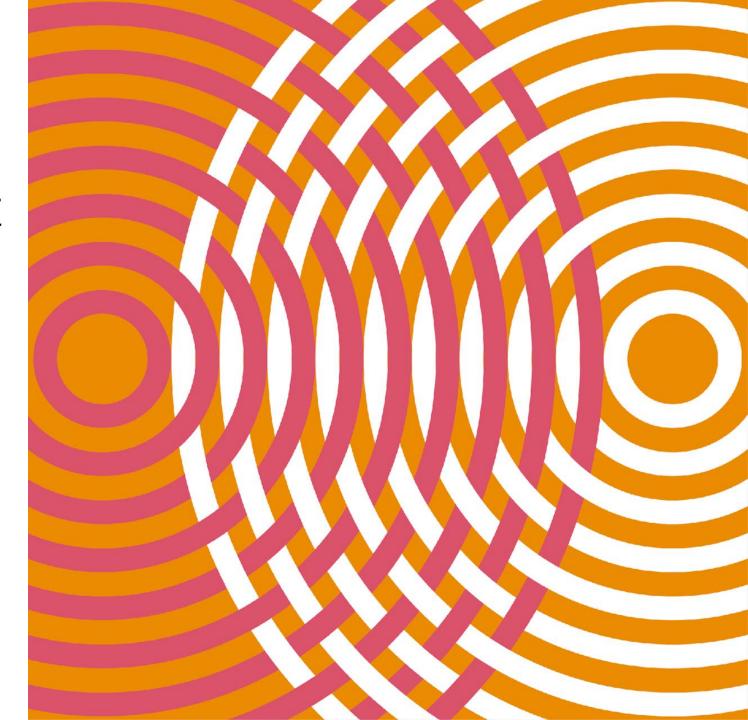
Results of the socio-economic impact assessment of the global fragrance industry

Presentation by **PwC** May 2019





Introduction

This document provides the Value Added and Employment results underpinning the report "The value of fragrance" (June 2019), including a breakdown of the results by country and regional level.

The country and regional level data is based on the consolidated data per country provided by the companies that participated in the data collection. Due to a lack of available data, the data could not be compared with data from other available sources and therefore may over or underestimate the Value Added and employment in some countries. The data should therefore be interpreted carefully.

The numbers represent global figures, excluding the US and Canada and are based on 2017 data.

For reporting purposes we recommend to round the employment figures (e.g. to a chosen multiple of 100) to avoid stating a false confidence in the numbers.

This document should be read in conjunction with the full report "The value of fragrance" (June 2019). Reading this report is no substitute for reading the full report.

Fragrance Industry

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Overall results, as reported in the report "Value of fragrance"

Employment figures are rounded to the nearest 500 to reflect the uncertainties associated with the employment figures.

	Value Added (€bn)	Employment (FTEs)
Direct contribution	2.5	15,000
Contribution from employee spending (from wages paid by the fragrance industry)	0.3	11,000
Total	2.8	26,000
Contribution from supply chain spending	3.6	325,500
Contribution from employee spending (from wages paid by the suppliers)	0.8	63,500
Total	4.4	389,000
Total contribution from supply chain spending and employee spending	4.8	400,000
Total contribution from employee spending	1.1	74,500
Total contribution of the fragrance industry	7.2	415,000

	Naturals	Synthetics	Indirect Materials	TOTAL
Contribution to GDP from supply chain spending (€bn)	1.0	1.9	0.8	3.6
Contribution to GDPfrom employee spending (from wages paid by the suppliers) (€bn)	0.2	0.4	0.2	0.8
Total	1.19	2.29	0.97	4.44
Contribution to employment from supply chain spending (FTEs)	197,000	105,000	23,500	325,500
Contribution to employment from employee spending (from wages paid by the suppliers) (FTEs)	21,000	34,500	8,000	63,500
Total	218,000	139,500	31,500	389,000

Overall results, as reported in the report "Value of fragrance"

Employment figures are <u>not</u> rounded. The remainder of this document is based on the numbers on this page.

