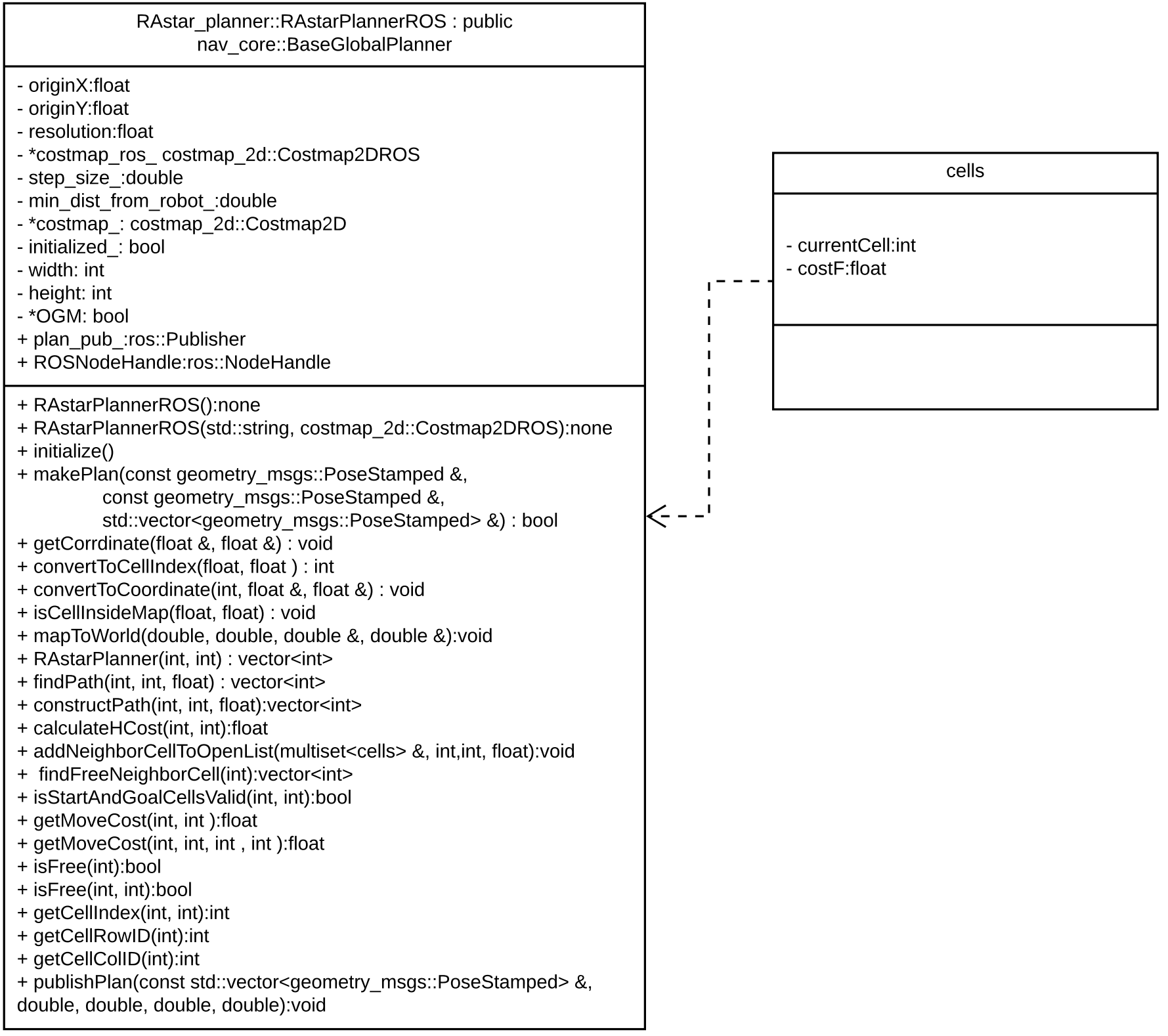
RAstar_planner::RAstarPlannerROS : public
nav_core::BaseGlobalPlanner
- originX:float
- originY:float
- resolution:float
- *costmap_ros_ costmap_2d::Costmap2DROS
- step_size_:double
- min_dist_from_robot_:double
- *costmap_: costmap_2d::Costmap2D
- initialized_: bool
- width: int
- height: int
- *OGM: bool
+ plan_pub_:ros::Publisher
+ ROSNodeHandle:ros::NodeHandle
+ RAstarPlannerROS():none
+ RAstarPlannerROS(std::string, costmap_2d::Costmap2DROS):none
+ initialize()
+ makePlan(const geometry_msgs::PoseStamped &,
const geometry_msgs::PoseStamped &,
std::vector<geometry_msgs::PoseStamped> &) : bool
+ getCorrdinate(float &, float &) : void
+ convertToCellIndex(float, float ) : int
+ convertToCoordinate(int, float &, float &) : void
+ isCellInsideMap(float, float) : void
+ mapToWorld(double, double, double &, double &):void
+ RAstarPlanner(int, int) : vector<int>
+ findPath(int, int, float) : vector<int>
+ constructPath(int, int, float):vector<int>
+ calculateHCost(int, int):float
+ addNeighborCellToOpenList(multiset<cells> &, int,int, float):void
+ findFreeNeighborCell(int):vector<int>
+ isStartAndGoalCellsValid(int, int):bool
+ getMoveCost(int, int ):float
+ getMoveCost(int, int, int , int ):float
+ isFree(int):bool
+ isFree(int, int):bool
+ getCellIndex(int, int):int
+ getCellRowID(int):int
+ getCellColID(int):int
+ publishPlan(const std::vector<geometry_msgs::PoseStamped> &,
double, double, double, double):void
cells
- currentCell:int
- costF:float