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5.1. Complex type

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CategorizedSubjectAttributeDesignatorType

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The **CategorizedSubjectAttributeDesignatorType** complex type that extends the **AttributeDesignatorType** complex type. It is the base type for elements and extensions that refer to *named categorized subject attributes*. A *named categorized subject attribute* is defined as follows:

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A *subject* is represented by a <Subject> element of the <Subjects> element the <xacml-context:Request> element. Each <Subject> element SHALL contain one and only one attribute with an AttributeId attribute that is equal to urn:oasis:tc:xacml:1.0:subject-category. This attribute is called the *subject category attribute*. The DataType attribute of the *subject category attribute* SHALL be equal to http://www.w3.org/2001/XMLSchema-instance#string.

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A *categorized subject* a *subject* that is identified by a particular *subject category attribute*.

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A *subject attribute* is an *attribute* of a particular *subject*, i.e. located within a <Subject> element.

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A *named subject attribute* is a *named attribute* for a *subject*.

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A *named categorized subject attribute* is a *named subject attribute* for a particular *categorized subject*.

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The **CategorizedSubjectAttributeDesignatorType** complex type extends the **AttributeDesignatorType** with a SubjectCategory attribute. The **CategorizedSubjectAttributeDesignatorType** extends the match semantics of the **AttributeDesignatorType** such that it narrows the attribute search space to the specific *categorized subject* such that value of the SubjectCategory attribute matches by string equality the value of the subject's *subject category attribute*.

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If there are multiple *subjects* with the same *subject category attribute*, they are treated as if they were one *categorized subject*.

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Elements and extensions of the **CategorizedSubjectAttributeDesignatorType** complex type determine the presence or select *attribute values* associated with *named categorized subject attributes*. Elements and extensions of the **CategorizedSubjectAttributeDesignatorType** SHALL NOT alter the match semantics of *named categorized subject attributes*, but MAY narrow the search space.

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<xs:complexType name="CategorizedSubjectAttributeDesignatorType">
  <xs:complexContent>
    <xs:extension base="xacml:AttributeDesignatorType">
      <xs:attribute name="SubjectCategory"
        type="xs:anyURI"
        use="optional"
        default="urn:oasis:tc:xacml:1.0:subject-category:access-subject"/>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

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46 The <CategorizedSubjectAttributeDesignatorType> complex type contains the following
47 attribute in addition to the attributes of the **AttributeDesignatorType** complex type:

48 SubjectCategory [Optional]

49 This attribute SHALL specify the **categorized subject** from which to match **named subject**
50 **attributes**. If SubjectCategory is not supplied, its default value SHALL
51 urn:oasis:tc:xacml:1.0:subject-category:access-subject.

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