



**CROSS  
COUNTRY**

**FIS TD Seminar Sundsvall October 2018**



# ICR Updates

Seasons 2017/18 and 2018/19

Anna Rosa

# FIS Race Director Assistant - RDA [302.1.1]

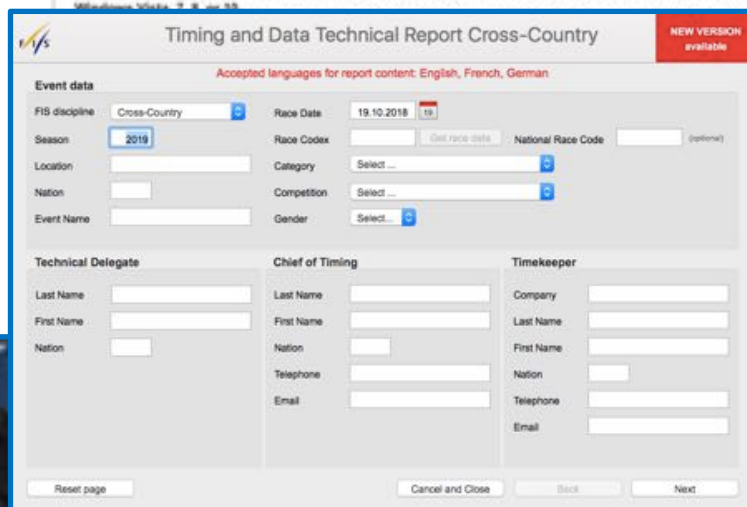


- At OWG /WSC / WC
- Not a voting member of the jury but shall act as Race Director in case of RD absence



# Timing and Data Technical Report [302.3.4]

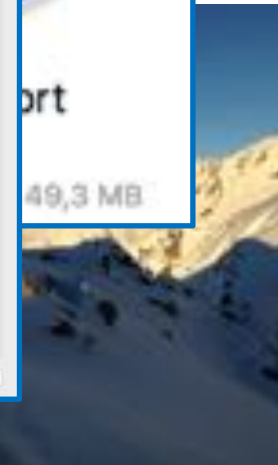
<https://data.fis-ski.com/services/timing-and-data/timing-and-data.html>

This screenshot shows the "Timing and Data Technical Report Cross-Country" form. It includes a "NEW VERSION available" badge. The form is divided into several sections: "Event data" with fields for FIS discipline (Cross-Country), Race Date (19.10.2018), Season (2019), Location, Nation, and Event Name; "Technical Delegate" with fields for Last Name, First Name, and Nation; "Chief of Timing" with fields for Last Name, First Name, Nation, Telephone, and Email; and "Timekeeper" with fields for Company, Last Name, First Name, Nation, Telephone, and Email. Accepted languages for report content are listed as English, French, and German. Buttons at the bottom include "Reset page", "Cancel and Close", "Back", and "Next".



This screenshot shows the "Timing and Data Technical Report Cross-Country" form, specifically the "Hardware and Software" section. It includes a "NEW VERSION available" badge. The section is divided into "Hardware and Software" and "Result Software". The "Hardware and Software" section has a table with columns for Brand, Model, and Serial number, and rows for System A Timer (at finish), System B Timer (at finish), Timer A Start (if used), Timer B Start (if used), Start Device, Finish Cells A, Finish Cells B, Photo Finish A (if used), and Photo Finish B (if used). The "Result Software" section has fields for Software company and Software name/version. There are also fields for Connection to start (cable, radio or other) for System A and System B, and a checkbox for Voiccom. Buttons at the bottom include "Reset page", "Outputs", "Cancel and Close", "Back", and "Save XML".



# CROSS TD report

Page  
1 2 3 4 5

Using these buttons entered data will not be saved

**5. Results / Ergebnisse**

Carried out according to ICR Durchführung gemäss IWO	<input type="radio"/> Yes / Ja <input type="radio"/> No / Nein	Comments
Production and distribution of results/ Erstellung und Bereitstellung der Ergebnisse	no issue for this competition ↓	

**6. Timing / Zeitnahme**

Timing Report Zeitnahmebericht	coming soon	
Timing problems Probleme Zeitmessung	<input type="radio"/> Yes / Ja <input type="radio"/> No / Nein	Remarks timing problems Bemerkungen Probleme Zeitmessung

**7. Sanctions and Protest/Sanktionen und Proteste**

Protests Proteste	<input type="radio"/> Yes / Ja <input type="radio"/> No / Nein	Art. ICR / Remarks Art. IWO / Bemerkungen	
Sanction cases Sanktionsfälle	Enter FIS code or athlete/relay name for others use "Add an other person/team"	No sanction cases added.	

**8. Competition schedule / Wettkampfzeitplan**

Cancellation Abbruch	<input type="checkbox"/>	Comment
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**XML [317.2.5]**

All official results must also be electronically transmitted to FIS in XML format.



