

Introduction

The following describes a draft DATEX II extension for OpenLR.

I tried to be as close as possible as the UML model received from OpenLR, Sven Baselau and from the documents found on OpenLR website.

The approach I made was to take the models for OpenLR linear references and point references and extend the Datex II Linears and Points. I found that the most logical way. But, then the top level classes from OpenLR are not handled. That is also possible but in that case the Location class should have been extended.

I also see the following mapping between the top level classes of OpenLR and DATEX II

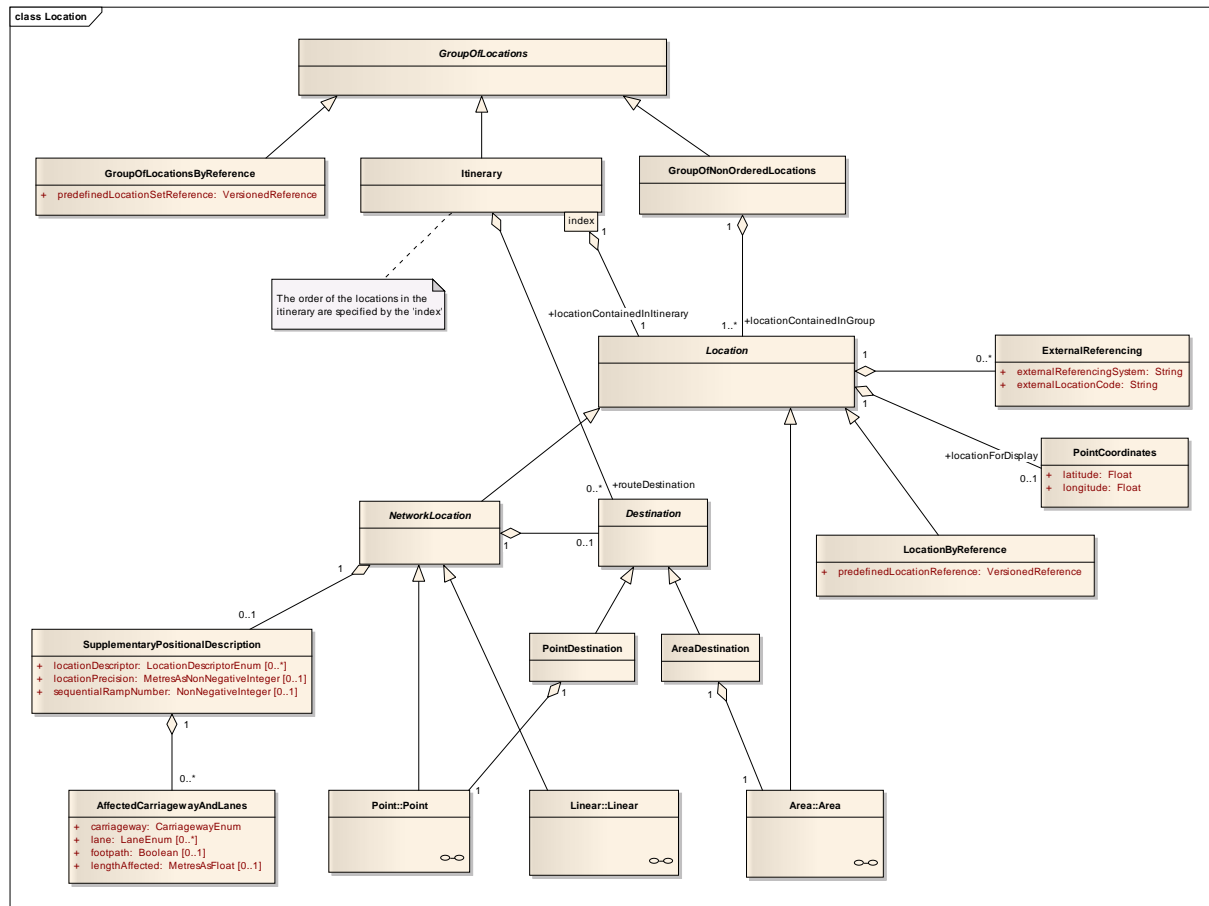
- The OpenLR class with a LocationID can in DATEX II be a predefined Location
- BinaryLocationReferences in OpenLR can in DATEX II be places in ExternalReferencing
- AdditionalInformation in OpenLR, can be another extension in DATEX II

So these are not currently included in this proposal. The extension includes elements below the XMLLocationReference.

I tried to reuse already defined DATEX II classes like coordinate and offsets.

