

```
1 <?xml version="1.0" encoding="utf-8"?>
2 <xs:schema elementFormDefault="qualified" xmlns:xs="http://www.w3.org/2001/
  XMLSchema">
3
4   <xs:simpleType name="ExtReference">
5     <xs:restriction base="xs:string">
6       <xs:minLength value="1"/>
7     </xs:restriction>
8   </xs:simpleType>
9
10  <xs:simpleType name="nonEmptyString">
11    <xs:restriction base="xs:string">
12      <xs:minLength value="1"/>
13    </xs:restriction>
14  </xs:simpleType>
15
16  <xs:complexType name="DeviceId">
17    <xs:sequence>
18      <xs:element minOccurs="1" maxOccurs="1" name="OperatorId"
19        type="xs:unsignedByte" />
20      <xs:element minOccurs="1" maxOccurs="1" name="DeviceClassId"
21        type="xs:unsignedShort" />
22      <xs:element minOccurs="1" maxOccurs="1" name="DeviceCode"
23        type="xs:unsignedShort" />
24      <xs:element minOccurs="0" maxOccurs="1" name="ExtReference"
25        type="xs:string" />
26      <xs:element minOccurs="0" maxOccurs="1" name="AdditionalInfo"
27        type="AdditionalInfo" />
28    </xs:sequence>
29  </xs:complexType>
30
31  <!-- configurazione delle tariffe -->
32  <xs:complexType name="ProductCatalog">
33    <xs:sequence>
34      <xs:element minOccurs="0" maxOccurs="unbounded" name="ProductItem"
35        type="ProductItem" />
36    </xs:sequence>
37  </xs:complexType>
38  <xs:complexType name="ProductItem">
39    <xs:sequence>
40      <xs:element minOccurs="1" maxOccurs="1" name="ProviderId"
41        type="xs:unsignedShort" />
42      <xs:element minOccurs="1" maxOccurs="1" name="TariffId"
43        type="xs:unsignedShort" />
44      <xs:element minOccurs="1" maxOccurs="1" name="ProductDescription"
45        type="xs:string" />
46      <xs:element minOccurs="0" maxOccurs="1" name="ExtReference"
47        type="xs:string" />
48      <xs:element minOccurs="1" maxOccurs="1" name="ProductFeatures"
49        type="ProductFeatures" />
50      <xs:element minOccurs="1" maxOccurs="1" name="ValidityStartDate"
51        type="xs:dateTime" />
52    </xs:sequence>
53  </xs:complexType>
54</xs:schema>
```

```
40     <xs:element minOccurs="0" maxOccurs="1" name="ValidityEndDate"
41         nillable="true" type="xs:dateTime" />
42     <!-- eventuali parametri di utilizzo -->
43     <xs:element minOccurs="0" maxOccurs="1" name="AdditionalInfo"
44         type="AdditionalInfo" />
45 </xs:sequence>
46 <xs:attribute name="UID" type="ExtReference" use="required" />
47 <xs:attribute name="LineNumber" type="xs:int" use="optional" />
48 <xs:attribute name="LinePosition" type="xs:int" use="optional" />
49 </xs:complexType>
50 <!-- configurazione dei dispositivi -->
51 <xs:complexType name="DeviceCatalog">
52     <xs:sequence>
53         <xs:element minOccurs="0" maxOccurs="unbounded" name="Device"
54             type="DeviceItem" />
55     </xs:sequence>
56 </xs:complexType>
57 <xs:complexType name="DeviceItem">
58     <xs:sequence>
59         <xs:element minOccurs="1" maxOccurs="1" name="DeviceId" type="DeviceId" />
60         <xs:element minOccurs="1" maxOccurs="1" name="DeviceDescription"
61             type="xs:string" />
62         <xs:element minOccurs="1" maxOccurs="1" name="CreationDate"
63             type="xs:dateTime" />
64         <xs:element minOccurs="0" maxOccurs="1" name="ExpirationDate"
65             nillable="true" type="xs:dateTime" />
66         <xs:element minOccurs="0" maxOccurs="1" name="ParentDeviceId"
67             type="DeviceId" />
68     </xs:sequence>
69     <xs:attribute name="UID" type="ExtReference" use="required" />
