# HBO MODS Extension

The HBO MODS Extension contains extensions for **Awards**, **Grades** and **Organisation names**. For a technical implementation, please see the XML schema provided on this page.

**XML Schema**

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:mods="http://www.loc.gov/mods/v3" xmlns="info:
eu-repo/xmlns/hboMODSextension" targetNamespace="info:eu-repo/xmlns/hboMODSextension" elementFormDefault="
qualified" attributeFormDefault="unqualified">
        <xs:import namespace="http://www.loc.gov/mods/v3" schemaLocation="http://www.loc.gov/standards/mods
/v3/mods-3-4.xsd"/>

        <!-- (1) HBO MODS extension -->

        <xs:element name="hbo" type="hboDefinition"/>

        <!-- (2) Group Definition -->

        <xs:group name="hboGroup">
                <xs:choice>
                        <xs:element name="award" type="awardDefinition"/>
                        <xs:element name="grade" type="gradeDefinition"/>
                        <xs:element name="name" type="nameDefinition"/>
                </xs:choice>
        </xs:group>

        <xs:complexType name="hboDefinition">
                <xs:group ref="hboGroup" maxOccurs="unbounded"/>
        </xs:complexType>


        <!-- (3) Top Level Types -->

        <!-- awardType definition -->
        <xs:complexType name="awardDefinition">
                <xs:sequence>
                        <xs:element name="issuedBy" type="namedEntityType"/>
                        <xs:element name="description" type="xs:string"/>
                        <xs:element name="dateAwarded" type="mods:dateDefinition"/>
                </xs:sequence>
                <xs:attribute name="ID" type="xs:string" use="optional"/>
                <xs:attribute name="authority" type="xs:string" use="optional"/>
        </xs:complexType>

        <!-- gradeType definition -->
        <xs:complexType name="gradeDefinition">
                <xs:simpleContent>
                        <xs:extension base="xs:string">
                                <xs:attribute name="ID" type="xs:string" use="optional"/>
                                <xs:attribute name="authority" type="xs:string" use="optional"/>
                                <xs:attribute name="type" type="xs:string" use="optional"/>
                        </xs:extension>
                </xs:simpleContent>
        </xs:complexType>

        <!-- nameDefinition -->
        <xs:complexType name="nameDefinition">
                <xs:complexContent>
                        <xs:extension base="nameBaseDefinition">
                                <xs:attribute name="altRepGroup" type="xs:string"/>
                                <!--  altRepGroup new in 3.4 -->
                                <xs:attribute name="nameTitleGroup" type="xs:string"/>
                                <!--  nameTitleGroup new in 3.4 -->
                                <xs:attribute name="usage" type="mods:usageAttributeDefinition"/>
                                <!--  usage added to <name> in 3.4 -->
                        </xs:extension>
                </xs:complexContent>
        </xs:complexType>
```

```
        <!-- (4) Subordinate Types -->

        <!-- namedEntityType definition -->
        <xs:complexType name="namedEntityType">
                <xs:simpleContent>
                        <xs:extension base="xs:anyURI">
                                <xs:attribute name="IDref" type="xs:string" use="optional"/>
                        </xs:extension>
                </xs:simpleContent>
        </xs:complexType>

        <xs:group name="modsNameBaseGroup">
                <xs:choice>
                        <xs:element ref="mods:namePart"/>
                        <xs:element ref="mods:displayForm"/>
                        <xs:element ref="mods:affiliation"/>
                        <xs:element ref="mods:role"/>
                        <xs:element ref="mods:description"/>
                </xs:choice>
        </xs:group>

        <!-- nameBaseDefinition -->
        <xs:complexType name="nameBaseDefinition">
                <xs:complexContent>
                        <xs:extension base="mods:nameBaseDefinition">
                                <xs:choice minOccurs="0" maxOccurs="unbounded">
                                        <xs:element name="namePart" type="namePartDefinition"/>
                                </xs:choice>
                        </xs:extension>
                </xs:complexContent>
        </xs:complexType>

        <!-- namePartDefinition definition -->
        <xs:complexType name="namePartDefinition">
                <xs:simpleContent>
                        <xs:extension base="mods:xsString">
                                <xs:attribute name="type"  type="unionNamePartTypeAttributeDefiniton"/>
                        </xs:extension>
                </xs:simpleContent>
        </xs:complexType>

        <!-- namePartTypeAttributeDefinition -->
        <xs:simpleType name="namePartTypeAttributeDefinition">
                <xs:restriction base="xs:string">
                        <xs:enumeration value="department"/>
                        <xs:enumeration value="lectorate"/>
                        <xs:enumeration value="organisation"/>
                </xs:restriction>
        </xs:simpleType>

        <!-- unionNamePartTypeAttributeDefinition -->
        <xs:simpleType name="unionNamePartTypeAttributeDefiniton">
                <xs:union memberTypes="mods:namePartTypeAttributeDefinition namePartTypeAttributeDefinition"
/>
        </xs:simpleType>

</xs:schema>
```