

# Statement of WRO® Guiding Principles and Ethics Code

Version 2024

## The WRO Guiding Principles

World Robot Olympiad<sup>™</sup> was established to help young people develop their creativity and problem-solving skills. We do this in the form of robotics competitions, but our main goals are to:

- Help young people acquire 21st century skills like creative and innovative thinking.
- Encourage young people to be our future scientists, engineers, makers and inventors.
- Expand the horizon of young people through exploration of robots and robotic systems.
- Help introduce the concept of modern science into educational activities.
- Promote robotics in STEM education worldwide.
- Have young people from all over the world to measure their skills and have fun.

We are aware that a competition usually means that those involved are driven to win. This applies to team members, coaches, parents and even to countries. We feel there is nothing wrong with that, as long as the guiding principles of the competition remain intact.

These WRO Guiding Principles are:

- Teams are encouraged to learn and master new skills while having fun together.
- Coaches, mentors and parents are there to guide the teams, not to do the work for them.
- Participating and learning are more important than winning.



# What does WRO consider inappropriate behaviour and cheating?

## Preparation for the competition:

- Coaches/parents/mentors building robots or writing software for the team.
- Teams buying solutions online and using those solutions in a competition. (hardware and/or code)
- Teams copying solutions from others and using those solutions in a competition. (hardware and/or code)
  - Exception: Teams are allowed to use the basic robot models that are provided in the LEGO Education lesson plans and adapt those for the challenge.
- Coaches/parents/mentors building and preparing things for the Future Innovators booths and/or the Robot model.

## At the competition day:

- Coaches/parents/mentors entering the competition areas.
- Coaches/parents/mentors trying to tell the team how to solve a surprise rule.
- Coaches/parents/mentors trying to help the teams during practice times.
- Coaches/parents/mentors setting up the Future Innovators booth for the team when it is not needed.
- Coaches/parents/mentors giving directions to the teams during matches, building time or Future Innovators presentations.
- Coaches/parents/mentors joining in any rules discussion with referees and judges.
- Interfering with competition tables, booths, materials or robots of other teams.

## How to address inappropriate behaviour and cheating?

- Promote the WRO Values in all tournaments, and have teams & coaches commit themselves to those values when registering.
- Communicate up front that teams can be subject for investigation if irregularities are detected.

## **Possible actions:**

- Introduce a short software & hardware check (interview) for all teams during building time, to assess if teams did the work themselves.
- Different forms or penalties are possible for misbehaviour:
  - A team may not be allowed to participate in one or more runs.
  - A team may get up to a 50% reduced score in one or more runs.
  - A team may not qualify for the next round (in case you have a qualification model).
  - A team may not qualify for the international final.
  - A team may get less points for certain aspects if there is a suspicion that the work was not done by the team members.
  - A team may be disqualified completely from the competition.
- Use the concept of yellow and red cards for teams, coaches and supporters: If someone misbehaves you can give the team a yellow card and warn the persons involved that the 2<sup>nd</sup> time they will get a red card. And a red card will result in a penalty.
  - .... Other actions that fit your competition and country



## The WRO Ethics Code for Teams

"It is not whether you win or lose, but how much you learn that counts."

#### As a team we follow these principles:

We are participating in a competition. We like to win. We want to learn. And we also want to have fun.

We want to play fair. We design our own robot and we write our own software. It is not fair if someone else does that for us.

We can only learn if we try things ourselves. Our coach can teach us things and guide us. And we can also get inspired by others.

But our coach should not do the work for us. And we do not simply copy a robot or software from someone else. We use the examples we find to design our own robot and programming.

Sometimes we fail and that is OK. Original ideas come from failing. Winning is nice but failing is part of our journey.

Team name: \_\_\_\_\_

Name & signature of Coach: \_\_\_\_\_

Name & signatures of Team members: \_\_\_\_\_



## What is OK and what is not OK in World Robot Olympiad<sup>M</sup>?

ОК	Not OK
All competitions	All competitions
We search for information online and share ideas with other people. We learn from the examples and use what we have learned in our own robot. (hardware and/or software)	We buy a solution online or we use a direct copy of another person. We use that solution in the competition. (hardware and/or software)
Our coach/mentor/parent advises us on different ways to program things.	Our coach/mentor/parent programs the software (or parts of the software) for us.
Our coach/mentor/parent shows us different ways of constructing things.	Our coach/mentor/parent builds the robot (or parts of the robot) for us.
Our coach/mentor/parent lets us find out what to do ourselves if things don't work.	Our coach/mentor/parent fixes it for us if things don't work.
Our coach/mentor/parent lets us handle issues ourselves on the competition day.	Our coach/mentor/parent discusses with the judges about the rules and decisions on the competition day.
We want to win the competition, but not by cheating or having someone else do the work for us.	We want to win the competition; it does not matter how we win it.
We adapt our strategy ourselves and repair / adapt our robots ourselves.	Our coach/mentor/parent suggests or tells us how to change our strategy and repairs / adapts our robots for us.
RoboMission	RoboMission
We try to solve the surprise rule and 2 <sup>nd</sup> Day Challenge ourselves, because we have learned all the basics and can find a solution as a team.	Our coach/mentor/parent tries to give us the instructions to solving the surprise rule and 2 <sup>nd</sup> Day Challenge after it has been announced.
Future Innovators	Future Innovators
Our coach/mentor/parent only helps us with preparing our robot model or Future Innovators booth if it is needed. (For example, if things are too heavy, if we need to learn new skills, or if something is too dangerous for us to prepare on our own.)	Our coach/mentor/parent decides what our robot model and/or our booth will look like and builds things for us even if we could make it on our own.