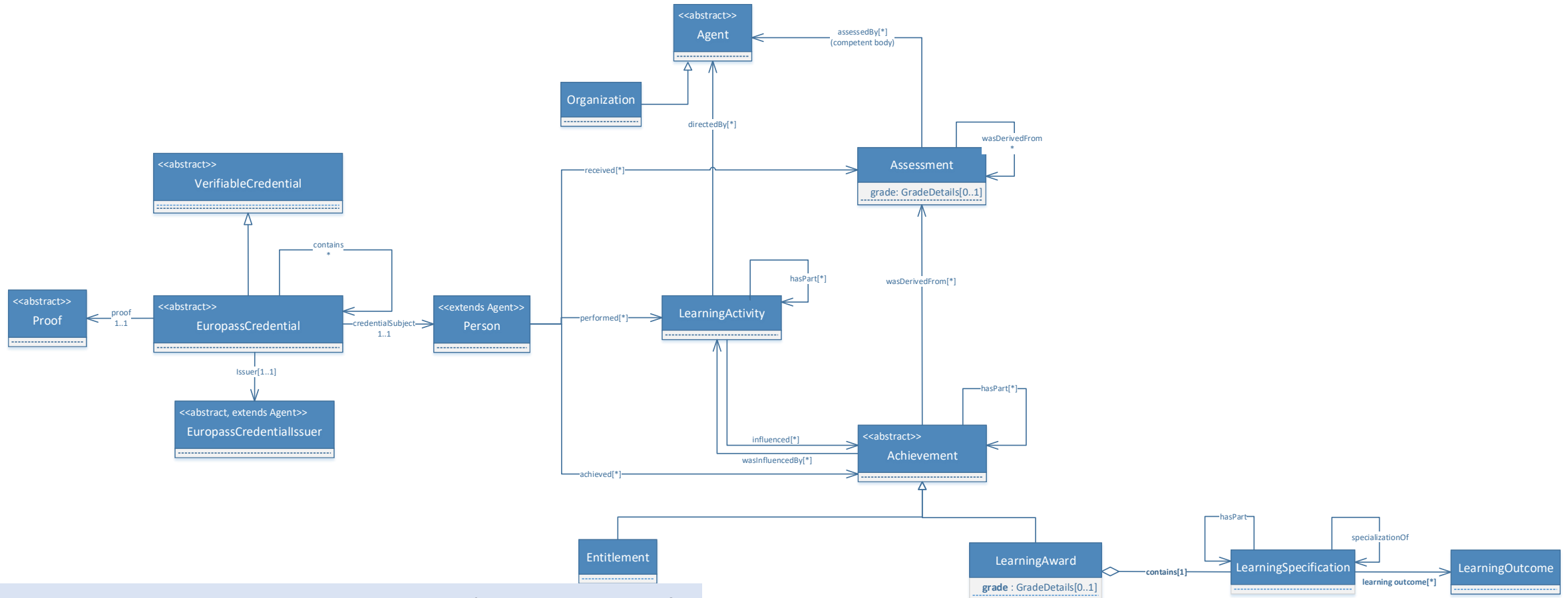
**Achievements** may be:  
 (1) **a learning award**: representing the acquisition of knowledge, skills or responsibility and autonomy



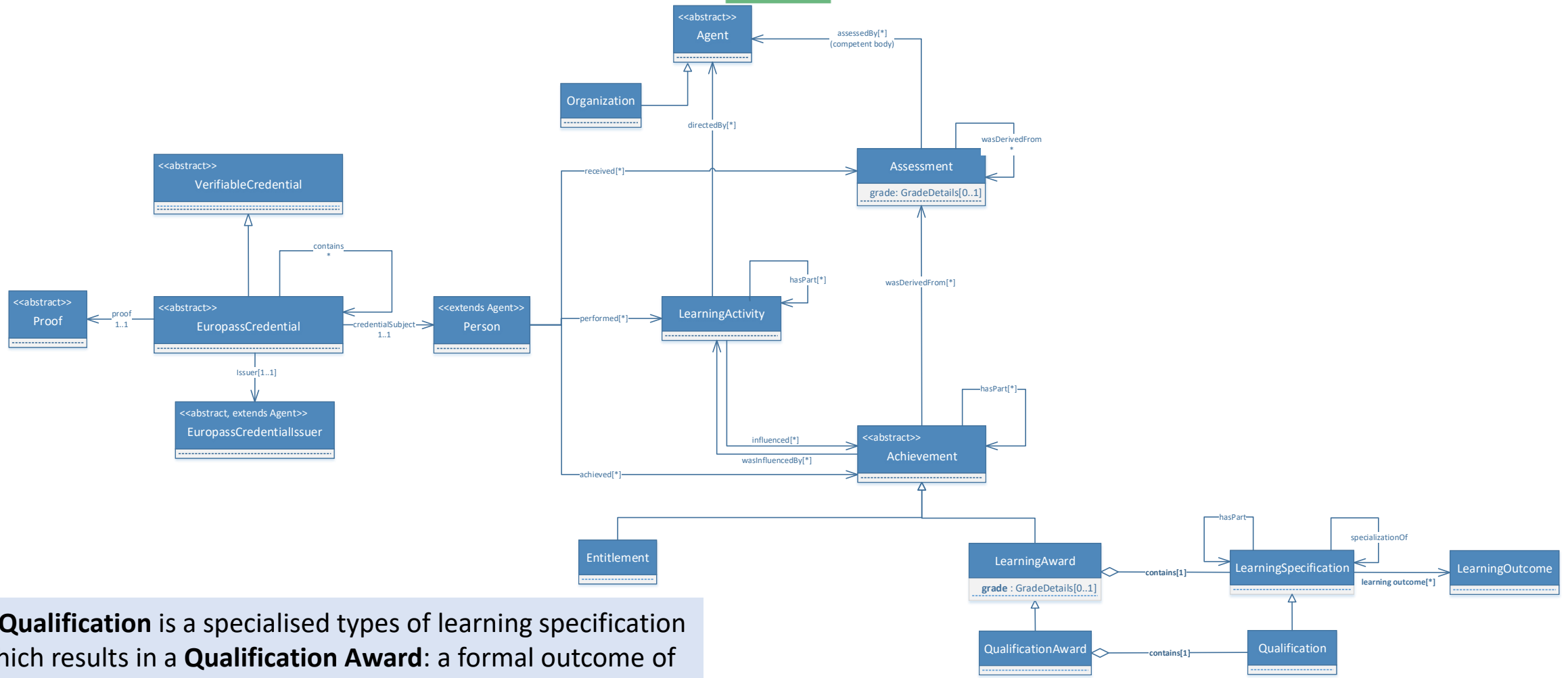
**Achievements** may be:  
 (2) an entitlement: representing the acquisition of a right