## Jury duties [303.4]

before arrival to competition site / on  
competition site before competition  
competition / during competition **are related**  
**but not limited to...**



## Reimbursement of Expenses [301.1.1]

The competition officials have a right to reimbursement for **all appointment related travel expenses** (including but not limited to airfare, baggage fees, car rental or mileage, airport transfer, visa, health insurance, airport parking and highway taxes)





## Men = Ladies

Individual Sprint Men	1 – 1.8	0.5 – 1.8
<del>Individual Sprint</del> Ladies	<del>0.8 — 1.6</del>	<del>0.4 — 1.6</del>
Team Sprint Men	2x(3-6) x 1 – 1.8	0.5 – 1.8
<del>Team Sprint</del> Ladies	<del>2x(3-6) x 0.8 — 1.6</del>	<del>0.4 — 1.6</del>

As a consequence same goes for OWG, WSC, JWSC, WC and FIS Competitions





# JWSC and U23 WSC Programmes

## 310.3.3

### JWSC

For JWSC competitions the formats, distances and techniques will be

	Ladies	Men
Interval Start	5 km F/C*	10 km F/C*
Skiathlon	<del>5 km C + 5 km F</del>	<del>10 km C + 10 km F</del>
Mass Start	15 km C/F*	30 km C/F*
Sprint	<del>0.8-1.0 – 1.6-8 km C/F*</del>	1 – 1.8 km C/F*
Relay	4 x 3.3 km C/F	4 x 5 km C/F

\* Interval Start and Sprint competitions will alternate techniques each year.

Sprint and Mass Start competitions will be held in the same technique.

## 310.3.4

### U23 WSC

	Ladies	Men
Interval Start	10 km F/C*	15 km F/C*
Skiathlon	<del>7.5 km C + 7.5 km F</del>	<del>15 km C + 15 km F</del>
Mass Start	15 km C/F*	30 km C/F*
Sprint	<del>0.8-1.0 – 1.6-8 km C/F*</del>	1 – 1.8 km C/F*

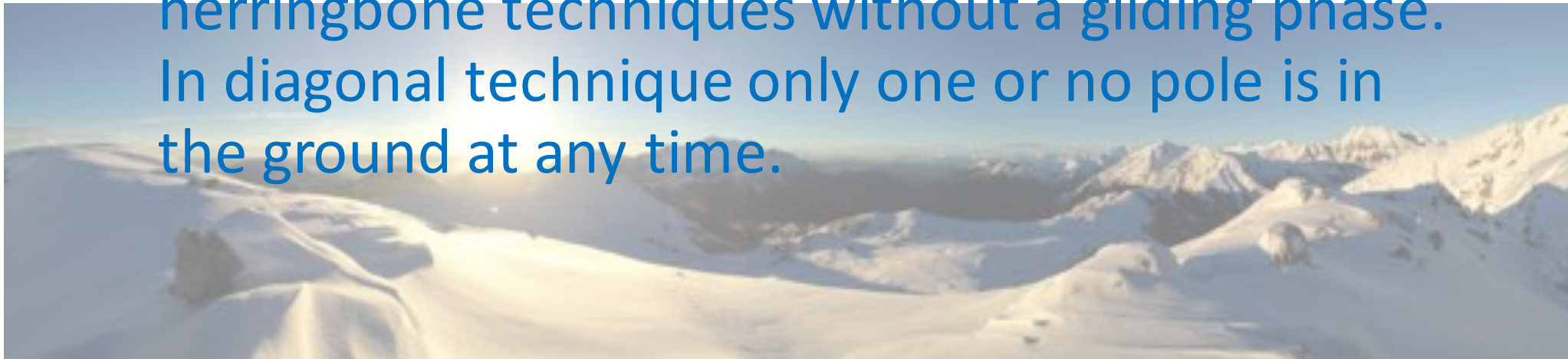
\* Interval Start and Sprint competitions will alternate techniques each year.

Sprint and Mass Start competitions will be held in the same technique.

