

# Proposed modification to the IPCAS points calculation system

IPC ALPINE SKIING

22 February 2009

Sport Forum – High 1 KOREA



## How is the FIS proceeding for able bodied races



*Our IPCAS points system is based on the able body points calculation system*



- The penalty is calculated from the best points holder per gender
- The penalty is then applied to all the athletes within the gender
- The race points for each athlete are calculated from the time difference between them and the fastest skier in their gender



Place Goetschen Discipline Giant  
Slalom

Date 27.01.2009 Category European  
Cup **able bodied competition**

**Penalty: 6.00**

1	18	MADER Regina AUT	1:17.60	1:17.20	2:34.80	<b>6.00</b>
2	5	HACKL Karin AUT	1:17.38	1:17.45	2:34.83	<b>6.17</b>
3	7	KOEHLE Stefanie AUT	1:16.93	1:18.20	2:35.13	<b>7.88</b>
4	15	BRIGNONE Fede ITA	1:18.03	1:17.22	2:35.25	<b>8.56</b>
5	3	SCHILD Bernadette AUT	1:17.83	1:17.89	2:35.72	<b>11.23</b>
6	1	LOESETH Lene NOR	1:16.98	1:18.84	2:35.82	<b>11.80</b>
7	17	CURTONI Irene ITA	1:19.31	1:16.62	2:35.93	<b>12.42</b>
8	2	KAMER Nadia SUI	1:18.04	1:18.00	2:36.04	<b>13.05</b>



# Able bodied GS results 2008/2009 season



Name: ALTACHER Margret

- 12-02-2009 Turnau AUT FIS Race GS 6  
22.26
- 06-02-2009 Gaal AUT FIS Race GS 4 23.37
- 05-02-2009 Gaal AUT FIS Race GS 8 28.84
- 27-01-2009 Goetschen GER Eur Cup GS 10  
14.47
- 16-12-2008 Schruns AUT Eur Cup GS 7  
12.42
- 26-11-2008 Trysil NOR Eur Cup GS 10  
20.81
- 22-11-2008 Funasdalen SWE EurCu GS 11  
17.21
- 31-03-2008 Haus im Ennstal AUT GS 21  
25.43
- 19-03-2008 Innerkrems AUT NatCh GS 9  
24.03



# Other able bodied GS results for the season 2008/2009



		Best	Worst	Difference
•	Altacher Margret	12.42	28.84	56%
•	Kamer Nadja	10.14	36.46	72%
•	Curtoni Irene	12.42	37.69	67%
•	Bertrand Olivia	9.00	24.76	63%
•	Loeseth Lene	7.88	24.37	67%
•	<b>Average Difference:</b>			<b>65%</b>

**Same for all of these athletes, the best or worst results happened at any level of racing**

# IPCAS points calculation system in place at the moment

- The Penalty is calculated by taking the bests points holder in all categories within the same gender
- The penalty is applied for points calculation within the same gender (*we can use this approach since we use a single set of factors across all categories*)
- Race points are calculated in each category individually
- At the moment, an additional *\*minimum penalty\** is applied to an athlete race points if the number of athletes present at the start in that category is too low
- The race results have a possibility of up to 3 zeros per gender per race



# IPC GS race results Noram Breckenridge 2007



- Penalty female: **15.00**
- **Visually Impaired Skiers female**
- 1 ATHLETE A 1:05.47 1:04.37 2:09.84 0,00

**15.00**



- 2 ATHLETE X 1:07.00 1:06.93 2:13.93 4,09  
**42,72**
- 3 ATHLETE Y 1:07.81 1:14.02 2:21.83 11,99  
**96,26**
- 4 ATHLETE Z 1:15.50 1:17.81 2:33.31 23,47  
**174,07**



- **Sit Skier Female** (only 2 at the start so +25pts)
- 1 ATHLETE J 1:03.47 1:03.20 2:06.67 0,00 **40.00**
- 2 ATHLETE D 1:04.30 1:05.05 2:09.35 2,68  
**58.16**

# Other IPC GS results for the season 2008/2009



- **Female Visually impaired: Athlete A**

- 07-12-2007 Breck USA **Noram** GS  
15.00

- 16-02-2008 High 1 Korea WC GS  
50.75

- **Female Sit skier: Athlete B**

- 15-12-2007 Pitztall AUT **EC** GS  
15.00

- 21-12-2007 Kuhtai AUT **EC** GS  
15.00

- 8-01-2008 Abtenau AUT WC GS  
62.63

- 14-01-2008 Queyras FRA WC GS  
42.58

- **Female Standing: Athlete C**

- 11-12-2008 Pitztall AUT **EC** GS



# What do all these results have in common?



- 07-12-2007 Breck USA Noram GS  
15.00



- 15-12-2007 Pitztall AUT EC GS  
15.00

- 21-12-2007 Kuhtai AUT EC GS  
15.00

- 21-12-2008 Kuhtai AUT EC GS  
15.00

VS

- *11-12-2008 Pitztall AUT EC GS*  
*64.8*

*The best female standing athlete was present*

*The best ranked athletes in the world where*

*With our actual system, everytime the best athlete in the world is not present in a category, an athlete can score up to 74% BETTER points*



