



REPUBLIC OF CROATIA
State geodetic administration



Improvement of CROTIS Topographic Model for Objectives of Buildings, Traffic and Hydrography

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Selce, 09. 09. 2017.



AGENDA:

- *CROTIS*
 - *About CROTIS*
 - *History*
 - *Object entity*
 - *Improvement of CROTIS*
 - *Basic package*
 - *Buildings*
 - *Traffic*
 - *Hydrography*
-



AGENDA:

- *Examples and explanation*
 - *Legislation*
 - *Conclusion*
-



CROTIS

- ***CROTIS is CROatian Topographic Information System***
 - ***First version based on ATKIS (German Topographic Information System) - start 1990.***
 - ***CROTIS 1.0 - 2000. (9 object entity)***
 - ***CROTIS 1.1 - 2001. - EXPRESS exchange model***
-



CROTIS

- *CROTIS 1.0 and CROTIS 1.1*

1. *Permanent geodetic point*
 2. *Buildings, economic and public object*
 3. *Utility*
 4. *Transportation*
 5. *Vegetation and land use*
 6. *Hydrography*
 7. *Relief*
 8. *Administrative units, boundaries*
 9. *Geographical names*
-

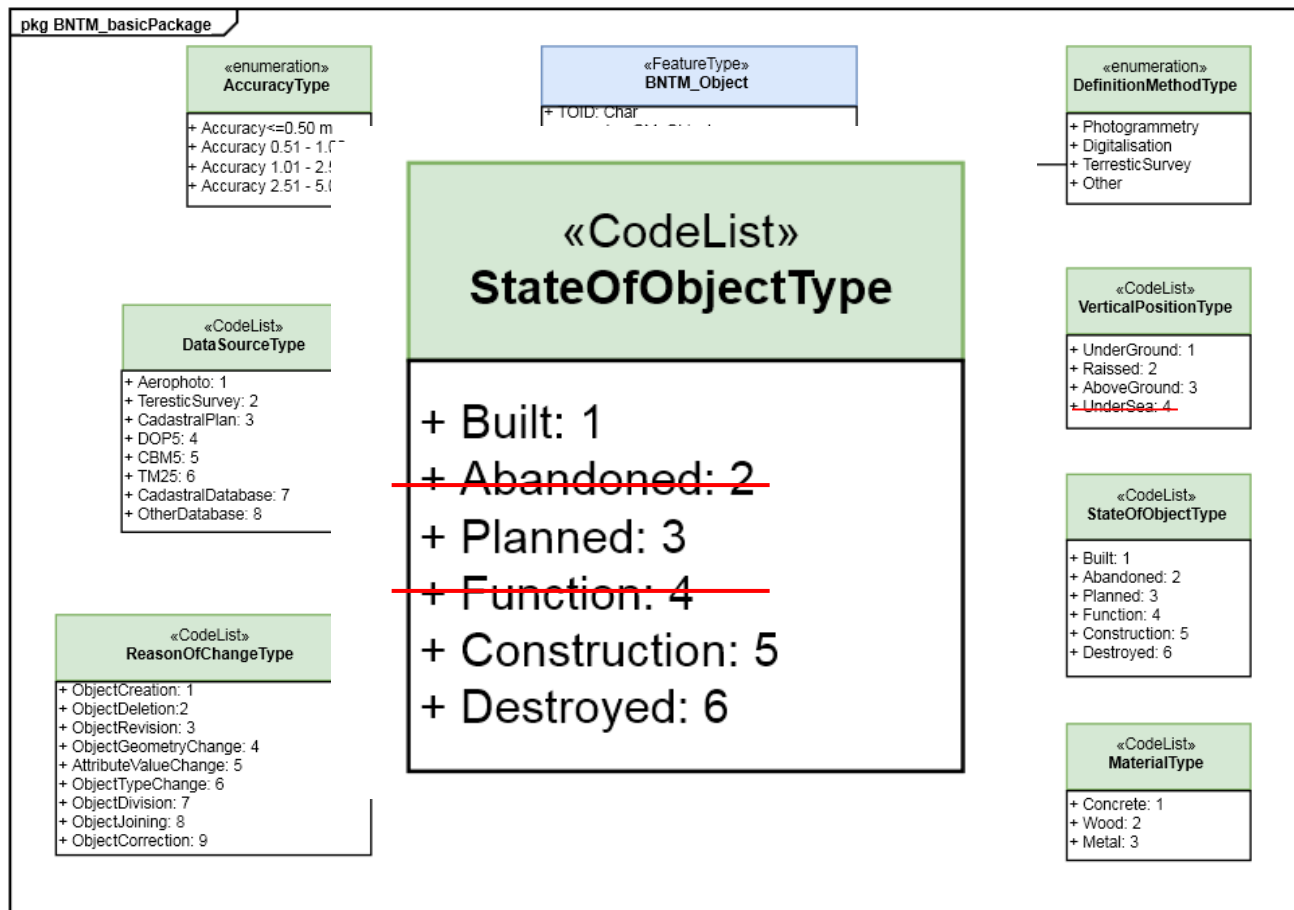


CROTIS

- ***CROTIS 1.2 - 2009. (7 objects entity)***
 - ***Relocated permanent geodetic point and administrative units, boundaries***
 - ***CROTIS 2.0 - 2014. (6 objects entity)***
 - ***Relocated relief and some object change name***
 - ***Described by UML***
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IMPROVEMENT OF CROTIS - BASIC PACKAGE