This extension is based on OpenLR whitepaper version 1.3 downloaded from www.openlr.org

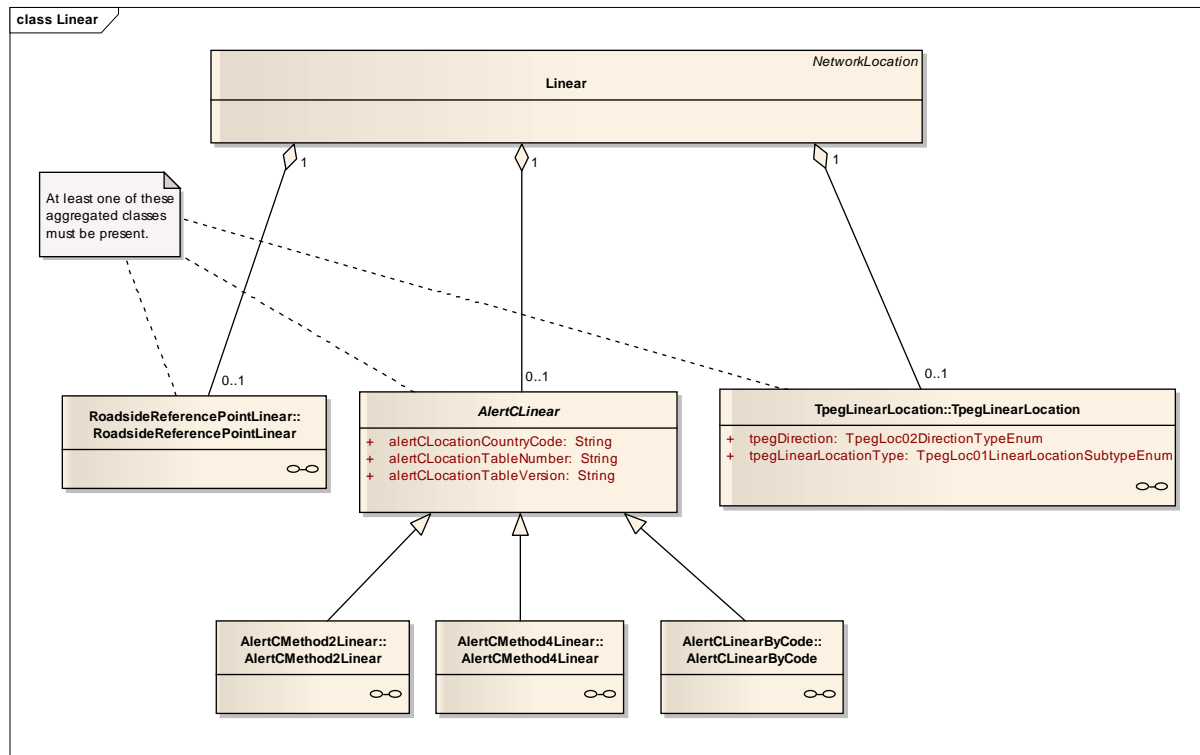
DATEX II Location model



OpenLR's Point and Line approach fits very well into the model. Point references will go into Point package and Linear references will go into Linear.