70     <xs:attribute name="LineNumber" type="xs:int" use="optional" />
71     <xs:attribute name="LinePosition" type="xs:int" use="optional" />
72 </xs:complexType>
73 <!-- anagrafica dei card holder -->
74 <xs:complexType name="HolderCatalog">
75     <xs:sequence>
76         <!--<xs:element minOccurs="1" maxOccurs="unbounded" name="HolderItem"
77             type="HolderItem" />-->
78         <!-- Exactly one of HolderPerson or HolderCompany -->
79         <xs:choice minOccurs="1" maxOccurs="unbounded">
80             <xs:element minOccurs="1" maxOccurs="1" name="HolderPerson"
81                 type="HolderPerson" />
82             <xs:element minOccurs="1" maxOccurs="1" name="HolderCompany"
83                 type="HolderCompany" />
84             <xs:element minOccurs="1" maxOccurs="1" name="HolderAnonymous"
85                 type="HolderAnonymous" />
86         </xs:choice>
87     </xs:sequence>
88     <xs:attribute name="LineNumber" type="xs:int" use="optional" />
89     <xs:attribute name="LinePosition" type="xs:int" use="optional" />
```

```
81 </xs:complexType>
82
83 <xs:complexType name="ActHolder">
84 <!-- Exactly one of HolderPerson or HolderCompany -->
85 <xs:choice>
86 <xs:element minOccurs="1" maxOccurs="1" name="HolderPerson" type="HolderPerson" />
87 <xs:element minOccurs="1" maxOccurs="1" name="HolderCompany" type="HolderCompany" />
88 <xs:element minOccurs="1" maxOccurs="1" name="HolderAnonymous" type="HolderAnonymous" />
89 </xs:choice>
90 </xs:complexType>
91
92 <xs:simpleType name="HolderFiscalCode">
93 <xs:restriction base="xs:string">
94 <xs:minLength value="16"/>
95 <xs:maxLength value="16"/>
96 </xs:restriction>
97 </xs:simpleType>
98
99 <xs:simpleType name="HolderCompanyCode">
100 <xs:restriction base="xs:string">
101 <xs:minLength value="11"/>
102 <xs:maxLength value="11"/>
103 </xs:restriction>
104 </xs:simpleType>
105
106 <xs:complexType name="HolderPersonData">
107 <xs:sequence>
108 <xs:element minOccurs="0" maxOccurs="1" name="Title" nillable="true" type="xs:string" />
109 <xs:element minOccurs="1" maxOccurs="1" name="FirstName" type="xs:string" />
110 <xs:element minOccurs="1" maxOccurs="1" name="FamilyName" type="xs:string" />
111 <xs:element minOccurs="0" maxOccurs="1" name="BirthDate" nillable="true" type="xs:dateTime" />
112 <xs:element minOccurs="0" maxOccurs="1" name="BirthPlace" type="xs:string" />
113 <xs:element minOccurs="0" maxOccurs="1" name="Nationality" type="xs:string" />
114 <xs:element minOccurs="0" maxOccurs="1" name="Sex" type="xs:string" />
115
116 <xs:element minOccurs="0" maxOccurs="1" name="DocCode" type="xs:string" />
117 <xs:element minOccurs="0" maxOccurs="1" name="DocType" type="xs:string" />
118 <xs:element minOccurs="0" maxOccurs="1" name="DocIssueDate" nillable="true" type="xs:dateTime" />
119 <xs:element minOccurs="0" maxOccurs="1" name="DocEndValidityDate" nillable="true" type="xs:dateTime" />
120 <xs:element minOccurs="0" maxOccurs="1" name="DocIssuer" type="xs:string" />
    >
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121     <xs:element minOccurs="1" maxOccurs="1" name="Address" type="xs:string" />
122     <xs:element minOccurs="1" maxOccurs="1" name="Town" type="xs:string" />
123     <xs:element minOccurs="0" maxOccurs="1" name="ZipCode" type="xs:string" />
124     <!-- District :
125         per l'ITALIA : Codice ISTAT del Comune di domicilio
126     -->
127     <xs:element minOccurs="0" maxOccurs="1" name="District" type="xs:string" />
128     <xs:element minOccurs="0" maxOccurs="1" name="Phone1" type="xs:string" />