IMPROVEMENT OF CROTIS - BASIC PACKAGE

- Examples



Built



Under construction



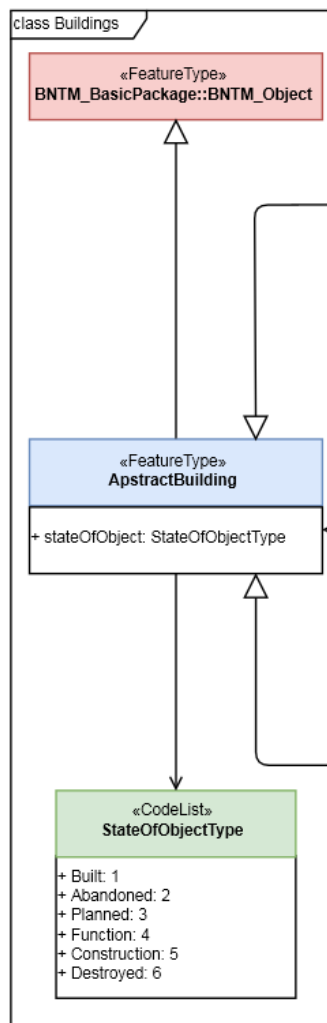
Destroyed



Ruin



IMPROVEMENT OF CROTIS - BUILDINGS



+ House: 2
+ Cottage: 3
+ HighBuilding: 4
+ Customs: 5
+ Hospital: 6
+ HealthCentre: 7
+ School: 8
+ Faculty: 10
+ Factory: 11
+ Silo: 12
+ Mill: 13
+ Sawmill: 14
+ Brickyard: 15
+ CementPlant: 16
+ Gravel: 17
+ Mine: 18
+ Winery: 20
+ Quarry: 21
+ Refinery: 22
+ Shipbuilding: 23
+ Dam: 24
+ Ironworks: 25
+ Hydropower: 26
+ ThermalPowerPlant: 27

+ Synagogue: 45
+ ConventMonastery: 46
+ Stadium: 47
+ SportHall: 48
+ MountainHut: 49
+ ParishDorm: 50
+ OtherBuildings: 51
+ Nursery: 52
+ Mall: 53
+ Post: 54
+ Police: 55
+ FireDepartment: 56
+ Court: 57
+ Theater: 58
+ ConcertHall: 59
+ ResearchCentre: 60
+ Embassy: 61
+ Observatory: 62
+ SeaPortBuilding: 63

«CodeList»
BuildingType

ig: 1 + Mosque: 44
+ Synagogue: 45
+ ConventMonastery: 46
+ Stadium: 47
+ SportHall: 48
+ MountainHut: 49
+ ParishDorm: 50
+ OtherBuildings: 51
+ Nursery: 52
+ Mall: 53
+ Post: 54
+ Police: 55
+ FireDepartment: 56
+ Court: 57
+ Theater: 58
+ ConcertHall: 59
+ ResearchCentre: 60
+ Embassy: 61
+ Observatory: 62
+ SeaPortBuilding: 63