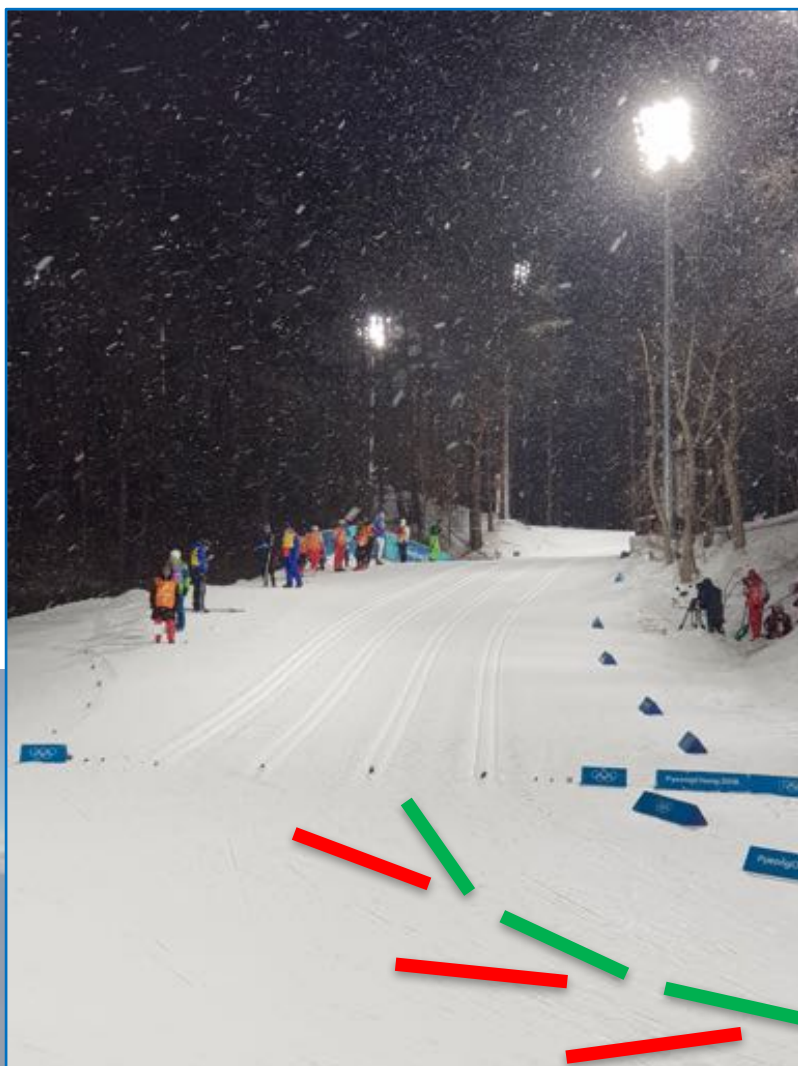


## Classical technique final version [310.2.2.2]

- Classical technique includes the Diagonal Stride techniques, the double poling **with or without diagonal kick**, herringbone techniques without a gliding phase, and turning techniques.
- **Diagonal Stride technique is comprised of alternating diagonal movements of both arms and legs and includes diagonal stride and herringbone techniques without a gliding phase. In diagonal technique only one or no pole is in the ground at any time.**



## Turning technique final version [310.2.2.3]



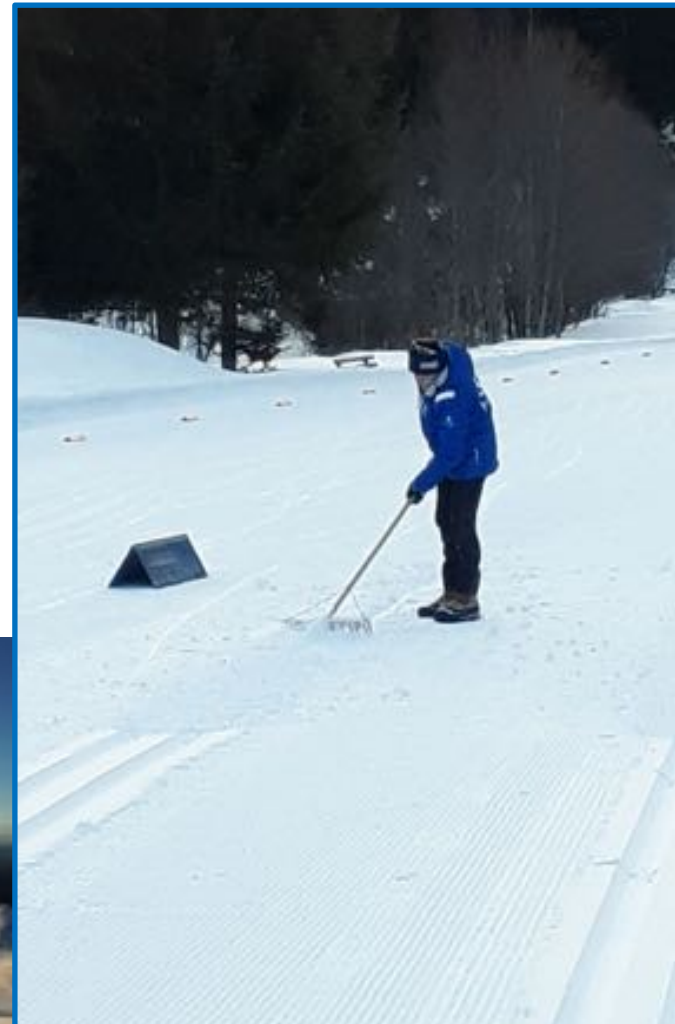
Turning techniques comprise steps with the **inner ski** and pushes with the **outer ski** in order to change skiing directions. The sections of the course where turning techniques are allowed must be clearly marked.





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# Turning zone



## Test area [311.1.4]

A test area should be prepared and clearly marked along or near the competition course.