129     <xs:element minOccurs="0" maxOccurs="1" name="Phone2" type="xs:string" />
130     <xs:element minOccurs="0" maxOccurs="1" name="Email" type="xs:string" />
131     <xs:element minOccurs="0" maxOccurs="1" name="ExtReference"
132         type="xs:string" />
133 </xs:sequence>
134 <xs:attribute name="UID" type="ExtReference" use="required" />
135 <xs:attribute name="LineNumber" type="xs:int" use="optional" />
136 <xs:attribute name="LinePosition" type="xs:int" use="optional" />
137 </xs:complexType>
138 <xs:complexType name="HolderPerson">
139     <xs:complexContent>
140         <xs:extension base="HolderPersonData">
141             <xs:sequence>
142                 <xs:element minOccurs="0" maxOccurs="1" name="FiscalCode"
143                     type="nonEmptyString" />
144             </xs:sequence>
145         </xs:extension>
146     </xs:complexContent>
147 </xs:complexType>
148 <!--<xs:complexType name="HolderPersonItem">
149     <xs:complexContent>
150         <xs:extension base="HolderPersonData">
151             <xs:sequence>
152                 <xs:element minOccurs="1" maxOccurs="1" name="FiscalCode"
153                     type="HolderFiscalCode" />
154             </xs:sequence>
155         </xs:extension>
156     </xs:complexContent>
157 </xs:complexType-->
158 <xs:complexType name="HolderCompanyData">
159     <xs:sequence>
160         <xs:element minOccurs="1" maxOccurs="1" name="CompanyName"
161             type="xs:string" />
162         <xs:element minOccurs="0" maxOccurs="1" name="Nationality"
163             type="xs:string" />
164         <xs:element minOccurs="1" maxOccurs="1" name="Address" type="xs:string" />
165         <xs:element minOccurs="1" maxOccurs="1" name="Town" type="xs:string" />
166         <xs:element minOccurs="0" maxOccurs="1" name="ZipCode" type="xs:string" />
167         <xs:element minOccurs="0" maxOccurs="1" name="District" type="xs:string" />
168         <xs:element minOccurs="0" maxOccurs="1" name="Phone1" type="xs:string" />
169         <xs:element minOccurs="0" maxOccurs="1" name="Phone2" type="xs:string" />

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168     <xs:element minOccurs="0" maxOccurs="1" name="Email" type="xs:string" />
169     <xs:element minOccurs="0" maxOccurs="1" name="ExtReference"
170         type="xs:string" />
171 </xs:sequence>
172 <xs:attribute name="UID" type="ExtReference" use="required" />
173 <xs:attribute name="LineNumber" type="xs:int" use="optional" />
174 <xs:attribute name="LinePosition" type="xs:int" use="optional" />
175 </xs:complexType>
176 <xs:complexType name="HolderCompany">
177     <xs:complexContent>
178         <xs:extension base="HolderCompanyData">
179             <xs:sequence>
180                 <!-- partita IVA dell'azienda -->
181                 <xs:element minOccurs="0" maxOccurs="1" name="CompanyCode"
182                     type="nonEmptyString" />
183             </xs:sequence>
184         </xs:extension>
185     </xs:complexContent>
186 </xs:complexType>
187 <xs:complexType name="HolderCompanyItem">
188     <xs:complexContent>
189         <xs:extension base="HolderCompanyData">
190             <xs:sequence>
191                 <!-- partita IVA dell'azienda -->
192                 <xs:element minOccurs="1" maxOccurs="1" name="CompanyCode"
193                     type="HolderCompanyCode" />
194             </xs:sequence>
195         </xs:extension>
196     </xs:complexContent>
197 </xs:complexType>
198 <xs:complexType name="HolderAnonymous">
199     <xs:sequence>
200         <xs:element minOccurs="0" maxOccurs="1" name="ExtReference" nillable="true"
