
G09.03.03

Status of EMRP and EMPIR

Krakow, 2 June 2015

DELEGATION AGREEMENT

NUMBER H2020 EMPIR

Signed 27 April 2015

European Metrology Programme for Innovation and Research (EMPIR)

This **Delegation Agreement** ('the Agreement') is between the following parties:

on the one part,

the **European Union** ('the EU'), represented by the European Commission ('the Commission'), represented for the purposes of signing this Agreement by Clara de la Torre, Director of Directorate D in the Commission's Directorate-General for Research and Innovation,

and

on the other part,

the European Association of National Metrology Institutes, (EURAMET e.V.), Bundesallee 100, 38116 Braunschweig, Germany, Official registration: VR 200202, Bl. 23-28, represented for the purpose of signing this Delegation Agreement by Dr. Kamal Hossein, the Chairperson of EURAMET, and by Dr. Jörn Stenger, the EMPIR Chair.

The Commission has decided to entrust budget implementation tasks ('the entrusted tasks') to EURAMET e.V. under Decision No 555/2014/EU of the European Parliament and of the Council of 15 May 2014 on the Participation of the Union in the European Metrology Programme for Innovation and Research (EMPIR) jointly undertaken by several Member States (Decision No 555/2014/EU).

TRANSFER OF FUNDS AGREEMENT

Delegation Agreement number: H2020 EMPIR

Signed 27 April 2015

2014

This is a 'Transfer of Funds Agreement' between the following parties:

on the one part,

the **European Union** ('the EU'), represented by the European Commission ('the Commission'), represented for the purpose of signing this Transfer of Funds Agreement by Clara de la Torre, Director of Directorate D in the Commission's Directorate-General for Research and Innovation,

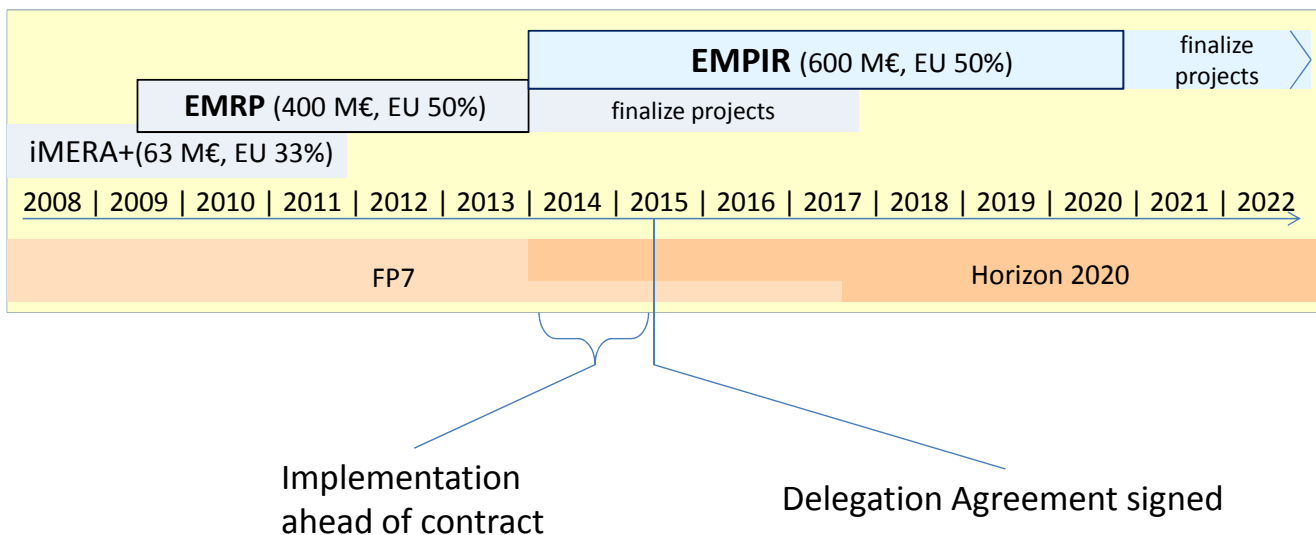
and

on the other part,

the European Association of National Metrology Institutes, Eingetragener Verein (hereinafter referred to as 'EURAMET e.V. '), Legal registration No. VR200202, Bundesallee 100, Braunschweig, 38116, Germany, represented for the purpose of signing this Transfer of Funds Agreement by Dr. Kamal Hossain, the Chairperson of EURAMET, and Dr. Jörn Stenger, the EMPIR Chair.

