Final Qualification Ranking Lists for allocation of Quota places for ISU Four Continents Speed Skating Championships 2023 (20.11.2022)

500m Men (20 quota places, max. 3 quota places per

quota rank	Nat.	No	Name	WC time	Venue	Date	Event
1	CAN	1	Laurent Dubreuil	34.34	Heerenveen	2022-11-19	WC2
2	JPN	1	Wataru Morishige	34.45	Heerenveen	2022-11-19	WC2
3	JPN	2	Yuuma Murakami	34.70	Stavanger	2022-11-12	WC1
4	USA	1	Jordan Stolz	34.70	Heerenveen	2022-11-19	WC2
5	CAN	2	Christopher Fiola	34.91	Heerenveen	2022-11-19	WC2
6	JPN	3	Ryota Kojima	34.95	Heerenveen	2022-11-19	WC2
7	KOR	1	Min Kyu Cha	34.98	Heerenveen	2022-11-19	WC2
8	KOR	2	Joon-Ho Kim	35.01	Heerenveen	2022-11-19	WC2
	JPN	*4*	*Takuya Morimoto*	*35.02*	*Heerenveen*	*2022-11-19*	*WC2*
9	CHN	1	Tao Yang	35.05	Heerenveen	2022-11-19	WC2
10	KAZ	1	Yevgeniy Koshkin	35.06	Heerenveen	2022-11-19	WC2
	JPN	*5*	*Taiyo Nonomura*	*35.11*	*Heerenveen*	*2022-11-19*	*WC2*
11	USA	2	Austin Kleba	35.25	Heerenveen	2022-11-19	WC2
12	KOR	3	Cheol-Min Kim	35.27	Heerenveen	2022-11-19	WC2
13	USA	3	Cooper Mcleod	35.30	Heerenveen	2022-11-19	WC2
14	CHN	2	Ziwen Lian	35.32	Heerenveen	2022-11-19	WC2
15	CAN	3	Cédrick Brunet	35.42	Heerenveen	2022-11-19	WC2
16	CHN	3	Zhongyan Ning	35.47	Heerenveen	2022-11-19	WC2
	KOR	*4*	*Tae-Yun Kim*	*35.52*	*Stavanger*	*2022-11-12*	*WC1*
17	TPE	1	Wei-Lin Tai	35.78	Heerenveen	2022-11-19	WC2
	CHN	*4*	*Haonan Du*	*35.83*	*Heerenveen*	*2022-11-19*	*WC2*
	CHN	*5*	*Junzhi Zhang*	*36.43*	*Stavanger*	*2022-11-12*	*WC1*

Final Qualification Ranking Lists for allocation of Quota places for
ISU Four Continents Speed Skating Championships 2023 (20.11.2022)

1000m Men (20 quota places, max. 3 quota places per country)

quota rank	Nat.	No	Name	WC time	Venue	Date	Event
1	CHN	1	Zhongyan Ning	1:07.86	Heerenveen	2022-11-18	WC2
2	JPN	1	Kazuya Yamada	1:08.20	Heerenveen	2022-11-18	WC2
3	CAN	1	Connor Howe	1:08.64	Heerenveen	2022-11-18	WC2
4	CAN	2	Laurent Dubreuil	1:08.68	Heerenveen	2022-11-18	WC2
5	JPN	2	Ryota Kojima	1:08.70	Heerenveen	2022-11-18	WC2
6	USA	1	Jordan Stolz	1:08.73	Stavanger	2022-11-13	WC1
7	CHN	2	Haotian Wang	1:08.80	Heerenveen	2022-11-18	WC2
8	CAN	3	Antoine Gélinas-Beaulieu	1:08.99	Heerenveen	2022-11-18	WC2
9	USA	2	Cooper Mcleod	1:09.14	Heerenveen	2022-11-18	WC2
10	JPN	3	Taiyo Nonomura	1:09.18	Heerenveen	2022-11-18	WC2
11	CHN	3	Ziwen Lian	1:09.35	Heerenveen	2022-11-18	WC2
12	USA	3	Conor Mcdermott-Mostowy	1:09.51	Heerenveen	2022-11-18	WC2
	JPN	*4*	*Masaya Yamada*	*1:09.58*	*Stavanger*	*2022-11-13*	*WC1*
	USA	*4*	*Austin Kleba*	*1:09.68*	*Heerenveen*	*2022-11-18*	*WC2*
	CAN	*4*	*Tyson Langelaar*	*1:09.70*	*Heerenveen*	*2022-11-18*	*WC2*
13	KOR	1	Seong-Hyeon Park	1:09.77	Heerenveen	2022-11-18	WC2
14	KAZ	1	Artur Galiyev	1:10.09	Heerenveen	2022-11-18	WC2
15	KAZ	2	Dmitry Morozov	1:10.28	Heerenveen	2022-11-18	WC2
	CAN	*5*	*Christopher Fiola*	*1:10.36*	*Heerenveen*	*2022-11-18*	*WC2*
16	KOR	2	Tae-Yun Kim	1:10.36	Heerenveen	2022-11-18	WC2
17	KOR	3	Kyeong-Rae Kim	1:10.92	Heerenveen	2022-11-18	WC2
18	TPE	1	Wei-Lin Tai	1:11.39	Heerenveen	2022-11-18	WC2