201             type="xs:string" />
202     </xs:sequence>
203     <xs:attribute name="LineNumber" type="xs:int" use="optional" />
204     <xs:attribute name="LinePosition" type="xs:int" use="optional" />
205 </xs:complexType>
206 <xs:complexType name="Product">
207     <xs:sequence>
208         <xs:element minOccurs="1" maxOccurs="1" name="ProviderId"
209             type="xs:unsignedShort" />
210         <xs:element minOccurs="1" maxOccurs="1" name="TariffId"
211             type="xs:unsignedShort" />
212         <xs:element minOccurs="0" maxOccurs="1" name="ExtReference" nillable="true"
213             type="xs:string" />
214     </xs:sequence>
215     <xs:attribute name="LineNumber" type="xs:int" use="optional" />
```

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213     <xs:attribute name="LinePosition" type="xs:int" use="optional" />
214 </xs:complexType>
215
216 <xs:complexType name="Card">
217   <xs:sequence>
218     <xs:element minOccurs="1" maxOccurs="1" name="CardOperatorId" type="xs:unsignedByte" />
219     <xs:element minOccurs="1" maxOccurs="1" name="CardType" type="xs:unsignedShort" />
220     <xs:element minOccurs="1" maxOccurs="1" name="CardSerialNo" type="xs:string" />
221   </xs:sequence>
222   <xs:attribute name="LineNumber" type="xs:int" use="optional" />
223   <xs:attribute name="LinePosition" type="xs:int" use="optional" />
224 </xs:complexType>
225
226 <xs:complexType name="Line">
227   <xs:sequence>
228     <xs:element minOccurs="1" maxOccurs="1" name="LineOperatorId" type="xs:unsignedShort" />
229     <xs:element minOccurs="1" maxOccurs="1" name="LineId" type="xs:unsignedShort" />
230     <xs:element minOccurs="1" maxOccurs="1" name="LineDescription" type="xs:string" />
231   </xs:sequence>
232   <xs:attribute name="LineNumber" type="xs:int" use="optional" />
233   <xs:attribute name="LinePosition" type="xs:int" use="optional" />
234 </xs:complexType>
235
236 <xs:complexType name="Node">
237   <xs:sequence>
238     <xs:element minOccurs="1" maxOccurs="1" name="NodeOperatorId" type="xs:unsignedShort" />
239     <xs:element minOccurs="1" maxOccurs="1" name="NodeId" type="xs:unsignedShort" />
240   </xs:sequence>
241   <xs:attribute name="LineNumber" type="xs:int" use="optional" />
242   <xs:attribute name="LinePosition" type="xs:int" use="optional" />
243 </xs:complexType>
244
245 <!-- distanza tariffaria -->
246 <xs:complexType name="Distance">
247   <xs:sequence>
248     <xs:element minOccurs="1" maxOccurs="1" name="Unit" type="xs:unsignedByte" />
249     <xs:element minOccurs="1" maxOccurs="1" name="Value" type="xs:unsignedInt" />
250   </xs:sequence>
251   <xs:attribute name="LineNumber" type="xs:int" use="optional" />
252   <xs:attribute name="LinePosition" type="xs:int" use="optional" />
253 </xs:complexType>
254
```

```
255 <xs:complexType name="ZoneSet">
256   <xs:sequence>
257     <xs:element minOccurs="0" maxOccurs="unbounded" name="Zone" type="Zone" />
258   </xs:sequence>
259   <xs:attribute name="LineNumber" type="xs:int" use="optional" />
260   <xs:attribute name="LinePosition" type="xs:int" use="optional" />
261 </xs:complexType>
262
263 <xs:complexType name="Zone">
264   <xs:sequence>
265     <xs:element minOccurs="1" maxOccurs="1" name="ZoneOperatorId" type="xs:unsignedShort" />
266     <xs:element minOccurs="1" maxOccurs="1" name="ZoneId" type="xs:unsignedShort" />
267   </xs:sequence>
268   <xs:attribute name="LineNumber" type="xs:int" use="optional" />
269   <xs:attribute name="LinePosition" type="xs:int" use="optional" />