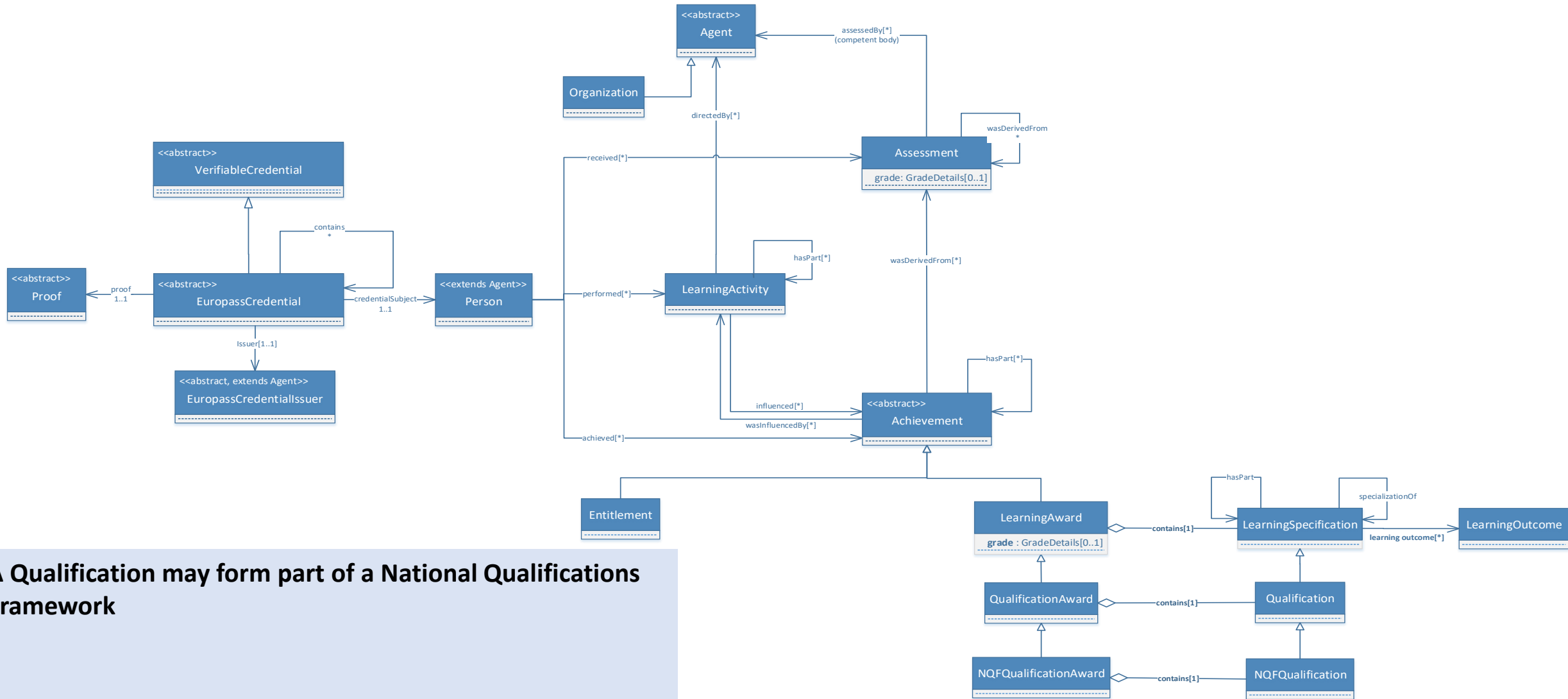
A learning award represents the individual's achievement of a **learning specification**, i.e. a description of a 'package' of learning....



A learning award represents the individual's achievement of a **learning specification**, i.e. a description of a 'package' of learning....described as **learning outcomes**.



A **Qualification** is a specialised types of learning specification which results in a **Qualification Award**: a formal outcome of an assessment and validation process which is obtained when a competent authority determines that an individual has achieved learning outcomes to given standards.



**A Qualification may form part of a National Qualifications Framework**



European  
Commission

