CANOE SLALOM
GATES
HOMOLOGATION MANUAL

Version #2 – Updated on May 2019

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I. INTRODUCTION

This manual describes the ICF homologation process concerning the gates for canoe slalom.

The homologation process is conducted by an ICF experts' panel (ICF Technical committee members, ICF staff, external advisors) nominated by the ICF Secretary General.

Homologation represents a "system of evaluation" that is designed to guide the development and ensure high-standard equipment dedicated to canoeing suitable for ICF competitions and venues. It is a process for certification that provides a forum for constructive discussion between ICF experts and providers. The resulting certification represents an ICF stamp of approval for usage of equipment/facilities specific to the environment intended.

The homologation process takes place in two stages:

- Stage 1: Homologation technical file
- Stage 2: Test session on the samples sent by the providers

II. REASON TO COMPLETE AN ICF HOMOLOGATION

For several reasons, the ICF shall regularly pass to some national or international sport stakeholders (Eg. Organising committees for Olympic Games, Continental Games, National Federations) a list of technical products and their recognized manufacturers specific to canoeing.

Through the homologation process the ICF wants to reinforce the quality control of the technical products and create a strong link with the manufacturers.

III. HOMOLOGATION COST

The manufacturer will provide the needed samples and will pay the ICF a test fee of 500€.

This fee must be paid to the ICF by the manufacturers before the delivery of homologation results by the ICF.

IV. STAGE 1 – HOMOLOGATION TECHNICAL FILE AND SAMPLES TO PROVIDE

The manufacturer shall provide to the ICF the homologation technical file and some samples for the testing phase.

A. Homologation technical file

The technical file should include the following items:

- Short introduction of the company
- General presentation of the proposed gate: history of development of the product, main strengths etc.
- List of materials used in construction of the pole and the crossbar.
- Technical scheme of a pole and the crossbar including size, weight, fixation system etc.
- If available:
    - Commercial catalog (electronic or online)
    - List of main customers and their technical appreciation of the product.
    - User manual

The Homologation technical documents should be emailed to the ICF headquarters attention: (Simon.toulson@canoeicf.com, cyril.nivel@canoeicf.com and jmprono@gmail.com)

B. Samples to provide

The manufacturers must provide the ICF with **3 red** poles, **3 green** poles, **2** crossbars and **2** gate panel numbers. These products must be sent to the ICF (the delivery address will be confirmed by the ICF on request to cyril.nivel@canoeicf.com).

V. STAGE 2 – TEST SESSION

A. Principles

This test session will be conducted by the ICF and the nominated experts' panel.

The manufacturers are not able to be present during this test session.

All results will be provided to the manufacturers without public communication.

Discussion between the ICF experts' panel and the manufacturer may be requested by either party:

- The ICF during the completion of the testing phase for additional information.
- The manufacturer after the receipt of the homologation report.

B. Goals

The test session has three main assessment goals:

- Measurement: each pole and each crossbar must comply to the ICF rules (see summary in appendix 1).
- Motion sensibility for a pole (targeted time to return motionless after an impact: maximum 45s with a margin of +/- 5 degrees)
- Stress test:
  - Paddle (shaft and blade) impact on a pole
  - Mechanical strength of the crossbar

Furthermore, the ICF will assess, based on technical information provided, feedback from customers and simulation software:

- Impact of the temperature and the temperature changes on a pole (deformation)
- Long term use on a venue

VI. CONCLUSION OF THE HOMOLOGATION PROCESS

Following the completion of the two stages, the ICF experts shall deliver a report to the ICF Secretary General. Based on this report and his conclusion, the ICF Secretary General will officially inform the provider of the results of the homologation process.

APPENDIX 1 – 2019 ICF RULES AND REGULATION FOR CANOE SLALOM GATES

A. 2019 ICF competition rules – article 8.3 "Gate requirements"

8.3.1 - The gates consist of two (2) suspended poles painted with green and white rings for downstream gates and red and white rings for upstream gates, with the bottom ring always white, each ring is 20 cm high.

8.3.2 - A black band of a minimum width of 2 cm and maximum width of 2.5 cm is placed around the base of each pole.

8.3.3 - The gate numbers will be displayed according to the CSLC template on the white ring, second from the bottom.

8.3.4 - Competition Logos and/or advertising agreed with the CSLC may be displayed on any of the rings above the bottom four (4) rings.

8.3.5 - The width of a gate is 1.2 meters minimum to 4.0 meters maximum measured between the poles.

8.3.6 - Poles must be round and 1.6 to 2 m long by 3.5 to 5.0 cm in diameter, and of sufficient weight that motion caused by wind is not excessive.

8.3.7 - The height of the poles above the water should be such that it provides fair and reasonable conditions for negotiation whilst simultaneously satisfying the aims of the Course Designers.

8.3.8 - As an indicator to the Course Designers and Chief Judge the pole height should be approximately 20 cm above the surface of the water and should not be set in motion by any surge of water.

8.3.9 - The pole adjusting system must enable easy adjustment for each pole on every gate.

8.3.10 - Gates must be numbered in the order of negotiation.