270 </xs:complexType>
271
272 <xs:complexType name="PriceIntegrationItem">
273   <xs:sequence>
274     <xs:element minOccurs="1" maxOccurs="1" name="PriceIntegrationId" type="xs:unsignedShort" />
275     <xs:element minOccurs="0" maxOccurs="1" name="QuotaPercentage" type="xs:decimal" />
276   </xs:sequence>
277   <xs:attribute name="LineNumber" type="xs:int" use="optional" />
278   <xs:attribute name="LinePosition" type="xs:int" use="optional" />
279 </xs:complexType>
280
281 <xs:complexType name="PriceIntegration">
282   <xs:annotation>
283     <xs:documentation>
284       FullPrice: full price
285       PriceIntegrationItem: list of causal for price facilitation when paid
286       price is minor of FullPrice
287     </xs:documentation>
288   </xs:annotation>
289   <xs:sequence>
290     <xs:element minOccurs="1" maxOccurs="1" name="FullPrice" type="xs:decimal" />
291     <xs:element minOccurs="1" maxOccurs="unbounded" name="PriceIntegrationItem" type="PriceIntegrationItem" />
292   </xs:sequence>
293   <xs:attribute name="LineNumber" type="xs:int" use="optional" />
294   <xs:attribute name="LinePosition" type="xs:int" use="optional" />
295 </xs:complexType>
296
297 <xs:complexType name="Contract">
298   <xs:sequence>
299     <xs:element minOccurs="1" maxOccurs="1" name="SaleOperatorId" type="xs:unsignedByte" />
```

```
299     <xs:element minOccurs="1" maxOccurs="1" name="SaleDeviceId"
      type="xs:unsignedInt" />
300     <xs:element minOccurs="1" maxOccurs="1" name="SaleSerialNo"
      type="xs:unsignedInt" />
301     <xs:element minOccurs="0" maxOccurs="1" name="IssuingDateTime"
      nillable="true" type="xs:dateTime" />
302   </xs:sequence>
303   <xs:attribute name="LineNumber" type="xs:int" use="optional" />
304   <xs:attribute name="LinePosition" type="xs:int" use="optional" />
305 </xs:complexType>
306
307 <!--sono i "selling values" o paramtri del prodotto venduto, rimborsato, etc. -->
308 <xs:complexType name="ProductFeatures">
309   <xs:sequence>
310     <xs:element minOccurs="1" maxOccurs="1" name="ProductFamily"
      type="xs:unsignedShort" />
311     <xs:element minOccurs="1" maxOccurs="1" name="ProductType"
      type="xs:unsignedShort" />
312   </xs:sequence>
313   <xs:attribute name="LineNumber" type="xs:int" use="optional" />
314   <xs:attribute name="LinePosition" type="xs:int" use="optional" />
315 </xs:complexType>
316
317 <xs:complexType name="DepartureArrival">
318   <xs:sequence>
319     <xs:element minOccurs="1" maxOccurs="1" name="DepartureNodeId"
      type="xs:unsignedShort" />
320     <xs:element minOccurs="1" maxOccurs="1" name="ArrivalNodeId"
      type="xs:unsignedShort" />
321   </xs:sequence>
322   <xs:attribute name="LineNumber" type="xs:int" use="optional" />
323   <xs:attribute name="LinePosition" type="xs:int" use="optional" />
324 </xs:complexType>
325
326 <xs:complexType name="ValidityPeriod">
327   <xs:sequence>
328     <xs:element minOccurs="1" maxOccurs="1" name="ValidityStartDate"
      type="xs:dateTime" />
329     <xs:element minOccurs="1" maxOccurs="1" name="ValidityEndDate"
      type="xs:dateTime" />
330   </xs:sequence>
331   <xs:attribute name="LineNumber" type="xs:int" use="optional" />
332   <xs:attribute name="LinePosition" type="xs:int" use="optional" />
333 </xs:complexType>
334
335 <xs:complexType name="Ticket">
336   <xs:complexContent>
337     <xs:extension base="ProductFeatures">
338       <xs:sequence>
339         <xs:element minOccurs="0" maxOccurs="1" name="ExpirationDate"
          nillable="true" type="xs:dateTime" />
