248 XML Basics

```
<element name="text" type="string"/>
     <element name="attachment" minOccurs="0"</pre>
          maxOccurs="unbounded">
       <complexType>
          <attribute name="encoding" use="optional"
               default="mime">
            <simpleType>
               <restriction base="string">
                  <enumeration value="mime"/>
                  <enumeration value="binhex"/>
               </restriction>
            </simpleType>
          </attribute>
          <attribute name="file" type="string"
               use="required"/>
       </complexType>
     </element>
  </sequence>
</complexType>
```

Note that some data types are defined separately and given names, while others are defined within other types and defined anonymously (the types for the attachment element and the encoding attribute). In general, if a type is used only once, it makes sense to define it anonymously for local use. However, this approach reaches its limitations quickly if nesting becomes too deep.

## A.3 Namespaces

One of the main advantages of using XML as a universal (meta) markup language is that information from various sources may be accessed; in technical terms, an XML