	Value Added (€bn)	Employment (FTEs)
Direct contribution	2.5	15,183
Contribution from employee spending (from wages paid by the fragrance industry)	0.3	11,209
Total	2.8	26,392
Contribution from supply chain spending	3.6	325,459
Contribution from employee spending (from wages paid by the suppliers)	0.8	63,407
Total	4.4	388,867
Total contribution from supply chain spending and employee spending	4.8	400,076
Total contribution from employee spending	1.1	74,617
Total contribution of the fragrance industry	7.2	415,259

	Naturals	Synthetics	Indirect Materials	TOTAL
Contribution to GDP from supply chain spending (€bn)	1.0	1.9	0.8	3.6
Contribution to GDPfrom employee spending (from wages paid by the suppliers) (€bn)	0.2	0.4	0.2	0.8
Total	1.19	2.29	0.97	4.44
Contribution to employment from supply chain spending (FTEs)	196,938	105,221	23,300	325,459
Contribution to employment from employee spending (from wages paid by the suppliers) (FTEs)	20,778	34,719	7,911	63,407
Total	217,716	139,940	31,211	388,867

Country breakdown (1/2)

• Value Added is measured in €m; Employment is measure in FTEs

• The countries highlighted in orange are the selected 20 countries

	Proportion						Value					
		Value Added from employee	Value Added from supply chain spend and wages paid by		Employment from	Employment from supply chain spend and wages paid by			Value Added from supply chain spend and wages paid by	Direct	Employment from	Employment from supply chain spend and wages paid by
Country		spending		Employment			Added					suppliers
Argentina	2.7%	2.9%				0.4%	66			393		
Australia	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	-		. 17	-	_	156
Brazil	9.0%	10.1%	2.0%	8.5%	11.7%	1.1%	222	2 34	. 88	1,290	1,315	4,408
Chile	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-			-	-	-
China	9.5%	9.5%	28.7%	12.3%	36.5%	45.7%	234	32	1,277	1,865	4,091	177,565
Colombia	1.4%	1.4%	<0.1%	1.1%	3.0%			5	0	162	336	9
France	5.5%											
Germany	8.2%	8.1%	8.0%	11.6%	2.9%	0.9%	202	27	356	1,757	329	3,595
India	3.0%	1.5%	8.7%	3.9%	12.5%	32.0%	75	5 5	388	588	1,399	124,307
Indonesia	0.8%								126	164	236	
Italy	0.9%	0.5%	1.1%	0.4%	0.2%	0.3%			51	67	21	1,003
Japan	2.7%	5.3%	3.5%	3.5%	1.5%	0.4%	66	18	155	534	169	1,529
Mexico	7.3%	7.2%	2.4%	8.5%	8.4%	1.5%	180	24	106	1,290	938	5,874
Netherlands	11.5%	3.2%	0.3%	4.9%	1.3%	<0.1%	284			744	141	
Singapore	9.2%	10.6%	1.1%	9.6%	4.1%	0.1%	227	35	49	1,460	460	496
South Korea	0.3%	0.4%	0.1%	0.4%	0.3%	<0.1%	7	1	2	59		
Spain	5.4%	6.5%	3.1%	5.7%	2.8%	0.4%	134	- 22	136	860	310	1,547
Switzerland	16.0%	21.2%	10.9%	10.2%	4.4%	0.8%	395	71	483	1,551	498	3,120
Turkey	1.4%	2.3%	0.1%	3.1%	2.3%	0.1%			5	471		
UK	5.4%	5.0%	2.4%	5.1%	1.9%	0.3%	133	17	107	781	208	1,087