Final Qualification Ranking Lists for allocation of Quota places for ISU Four Continents Speed Skating Championships 2023 (20.11.2022)

1500m Men (20 quota places, max. 3 quota places per country)

quota rank	Nat.	No	Name	WC time	Venue	Date	Event
1	CAN	1	Connor Howe	1:43.38	Heerenveen	2022-11-20	WC2
2	CHN	1	Zhongyan Ning	1:43.91	Heerenveen	2022-11-20	WC2
3	USA	1	Jordan Stolz	1:44.27	Heerenveen	2022-11-20	WC2
4	JPN	1	Taiyo Nonomura	1:44.57	Heerenveen	2022-11-20	WC2
5	JPN	2	Ryota Kojima	1:45.39	Heerenveen	2022-11-20	WC2
6	JPN	3	Kazuya Yamada	1:45.45	Heerenveen	2022-11-20	WC2
7	CAN	2	Tyson Langelaar	1:45.82	Heerenveen	2022-11-20	WC2
8	KAZ	1	Dmitry Morozov	1:45.95	Heerenveen	2022-11-20	WC2
9	CAN	3	Antoine Gélinas-Beaulieu	1:45.98	Heerenveen	2022-11-20	WC2
	JPN	*4*	*Seitaro Ichinohe*	*1:46.36*	*Heerenveen*	*2022-11-20*	*WC2*
10	CHN	2	Haotian Wang	1:46.88	Heerenveen	2022-11-20	WC2
	JPN	*5*	*Masaya Yamada*	*1:47.12*	*Stavanger*	*2022-11-11*	*WC1*
11	USA	2	Ethan Cepuran	1:47.65	Heerenveen	2022-11-20	WC2
12	CHN	3	Shen Hanyang	1:48.19	Heerenveen	2022-11-20	WC2
	CAN	*4*	*Hayden Mayeur*	*1:48.26*	*Heerenveen*	*2022-11-20*	*WC2*
13	USA	3	Emery Lehman	1:48.47	Stavanger	2022-11-11	WC1
14	KAZ	2	Demjan Gavrilov	1:48.55	Heerenveen	2022-11-20	WC2
	USA	*4*	*Casey Dawson*	*1:48.65*	*Heerenveen*	*2022-11-20*	*WC2*
15	KOR	1	Cheon-Ho Um	1:49.17	Heerenveen	2022-11-20	WC2
16	KOR	2	Hojun Yang	1:50.03	Stavanger	2022-11-11	WC1
	CHN	*4*	*Ziwen Lian*	*1:50.36*	*Heerenveen*	*2022-11-20*	*WC2*
17	TPE	1	Wei-Lin Tai	1:50.44	Heerenveen	2022-11-20	WC2

Final Qualification Ranking Lists for allocation of Quota places for ISU Four Continents Speed Skating Championships 2023 (20.11.2022)

