#### INTERNATIONAL GLIDING COMMISSION (IGC) - PROPOSAL FORM

Submit the proposal via email to IGC Secretary.

#### Date: December 28, 2018

Proposal submitted by: Belgium 08

This proposal is a:



mark the boxes with  $\star$  as appropriate

Type the text changes in the space below (show deletions as strike-through and additions as bold underlined): 7.4.1 Definitions

Start Point - is the midpoint of the Start Line or center of the Start Ring.

Designated Start - is the use of a set of possible start times, beginning with the original time of opening of the Start (see 7.4.5a), and including additional time at regular intervals thereafter.

## Start Time - is either:

the time the competitor crosses the Start Line or leaves the Start Ring,

interpolated to the nearest second., or

\* if the Designated Start option is in effect, the Designated Start time immediately before the time the competitor crosses the Start Line.

#### 7.4.2 Start Options

The Organisers may implement the Designated Start option. To do this, the Organisers must make an announcement at Briefing and publish the "Designated Start Interval" on the Task Sheet. The published interval must be 10, 20 or 30 minutes.

Start anywhere along the ring is possible. Distance of the first leg is taken from the fix where the competitor leaves the ring to the fix where he takes his first turn point. Coming back into the ring does not cancel the start.

### 7.4.3 Start Geometry

The Organisers shall select which start geometry will be used during the contest. The Start geometry selected for the Championship shall be stated in the Local Procedures. The choices are:

- a. Start Line: A line, of defined length, perpendicular to the course to the first Turn Point, or the center of first Assigned Area.
- b. Start Ring: A 15 Km radius circle, centered on a Start Point, and of sufficient radius to enclose enclosing the contest site and all release areas.

### 7.4.4 Validity of Starts

- a. A Start is valid if the Flight Log shows that the glider crossed the Start Line in the direction specified on the task sheet or leaves the Start Ring, after the opening of the Start.
- b. If there is no proof that the competitor had a valid start after the opening of the Start in his class, the start may nevertheless be validated if the Flight Log shows a valid fix within 500 meters of the Start Line or the Start Ring after the opening of the Start. The time of crossing shall be taken from that fix, but a penalty that depends on the distance from that fix to the Start Line or Ring shall be applied. If no such event is detected the competitor shall be deemed not to have a valid start.

### 7.4.5 Starting Procedures

The start shall normally be opened 30 minutes after a launch has been offered to the last sailplane in the class that is currently being launched. This time period may be reduced to 20 minutes if the distance from the center of the release area to the Start Point or Start Ring is less than 15 km.

a. The time of opening of the Start shall be specified to a whole minute, and announced by radio. The radio procedures for announcing the start shall be detailed in the Local Procedures. At the announced opening time, the start will open.

If a delay is needed, the new opening time should be announced at least 3 minutes before the superseded opening time.

- b. A pre-start altitude (MSL) limit may be imposed and shall be specified at the briefing. After the start gate is opened and before making a valid start, the pilot must ensure at least one fix below the specified pre-start altitude limit. Failure to do so will be penalized.
- c. b. The start line or start ring shall normally be closed at the end of legal daylight, or when all competitors are accounted for. Conditions for closing the start at other times must be described in detail in the Local Procedures. After the closing of the start line or start ring, no starts will be valid.
- 7.4.6 Multiple Starts

In the case of multiple valid Starts, the competitor has the right to be scored using the Start that yields the best score, **for as long as this Start complies with 7.4.7.** A Start made after a properly completed Task will not be considered valid. A competitor may claim only the first task completion each day.

7.4.7 Communication of Start Times

Pilots shall communicate their start times to the Organisers within 30 minutes of their last valid start to an accuracy of two minutes and the Organisers shall publish tarting times as quickly as possible. Penalties may be given for non-compliance or incorrect notification.

7.4.7 Event Marker Procedure

When ready to take a start, the competitor will press the event marker on his primary and BU flight recorders. Time between primary and BU event markers must be less than 1 minute and primary should always be depressed first. The event marker can be pressed inside or outside the Start Ring. The competitor has 2 minutes after the first event marker time to take a valid start. If a valid start is not taken within those 2 minutes, the pilot must wait 15 minutes after the first event marker time to restart the procedure.