IFRA: Results

May 2019

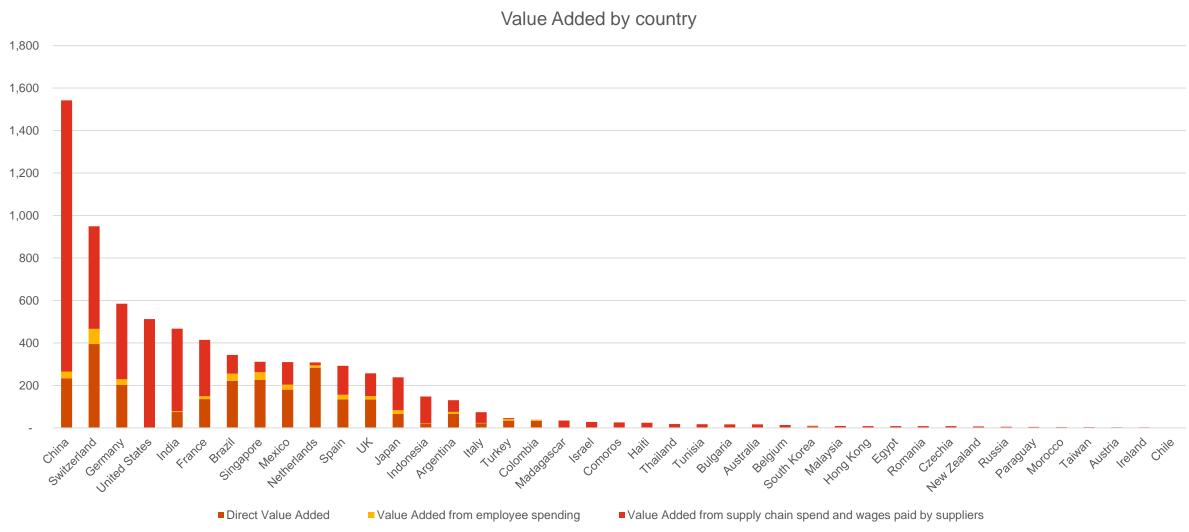
Country breakdown (2/2)

Value Added is measured in €m; Employment is measure in FTEs

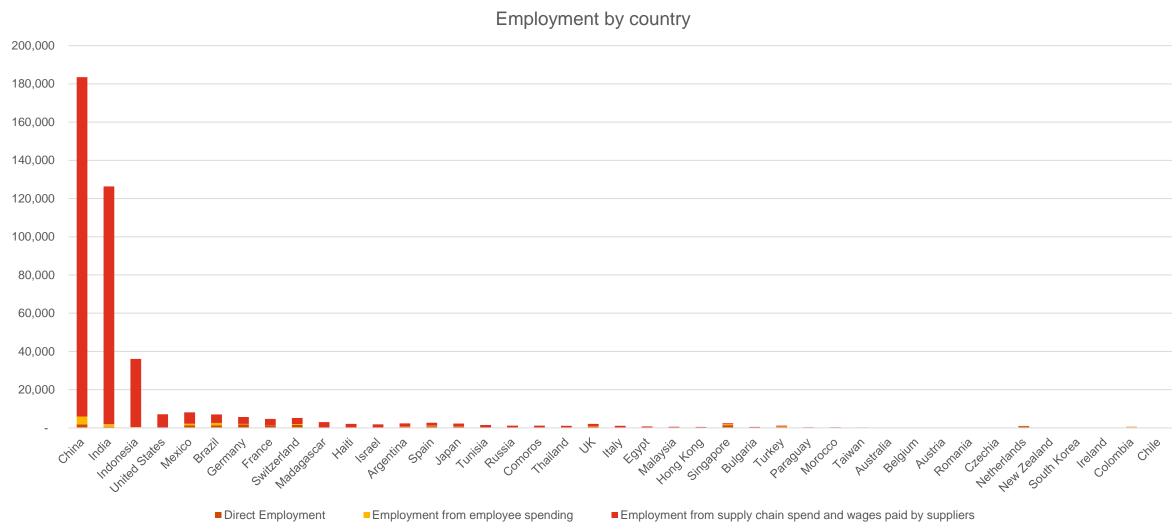
	Proportion						Value					
Country	Direct Value	Value Added from employee spending		Direct Employment	Employment from employee spending	Employment from supply chain spend and wages paid by suppliers	Direct Value Added	Value Added from employee spending	Value Added from supply chain spend and wages paid by suppliers	Direct Employment	Employment from employee spending	Employment from supply chain spend and wages paid by suppliers
Hong Kong			0.2%		T [']	0.1%			. g			- 522
Malaysia			0.2%			0.2%			. 9		-	- 607
Thailand			0.4%)		0.3%		-	- 18		-	- 1,132
Taiwan			0.1%)		0.1%		-	- 4		-	- 226
Russia		-	- 0.1%)	-	- 0.3%		-	- 5		-	- 1,180
Israel		-	- 0.6%	D	-	- 0.5%)	_	- 28		-	- 1,894
New Zealand		-	- 0.1%	D	-	- 0.0%)	_	- 7		-	- 62
Belgium		-	- 0.3%	D	-	- 0.0%)	_	- 14		-	- 154
Romania		-	- 0.2%	o O	-	- 0.0%)	-	- 8		-	- 92
Czechia		-	- 0.2%		-	- 0.0%		-	- 8		-	- 92 - 92 - 29
Ireland		-	- 0.1%		-	- 0.0%		-	- 3		-	- 29
Austria		-	- 0.1%		-	- 0.0%	o l	-	- 3		-	- 93 - 483
Bulgaria		-	- 0.4%		-	- 0.1%		-	- 17		-	- 483
Haiti		-	- 0.5%		-	- 0.5%		-	- 24		-	- 2,072
Paraguay		-	- 0.1%		-	- 0.1%		-	- 4		-	- 374
United States		-	- 11.5%		-	- 1.8%		-	- 512		-	- 7,095
Madagascar		-	- 0.8%		-	- 0.8%		-	- 35		-	- 3,020
Comoros		-	- 0.6%		-	- 0.3%		-	- 26		-	- 1,168
Morocco		-	- 0.1%		-	- 0.1%		-	- 4	ļ ·	-	- 340
Tunisia		-	- 0.4%		-	- 0.4%		-	- 18		-	- 1,518
Egypt		-	- 0.2%	b	-	- 0.2%		-	. 9		-	- 739

