The ranking system is subject to change and refinement

There will be only one operator allowed at the control station, except for the “Combined UGV/UAV” scenario where you can have two.

The control station has no line of sight to the operational area (operator will be in a tent).

The operator cannot leave the control station during the trial.

For the “Autonomous reconnaissance” scenario, a safety technician (team member) in the proximity of the vehicle will be allowed.

If a participant has to abort the trial because of technical difficulties, the chief judge team might allow to repeat the trial if there is an empty start slot available.

The ranking system is hierarchical organised in three factors:

1. Primary Target: Detect as many ERICards as possible
   Number of correctly detected ERICards including their positions in GPS coordinates (minimum accuracy of 15m per position) with a minimum of false reports.
   Maximum of points == number of detectable ERICards incl. GPS positions)
   More points are better!

2. Secondary Target: Minimize the total time for task completion (TTC)
   The total time for the task completion is the sum of
   a) the time from leaving the start chute to arriving at the goal line (maximum time is the maximum time allowed for this scenario)
   and
   b) the time needed for manual interventions.

   A manual intervention starts at the moment when someone interacts with the vehicle and/or the operator console (or any other device that interoperates with the control station and/or the vehicle) and ends in the moment when the interaction is finished.

   Example:
   You touch the operator console to enter another GPS waypoint or to steer the vehicle manually.

   The time where you interact with the operator console /vehicle will be added to your time that you needed to complete the scenario.

   If you tele-operate the vehicle over the complete time of the trial you will have twice the time of an autonomous vehicle.

   Yes, this is meant as penalty! Go autonomous! ;-;

   There will be a maximum trial duration, after that the trial will be ended regardless of its state.

   Every TTC will be rounded to the next lower 5-minute value.

   Less time is better!
3. Tertiary Target: Visual Enhancement

   Number of bonus points for

   a) providing a digital map which includes a plot of the driven track and the position of the detected ERICards
      1 point for the complete plot of the track (maximum of bonus points == 1)
      1 point for each correct position of an ERICard in the map (maximum of bonus points == number of detectable ERICards)

   b) digital pictures of the correct detected ERICards in a quality that allows an easy identification of the numbers on the cards
      1 point for each correct and readable ERICard (maximum of bonus points == number of detectable ERICards)

   More points are better!

Score formula := detected ERICards x 1.000.000
                 + 1.000.000 - (floor(total time for task completion / 5 minutes)) x 100
                 + bonus points

A higher score is better!

Please be a sportsman and play fair!

If there are weaknesses in this ranking system feel free to tell us.

If the chief judge team has the impression that someone is trying to cheat, fleece or be “very clever” it will react in an appropriate manner.