7.4.8 Delta Start Altitude

A Delta Altitude Start to Finish will be provided at the daily briefing and on the Task sheets. Adapting this "Delta Altitude" to the weather situation will be the responsibility of the Contest Director. This defined altitude between the Start and Finish altitudes shall not be less than 500 meters (included) and not exceed 2000 meters (included). Starting altitude is free, below maximum Start altitude, but competitors must finish within this delta altitude and above the minimum Finish altitude. A 1 point per meter penalty is applicable for pilots finishing outside this Delta Altitude or below the minimum Finish altitude.

## 7.4.9 <u>Start Speed</u> <u>Maximum speed, crossing the start ring is limited to 150 km/h ground speed.</u>

Type the reasons in the space below:

The aim of this new start procedure is to break up the initial gaggle formations, which are dangerous and frustrating to most of the pilots. Leeching is not the natural behaviour of the majority of the pilots, but is a direct consequence of the current rules.

We want to keep the procedure as simple as possible for the pilots, but at the same time; we want to render the overall situation picture so complex that pilots and ground teams will abandon the idea of trying getting it! One condition to get this possible is the approval of the proposal Belgium 02 (FLARM/OGN...). A 15 Km radius Start Circle requires to keep an eye to the equivalent of a 94 Km line. Add to this that the target of a leeching candidate has the possibility to start from a much wider range of altitude than before (pilots use to start as high as possible depending of the cloud base or the maximum Start Altitude) and you make it almost impossible for a single pilot to control the start of his competitors without external aid. The Delta altitude aims also at drastically reducing the danger of the current Start procedure, where congestion close to cloud base or maximum Start altitude is frequent, if not the norm. With this new start procedure, including a maximum speed task, we think that the pre-start altitude is no longer relevant and would add complexity, hence its removal.

The 15 Km radius Start Ring, start anywhere along the Ring offers an enormous area for very different start strategies and, at the same time, remains close to the airport. There is no obligation to center it on the airport for as long as it covers the airport and the release areas. This center should however not be too far from the airport to avoid extending the global Start area that includes all the concerned classes. Gliders could come from any direction within those Start circles and at different speeds, but this is compensated by the fact that pilots will have a lot less to look inside.

There has been lots of discussions about the best effective way to use the Event Marker in the Start procedure. The way we propose it allows the pilot to take a Start when he thinks the conditions are optimum for him, and not sometime in the future, when conditions might have changed. In 5 to 10 minutes conditions often change dramatically and a pilot can be confronted to less than optimal conditions. Our small window should avoid this kind of lottery Start.

If a pilot finds himself alone, he can start at any altitude and in the best conditions for him.

If he is followed by a group, or another pilot, he does not want to guide during the whole Task; he can simulate a start without depressing the Event Marker, fly away for 2 to 3 minutes and turn back. The leeching candidates will most probably follow him to notice he is turning back. But, they have depressed the Event Marker and he had not. They are almost condemned to press on or wait another 15 minutes after they had pressed the Event Marker, while their target is still free to start whenever he wants.

This example will probably be witnessed when this new procedure will take effect, but soon pilots will understand that trying to follow a targeted pilot has become way to complicated and they will reverse to their own strategy; which is in fine the goal of these changes. This will not totally suppress the formation of gaggles, sometime during the flight, but the strategies will differ again at every Turn Point / Turn Area and for the Finish in function of the Finish altitude; which will be different for every pilot, because of their Delta altitude.

The maximum one minute interval between the button press of the Event Markers from the Primary and Back Up leaves plenty of time to the pilot to accomplish the maneuver. The submission of both Primary and Back Up Flight Logs for evaluation on each Championship Day on which a launch was made prevents competitors using both flight recorders differently, pushing the event markers at different times to enable them to start at different times, effectively bypassing the new rule.

One can argue that the workload on the pilot is increased with this procedure. We do not think so. For sure, it will take a few start to get accustomed to it, but it will be compensated by everything it has suppressed. The time and altitude at which the glider took its last Start is available on all current flight computers. Those will rapidly modify their software and make the Delta Finish altitude available, should these proposals be accepted.

# Provide supporting data or reference to external documents for the proposed technical amendments in the space below:

The proposal should be applicable from: As Soon As Possible				
Sporting Code Volume:	Annex A to Section 3 - Gliding			
Version/Edition:	2018 Edition valid from 1 October 2018			
Heading of section:	7.4 STARTING			
Number & heading of the paragraph:	7.4.1 to 7.4.9			

See the next page!

Approved Amendment (if applicable):

Final Wording of Proposal:

Overall Votes Cast:	For:	Against:	Abstain:	
ADOPTED:	Yes:	No:		