



Precious Metals
Consortium



Precious Metals & Rhenium Consortium

General Assembly Meeting

31 May & 1 June 2017 | Pforzheim, Germany



Precious Metals
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1. Welcome and Introduction

Guy Ethier, Umicore



1.1 Confidentiality and Competition Law

DO	DON'T
<u>Application of competition law</u>	
Art. 101 and 102 TFEU may be applicable to the conclusion of any preliminary agreement and activities of any preliminary phase.	Don't assume that conflicts with competition law are excluded simply by the fact that the Agreement complies with the provisions of the REACH Regulation.
<u>Consultation in Matters of Competition Law</u>	
Consult an in-house legal expert or the compliance officer of your company or an external lawyer whenever there are uncertainties respecting compliance with competition law. Stop all meetings/discussions which are not in compliance with these Compliance Guidelines until a legal expert has been involved.	Don't assume that these Compliance Guidelines deal with all competition law issues exhaustively. Basically, compliance with Art. 101 and 102 TFEU can be determined only on the basis of market impact in each individual case. These Compliance Guidelines may therefore be regarded only as a means of providing general conduct recommendations.
<u>Activities in any preliminary phase and at any other stage of operation of the Consortium</u>	
Restrict cooperation within the scope of the preliminary phase to the initially defined goals and purposes of the cooperation.	Pursuant to Art. 101 and 102 TFEU, activities which have the object or the effect of preventing, restricting and/or distorting competition are prohibited within the scope of this Agreement, including: <ul style="list-style-type: none"> - Coming to agreement, including arrangements or collusions, about prices, markets and customers (see Art. 101 paragraph 1 a)-e) TFEU); - Joint boycotting of other companies; - The unjustified unequal treatment of trade partners; - The abusive exploitation of a dominating market position.
<u>Exchange of Confidential Information</u>	
Involve a Trustee for the exchange of Confidential Information.	The exchange of Information concerning market behaviour and having the object or the effect of preventing, restricting and/or distorting competition is inadmissible; in particular, this relates to : <ul style="list-style-type: none"> - Production capacities; - Productions or sales volumes; - Import volumes; - Market shares; - Price policy; - Distribution and marketing terms; - Marketing strategies; - Information regarding the relationship with suppliers.
<u>Documentation on Cooperation</u>	
Keep minutes of all meetings which detail the subject of the meeting. In case of uncertainty, have the contents of the minutes reviewed by an external legal expert prior to sending them to all parties of the Agreement. Stop all meetings which are not in compliance with these Guidelines until a legal expert has been involved.	



1.2 Tour de table, quorum and apologies

Cf. attendance list

Quorum is reached: 62 %

1.3 Approval of the agenda 31 May 2017 (1)

1. Welcome and Introduction

1.1. Confidentiality and Competition Law

1.2. Tour de table, quorum and apologies

1.3. Approval of the agenda

1.4. Approval of the minutes of the last meeting (December 2016, Brussels), including status of action items

2. PMC finances

2.1. 2016 audited accounts

2.2. 2017 status

3. PMC Workplan 2017 : timeline and registration status

4. Data Sharing status

4.1. REACH

4.2. K-REACH

1.3 Approval of the agenda 31 May 2017 (2)

5. PMC after 2018

6. PMC Workplan : a transition year

7. Communication : new EPMF/PMC website

8. Knowledge Management System

9. Closing remarks

1.4 Approval of the minutes of the last meeting (December 2016) including status of action items

Actions	Who?	When?	Status
Review and streamline approval process to ensure better efficiency taking into account the potential liability of the Assembly linked to the Consortium Agreement	Management Committee	March 2017	DONE
Develop KPIs for 2017 to ensure on time implementation	FC	March 2017	DONE
Management Committee to elect Chair and co-Chair at next Management Committee meeting/conference call	Management Committee	Q1 2017	DONE
Contact Cri Criterion in order to know whether they are willing to be involved in the PMC at WG level. Topic will also be added to next PMC Mgt Cttee	FC	Q1 2017	DONE
Review PMC portfolios and what PM has been registered so far	FC	Q1 2017	DONE
Check with Concawe and Cri Criterion the PETCO experience	FC	Q1 2017	DONE

1.4 Approval of the minutes of the last meeting (December 2016) including status of action items

Actions	Who?	When?	Status
Discussion of PMC updated agreement	Management Committee	15 March 2017	DONE
Organisation of another brainstorming session to assess the extension of the scope of PMC to better reflect the agreed mandate	ALL	25 April 2017	DONE
Agreement by the Assembly on PMC updated scope and long term strategy according to the new objectives	Assembly	June 2017	
Approval of rolling plan including key milestones for 2018-2023	Assembly	December 2017	
Organize a meeting between EPMF Board and PMC Chairs to discuss future of PMC and the silver proposal	FC	January 2017	DONE
Propose a pragmatic and legally acceptable solution to handle silver under PMC umbrella	FC/K&L Gates	January 2017	DONE
Review and approve of the proposal on silver WFD via a written procedure	Assembly	February 2017	DONE
Prepare a proposal on Knowledge Management	FC	June 2017	DONE