## The homologation [311.2]

All FIS Cross-Country competitions should be carried out on homologated courses. **Exceptions are: popular competitions, Rollerskiing competitions, substitute courses if approved by the TD.** The details on homologation procedure are described in FIS Cross-Country homologation manual [311.2.1]





## Maximum climb definition [311.2.4.2]

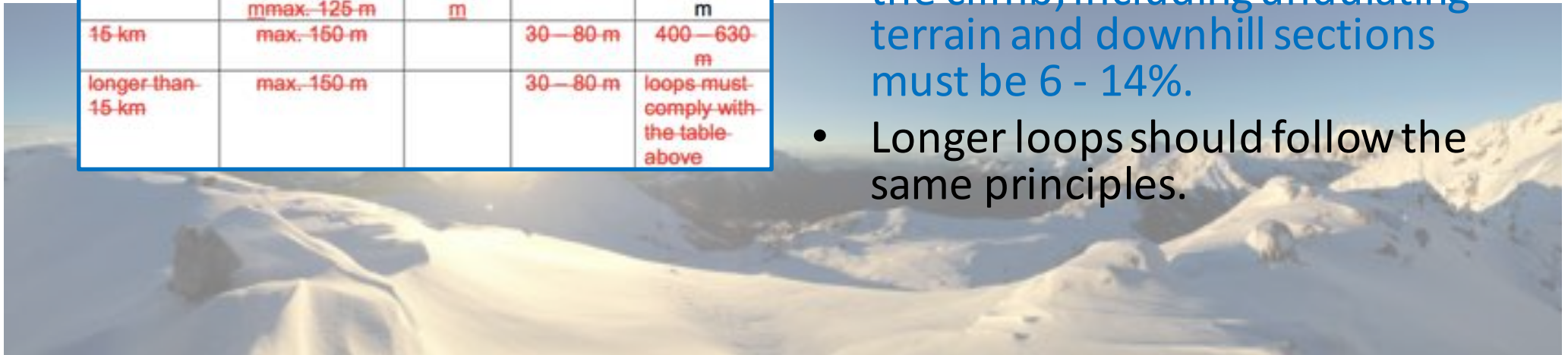
MC is the climb with the highest partial total climbheight difference (PHD)



# Norms for Cross-Country courses [311.2.5]

Course distance (loop length)	Minimum climb (in PHD m) <sup>2</sup> HD	HD	MC	TC
Sprint F	max. 50 m	max. 50 m	0 – 30 m	0 – 60 m
Sprint C	max. 50 m 1 climb > 15 m	max. 50 m	10 – 40 m	20 – 60 m
2.5 km	max. 50 m 1 climb > 25 m	max. 50 m	30 – 50 m	75 – 105 m
3.3 km	1 climb > 25 m max. 65 m	max. 65 m	30 – 65 m	100 – 140 m
3.75 km	1 climb > 30 m max. 80 m	max. 80 m	30 – 80 m	110 – 160 m
5 km	1 climb > 30 m max. 100 m	max. 100 m	30 – 80 m	150 – 210 m
7.5 km	2 climbs > 30 m max. 125 m	max. 125 m	30 – 80 m	200 – 315 m
8.3 km	Max 3 climbs > 30 m max. 125 m	max. 125 m	30 – 80 m	210 – 350 m
10 km	3 climbs > 30 m max. 125 m	max. 125 m	30 – 80 m	250 – 420 m
15 km	max. 150 m		30 – 80 m	400 – 630 m
longer than 15 km	max. 150 m		30 – 80 m	loops must comply with the table above

- <sup>2</sup> A climb is defined as an uphill with a gradient from 9 - 18 %, broken up with short undulating sections less than 200 meters in length, steep uphill = 4m < PHD < 10m, gradient > 18%, or a downhill that does not exceed 10 m partial height difference (PHD). The average gradient of the climb, including undulating terrain and downhill sections must be 6 - 14%.
- Longer loops should follow the same principles.



# Course width categories [311.2.6]

Category	Minimum course width			Used for
	Uphills	Undulated terrain	Downhills	
A	3 m	3 m	3 m	Interval <u>S</u> Start C
B	4 m	4 m	4 m	Interval <u>S</u> Start F Relay C
C	6 m	6 m	6 m	Mass <u>S</u> Start C Skiathlon C part Pursuit C Relay F Sprint C Team sprint C
D	9 m	7,5 m	6 m	Mass <u>S</u> Start F Skiathlon F part Pursuit F Sprint F Team sprint F
E	12 m	9 m	<u>9-6 m</u>	Skiathlon (when both techniques are used on the same course)



## Minimum lap length for interval start

At OWG, WSC, JWSC/U23 and WC, the minimum lap length for interval start competitions of distances 10 km or longer should be 5 km

[311.2.9]



## Course markings [311.4.1]

At OWG and WSC the colors of the markings have to be determined and described in the course descriptions.



Hard material course markings and commercial markings should only be placed at the sides of the course.

## Start list content [314.8]

- the starting order of competitors
- their start numbers
- years of births
- respective FIS points
- start time(s)
- the technical details of the course;
- length, HD, MC, TC,
- number of participating nations
- composition of the jury





## Start list examples [315]

- Interval Start: <http://data.fis-ski.com/pdf/2017/CC/2228/2017CC2228SL.pdf>
- Mass Start: <http://data.fis-ski.com/pdf/2017/CC/2267/2017CC2267SL.pdf>
- Pursuit competition: <http://data.fis-ski.com/pdf/2017/CC/3033/2017CC3033SL.pdf>
- Heat Starts: <http://medias3.fis-ski.com/pdf/2017/CC/2221/2017CC2221SL.pdf>



## Official result list content [317.2.2]

- the final order of the competitors
- their FIS Codes
- starting number
- Times
- intermediate times and competition points
- skiing technique
- the number of competitors
- names of the competitors who started but did not finish
- any written sanctions to competitors
- the technical details of the course
- length, HD, MC, TC
- the weather, temperature data
- number of competitors (entered, ranked, DNS and DNF)
- number of participating nations
- composition of the Jury.