8.3.11 - The gate number panels must measure 30 cm x 30 cm. The numbers must be inscribed on both sides of the panels using written in black on a yellow or white background. Each number and letter must measure 20 cm in height and 2 cm in thickness. On the side of the panel opposite the direction of correct negotiation, there is a diagonal red line from the bottom left to the top right.

8.3.12 - At each Transmission position, the number sequence of the gates being judged must be clearly displayed.

B. Additional ICF technical requirements for manufacturers

1. Cross bar

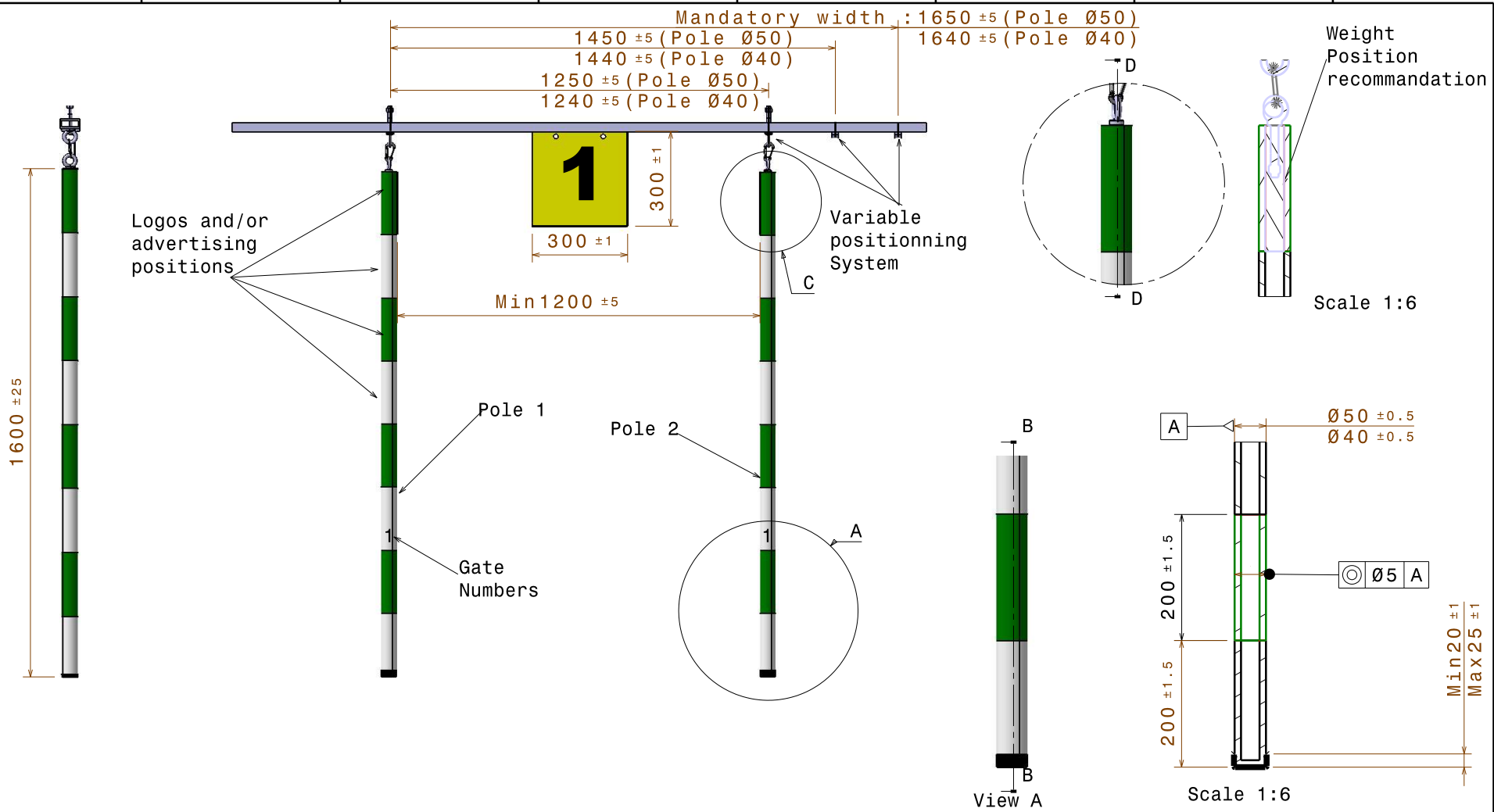
- Crossbar width: 2m maximum
- The crossbar must allow the mandatory gate width 1.2m, 1.4m and 1.6m.

2. Pole

- **Pole weight:**
  - For ICF World Cups, ICF World Championships and Olympic Games: the weight of one pole must be 2.5 kg.
  - For other competitions and training: the ICF recommends a minimum pole weight of 1.7kg
  - The pole must be internally weighted. The additional weight must be fixed at the top of the pole to reduce the pendulum effect.

- **Pole length:**
  - All new homologated poles must be 1.6 m from the hanging point to the bottom of the pole.