5000m Men (16 quota places, max. 3 quota places per country)

quota rank	Nat.	No	Name	WC time	Venue	Date	Event
1	USA	1	Ethan Cepuran	6:15.31	Heerenveen	2022-11-19	WC2
2	CAN	1	Graeme Fish	6:17.29	Heerenveen	2022-11-19	WC2
3	JPN	1	Seitaro Ichinohe	6:17.64	Heerenveen	2022-11-19	WC2
4	CAN	2	Jordan Belchos	6:19.98	Heerenveen	2022-11-19	WC2
5	JPN	2	Riku Tsuchiya	6:20.86	Heerenveen	2022-11-19	WC2
6	JPN	3	Ryousuke Tsuchiya	6:21.01	Heerenveen	2022-11-19	WC2
7	KOR	1	Seung-Hoon Lee	6:21.73	Heerenveen	2022-11-19	WC2
8	CAN	3	Connor Howe	6:22.15	Heerenveen	2022-11-19	WC2
9	KAZ	1	Vitaliy Chshigolev	6:22.68	Heerenveen	2022-11-19	WC2
	JPN	*4*	*Takahiro Ito*	*6:24.56*	*Heerenveen*	*2022-11-19*	*WC2*
10	USA	2	Casey Dawson	6:25.30	Heerenveen	2022-11-19	WC2
11	CHN	1	Yu Wu	6:26.34	Heerenveen	2022-11-19	WC2
12	USA	3	Emery Lehman	6:27.38	Heerenveen	2022-11-19	WC2
	CAN	*4*	*Antoine Gélinas-Bea*	*6:28.78*	*Heerenveen*	*2022-11-19*	*WC2*
	JPN	*5*	*Motonaga Arito*	*6:32.23*	*Heerenveen*	*2022-11-19*	*WC2*
13	KOR	2	Jaewon Chung	6:32.40	Heerenveen	2022-11-19	WC2
14	KAZ	2	Bagdaulet Sagatov	6:32.96	Heerenveen	2022-11-19	WC2
	USA	*4*	*Jordan Stolz*	*6:37.24*	*Stavanger*	*2022-11-12*	*WC1*
15	NZL	1	**Pre-allocated**				

Final Qualification Ranking Lists for allocation of Quota places for ISU Four Continents Speed Skating Championships 2023 (20.11.2022)

Team Pursuit Men (6 quota places, max. 1 quota places per country)

quota rank	Nat.	WC time	Venue	Date	Event
1	United States of America	**3:44.01**	Stavanger	2022-11-11	WC1
2	Canada	**3:50.23**	Stavanger	2022-11-11	WC1
3	Japan	**3:50.44**	Stavanger	2022-11-11	WC1
4	Republic of Korea	**3:54.62**	Stavanger	2022-11-11	WC1
5	China	**3:55.26**	Stavanger	2022-11-11	WC1
6	New Zealand	**Pre-allocated**			
7	Kazakhstan	**4:12.05**	Stavanger	2022-11-11	WC1

Final Qualification Ranking Lists for allocation of Quota places for ISU Four Continents Speed Skating Championships 2023 (20.11.2022)

Team Sprint Men (6 quota places, max. 1 quota places per country)

quota rank	Nat.	WC time	Venue	Date	Event
1	China	1:19.55	Heerenveen	2022-11-20	WC2
2	United States of America	1:19.90	Heerenveen	2022-11-20	WC2
3	Canada	1:20.58	Heerenveen	2022-11-20	WC2
4	Republic of Korea	1:21.84	Heerenveen	2022-11-20	WC2
5	Kazakhstan	1:22.88	Heerenveen	2022-11-20	WC2

Final Qualification Ranking Lists for allocation of Quota places for ISU Four Continents Speed Skating Championships 2023 (20.11.2022)

Mass start Men (20 quota places, max. 2 quota places per country)

quota rank	Nat.	No	Name	WC Points
1	KOR	1	Jaewon Chung	132
2	USA	1	Ethan Cepuran	104
3	CAN	1	Connor Howe	73
4	JPN	1	Kouta Kikuchi	68
5	CHN	1	Shen Hanyang	67
6	CAN	2	Hayden Mayeur	61
7	JPN	2	Ryousuke Tsuchiya	54
8	KOR	2	Seung-Hoon Lee	52
9	CHN	2	Hongli Wang	26
10	KAZ	1	Demjan Gavrilov	25
11	KAZ	2	Vitaliy Chshigolev	20
12	NZL	1	Peter Michael	16
13	USA	2	Emery Lehman	15
	USA	*3*	*Conor Mcdermott-Mostowy*	*11*
14	IND	1	Vishwaraj R. Jadeja	9
15	COL	1	**Pre-allocated**	
16	NZL	2	**Pre-allocated**	
17	TPE	1	**Pre-allocated**	

