```java
1 package pl.agh.capo.utilities;
2
3 public class EnvironmentalConfiguration {
4
5     private static final boolean SIMULATION = true;
6
7     // RabbitMQ connection leads
8     public static final String ADDRESS = SIMULATION ? "127.0.0.1" : "192.168.2.101";
9     public static final String USERNAME = SIMULATION ? "guest" : "panda";
10    public static final String PASSWORD = SIMULATION ?"guest" : "panda";
11    public static final String CHANNEL_NAME = "capoRobotState";
12
13    // Empirically selected values to control robots
14    // Units consisted with International System of Units
15    public static final double ROBOT_DIAMETER = 0.29;
16    public static final double ROBOT_WHEELS_HALF_DISTANCE = 0.14;
17    public static final double ROBOT_MAX_SPEED = 0.5;
18    public static final double PREF_ROBOT_SPEED = ROBOT_MAX_SPEED / 2.0;
19
20    // Multiplier of angle to desired velocity (used to perform turning)
21    public static final double ANGULAR_VELOCITY_FACTOR = 3.0;
22
23    // Max speed multiplier determining collision free zone in Free right side solution
24    public static final double RECIPROCITY_FACTOR_OPPOSITE = 5.0;
25    public static final double RECIPROCITY_FACTOR_PRIMARY = 1.0;
26    public static final double RECIPROCITY_FACTOR_SUBORDINATED = 10.0;
27    public static final double RECIPROCITY_FACTOR_BEHIND = 3.0;
28
29    // Multiplier of half robot diameter
30    public static final double WALL_COLLISION_MARGIN_FACTOR = 2.0;
31
32    // Radius used to find VO
33    public static final double VO_ROBOT_RADIUS = 2.0 * ROBOT_DIAMETER;
34
35    // Minimum distance which allow robots to turn near each other,
36    // Additional area of VO - not quite consistent with definition
37    public static final double ACCEPTABLE_RADIUS = 1 * VO_ROBOT_RADIUS;
38
39    // Multiplier of max speed during selecting velocity in pure VO solution
40    public static final double MIN_SPEED_FACTOR = 0.2;
41
42
43
44
45
46    // Tries of selecting velocity in pure VO solution
47    // public static final int TRIES_COUNT = 500;
48 }
49
```