```



```
340      <!-- One of ... or None -->
341      <xs:choice minOccurs="0">
342          <xs:element minOccurs="1" maxOccurs="1" name="DepartureArrival" type="DepartureArrival" />
343          <xs:element minOccurs="1" maxOccurs="1" name="Distance" type="Distance" />
344          <xs:element minOccurs="1" maxOccurs="1" name="Zones" type="ZoneSet" />
345      </xs:choice>
346  </xs:sequence>
347 </xs:extension>
348 </xs:complexContent>
349 </xs:complexType>
350
351 <xs:complexType name="Subscription">
352     <xs:complexContent>
353         <xs:extension base="ProductFeatures">
354             <xs:sequence>
355                 <!-- ValidityPeriod is not specified for sliding subscription -->
356                 <xs:element minOccurs="0" maxOccurs="1" name="ValidityPeriod" type="ValidityPeriod" />
357                 <!-- One of ... or None -->
358                 <xs:choice minOccurs="0">
359                     <xs:element minOccurs="1" maxOccurs="1" name="DepartureArrival" type="DepartureArrival" />
360                     <xs:element minOccurs="1" maxOccurs="1" name="Zones" type="ZoneSet" />
361                 </xs:choice>
362             </xs:sequence>
363         </xs:extension>
364     </xs:complexContent>
365 </xs:complexType>
366
367 <xs:complexType name="Carnet">
368     <xs:complexContent>
369         <xs:extension base="Ticket">
370             <xs:sequence>
371                 <!-- valore da "consumare" con gli utilizzi -->
372                 <xs:element minOccurs="1" maxOccurs="1" name="NumberOfJourneys" type="xs:unsignedShort" />
373             </xs:sequence>
374         </xs:extension>
375     </xs:complexContent>
376 </xs:complexType>
377
378 <!-- titolo a scalare, ricaricabile o borsellino elettronico-->
379 <xs:complexType name="Purse">
380     <xs:complexContent>
381         <xs:extension base="ProductFeatures">
382             <xs:sequence>
383                 <!-- unita' di misura -->
384                 <xs:element minOccurs="1" maxOccurs="1" name="Unit" />
```

```
    type="xs:unsignedByte" />
385     <!-- valore da "consumare" con gli utilizzi -->
386     <xs:element minOccurs="1" maxOccurs="1" name="Value"
    type="xs:unsignedInt" />
387   </xs:sequence>
388 </xs:extension>
389 </xs:complexContent>
390 </xs:complexType>
391
392 <!--
393 skip: Allow any element, and ignore any definition for the element.
394 lax: Allow any element, but validate the element if any definition is found for
    it.
395 strict: Allow any element, but require that it have a definition and be valid
    per that definition.
396 -->
397 <xs:complexType name="AdditionalInfo">
398   <xs:sequence>
399     <xs:element minOccurs="1" maxOccurs="1" name="Description"
    type="xs:string" />
400     <xs:any minOccurs="1" maxOccurs="unbounded" processContents="lax"
    namespace="##any"/>
401   </xs:sequence>
402   <xs:attribute name="LineNumber" type="xs:int" use="optional" />
403   <xs:attribute name="LinePosition" type="xs:int" use="optional" />
404 </xs:complexType>
405
406 <xs:complexType name="ProductSaleParam">
407   <!-- One of ... or None -->
408   <xs:choice minOccurs="0">
409     <xs:element name="Ticket" type="Ticket"/>
410     <xs:element name="Subscription" type="Subscription"/>
411     <xs:element name="Carnet" type="Carnet"/>
412     <xs:element name="Purse" type="Purse"/>
413   </xs:choice>
414 </xs:complexType>
415
416 <!-- per costringere xsd a serializzare elementi non referenziati nell'albero
    -->
417 <!--<xs:element name="Xyz" type="xs:string" />-->
418
419 </xs:schema>
```