Final Qualification Ranking Lists for allocation of Quota places for ISU Four Continents Speed Skating Championships 2023 (20.11.2022)

500m Women (20 quota places, max. 3 quota places pe

quota rank	Nat.	No	Name	WC time	Venue	Date	Event
1	KOR	1	Min-Seon Kim	37.21	Heerenveen	2022-11-20	WC2
2	USA	1	Erin Jackson	37.53	Heerenveen	2022-11-20	WC2
3	JPN	1	Kurumi Inagawa	37.69	Heerenveen	2022-11-20	WC2
4	USA	2	Kimi Goetz	37.84	Heerenveen	2022-11-20	WC2
5	JPN	2	Konami Soga	37.92	Heerenveen	2022-11-20	WC2
6	KAZ	1	Yekaterina Aydova	38.01	Heerenveen	2022-11-20	WC2
7	JPN	3	Kako Yamane	38.08	Heerenveen	2022-11-20	WC2
8	CHN	1	Jingzhu Jin	38.11	Heerenveen	2022-11-20	WC2
	JPN	*4*	*Miho Takagi*	*38.17*	*Stavanger*	*2022-11-11*	*WC1*
9	CAN	1	Carolina Hiller	38.28	Heerenveen	2022-11-20	WC2
10	CAN	2	Brooklyn McDougall	38.51	Heerenveen	2022-11-20	WC2
11	KOR	2	Na-Hyeon Lee	38.54	Heerenveen	2022-11-20	WC2
12	CHN	2	Qishi Li	38.57	Heerenveen	2022-11-20	WC2
13	KAZ	2	Alina Dauranova	38.75	Heerenveen	2022-11-20	WC2
	JPN	*5*	*Suzune Usami*	*38.95*	*Heerenveen*	*2022-11-20*	*WC2*
14	USA	3	McKenzie Browne	39.06	Heerenveen	2022-11-20	WC2
15	KOR	3	Hyeon-Yeong Kim	39.07	Stavanger	2022-11-11	WC1
16	CHN	3	Lina Zhang	39.11	Heerenveen	2022-11-20	WC2
	CHN	*4*	*Chong Pei*	*39.18*	*Heerenveen*	*2022-11-20*	*WC2*
17	CAN	3	Rose Laliberté-Roy	39.2	Heerenveen	2022-11-20	WC2
	USA	*4*	*Sarah Warren*	*39.39*	*Heerenveen*	*2022-11-20*	*WC2*
	CAN	*4*	*Béatrice Lamarche*	*39.81*	*Heerenveen*	*2022-11-20*	*WC2*
18	TPE	1		**Pre-allocated**			

Final Qualification Ranking Lists for allocation of Quota places for ISU Four Continents Speed Skating Championships 2023 (20.11.2022)

1000m Women (20 quota places, max. 3 quota places per country)

quota rank	Nat.	No	Name	WC time	Venue	Date	Event
1	JPN	1	Miho Takagi	1:13.92	Heerenveen	2022-11-18	WC2
2	CHN	1	Qishi Li	1:14.82	Heerenveen	2022-11-18	WC2
3	USA	1	Kimi Goetz	1:15.14	Heerenveen	2022-11-18	WC2
4	KOR	1	Min-Seon Kim	1:15.24	Heerenveen	2022-11-18	WC2
5	CAN	1	Ivanie Blondin	1:15.40	Heerenveen	2022-11-18	WC2
6	KAZ	1	Yekaterina Aydova	1:16.08	Heerenveen	2022-11-18	WC2
7	JPN	2	Ayano Sato	1:16.15	Heerenveen	2022-11-18	WC2
8	CHN	2	Mei Han	1:16.30	Heerenveen	2022-11-18	WC2
9	KAZ	2	Nadezhda Morozova	1:16.73	Heerenveen	2022-11-18	WC2
10	USA	2	Erin Jackson	1:16.74	Heerenveen	2022-11-18	WC2
11	JPN	3	Kako Yamane	1:16.82	Heerenveen	2022-11-18	WC2
12	CAN	2	Alexa Scott	1:17.16	Heerenveen	2022-11-18	WC2
	JPN	*4*	*Sumire Kikuchi*	*1:17.23*	*Heerenveen*	*2022-11-18*	*WC2*
13	CAN	3	Brooklyn McDougall	1:17.54	Heerenveen	2022-11-18	WC2
14	KAZ	3	Alina Dauranova	1:17.77	Heerenveen	2022-11-18	WC2
	CAN	*4*	*Béatrice Lamarche*	*1:17.79*	*Heerenveen*	*2022-11-18*	*WC2*
15	KOR	2	Hyeon-Yeong Kim	1:17.82	Stavanger	2022-11-13	WC1
16	USA	3	Sarah Warren	1:18.49	Heerenveen	2022-11-18	WC2
17	CHN	3	Jingzhu Jin	1:18.63	Heerenveen	2022-11-18	WC2
	CHN	*4*	*Binyu Yang*	*1:19.44*	*Heerenveen*	*2022-11-18*	*WC2*
18	KOR	3	Na-Hyeon Lee	1:19.64	Heerenveen	2022-11-18	WC2
	JPN	*5*	*Shione Kaminaga*	*1:19.88*	*Stavanger*	*2022-11-13*	*WC1*
	USA	*4*	*Greta Myers*	*1:20.04*	*Heerenveen*	*2022-11-18*	*WC2*
19	TPE	1	**Pre-allocated**				