## Interval start procedure [315.2.3]

The competitor must have his feet behind the start line. ~~and remain stationary before the starter gives starting commands.~~ The poles ~~remain stationary~~ and must be placed in front of the starting line and/or starting gate.





## Heat start procedure [315.5.3]

The starter will give the command “**take your start positions**” and the competitors advance to the start line where **they must place their poles behind the start line and/or start gates**





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## Case study



## Gates [315.5.2.1]

Use of start gates is mandatory at OWG, WSC, WC, U23 WSC and JWSC competitions.





## Finish recommended norms

### Interval start

### *Classical*

### *Free*

Number of corridors	<u>3-4 tracks</u> 3-trackes	3 <u>or</u> 4 corridors (3 m each)
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### Mass start

Number of corridors	<u>Minimum 3</u> 4-tracks minimum	<u>3-4</u> corridors (3 m each)
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### Skiathlon

Number of corridors	/	<u>3-4</u> corridors (3 m each)
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### Pursuit (no tracks at start when F)

Number of corridors	<u>3-4</u> tracks minimum	<u>3-4</u> corridors (3m each)
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# Finish recommended norms

Individual sprint

*Classical*

*Free*

Number of corridors	<u>34</u> tracks minimum	<u>3-4</u> corridors (3 m each)
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Team sprint

Number of corridors	<u>4-3</u> tracks minimum	<u>3-4</u> corridors (3m each)
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Relay

Number of corridors	<u>4-3</u> tracks minimum	<u>3-4</u> corridors (3 m each)
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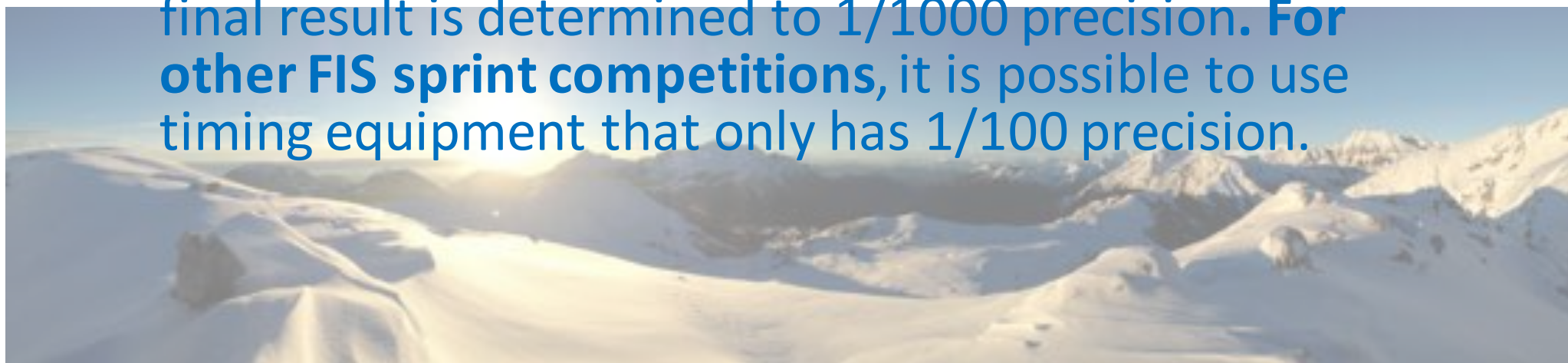






## Timing [325.5.1]

- For OWG, WSC, JWSC and WC sprint qualifying round ~~and heats~~, start and finish times are recorded to 1/1000 precision and the final result is determined to 1/100 precision. For other FIS sprint competitions, it is possible to use timing equipment that only has 1/100 precision but still the final results report the hundredths of a second.
- For OWG, WSC, JWSC and WC sprint heats, start and finish times are recorded to 1/1000 precision and the final result is determined to 1/1000 precision. For other FIS sprint competitions, it is possible to use timing equipment that only has 1/100 precision.