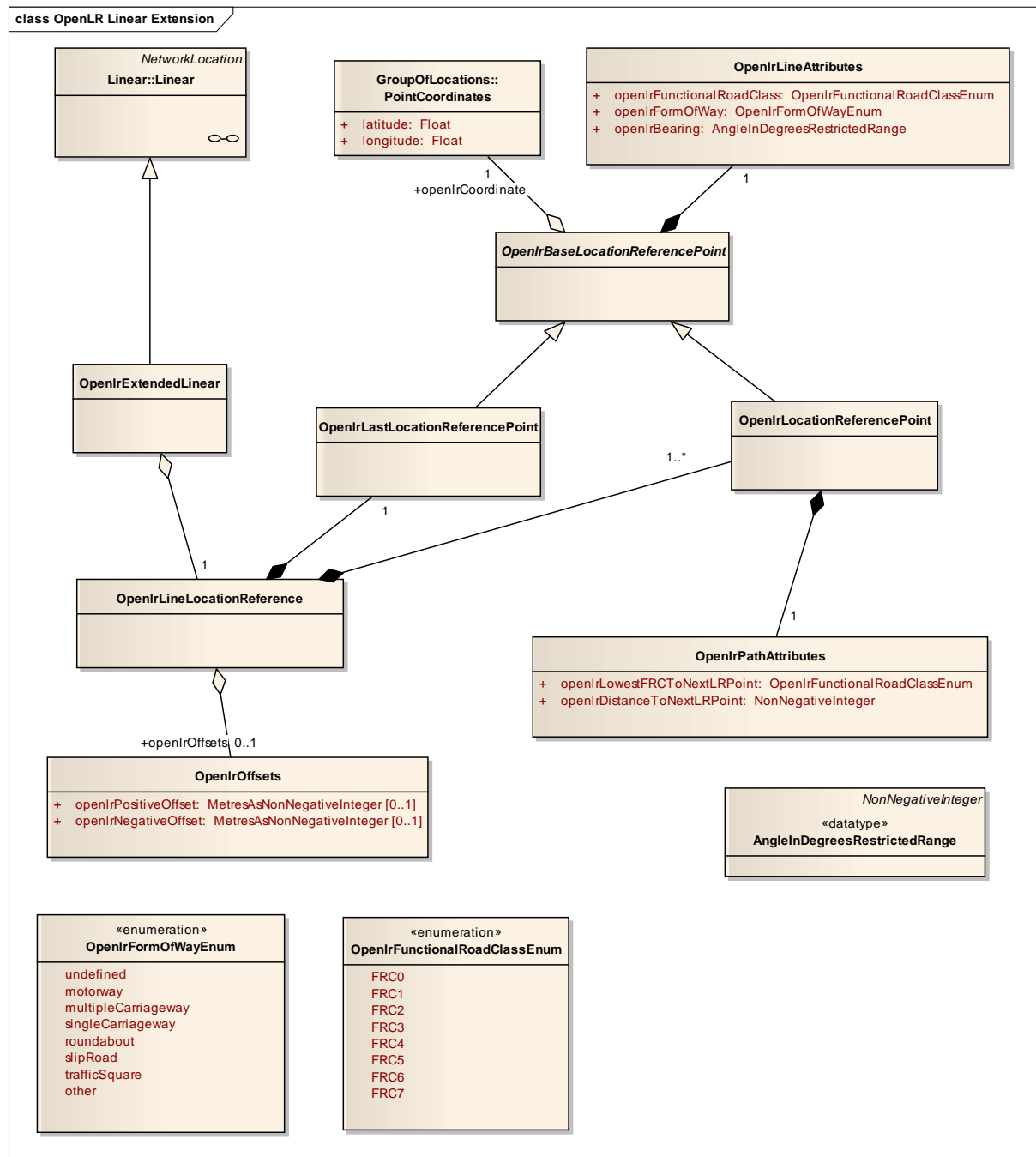
Linear references

DATEX II Linear Package



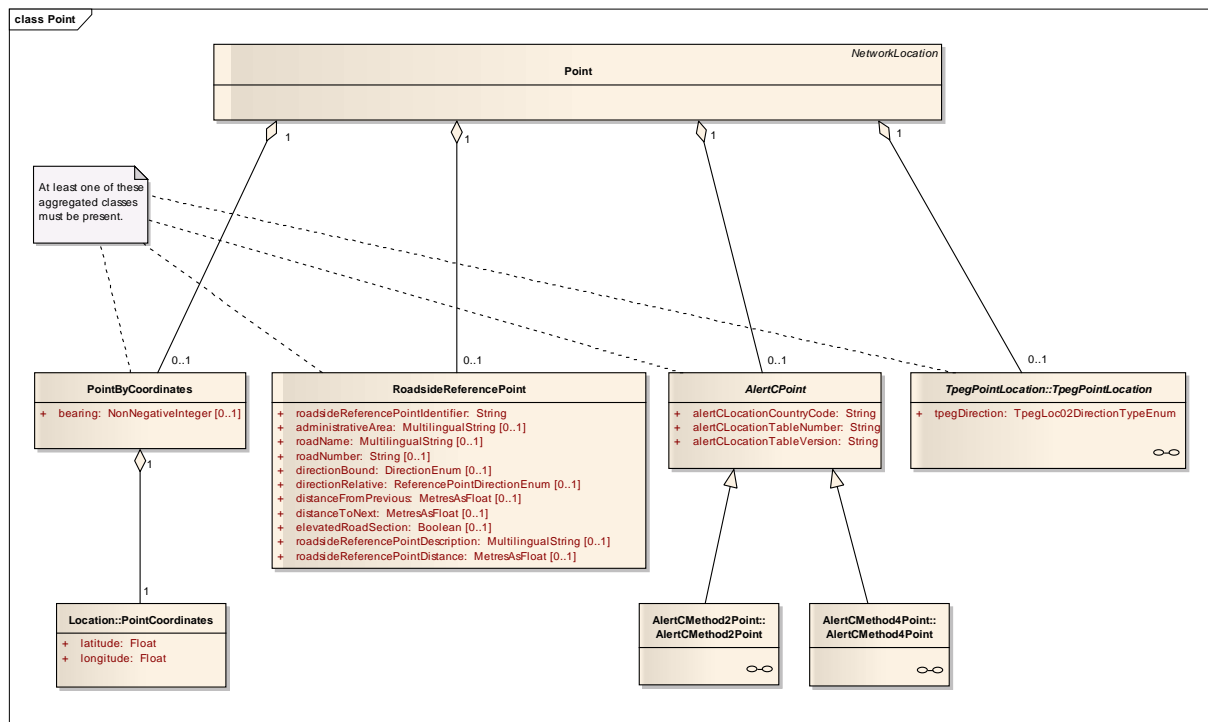
OpenLR Linear location Reference can easily be added as an extension of the Linear class. This will be in the same way as the other referencing systems.

