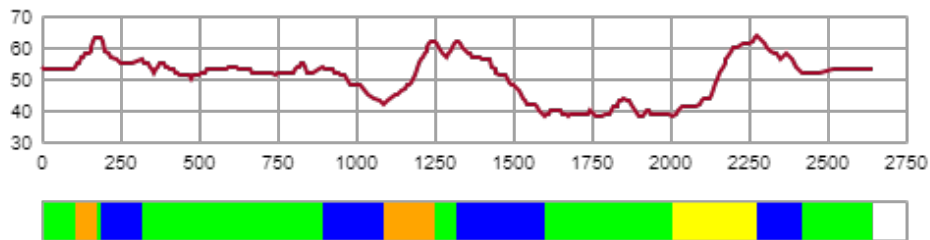




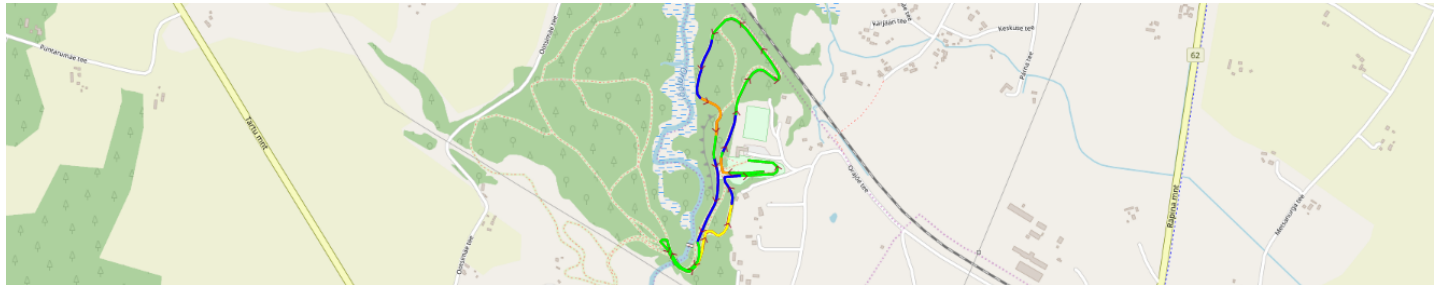
CERTIFICATE
OF FIS HOMOLOGATED CROSS-COUNTRY COURSE
FIS CROSS-COUNTRY COMMITTEE

(1) Registration number: 19/101.02/2.5
(2) Name of the competition site: Mammaste Sport Center
(3) Name of city/region: Mammaste Estonia
(4) Organizer: Mammaste Sport Center
(5) National ski association: Estonian Ski Association
(6) Contact person in the organizing committee: Arne Tilk
(7) Homologation inspector: Vahur Leemets
(8) Name of course: Mammaste 2,5km
(9) Competition level for course: COC

Course length:	2,642m	Height difference (HD):	26m	Lowest point:	38m
Course category:	D	Maximum climb (MC):	26m	Highest point:	64m
		Total climb (TC):	90m		



A-climb B-climb C-climb descent undulated terrain



FIS Office

Mignerey, Pierre
FIS International Ski Federation
Blochstrasse 2 / Postfach
CH - 3653 Oberhofen

FIS Stamp



FIS Homologation
Responsible

Bjørkestøl, Hermod

Date of Issue

24.09.2019

Valid until

30.06.2024

(10) Overview of the uphill:

	No.	PTC	% of TC
- major climbs	1	26	28.9
- shorter climbs	3	29	32.2
- descents	4	3	3.3
- undulated terrain	6	32	35.6

(11) Stadium area:

		Indoor working room:	
Fixed stadium area	yes	Timekeeping	yes
Fixed building	yes	Announcer	yes
Temporary stadium	no	Jury	yes
Temporary building	no	Race office	yes
Good infrastructure (access, parking, media, etc.)	yes		
Skitesting area along course/near stadium	yes		
Warm up track near the stadium	yes		

(12) Category for the stadium and course layout:

	Interval	Sprint	Skiathlon	Relay	Mass start
Stadium suitable for following competition formats	yes			yes	yes
Course suitable for following competition formats with					
a) Classical technique	yes			yes	yes
b) Free technique	yes			yes	yes
Course suitable for relay and skiathlon competition					
a) On same course					
b) Combined on different courses (C+D or D+D)					

(13) Possibility of snow making:

100% covered with artificial snow

(14) Map Material:

Orienteering map, triangular measurement map

(15) Source of accurate elevation data:

GPS, Triangular measurement

(16) Safety considerations:

(17) General remarks:

(18) Date of first inspection: 2019/7/24

(19) Date of final inspection: 2019/9/19

(20) Summary of terrain characteristics

	#	at m	PHD (m)	PTC (m)	grad. (%)	avg. grad.(%)	
A-climb ■	1	2,005	26	26	11.7 - 31.2	9.6	
	total			26			28.9% part of TC
B-climb ■	1	106	9	9	0.0 - 39.6	13.0	
	2	1,089	9	9	13.9 - 19.3	9.3	
	3	1,186	11	11	0.0 - 36.6	16.9	
	total			29			32.2% part of TC
C-climb ■	total			0			0.0% part of TC
undulated terrain ■	total			32			35.6% part of TC
	total climb			90			