IFRA: Results

Country level results: Value Added



Country level results: Employment



Regional results

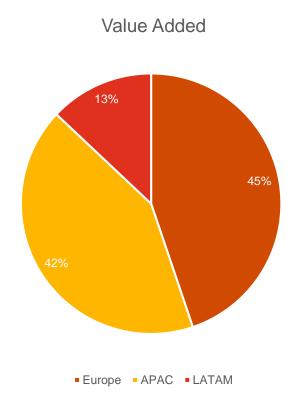
Value Added is measured in €bn; Employment is measure in FTEs

Regional proportions	Europe	APAC	LATAM		
Direct Value Added	54%	25%	21%		
Direct Employment	48%	31%	21%		
Value Added from employee spending (wages paid by fragrance industry)	51%	28%	22%		
Employment from employee spending (wages paid by fragrance industry)	17%	57%	26%		
Regional proportions	Europe	APAC	LATAM	Africa	USA
Value Added from supply chain spending and employee spending (wages paid by fragrance industry)	33%	47%	6%	2%	12%
Employment from supply chain spending and employee spending (wages paid by fragrance industry)	4%	88%	4%	2%	2%

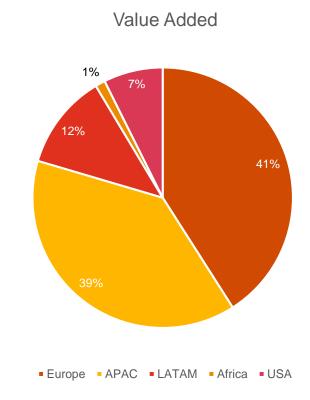
Regional results	Europe	APAC	LATAM		
Direct Value Added	1.3	0.6	0.5		
Direct Employment	7,288	4,707	3,188		
Value Added from employee spending (wages paid by fragrance industry)	0.2	0.1	0.1		
Employment from employee spending (wages paid by fragrance industry)	1,906	6,389	2,914		
Regional results	Europe	APAC	LATAM	Africa	USA
Value Added from supply chain spending and employee spending (wages paid by fragrance industry)	1.5	2.1	0.3	0.1	0.5
Employment from supply chain spending and employee spending (wages paid by fragrance industry)	15,555	342,203	15,555	7,777	7,777

IFRA: Results May 2019

Regional level results: Value Added

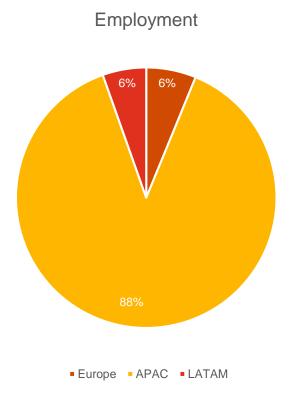


Excludes Value Added in Africa and the USA generated from supply chain spending.