DATEX II OpenLR Linear Location extension



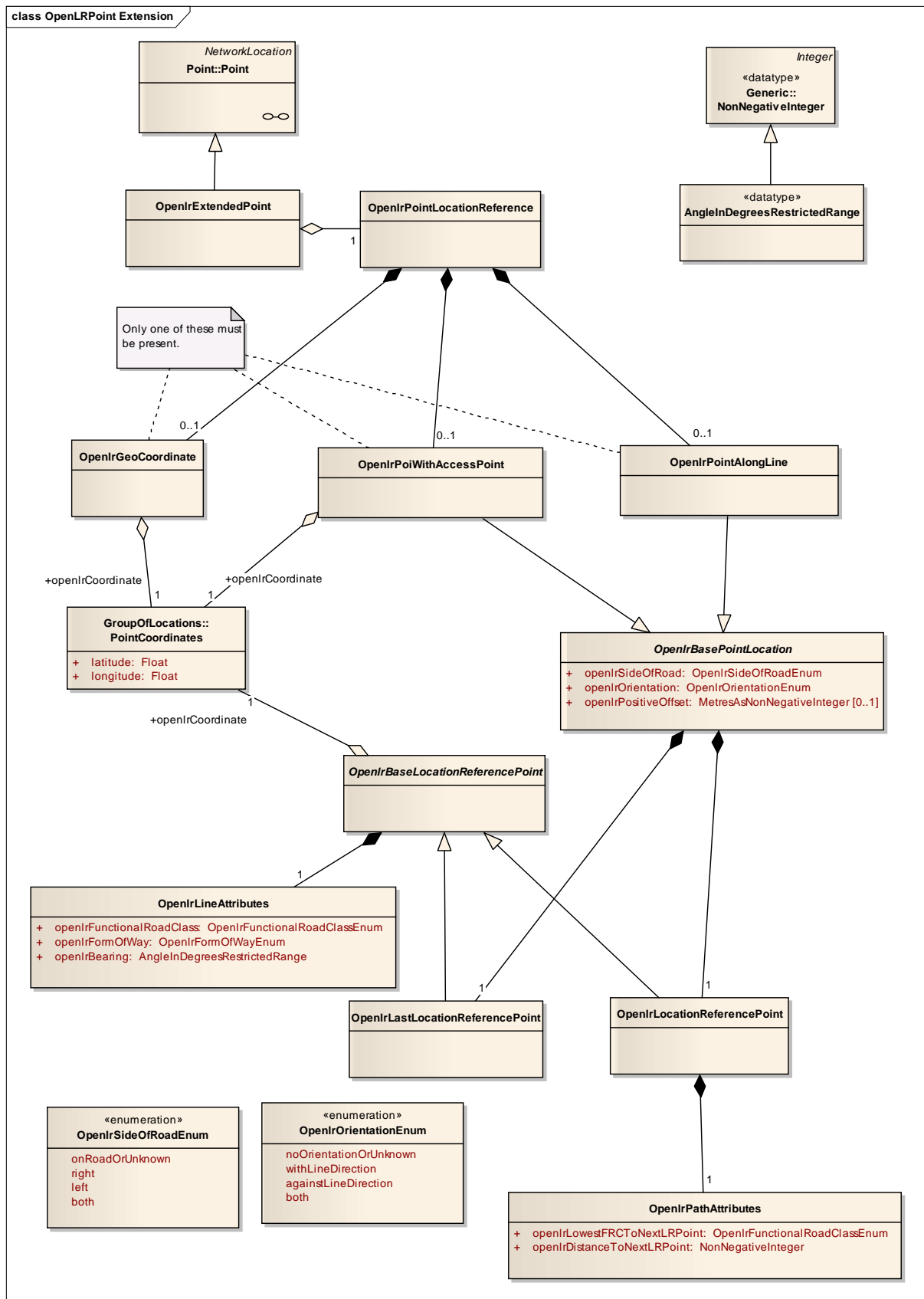
Point references

DATEX II Point package



OpenLR Point Reference can easily be a new extension of the Point class.

OpenRL Point reference extension



Above is extension for the point references.