By signing this Transfer of Funds Agreement, EURAMET e.V. agrees to carry out, under its own responsibility, the tasks set out in the Delegation Agreement and this Transfer of Funds Agreement and to implement the annual work plan.

Smooth transition from EMRP to EMPIR and co-implementation fully achieved



National commitments November 2014

Allocations in k€ of direct costs + 5%

12 November 2014 Program overbooking factor = 1.81

Calls 2015-2020

N°	Country	TP budget		2015				12 November 2014					Program overbooking factor = 1.81		Sum
		50M€	600M€	Health	SI	Pren	Rpot	SIP	2016	2017	2018	2019	2020		
	NMI/DI part	17,72	13,10	9,46	3,32	2,09	0,44	32,49	32,73	33,86	32,59	32,21	210,01		
	non-NMI/DI part	7,01	7,05	2,37	1,42	0,23	0	15,99	15,44	12,85	15,76	11,88	90,00		
1	Austria	152	32	23	8	5	1	156	157	162	156	154	1 006		
2	Belgium	147	209	151	53	33	7	160	157	150	150	220	1 437		
3	Bosnia-Herzegovina	291	- 23	- 16	- 6	- 4	- 1	170	172	178	171	169	1 101		
4	Bulgaria	-	102	74	26	16	3	156	157	162	156	154	1 006		
5	Croatia	213	- 13	- 10	- 3	- 2	0	130	131	135	130	129	838		
6	Czech Republic	2 183	561	405	142	90	19	1 600	1 600	1 500	1 300	896	10 296		
7	Denmark	876	335	242	85	53	11	818	818	818	818	813	5 687		
8	Estonia	408	- 49	- 35	- 12	- 8	- 2	159	155	159	157	157	1 089		
9	Finland	2 670	409	295	104	65	14	2 223	2 239	1 916	2 229	2 203	14 367		
10	France	3 260	1 771	1 279	449	283	59	5 001	5 038	5 212	5 016	4 958	32 325		
11	Germany	9 642	6 225	4 495	1 578	993	209	16 299	16 420	16 987	16 350	16 159	105 357		
12	Greece	-	-	-	-	-	-	-	-	-	-	-	-		
13	Hungary	16	120	87	30	19	4	194	196	203	195	193	1 257		
14	Ireland	146	6	4	1	1	0	111	112	116	111	110	719		
15	Italy	3 380	1 352	976	343	216	45	4 445	4 478	4 633	4 459	4 407	28 734		
16	Netherlands	2 412	895	647	227	143	30	3 500	3 200	2 000	3 500	3 200	19 754		
17	Norway	497	226	163	57	36	8	695	700	724	697	689	4 490		
18	Poland	348	143	103	36	23	5	463	466	483	464	459	2 993		
19	Portugal	215	28	20	7	4	1	145	146	151	145	143	1 006		
20	Romania	76	207	150	53	33	7	370	373	386	372	367	2 394		
21	Serbia	278	- 43	- 31	- 11	- 7	- 1	130	131	135	130	129	838		
22	Slovakia	-	30	21	8	5	1	35	35	35	35	34	239		
23	Slovenia	575	74	53	19	12	2	400	400	400	400	358	2 693		
24	Spain	832	344	248	87	55	12	1 111	1 120	1 158	1 115	1 102	7 184		
25	Sweden	1 168	107	77	27	17	4	1 100	900	950	950	842	6 142		
26	Switzerland	-	1 273	919	323	203	43	1 945	1 959	2 027	1 951	1 928	12 571		
27	Turkey	1 004	992	716	251	158	33	2 223	2 239	2 316	2 229	2 203	14 367		
28	United Kingdom	7 550	6 583	4 754	1 668	1 050	221	15 373	15 487	16 022	15 421	15 241	99 370		
	Sum	38 339	21 895	15 811	5 549	3 493	735	59 112	58 984	59 116	58 807	57 417	379 259		
	Overbooking factor	2,16	1,67	1,67	1,67	1,67	1,67	1,82	1,80	1,75	1,80	1,78	1,81		