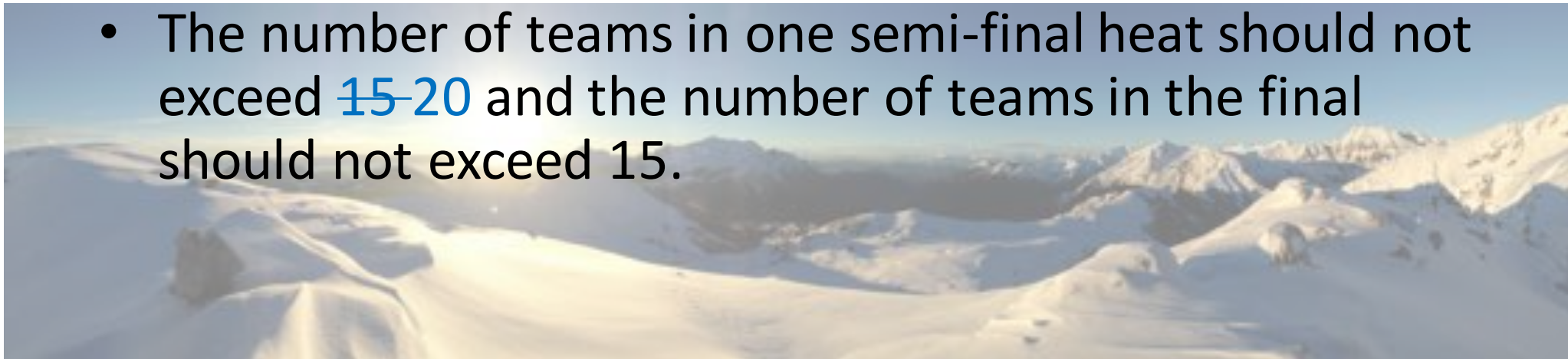
# Case study

- FIS Rollerski race

Rank	Bib	FIS Code	Name	Year	Nation	Time	Behind	FIS Points
1	1	3290326	PELLEGRINO Federico	1990	ITA	3:19.1		45.00
2	4	3290446	ZELGER Stefan	1995	ITA	3:27.3	+8.2	94.42
3	8	3290290	NIZZI Enrico	1990	ITA	3:28.1	+9.0	99.24
4	5	3290533	HELLWEGER Michael	1996	ITA	3:28.8	+9.7	103.46
5	9	3290245	NOECKLER Dietmar	1988	ITA	3:29.2	+10.1	105.87
6	2	3290383	RASTELLI Maicol	1991	ITA	3:29.3	+10.2	106.48
7	24	3290419	BECCHIS Francesco	1997	ITA	3:29.8	+10.7	109.49
8	11	3290374	BECCHIS Emanuele	1993	ITA	3:31.1	+12.0	117.33
9	36	3050198	HABENICHT Tobias	1993	AUT	3:31.3	+12.2	118.53
10	18	3290575	SERRA Daniele	1996	ITA	3:31.9	+12.8	122.15
11	12	3290524	ABRAM Mikael	1996	ITA	3:32.3	+13.2	124.56
12	7	3290514	GABRIELLI Giacomo	1996	ITA	3:33.0	+13.9	128.78
13	10	3290490	CAPPELLO Florian	1996	ITA	3:33.6	+14.5	132.39
14	22	3290510	DELLAGIACOMA Tommaso	1996	ITA	3:33.8	+14.7	133.60
15	32	3290372	TANEL Matteo	1993	ITA	3:34.0	+14.9	134.80
16	16	3290611	ROMANO Lorenzo	1997	ITA	3:34.4	+15.3	137.21
17	17	3290616	NOCELLINI Simone	1998	ITA	3:35.4	+16.3	140.37

## Team sprint [326.4]

- The better points of distance and sprint FIS points of a competitor will be used. In case the entered competitor does not have FIS Points ~~or his FIS Points are higher than 160, 160-999~~ points will be used for calculation.
- If there are more than ~~50~~ 40 teams entered, the jury may decide to use 3 semi-finals and distribute the teams according the following principle:
  - The number of teams in one semi-final heat should not exceed ~~15~~ 20 and the number of teams in the final should not exceed 15.





## The advancement of teams [326.4.6]

In case of three or more semi-final heats, up to 15 teams can advance to the finals using the same principles as above (2 teams from each heat plus next 9 fastest times when heats are timed or same number of teams by ranking from each heat when heats are not timed).



## Start numbers [326.4.8]

Separate colors shall be used for the start numbers for each relay leg. For OWG, WSC and WC competitions they will be: **1st leg = red; 2nd leg = blue.**



## Means of identification



- Competitors must wear/use all the means of identification (bibs, leg bibs, transponders, GPS...) provided by the organiser. [343.5]
- **Monetary fine** should be used for infractions of advertising and commercial markings rules, for minor course discipline infractions, **for infractions to ICR 343.5** and for violation of restrictions on ski testing and warming up. [352.7.2]



## Responsibilities of the competitors [343]

In all competitions obstruction is not allowed. This behavior is defined as deliberately impeding, blocking (by not following best line), charging or pushing any competitor with any part of the body or ski equipment.



**A hearing of the offender (ICR 224.7) may be organised:**

- on demand of the jury if necessary
- on demand of the offender in case of submission of a protest according to ICR 361.



## Competition suspension [352.3]

- In **popular competitions**, suspension means that the competitor is ranked on last rank and his/her time is not published.
- In **Team sprint competitions**, a competition suspension means that the team will be ranked last in the heat and last in the round.