For approval



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2. PMC Finances

France Capon, EPMF

2.1. 2016 audited accounts

		2016 Budget to be spent	2016 Budget to be invoiced	Expenses by 31/12/2016	Committed Expenses by 31/12/2016	TOTAL Expenses by 31/12/16 + Committed	Remaining available budget (2016 budget- Expenses- Committed)
2.1	Administrative costs	€ 618.800	€ 618.800	€ 561.665	€ 0	€ 561.665	€ 57.135
2.2	Ag-specific costs	€ 681.250	€ 689.903	€ 215.331	€ 431.983	€ 647.314	€ 33.936
2.3	Au-specific costs	€ 122.700	€ 79.550	€ 7.110	€ 96.089	€ 103.200	€ 19.500
2.4	PM CN- -specific costs	€ 388.500	€ 288.200	€ 234.829	€ 75.322	€ 310.151	€ 78.349
2.5	PGM- horizontal costs				€ 360.252	€ 360.252	-€ 360.252
2.5a	Pt-specific costs	€ 1.183.955	€ 645.102	€ 735.869	€ 256.860	€ 992.729	€ 191.226
2.5b	Pd-specific costs	€ 572.405	€ 622.173	€ 365.891	€ 25.000	€ 390.891	€ 181.514
2.5c	Rh-specific costs	€ 162.470	€ 171.217	€ 139.308	€ 88.943	€ 228.251	-€ 65.781
2.5d	Ru-specific costs	€ 558.420	€ 345.956	€ 391.582	€ 214.894	€ 606.476	-€ 48.056
2.5e	Ir-specific costs	€ 1.000	€ 1.000	€ 13.813	€ 0	€ 13.813	-€ 12.813
2.6	Re-specific costs	€ 11.400	€ 11.400	€ 3.776	€ 5.000	€ 8.776	€ 2.624
2.7	Refinables-specific costs	€ 772.550	€ 277.550	€ 23.576	€ 183.893	€ 207.469	€ 565.081
2.8	SVHC Roadmap-specific costs	€ 20.000	€ 20.000	€ 0	€ 0	€ 0	€ 20.000
2.9	Hydrazine- specific costs	€ 0	€ 0	€ 2.800	€ 0	€ 2.800	-€ 2.800
	TOTAL	€ 5.093.450	€ 3.770.851	€ 2.695.550	€ 1.738.235	€ 4.433.785	€ 659.665

2.1. 2016 audited accounts

2016 PMC expenses (actuals and committed) are **20% below budget to be spent**. The main reasons are:

- Administrative costs: we have an underspent in travels and meetings due to a cost efficient Assembly in June 2016, in legal costs (no major issues with data sharing yet) and in salaries due to a non-indexation of the salaries, and the bonus which have been paid in 2017.
- Ag costs: cost efficient solution for the literature review
- Au costs: the reimbursement of TCA testing and sample by Covance gives the impression of an underspent but overall, we are on budget.
- PM CN costs: the underspent is linked to the fact that one of the additional testing required took some time to be designed and the contract was only signed in February 2017. Therefore, a part of the left amount will be used in 2017 but is not included in the committed expenses by 31 December 2016.

2.1. 2016 audited accounts

- Pt and Pd costs: the significant underspent is due to the contingency added throughout the project as the budget foreseen in case of repeated testing needed. It is worth to note that if for Pd, we won't need to use this contingency anymore, there is still a risk for some Pt substances (HHPA) for which testing is still ongoing. In the case of Pt, we also save some money in the development of exposure scenarios and also in a change of strategy for Karstedt (waiving of a part of the ecotox test)
- Refinables costs: the project is lagging behind due to the significant delays in the discussions with ECHA regarding the IDs of UVCBs which delayed the program and the risk to be obliged to update the dossiers and perform additional ecotox testing.
- Hydrazine costs: a small overspent is recorded due to unexpected activities related to hydrazine in the context of the SVHC Roadmap project.
- Rh, Ru & Ir costs: these projects seem to be on overspent since the budget needed was available under the PGM horizontal costs (that we were not able to reallocate during the transition period) and not under the specific project

2.1. 2016 audited accounts

- **The financial controller and the treasurer reviewed and approved the 2016 audited accounts**
- **The PMC Management Committee recommends to the PMC Assembly to recommend to the EPMF Assembly to approve the 2016 audited accounts**