Final Qualification Ranking Lists for allocation of Quota places for ISU Four Continents Speed Skating Championships 2023 (20.11.2022)

1500m Women (20 quota places, max. 3 quota places per country)

quota rank	Nat.	No	Name	WC time	Venue	Date	Event
1	JPN	1	Miho Takagi	1:53.92	Heerenveer	2022-11-19	WC2
2	KAZ	1	Nadezhda Morozova	1:54.86	Heerenveer	2022-11-19	WC2
3	CAN	1	Ivanie Blondin	1:54.94	Heerenveer	2022-11-19	WC2
4	CHN	1	Qishi Li	1:55.22	Heerenveer	2022-11-19	WC2
5	JPN	2	Ayano Sato	1:55.67	Heerenveer	2022-11-19	WC2
6	CHN	2	Mei Han	1:55.91	Heerenveer	2022-11-19	WC2
7	USA	1	Kimi Goetz	1:56.06	Heerenveer	2022-11-19	WC2
8	KAZ	2	Yekaterina Aydova	1:57.26	Heerenveer	2022-11-19	WC2
9	JPN	3	Momoka Horikawa	1:58.19	Heerenveer	2022-11-19	WC2
10	CAN	2	Béatrice Lamarche	1:58.78	Heerenveer	2022-11-19	WC2
	JPN	*4*	*Yuna Onodera*	*1:59.15*	*Heerenveen*	*2022-11-19*	*WC2*
11	CAN	3	Alexa Scott	1:59.54	Heerenveer	2022-11-19	WC2
	CAN	*4*	*Valerie Maltais*	*1:59.59*	*Heerenveen*	*2022-11-19*	*WC2*
12	USA	2	Mia Kilburg-Manganel	2:00.59	Heerenveer	2022-11-19	WC2
	CAN	*5*	*Isabelle Weidemann*	*2:00.81*	*Stavanger*	*2022-11-12*	*WC1*
13	KOR	1	Ji-Woo Park	2:01.09	Heerenveer	2022-11-19	WC2
	JPN	*5*	*Shione Kaminaga*	*2:01.32*	*Heerenveen*	*2022-11-19*	*WC2*
14	USA	3	Greta Myers	2:01.59	Heerenveer	2022-11-19	WC2
15	CHN	3	Binyu Yang	2:01.65	Heerenveer	2022-11-19	WC2
	CHN	*4*	*Xiangyu Chen*	*2:01.81*	*Heerenveen*	*2022-11-19*	*WC2*
	USA	*4*	*Sarah Warren*	*2:02.79*	*Heerenveen*	*2022-11-19*	*WC2*
16	KOR	2	Hyeon-Seon Hwang	2:04.89	Heerenveer	2022-11-19	WC2

Final Qualification Ranking Lists for allocation of Quota places for ISU Four Continents Speed Skating Championships 2023 (20.11.2022)