TPs 2015-20	Indicative budget	
	NMI/DI	non-NMI/DI
2015 Health	13,10	7,05
2015 SI	9,46	2,37
2015 Pren	3,32	1,42
2015 RPot	2,09	0,23
2015 SIP	0,44	0
2016 ENV	13,28	7,15
2016 ENG	13,28	7,15
2016 Pren	3,41	1,46
2016 RPot	2,09	0,23
2016 SIP	0,44	0
2017 FUN	9,48	6,32
2017 IND	17,32	7,42
2017 Pren	3,41	1,46
2017 RPot	2,09	0,23
2017 SIP	0,44	0
2018 SI	16,56	4,14
2018 Health	13,46	7,25
2018 Pren	3,41	1,46
2018 SIP	0,44	0
2019 ENV	13,28	7,15
2019 ENG	13,28	7,15
2019 Pren	3,41	1,46
2019 undef	2,19	0
2019 SIP	0,44	0
2020 IND	10,13	4,34
2020 FUN	9,39	6,04
2020 Pren	3,50	1,50
2020 undef	8,75	0
2020 SIP	0,44	0

National commitments May 2015

Corrected for bidding level 2014 and due to strategic decisions of participating countries

BG: backloading FI: higher commitment IR: frontloading CH: formally not participating

N°	Country	Commitment(k€)	2014	Health	SI	Pren	Rpot	SIP	2016	2017	2018	2019	2020	Sum
1	Austria	840	152	50	50	0	50	0	140	141	146	140	137	1 006
2	Belgium	1 200	147	300	70	0	50	0	160	157	183	150	220	1 437
3	Bosnia-Herzegovina	920	291	0	0	0	130	20	190	152	108	101	109	1 101
4	Bulgaria	840	0	0	0	0	70	0	307	157	162	156	154	1 006
5	Croatia	700	213	30	30	0	35	0	110	110	110	110	90	838
6	Czech Republic	8 600	2 183	400	1 200	0	100	0	1 500	1 500	1 400	1 200	813	10 296
7	Denmark	4 750	876	341	248	196	0	33	818	818	818	818	721	5 687
8	Estonia	910	408	35	35	0	70	0	117	107	106	105	106	1 089
9	Finland*	16 200	2 670	450	2 000	280	50	58	2 861	2 877	2 555	2 867	2 727	19 395
10	France	27 000	3 260	1 850	1 500	550	100	20	5 001	4 858	5 212	5 016	4 958	32 325
11	Germany	88 000	9 642	6 500	7 000	500	500	200	15 100	16 420	16 987	16 350	16 159	105 357
12	Greece	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Hungary	1 050	16	120	70	20	7	3	204	206	213	205	193	1 257
14	Ireland	600	146	0	0	0	90	0	94	97	101	96	95	719
15	Italy	24 000	3 380	1 300	1 600	100	50	50	4 277	4 478	4 633	4 459	4 407	28 734
16	Netherlands	16 500	2 412	900	792	150	0	100	3 500	3 200	2 000	3 500	3 200	19 754
17	Norway	3 750	497	200	370	30	70	30	484	700	724	697	689	4 490
18	Poland	2 500	348	143	103	0	63	0	463	466	483	464	459	2 993
19	Portugal	840	215	100	30	0	20	0	140	140	135	130	96	1 006
20	Romania	2 000	76	207	150	53	32	8	370	373	386	372	367	2 394
21	Serbia	700	278	0	0	0	100	0	90	95	105	85	85	838
22	Slovakia	200	0	30	30	0	6	0	35	35	35	35	33	239
23	Slovenia	2 249	575	240	189	50	44	0	326	326	326	326	291	2 693
24	Spain	6 000	832	250	460	92	30	0	1 111	1 120	1 158	1 115	1 016	7 184
25	Sweden	5 131	1 168	400	300	100	30	20	1 100	900	744	744	636	6 142
26	Turkey	12 000	1 004	991	718	251	155	37	2 223	2 239	2 316	2 229	2 203	14 367
27	United Kingdom	83 000	7 550	8 800	4 500	500	150	380	15 320	15 487	16 022	15 421	15 241	99 370
	Sum	310 480	38 339	23 637	21 445	2 872	2 002	959	56 042	57 158	57 167	56 891	55 205	371 718
	Overbooking factor		2,14	1,76	1,79	1,78	1,71	1,92	1,76	1,77	1,66	1,77	1,65	1,76