APPENDIX 2 – GATE DESIGN



Minimum/Maximum pole weight : 1.7kg/2.5kg

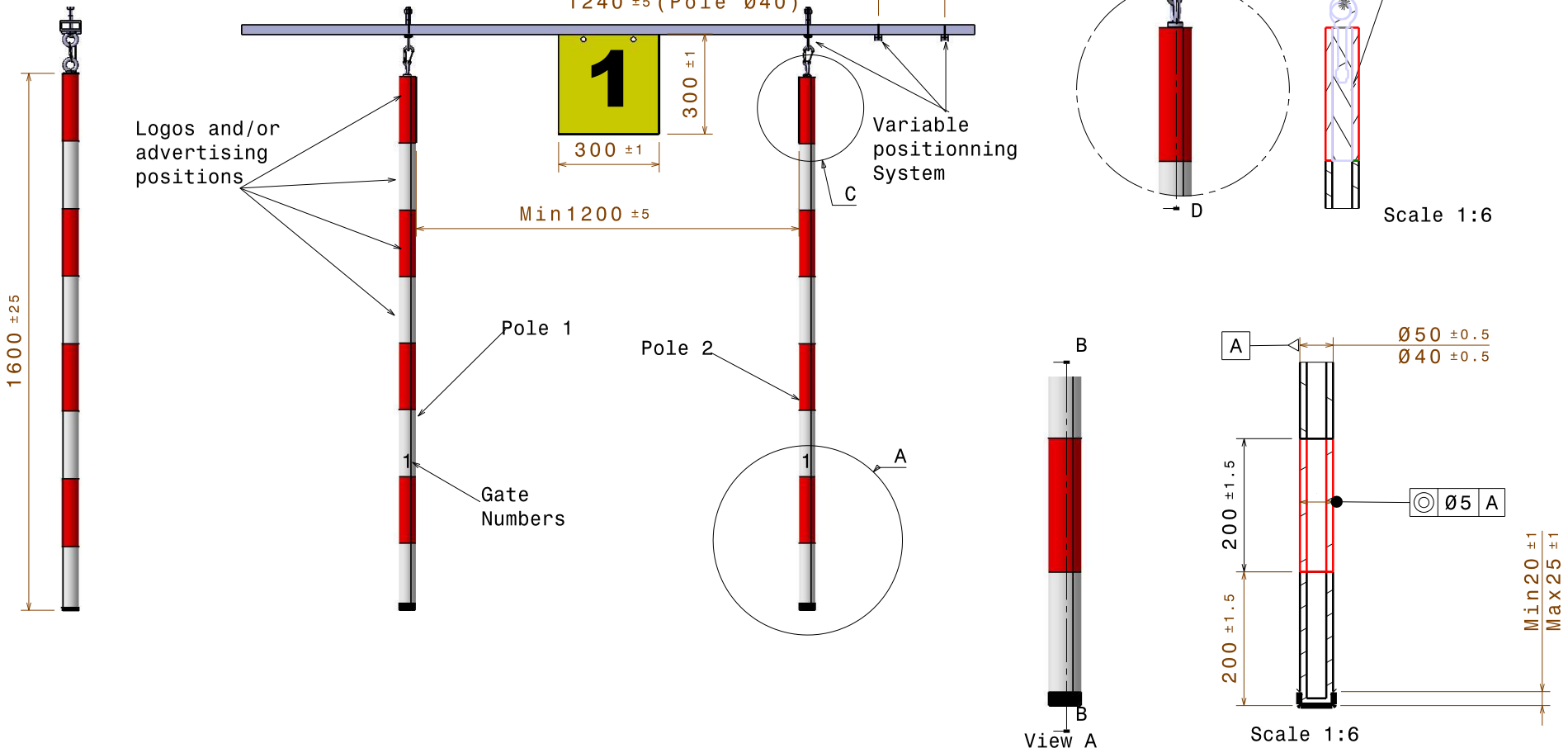
Mandatory width 1600+/-5mm (width between interior pole)

Recommendation: variable positionning pole system (every 200mm)

The maximum width of the gate is 4000+/-5mm,to make width more than 1600mm,the assembly of 2 bars will be realize.

All cotations in mm

DESIGNED BY: Bourhis DATE: 01/06/2019	Slalom Gate (Green)		
CHECKED BY: Nivel and Prono DATE: 01/06/2019			
SIZE A3	International Canoe Federation		
SCALE 1:12	Tolerance ISO 2768-mk	DRAWING NUMBER Version 6.0	SHEET 1/1



Minimum/Maximum pole weight : 1.7kg/2.5kg

Mandatory width 1600+/-5mm (width between interior pole)

Recommendation: variable positionning pole system (every 200mm)

The maximum width of the gate is 4000+/-5mm,to make width more than 1600mm,the assembly of 2 bars will be realize.

All cotations in mm

DESIGNED BY: Bourhis	Slalom Gate (Red)
DATE: 01/06/2019	
CHECKED BY: Nivel and Prono	
DATE: 01/06/2019	
SIZE A3	International Canoe Federation
SCALE 1:12 / Tolerance ISO 2768-mk	DRAWING NUMBER Version 6.0 / SHEET 1/1