ints: 27
28
nts: 29

ng: 32

g: 37
ig: 38
onBuilding: 39

«FeatureType»
SmallStructures

+ geometry: GM_Point

«FeatureType»
BigStructures

+ geometry: GM_Surface

+ Chimney: 6
+ ControlTower: 7
+ RopewayColumn: 8
+ Greenhouse: 9
+ Chapel: 10

+ AirportBuilding: 41
+ Hangar: 42
+ Church: 43



IMPROVEMENT OF CROTIS - BUILDINGS

- Examples



Nurssery

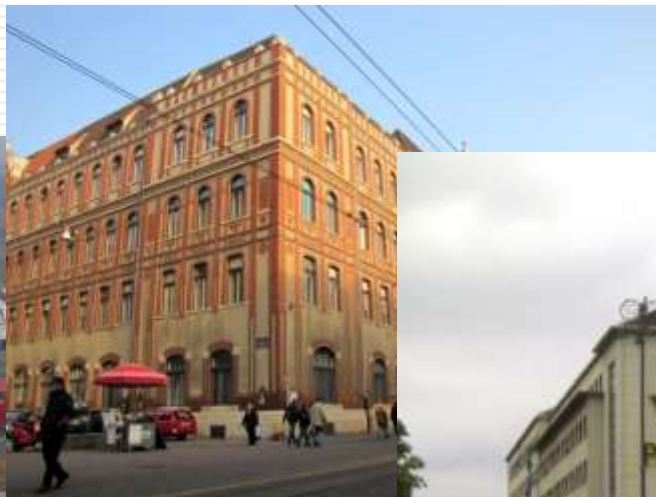


IMPROVEMENT OF CROTIS - BUILDINGS

- Examples



Mall



Post



IMPROVEMENT OF CROTIS - BUILDINGS

- Examples



Police



Fire department



IMPROVEMENT OF CROTIS - BUILDINGS

- Examples



Court



Theatre



IMPROVEMENT OF CROTIS - BUILDINGS

- Examples



Concert hall



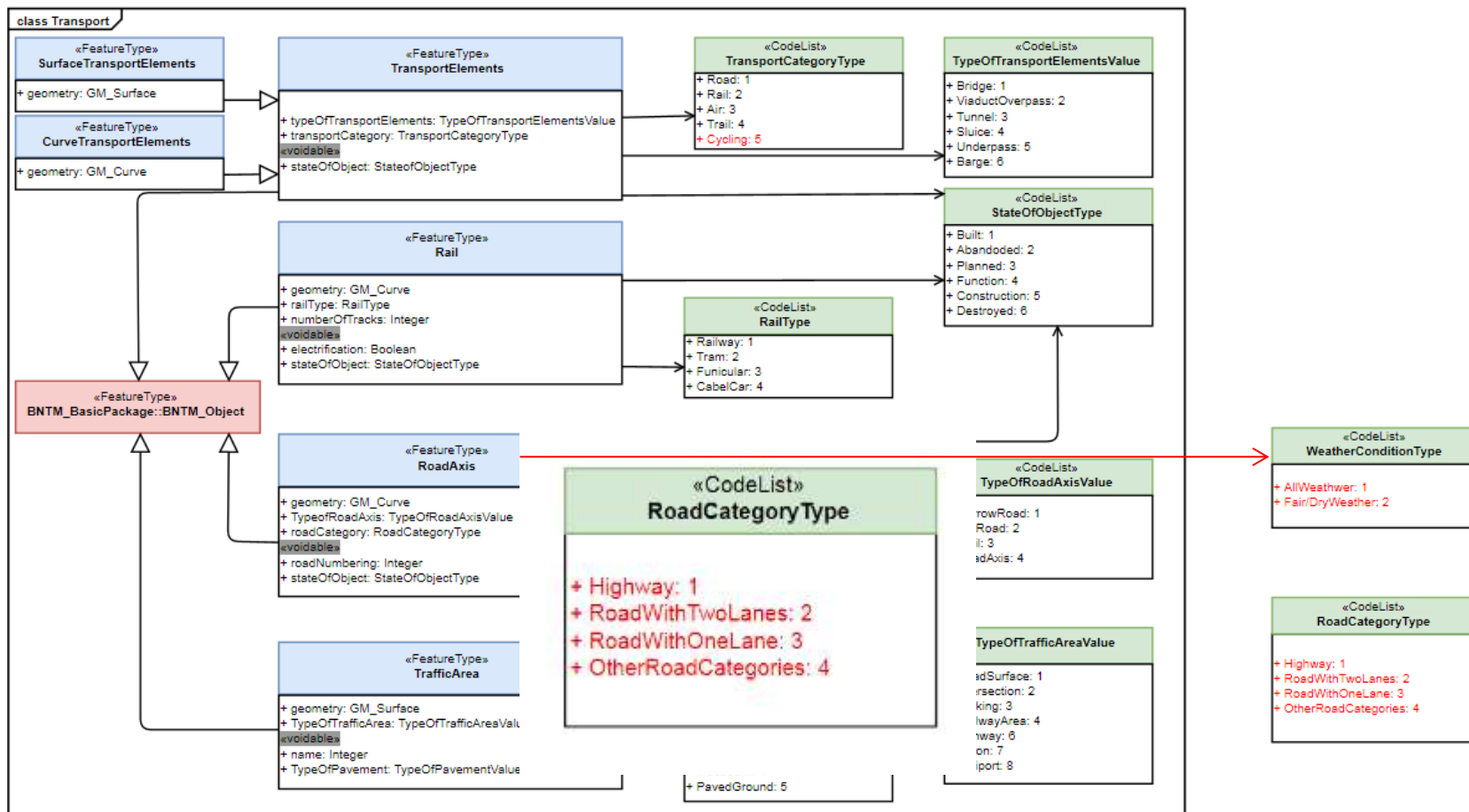
Observatory



Sea port building



IMPROVEMENT OF CROTIS - TRAFFIC