3000m Women (16 quota places, max. 3 quota places per country)

quota rank	Nat.	No	Name	WC Time	Venue	Date	Event
1	CAN	1	Isabelle Weidemann	3:57.70	Heerenveen	2022-11-20	WC2
2	CAN	2	Ivanie Blondin	3:59.82	Heerenveen	2022-11-20	WC2
3	KAZ	1	Nadezhda Morozova	4:02.83	Heerenveen	2022-11-20	WC2
4	CAN	3	Valerie Maltais	4:03.98	Heerenveen	2022-11-20	WC2
5	JPN	1	Ayano Sato	4:04.10	Heerenveen	2022-11-20	WC2
6	JPN	2	Momoka Horikawa	4:04.97	Heerenveen	2022-11-20	WC2
7	JPN	3	Miho Takagi	4:05.06	Heerenveen	2022-11-20	WC2
8	CHN	1	Mei Han	4:05.07	Heerenveen	2022-11-20	WC2
9	USA	1	Mia Kilburg-Manganello	4:07.48	Heerenveen	2022-11-20	WC2
10	CHN	2	Binyu Yang	4:08.51	Heerenveen	2022-11-20	WC2
	JPN	*4*	*Yuna Onodera*	*4:11.22*	*Heerenveen*	*2022-11-20*	*WC2*
11	CHN	3	Xiangyu Chen	4:13.12	Heerenveen	2022-11-20	WC2
	CAN	*4*	*Béatrice Lamarche*	*4:13.86*	*Heerenveen*	*2022-11-20*	*WC2*
12	USA	2	Greta Myers	4:14.62	Heerenveen	2022-11-20	WC2
13	KOR	1	Ji-Woo Park	4:15.63	Heerenveen	2022-11-20	WC2
14	KOR	2	Chae-Weon Park	4:21.64	Heerenveen	2022-11-20	WC2
	JPN	*5*	*Shione Kaminaga*	*4:21.72*	*Heerenveen*	*2022-11-20*	*WC2*
	CAN	*5*	*Alexa Scott*	*4:26.01*	*Stavanger*	*2022-11-11*	*WC1*

Final Qualification Ranking Lists for allocation of Quota places for ISU Four Continents Speed Skating Championships 2023 (20.11.2022)

Team Pursuit Women (6 quota places, max. 1 quota places per country)

quota rank	Nat.	WC time	Venue	Date	Event
1	Canada	3:01.81	Stavanger	2022-11-12	WC1
2	Japan	3:02.90	Stavanger	2022-11-12	WC1
3	China	3:07.47	Stavanger	2022-11-12	WC1
4	USA	3:08.97	Stavanger	2022-11-12	WC1
5	Kazakhstan	3:12.78	Stavanger	2022-11-12	WC1
6	Korea	3:16.14	Stavanger	2022-11-12	WC1

Final Qualification Ranking Lists for allocation of Quota places for
ISU Four Continents Speed Skating Championships 2023 (20.11.2022)

Team Sprint Women (6 quota places, max. 1 quota places per country)

quota rank	Nat.	WC time	Venue	Date	Event
1	Canada	1:27.45	Heerenveen	2022-11-19	WC2
2	United States of America	1:27.72	Heerenveen	2022-11-19	WC2
3	Japan	1:27.96	Heerenveen	2022-11-19	WC2
4	Kazakhstan	1:28.72	Heerenveen	2022-11-19	WC2
5	China	1:29.42	Heerenveen	2022-11-19	WC2
6	Republic of Korea	1:31.87	Heerenveen	2022-11-19	WC2

Final Qualification Ranking Lists for allocation of Quota places for ISU Four Continents Speed Skating Championships 2023 (20.11.2022)

Mass start Women (24 quota places, max. 2 quota places per country)

quota rank	Nat.	No	Name	WC Points
1	CAN	1	Ivanie Blondin	168
2	USA	1	Mia Kilburg-Manganello	131
3	CAN	2	Valerie Maltais	116
4	KOR	1	Ji-Woo Park	114
5	CHN	1	Binyu Yang	98
6	USA	2	Giorgia Birkeland	97
7	JPN	1	Momoka Horikawa	96
8	JPN	2	Sumire Kikuchi	91
9	KOR	2	Chae-Weon Park	28
10	CHN	2	Leming Li	27
11	BRA	1	Larissa Paes	21
12	COL	1	**Pre-allocated**	
13	MGL	1	**Pre-allocated**	
14	KAZ	1	**Pre-allocated**	
15	TPE	1	**Pre-allocated**	