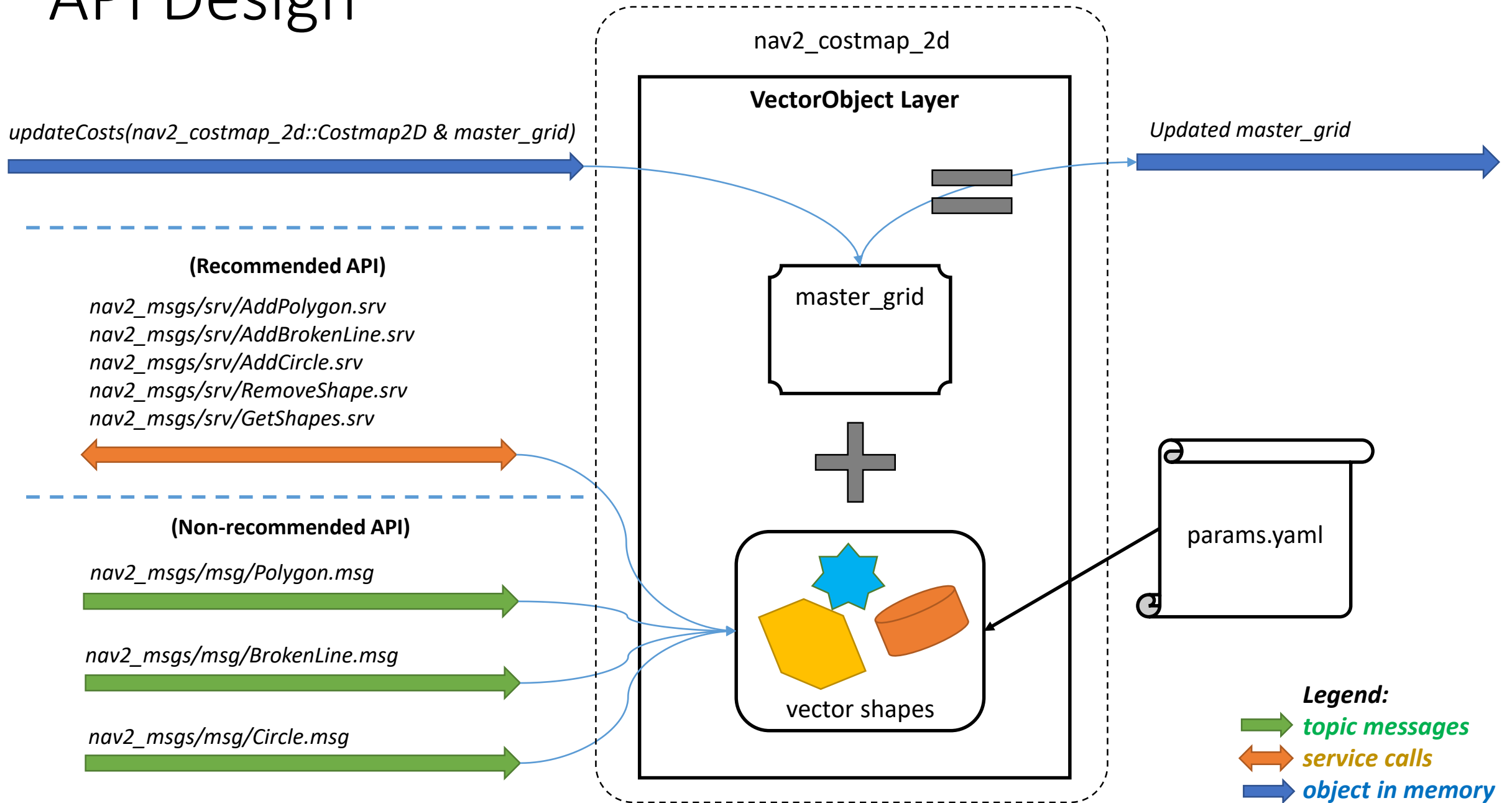


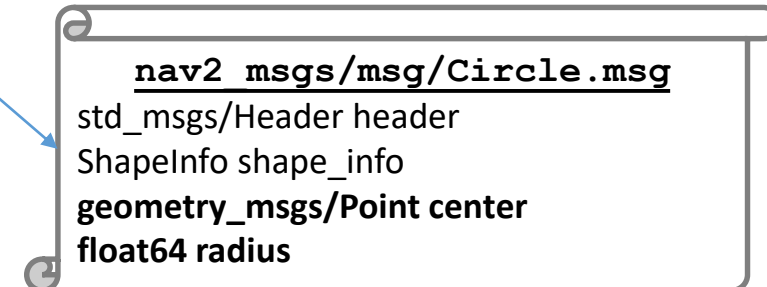
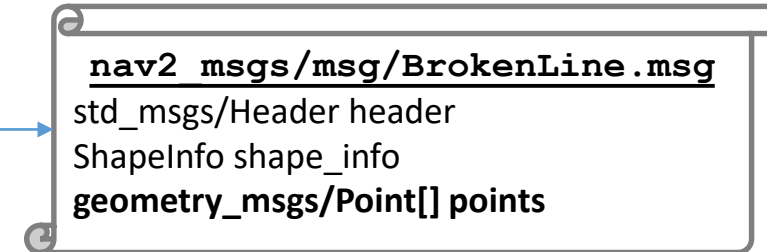
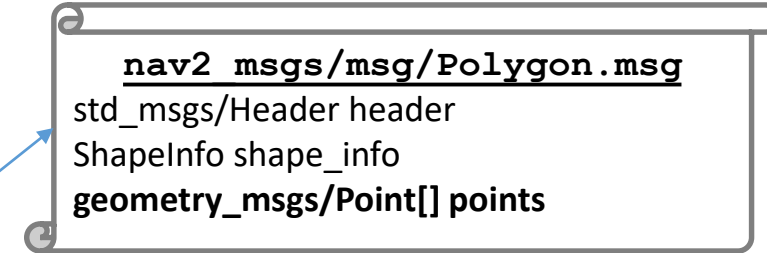
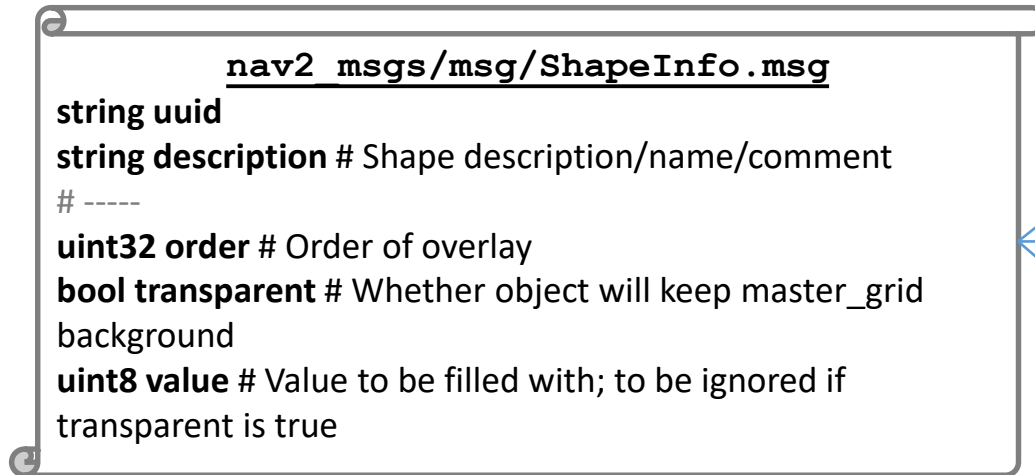
VectorObject Layer in Cosmtap2D

Alexey Merzlyakov
Samsung Research, 2023

API Design



API Details: New Messages



uint32 order
bool transparent
Refer to the [Vector Objects overlays](#)

uint8 value
(0 .. 254) range (from free cell ... to lethal obstacle);
255 – no information

API Details: New Services

Adding services

```
nav2_msgs/srv/AddPolygon.srv  
Polygon polygon  
---  
bool result  
string uuid
```

```
nav2_msgs/srv/AddBrokenLine.srv  
BrokenLine broken_line  
---  
bool result  
string uuid
```

```
nav2_msgs/srv/AddCircle.srv  
Circle circle  
---  
bool result  
string uuid
```

Removing service

```
nav2_msgs/srv/RemoveShape.srv  
string uuid  
---  
bool result
```

Information service

```
nav2_msgs/srv/GetShapes.srv  
---  
ShapeInfo[] shapes  
string[] data # shapes data for print
```

```
string[] data example:  
["polygon; points: (-1,0), (0,0), (1,0)",  
 "circle; center: (1,2); radius: 0.5"]
```

Vector Objects overlays