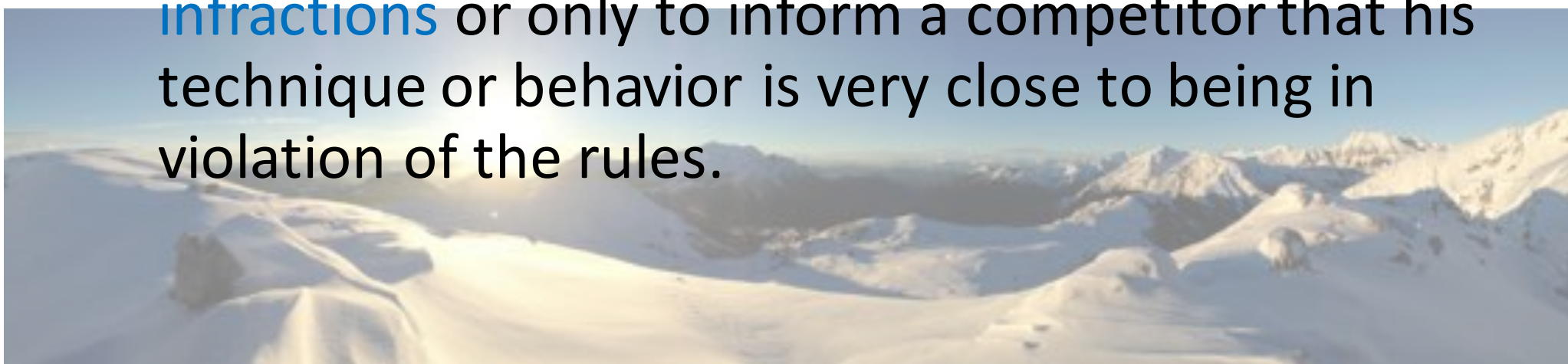
## Written and verbal reprimand [352.5-6]

- Written Reprimand

Written reprimand should be used for all infractions of the rules that do not lead to a clear advantage for the offender or **minor infractions with advantage to the offender.**

- Verbal Reprimand

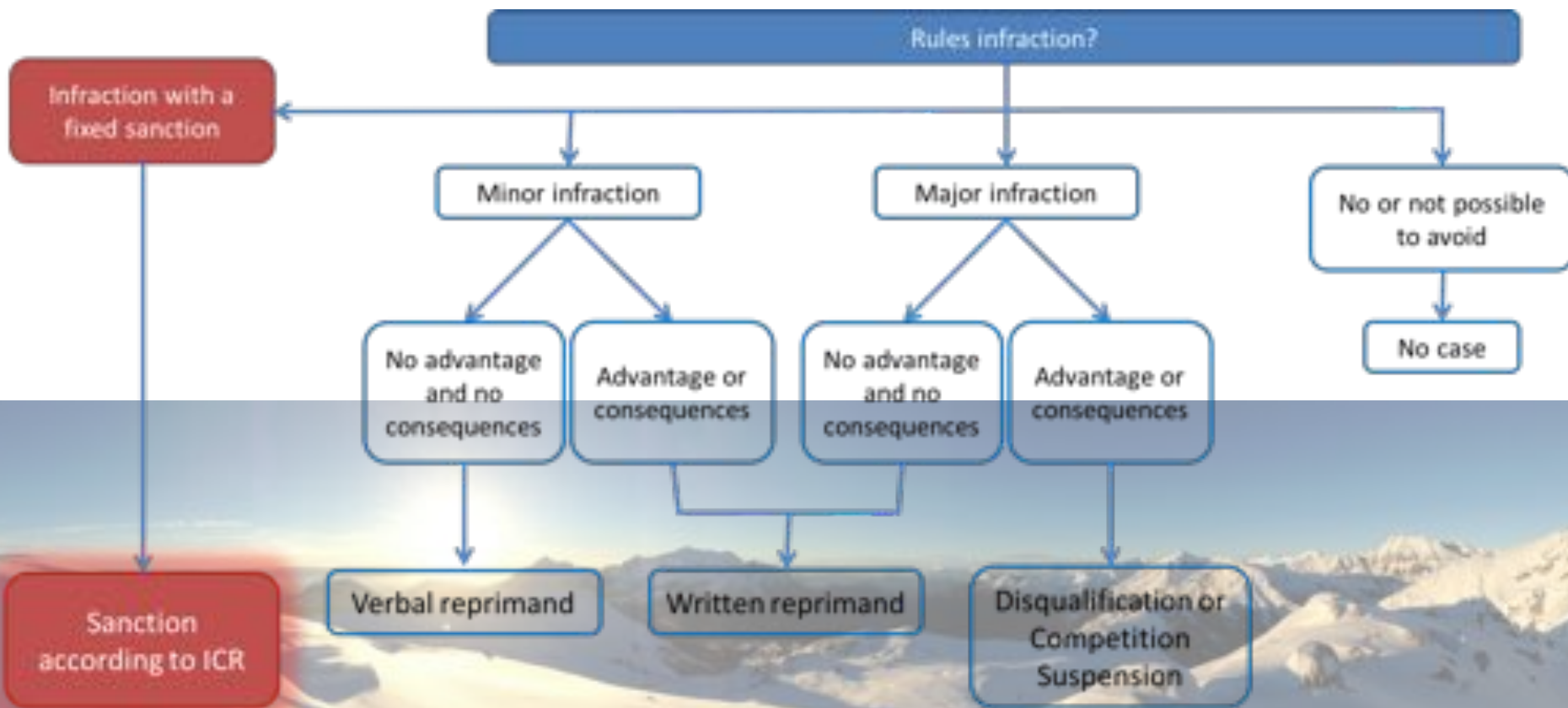
Verbal reprimand should be used **for minor infractions** or only to inform a competitor that his technique or behavior is very close to being in violation of the rules.