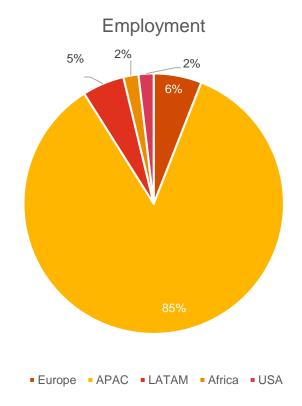


Includes Value Added in Africa and the USA generated from supply chain spending.

Regional level results: Employment



Excludes Employment in Africa and the USA generated from supply chain spending.



Includes Employment in Africa and the USA generated from supply chain spending.

Downstream Customers

Overall results, as reported in the report "Value of fragrance"

	Min	Max
Home Care and Cleaning	2,373	3,404
Personal Care and Cosmetics	28,228	45,137
Fine Fragrance	9,133	10,655
Air fresheners and scented candles	1,224	1,446
Fabric Care	6,886	11,275
TOTAL	47,844	71,917

Country breakdown (1/5)

Value Added is measured in €m

Category	Country	Region	Min	Max
Home Care and Cleaning	Argentina	LATAM	47.8	67.5
Personal Care and Cosmetics	Argentina	LATAM	363.0	543.1
Fabric Care	Argentina	LATAM	115.5	189.1
Fine Fragrance	Argentina	LATAM	213.5	249.1
Air fresheners and scented				
candles	Argentina	LATAM	20.5	24.2
Home Care and Cleaning	Australia	APAC	90.3	130.1
Personal Care and Cosmetics	Australia	APAC	525.8	838.0
Fabric Care	Australia	APAC	116.4	190.7
Fine Fragrance	Australia	APAC	245.4	286.3
Air fresheners and scented				
candles	Australia	APAC	46.0	54.3
Home Care and Cleaning	Brazil	LATAM	180.5	257.0
Personal Care and Cosmetics	Brazil	LATAM	2,941.2	4,311.8
Fabric Care	Brazil	LATAM	536.6	878.6
Fine Fragrance	Brazil	LATAM	2,286.9	2,668.1
Air fresheners and scented				
candles	Brazil	LATAM	32.8	38.8
Home Care and Cleaning	Chile	LATAM	26.5	38.0
Personal Care and Cosmetics	Chile	LATAM	361.6	540.8
Fabric Care	Chile	LATAM	59.1	96.8
Fine Fragrance	Chile	LATAM	213.8	249.4

Country breakdown (2/5)

Value Added is measured in €m; Employment is measure in FTEs

Category	Country	Region	Min	Мах
Air fresheners and scented candles	Chile	LATAM	28.5	33.6
Home Care and Cleaning	China	APAC	439.3	647.4
Personal Care and Cosmetics	China	APAC	6,545.0	10,893.6
Fabric Care	China	APAC	1,720.3	2,816.8
Fine Fragrance	China	APAC	346.9	404.8
Air fresheners and scented candles	China	APAC	53.2	62.8
Home Care and Cleaning	Colombia	LATAM	24.3	35.8
Personal Care and Cosmetics	Colombia	LATAM	311.0	465.2
Fabric Care	Colombia	LATAM	91.0	148.9
Fine Fragrance	Colombia	LATAM	249.7	291.3
Air fresheners and scented candles	Colombia	LATAM	12.2	14.4
Home Care and Cleaning	France	Europe	181.6	264.0
Personal Care and Cosmetics	France	Europe	1,483.9	2,322.0
Fabric Care	France	Europe	411.7	674.1
Fine Fragrance	France	Europe	947.0	1,104.8
Air fresheners and scented candles	France	Europe	128.6	152.0
Home Care and Cleaning	Germany	Europe	251.3	350.4
Personal Care and Cosmetics	Germany	Europe	1,632.1	2,592.7
Fabric Care	Germany	Europe	411.7	674.1

Country breakdown (3/5)