**Best Worst  
%diff**

- ALTACHER Margret 12.42 28.84 56%
- Kamer Nadja 10.14 36.46 72%
- Curtoni Irene 12.42 37.69 67%
- Bertrand Olivia 9.00 24.76 63%
- Loeseth Lene 7.88 24.37 67%

- **Average Difference:  
65%**

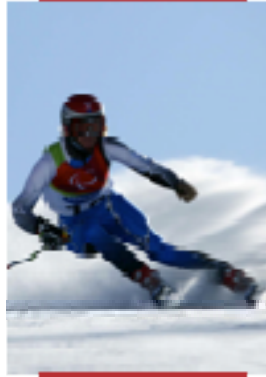
IPC examples:

- Athlete A 15.00 50.75 70%
- Athlete B 15.00 62.63 76%
- Athlete C 15.00 64.85 77%

## How does this system affects results?

- Athletes can achieve low points results using a penalty determined by the presence of elite athletes without competing against them
- Athletes can achieve world cup criteria's even if they are 20–30 seconds behind the fastest overall athlete in the same gender
- Athletes that are in a low participation category do not have any incentive to race at full intensity since they can still achieve low points results
- Athletes can then keep their points low and achieve world cup criteria's even if they are not racing at full intensity





### Visually Impaired Skiers female

1	3	006-0725	GASTEIGER Sabine	B 3	AUT	1:16.48	1:16.52	2:33.00	0,00	25,00
			Guide: GASTEIGER Emil							
2	2	013-0072	FORESTELL Kathleen	B 3	CAN	1:21.02	1:20.64	2:41.66	8,66	80 74,81
			Guide: GLOSSOP Emily							

### Sitting Skiers female

1	10	006-0448	LOESCH Claudia	LW 11	AUT	1:17.58	1:16.53	2:34.11	0,00	100 25,00
2	4	076-0119	VICTOR Stephani	LW 12-2	USA	1:16.18	1:18.28	2:34.46	0,35	80 0,00

### Standing Skiers female

1	15	030-0156	ROTHFUSS Andrea	LW 6/8-2	GER	1:10.69	1:09.12	2:19.81	0,00	100 0,00
2	13	013-0049	WOOLSTENCROFT Laure	LW 3-1	CAN	1:11.82	1:10.46	2:22.28	2,47	80 15,55
3	11	027-0050	JAMBAQUE Solene	LW 9-2	FRA	1:13.09	1:12.89	2:25.98	6,17	60 38,84
4	19	030-0189	KEMPFLE Theresa	LW 6/8-2	GER	1:12.89	1:13.53	2:26.42	6,61	50 41,61
5	14	040-0148	CORRADINI Melania	LW 6/8-1	ITA	1:16.08	1:15.01	2:31.09	11,28	45 71,00
6	17	013-0057	FOGARTY Arly	LW 5/7-2	CAN	1:18.06	1:15.54	2:33.60	13,79	40 86,80
7	20	006-0630	HASLACHER Danja	LW 2	AUT	1:16.89	1:18.43	2:35.32	15,51	36 97,62
8	23	076-0116	DUKAT Sandy	LW 2	USA	1:20.05	1:20.42	2:40.47	20,66	32 130,04
9	12	076-0166	STOREY Elitsa	LW 2	USA	1:20.31	1:20.99	2:41.30	21,49	29 135,26

- In this case the second place in the visually impaired category is getting a result of 74.81 pts while being 22 seconds behind the fastest women overall.

- The same time difference in the standup would translate in a result close to 135 pts (45% difference)

## Visually Impaired Skiers female

1	3	006-0725	GASTEIGER Sabine	B 3	AUT	1:16.48	1:16.52	<b>2:33.00</b>	0,00	100	25,00
			Guide: GASTEIGER Emil								
2	2	013-0072	FORESTELL Kathleen	B 3	CAN	1:21.02	1:20.64	<b>2:41.66</b>	8,66	80	74,81
			Guide: GLOSSOP Emily								