# The new chart

**2019:**

**2018:**



## Sanction according to ICR...?

- Not wearing all the **means of identification**...?
- **Sprint qualifications** early start infraction...?
- participating in the competition under **false pretences**...?
- Wearing **obscene names** or symbols on clothing and equipment...?
- Making an early **pursuit start**...?
- **Jeopardizing the security** of persons or property...?
- Making an early **interval start**...?
- Infractions of advertising and **commercial markings** rules...?
- Running more than one leg in a **relay competition**...?



## Popular appeals [387.4]

The deadline for an appeal against the jury decisions for competitors with active FIS codes expires at midnight **2 days** after the competition. Competitors with no active FIS codes have no right to appeal.



- In classic technique competitions, each Rollerski must have **ratched mechanism**.
- **Early start during Team Relay or Team Sprint** exchange must be sanctioned by time penalty (actual time gained + 15 seconds minimum penalty).



## Rol poles [396.10.1]

ICR 396.10.1 Rol season 2018/2019

Competition High	Pole length
200	165
195	162
190	159
185	156
180	153
175	150
170	147
165	144
160	141
155	138
150	135
145	132
140	129
135	126
130	123
125	120
120	117
115	114
110	111
105	108
100	105
95	102
90	99
85	96
80	93
75	90
70	87
65	84
60	81
55	78
50	75
45	72
40	69
35	66
30	63
25	60
20	57
15	54
10	51
5	48
0	45

In classical technique competitions, the maximum pole length must not exceed 83% of the competitor's body height **plus 2 cm**. The measurements and rounding must correspond to the provisions of ICR art 343.8.1.





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**FIS TD Seminar Sundsvall October 2018**



**FIS Points**

# Rol factors and minimum penalties

**F-Value**

Factor		Competition format
Factor	800 <sup>2</sup>	CC and ROL competitions with interval start and Pursuit 1 <sup>st</sup> part
Factor	1200 <sup>2</sup>	CC and ROL Sprints and Pursuit competitions 2 <sup>nd</sup> part
Factor	1400 <sup>2</sup>	CC Competitions with Mass start and Skiathlon and ROL Mass start (on competition courses with TC >28 m/km)
Factor	2800 <sup>2</sup>	Roller Ski Mass start competitions (on competition courses with TC <28 m/km) and CC FIS long distance popular competitions (art. 2.6)

\* The Rollerki Factor and Penalty Changes are valid from Season 2018/2019.

	Ladies	Men
U23 World Championships	25	25
Junior World Championships	35	35
Senior COC and FIS competitions	20	20
FIS long distance popular competitions longer than 50km (42km over 1500m above the sea level), only main competition	35	35
Junior COC and FIS competitions	35	35
EYOF	60	60
Youth Olympic Games YOG	50	50
FIS ROL WC/WSC	15	15
FIS ROL Juniors WC/WSC	50	50
FIS ROL competitions*	45	45
FIS ROL Juniors competitions	60	60

\* The Rollerki Factor and Penalty Changes are valid from Season 2018/2019.



# Minimum length

## Summary:

	JL	JM	SL	SM
10 km or longer	YES	YES	YES	YES
5 km ≤ and > 10 km	YES	YES	YES	NO
2,5 km ≤ and > 5 km	YES	YES	NO	NO
Sprint qualifications > 800 m	YES	YES	YES	YES

**From the season 2019/2020** Minimum distance required for Popular races to be valid for the FIS Points from actual minimum 50 km down to **30 km**.



FIS will be able to cancel TD report in terms if race is valid for FIS points





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# Tour de Ski Oberstdorf 2018



## Schedule changes

### **Schedule Changes, Moving Site Location and Cancellation**

Changes in the race schedule, i.e. shifting the race to another date, cancellation of the competition or any other significant changes in the race program must be communicated immediately to the

FIS Nordic Office, CH-3653 Oberhofen/Thunersee,  
Phone: +41 (33) 244 61 05 - Fax +41 (33) 244 61 71  
e-mail: [aschhoff@fisski.com](mailto:aschhoff@fisski.com)

as well as to the National Ski Federations and to the Technical Delegate (TD) assigned to the competition. In special case if the competition will be carried out on a non-homologated substitute course, the Technical Delegate (TD) has to confirm the norms of the course according to ICR article 311.

If for any reason a FIS World Cup, WSC or OWG competition cannot be held on the planned homologated course and must be held on an alternate course approved by the jury, the competition will be considered as valid for FIS points evaluation.





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**Equipment**

# Bindings

Allowed:



Not allowed:





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**Any question?**





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Thanks for your attention!