Value Added is measured in €m; Employment is measure in FTEs

Category	Country	Region	Min	Max
Fine Fragrance	Germany	Europe	947.0	1,104.8
Air fresheners and scented candles	Germany	Europe	86.8	102.6
Home Care and Cleaning	India	APAC	86.7	127.1
Personal Care and Cosmetics	India	APAC	1,661.8	2,503.2
Fabric Care	India	APAC	581.1	951.4
Fine Fragrance	India	APAC	130.9	152.8
Air fresheners and scented candles	India	APAC	32.7	38.6
Home Care and Cleaning	Indonesia	APAC	33.9	48.5
Personal Care and Cosmetics	Indonesia	APAC	768.9	1,249.4
Fabric Care	Indonesia	APAC	190.1	. 311.3
Fine Fragrance	Indonesia	APAC	78.8	91.9
Air fresheners and scented candles	Indonesia	APAC	15.3	18.0
Home Care and Cleaning	Italy	Europe	159.6	231.2
Personal Care and Cosmetics	Italy	Europe	1,180.8	1,800.4
Fabric Care	Italy	Europe	333.3	545.7
Fine Fragrance	Italy	Europe	516.5	602.6
Air fresheners and scented	l+oly.	Furana	60.5	82.5
candles	Italy	Europe	69.8	82.5
Home Care and Cleaning	Japan	APAC	254.1	. 349.2
Personal Care and Cosmetics	Japan	APAC	4,125.6	7,263.6
Fabric Care	Japan	APAC	801.4	1,312.2

Country breakdown (4/5)

Value Added is measured in €m; Employment is measure in FTEs

Category	Country	Region	Min	Max
Fine Fragrance	Japan	APAC	205.6	239.8
Air fresheners and scented candles	Japan	АРАС	294.7	348.2
Home Care and Cleaning	Mexico	LATAM	104.8	150.6
Personal Care and Cosmetics	Mexico	LATAM	1,041.0	
Fabric Care	Mexico	LATAM	431.7	706.9
Fine Fragrance	Mexico	LATAM	513.4	598.9
Air fresheners and scented candles	Mexico	LATAM	34.0	40.1
Home Care and Cleaning	Netherlands	Europe	44.0	61.1
Personal Care and Cosmetics	Netherlands	Europe	290.5	427.1
Fabric Care	Netherlands	Europe	100.4	164.4
Fine Fragrance	Netherlands	Europe	203.6	237.5
Air fresheners and scented candles	Netherlands	Europe	17.3	3 20.4
Home Care and Cleaning	Singapore	APAC	6.1	8.9
Personal Care and Cosmetics	Singapore	APAC	118.4	200.1
Fabric Care	Singapore	APAC	14.9	24.3
Fine Fragrance	Singapore	APAC	61.6	71.9
Air fresheners and scented candles	Singapore	АРАС	4.6	5.5
Home Care and Cleaning	South Korea	APAC	28.0	43.1
Personal Care and Cosmetics	South Korea	APAC	1,396.6	2,353.0
Fabric Care	South Korea	APAC	151.0	247.2

Country breakdown (5/5)

Value Added is measured in €m; Employment is measure in FTEs

Category	Country	Region	Min	Max
Fine Fragrance	South Korea	APAC	186.0	217.0
Air fresheners and scented	South Korea	АРАС	35.1	41.5
candles			55.1	
Home Care and Cleaning	Spain	Europe	109.3	162.1
Personal Care and Cosmetics	Spain	Europe	821.5	1,282.1
Fabric Care	Spain	Europe	235.3	385.2
Fine Fragrance	Spain	Europe	602.6	703.0
Air fresheners and scented	Spain	Europe	101.3	119.7
candles			101.3	
Home Care and Cleaning	Switzerland	Europe	36.4	52.7
Personal Care and Cosmetics	Switzerland	Europe	241.2	374.8
Fabric Care	Switzerland	Europe	77.3	126.6
Fine Fragrance	Switzerland	Europe	183.0	213.5
Air fresheners and scented candles	Switzerland	Europe	25.8	30.5
Home Care and Cleaning	Turkey	Europe	50.4	75.9
Personal Care and Cosmetics	Turkey	Europe	290.2	445.9
Fabric Care	Turkey	Europe	127.0	208.0
Fine Fragrance	Turkey	Europe	116.2	135.6
Air fresheners and scented candles	Turkey	Europe	9.3	11.0
Home Care and Cleaning	UK	Europe	218.3	303.3
Personal Care and Cosmetics	UK	Europe	2,127.8	3,086.5
Fabric Care	UK	Europe	380.4	622.8
Fine Fragrance	UK	Europe	884.3	1,031.7
Air fresheners and scented candles	UK	Europe	175.5	207.4

IFRA: Results

May 2019

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