*Increased national commitment not confirmed by EMPIR committee

EMRP

Some EMRP detailed issues

Reporting delayed in several cases:

2009 call 3 final reports not yet completed

2010 call 8 projects have still not submitted a first draft of their final reports – they are at least 5 months overdue now.

The MSU is also behind in its target in replying to the reports we have received – 27 replies have been outstanding for more than 45 days. This is due to the focus on contract negotiation in the first 3 months of the year, the backlog will be reduced over the summer.

RPot call

- improved call scope, and training events in Sarajevo and Tallinn around the stage 1 → reduced the number of inappropriate PRTs submitted this year.
- However, the sub-committee still regarded half of the 12 PRTs as out of scope and those PRTs selected to contribute to the SRTs still require much work to introduce a strategic approach and clear research objectives.
- Better involvement

EMRP fees

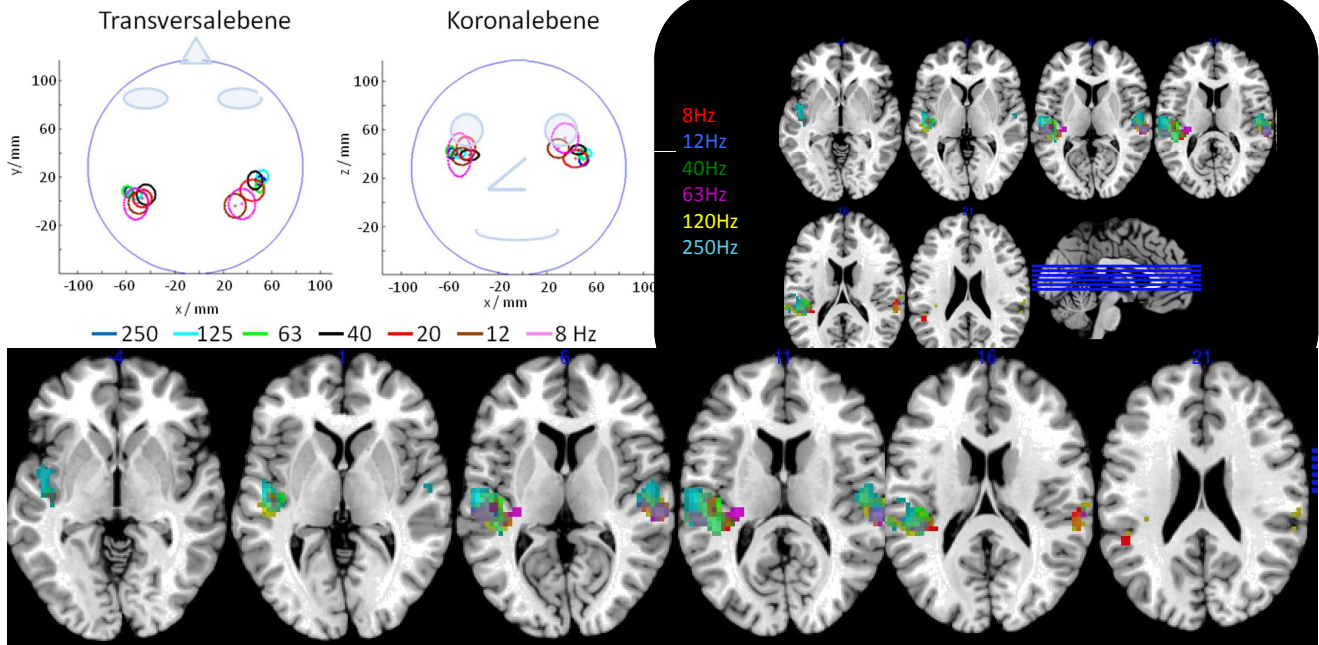
Seven countries had not paid their by March and were therefore prevented from receiving JRP payments in the April payment list.