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2	13	013-0049	WOOLSTENCROFT Laure	LW 3-1	CAN	1:11.82	1:10.46	<b>2:22.28</b>	2,47	80	15,55
3	11	027-0050	JAMBAQUE Solene	LW 9-2	FRA	1:13.09	1:12.89	<b>2:25.98</b>	6,17	60	38,84
4	19	030-0189	KEMPFLE Theresa	LW 6/8-2	GER	1:12.89	1:13.53	<b>2:26.42</b>	6,61	50	41,61
5	14	040-0148	CORRADINI Melania	LW 6/8-1	ITA	1:16.08	1:15.01	<b>2:31.09</b>	11,28	45	71,00
6	17	013-0057	FOGARTY Arly	LW 5/7-2	CAN	1:18.06	1:15.54	<b>2:33.60</b>	13,79	40	86,80
7	20	006-0630	HASLACHER Danja	LW 2	AUT	1:16.89	1:18.43	<b>2:35.32</b>	15,51	36	97,62
8	23	076-0116	DUKAT Sandy	LW 2	USA	1:20.05	1:20.42	<b>2:40.47</b>	20,66	32	130,04

- In the sit skiing class the winner gets a 25 pts result while being almost 15 seconds behind the fastest time overall.
- The equivalent performance in the standup would have given her a result of approximately 97 pts (74% difference)



# What we all want



- We want that all athletes qualified for World Cup represent the elite level of our sport
- We want that a 15, 30 or 45 points result represents the same level of achievement in all categories
- We want all athletes racing at their maximum intensity in every event
- We want all races to be fair and our point system to represent their achievements

Our working group has been addressing this issue and has come up with a modification of the existing system



# Proposed modification to the IPCAS points calculation system

- The penalty calculation would remain the same as in the present system
- The penalty is still applied to all 3 categories within the same gender
- An athlete race points would be based on the difference between the fastest factored time overall, within the same gender, and the athlete factored time and added with the penalty
- Only one athlete could achieve a 0 points results per race
- The current rule of the 25 Points \* *minimum penalty*\* for small number of athletes could be removed
- The ranking in all categories would not be affected by the modifications





# Example of using this system



Weather: sunny      Snow: hard      Temp:      Start: -15 °C      Finish: -12 °C

Penalty Male: 0,00      F-Value 880      Penalty Female: 0,00

Rank	Bib #	Code	Competitor	Class	Nation	Time 1st Run	Time 2nd Run	Total Time	Diff.	WC Point	Rank Points
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## Visually Impaired Skiers female

1	3	006-0725	GASTEIGER Sabine Guide: GASTEIGER Emil	B 3	AUT	1:16.48	1:16.52	2:33.00	0,00	100	25,00
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## Standing Skiers female

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2	13	013-0049	WOOLSTENCROFT Laure	LW 3-1	CAN	1:11.82	1:10.46	2:22.28	2,47	80	15,55
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9	12	076-0166	STOREY Elitsa	LW 2	USA	1:20.31	1:20.99	2:41.30	21,49	29	135,26
10	22	013-0071	DZIEWIOR Andrea	LW 2	CAN	1:23.14	1:23.30	2:46.44	26,63	26	167,62
11	16	076-0105	PENNINGTON Hannah	LW 3-2	USA	1:24.44	1:23.92	2:48.36	28,55	24	179,70

Time in secs / race p	
153.00	83.02
161.66	137.53
154.11	90.01
142.28	15.55
145.98	38.84
146.42	41.61
151.09	71.00
153.60	86.80
155.32	97.62
160.47	130.04
161.30	135.26
166.44	167.62
168.36	179.70

# No adjustments is needed before implementing this system



- Our factor restoration system is already design to equalize the factors across categories
- More monitoring of the ratios between the 3 categories will need to be done every year to insure they stay equal.



Sit Ski

Standup

Visually Impaired



## How will these modification bring us one step forward?

- By making sure that athletes achieving World Cup standards will be the elite portion in all categories
- By creating an incentive for all athletes to compete at maximum intensity even when they are part of a category that has small number of participants
- By making our IPCAS point system even more accurate across all categories
- By making it fair for all participants, in all categories and in all level of competitions



# Summary



- Our sport as evolved over the last few years, the level of racing is getting better every year and it is getting more credibility then before
- We have an way to modify our existing system to make it fair for all athletes and more representative of elite performances
- This modified IPCAS points system will bring us one more step towards a better and more competitive circuit for the future
- No modification to our factor system is needed to implement these modifications

*This is why our group in collaboration with the factor group and after reviewing all these facts, is proposing to implement these modification*



# Study on the modified IPCAS points calculation



## Data collection and analysis:

- Jordi Carbonell Spain
- Sebastien Michel Canada
- Sylvana Mestre IPC ALPINE SKIING

## Presentation:

Sebastien Michel Canada





Photo: Iwan Chaboya, Riki Poyman

[ipcalpineskiing@paralympic.org](mailto:ipcalpineskiing@paralympic.org)

[www.paralympic.org](http://www.paralympic.org)