IMPROVEMENT OF CROTIS - TRAFFIC

- Examples



Macadam
for all weather



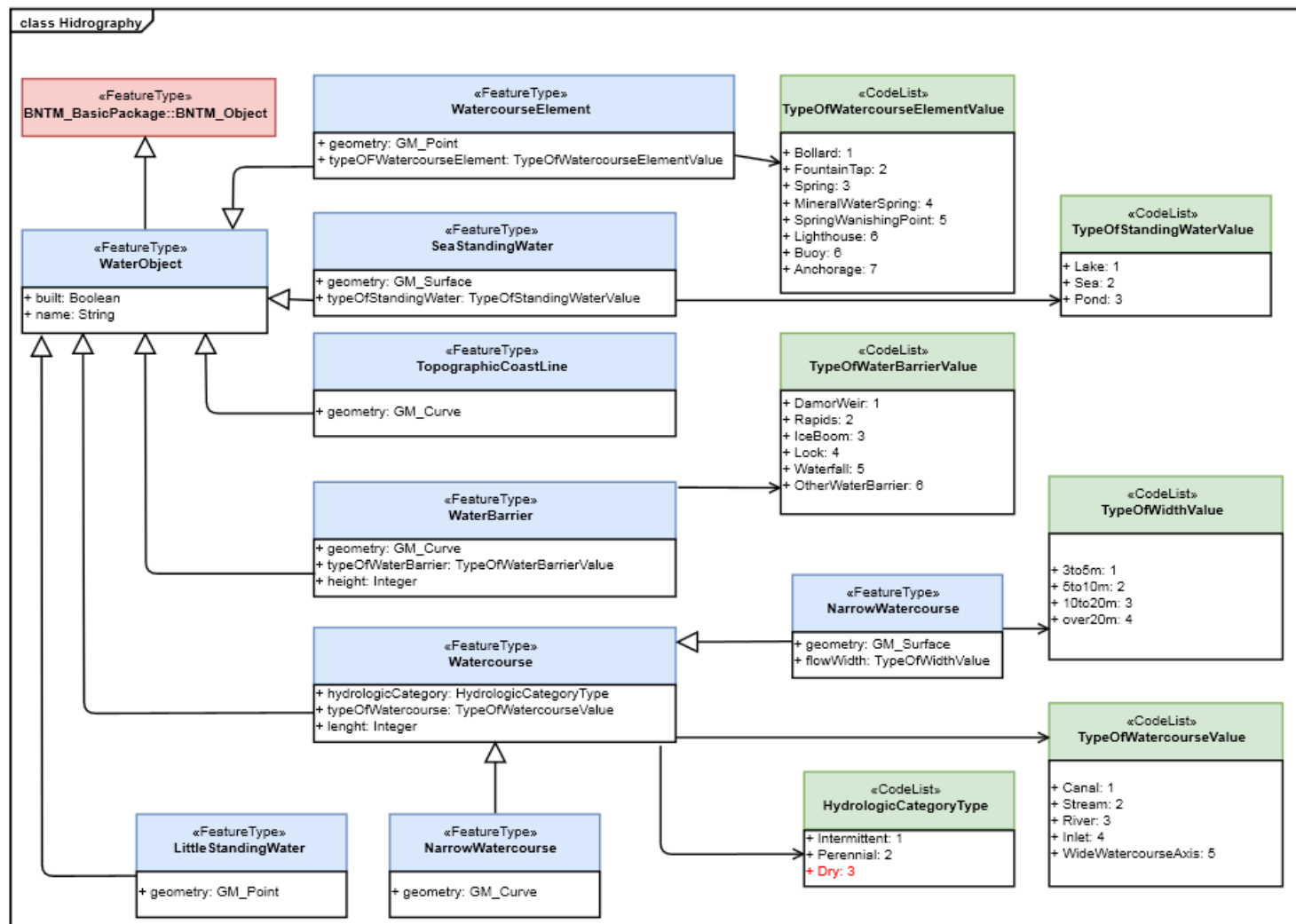
Macadam
for all weather ?



Macadam ?
for dry weather



IMPROVEMENT OF CROTIS - HYDROGRAPHY





IMPROVEMENT OF CROTIS - HYDROGRAPHY

- Examples



Stream
intermittent



Stream
perennial



Stream/gully
dry



LEGISLATION

- ***Croatian law***
 - ***INSPIRE***
 - ***DIGEST (FACC-DFDD)***
-



CONCLUSION

CROTIS :

- *Very good topographic information data model*
 - *"Alive" - 4 version to today*
 - *Needs some improvement through the time*
 - *Needs cooperation with other institutions who need their data*
 - *Base for another topographic data model (other institutions)*
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Thank you for your attention !