EMRP-project: EARS

Which frequencies cause brain reactions?
Exposure to acoustic signals down to infrasound

Magnetic encephalography (MEG)

Functional magnetic resonance tomography (fMRT)



EMPIR

Industry ranked list		
1	JRP-i01	3DMetChemIT
1	JRP-i17	PlanarCal
3	JRP-i20	Strength-ABLE
3	JRP-i30	EMPRESS
5	JRP-i28	MIQC2
6	JRP-i25	Pres-to-Vac
6	JRP-i21	3D Stack
8	JRP-i14	EIPow
9	JRP-i08	MethHPM
9	JRP-i13	MET5G
11	JRP-i31	HIT
12	JRP-i04	Innanopart
13	JRP-i22	PhotInd
14	JRP-i26	MNm Torque
15	JRP-i05	MAMPA
16	JRP-i12	DynaFun
17	JRP-i29	QuanThi
18	JRP-i33	Batteries
19	JRP-i23	MicroMec
20	JRP-i16	MagRes

Research Potential ranked list		
1	JRP-r01	ACQ-PRO
2	JRP-r02	Weighing
3	JRP-r08	ENVCRM
4	JRP-r03	Absorb
5	JRP-r04	Eura-Thermal
6	JRP-r09	HumMex
7	JRP-r07	T and F
8	JRP-r06	EMETRE

20	JRP-i24	OptSoLitho
22	JRP-i06	Nozzles
22	JRP-i09	NanoManu
24	JRP-i02	PureWater
24	JRP-i32	NIDFibers
26	JRP-i11	Electromobility
27	JRP-i10	Asphere
28	JRP-i07	Vision
29	JRP-i19	Process Flows
30	JRP-i15	MetroGRAPH
31	JRP-i18	GasFlowMet
32	JRP-i27	COMMET

SIP ranked list		
1	SIP-IND12	IND12 Vacuum
2	SIP-ENV04	UAEO_eLearning_T
3	SIP-ENV02	Autopart
4	SIP-IND07a	SIP-IND07 (1)
5	SIP-IND07b	SIP-IND07 (2)
6	SIP-ENG01	Siloxanes
7	SIP-ENG08	DIGITALSTD
8	SIP-IND09	Dynamic
9	SIP-ENV01	SIP ENV01
10	SIP-ENG06	SIP-ENG06

Grant Agreements issued by
May 2015 from 2014 call:

TP Ind: all 14

TP RPT: 5 out of 6

SIP: 7 out of 8

Huge achievement by MSU!
Great work by consortia

Guardians and facilitators

Year	Call	TP Guardian	TP Faciliator
2015	Health III	Beat Jeckelmann (METAS)	Sophie Vaslin-Reimann (LNE)
	SI III	Erkki Ikonen (MIKES)	Ian Severn (NPL)
	NRM I	Maguelonne Chambon (LNE)	Eveline Domini (LNE)
	RPT II	Miruna Dobre (SMD)	Tanasko Tasic (EURAMET)
	SIP II	-	Paula Knee (MSU) Eveline Domini (LNE)
2016	ENG III	Albert Dalhuijsen (VSL)	Silvie Hoffmanova (CMI)
	ENV III	Joern Stenger (PTB)	Béatrice Lalere (LNE)
	NRM II	Maguelonne Chambon (LNE)	Eveline Domini (LNE)
	RPT III	Miruna Dobre (SMD)	Tanasko Tasic (EURAMET)
	SIP III	-	Paula Knee (MSU) Eveline Domini (LNE)

„Permanent facilitators“

- RPot: Tanasko
- SIP - Innovation: Paula
- SIP – Standardization: Eveline

Call 2015 subcommittee meetings

Meeting SC-R April 20 – 22 noon
Joint meeting CB April 22 afternoon
Meeting SC-CB April 23

SC-R: Albert, Beat, Erkki, Giovanni, Jiri, Maguelonne, Rado, Robin, Jörn; Duncan

SC-CB: Miruna, Paul, Rado, Vida (excused), Jörn; Duncan

Joint meeting on CB: both subcommittees, Janko, Wolfgang, Tanasko

Joint meeting CB:

- Mechanisms for CB measures under EMPIR (such as RPot JRP's, RMG's, training)
- Role of secretariat, focus group and TC's

Call 2015 – SRT's

	number of PRT's	number of SRT's
HEA	65	21 (22)
SI	35	16 (17)
NRM	31	11 + 1
RPT	10	6
SIP		

Year	Call	EU contribution M€	Target % for non NMI/DIs
2014	2014-1 Industry JRPs	23.00	30%
	2104-2 Research Potential JRPs	1.50	10%
	2014-3 SIPs	0.50	0%
2015	2015-1 Health JRPs	20.40	35%
	2015-2 SI JRPs	12.00	20%
	2015-3 Pre-normative JRPs	4.80	30%
	2015-4 Research Potential JRPs	2.30	10%
	2015-5 SIPs	0.50	0%
2016	2016-1 ENV JRPs	20.00	35%
	2016-2 ENG JRPs	20.00	35%
	2016-3 Pre-normative JRPs	4.70	30%
	2016-4 Research potential JRPs	2.30	10%
	2016-5 SIPs	0.50	0%
2017	2017 -1 Fundamental JRPs	15.60	40%
	2017-2 Industry JRPs	24.30	30%
	2017-3 Pre-normative JRPs	4.80	30%
	2017-4 Research Potential JRPs	2.30	10%
	2017-5 SIPs	0.50	0%
2018	2018-1 SI JRPs	21.00	20%
	2018-2 Health JRPs	21.00	35%
	2018-3 Pre-normative JRPs	5.00	30%
	2018-4 SIPs	0.50	0%
2019	2019-1 ENV JRPs	20.00	35%
	2019-2 ENG JRPs	20.00	35%
	2019-3 Pre-normative JRPs	4.80	30%
	2019-4 undefined JRPs	2.20	0%
	2019-5 SIPs	0.50	0%
2020	2020-1 Industry JRPs	14.80	30%
	2020-2 Fundamental JRPs	15.80	39%
	2020-3 Prenormative JRPs	5.00	30%
	2020-4 undefined JRPs	8.90	0%
	2020-5 SIPs	0.50	0%
Total		300.00	

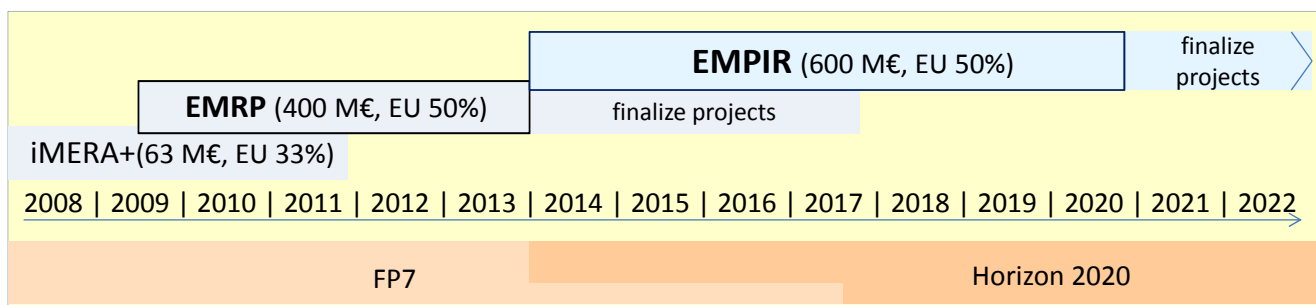
Beyond call 2015

2017 Evaluation EMRP and mid-term evaluation EMPIR:

- EMRP: Have we achieved the objectives?
- EMPIR: Are we on track towards the objectives?
- Recalculation overhead
- EMPIR committee will review operational figures

Beyond call 2015

Unlike other research programmes, iMERAplus, EMRP and EMPIR mark a strategic development:



→ Establish an implementation structure, learn to do joint research

→ develop a strategic research programme towards coordination

→ broaden the scope to all areas of metrology

Exploit these opportunities to develop a coordinated European metrology landscape at a next level of efficiency and effectiveness

Develop a model of European integration