2.1. Reserves end of 2016

	Reserves by 31/12/2016
Administrative costs	315.944
Ag-applicable costs	456.262
Au-applicable costs	75.706
PM CN- -applicable costs	155.638
Pt-applicable costs	579.734
Pd-applicable costs	285.247
Rh-applicable costs	354.359
Ru-applicable costs	348.025
Ir-applicable costs	90.035
Re-applicable costs	119.063
Refinables-applicable costs	701.603
SVHC Roadmap-applicable costs	20.000
Ag WFD-applicable costs	0
Hydrazine-applicable costs	83.408
TOTAL	3.585.023

2.2. 2017 accounts – status (till April)

		2017 Budget to be spent	2017 Budget to be invoiced	Expenses by 30/04/2017	Committed Expenses by 30/04/2017	TOTAL Expenses by 30/04/2017 + Committed	Remaining available budget (2017 budget- Expenses- Committed)
2.1	Administrative costs	€ 617.250	€ 617.250	€ 146.067	€ 203.880	€ 349.947	€ 267.303
2.2	Ag-applicable costs	€ 897.550	€ 862.550	€ 132.162	€ 473.885	€ 606.047	€ 291.503
2.3	Au-applicable costs	€ 355.200	€ 201.200	€ 51.748	€ 106.271	€ 158.019	€ 197.181
2.4	PM CN- applicable costs	€ 72.700	€ 64.200	€ 7.703	€ 84.646	€ 92.349	-€ 19.649
2.5	<i>PGM- applicable costs</i>				€ 360.252	€ 360.252	-€ 360.252
2.5a	<i>Pt-applicable costs</i>	€ 763.900	€ 738.400	€ 189.160	€ 202.303	€ 391.463	€ 372.437
2.5b	<i>Pd-applicable costs</i>	€ 25.200	€ 25.200	€ 19.301	€ 40.813	€ 60.114	-€ 34.914
2.5c	<i>Rh-applicable costs</i>	€ 171.050	€ 153.550	€ 64.521	€ 160.398	€ 224.919	€ -53.869
2.5d	<i>Ru-applicable costs</i>	€ 501.700	€ 435.200	€ 109.770	€ 247.391	€ 357.161	€ 144.539
2.5e	<i>Ir-applicable costs</i>	€ 13.850	€ 13.850	€ 6.410	€ 7.591	€ 14.001	€ -151
2.6	Re-applicable costs	€ 7.400	€ 7.400	€ 2.062	€ 5.000	€ 7.062	€ 338
2.7	Refinables-applicable costs	€ 772.700	€ 75.200	€ 6.109	€ 226.984	€ 233.093	€ 539.607
2.8	SVHC Roadmap-applicable costs	€ 81.250	€ 61.250	€ 3.770	€ 58.218	€ 61.988	€ 19.262
2.9	Ag Water Framework Directive costs	€ 100.000	€ 100.000	€ 3.375	€ 0	€ 3.375	€ 96.625
	TOTAL	€ 4.379.750	€ 3.355.250	€ 742.158	€ 2.177.632	€ 2.919.790	€ 1.459.960



2.2. 2017 accounts – status (till April)

- PM CN-: the overspent is due to additional analytical testing needed for the OECD 422 of Potassium dicyanorgentate.
- Palladium : the overspent is due to unexpected request from ECHA during the manual completeness check, to perform additional phys-chem which required additional budget.
- Rhodium: negative balance related to conservative budget estimates (eg occupational monitoring, studies+study monitoring). Final figure expected to be more balanced with predicted budget
- Refinables: the outcome of the meeting between ECHA and the industry on SID was not conclusive and therefore, we are still waiting for the next discussions before updating the refinables files.
- Ag EQS: due to high level activities in the Ag Evaluation, some activities in the Ag EQS has been postponed and will be conducted after the submission of the silver dossier (July 2017)



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3. PMC Workplan 2017: timeline and registration status

France Capon, EPMF

Reminder – approval process



Overall status of PMC Registrations

48 substances registered (+ refinables) and still 31 substances to be registered!

Name of the substance	Identification numbers		LR	Registered by LR
	CAS	EC		
Silver	7440-22-4	231-131-3	Aurubis	Nov 2010
Silver nitrate	7761-88-8	231-853-9	Ames	Nov 2010
Disilver oxide	20667-12-3	243-957-1	Ames	Oct 2010
Silver carbonate	534-16-7	208-590-3	Johnson Matthey	Mar 2012
Disilver(1+) sulphate	10294-26-5	233-653-7	Johnson Matthey	Mar 2012
Silver chloride	7783-90-6	232-033-3	Agfa Gevaert	Mar 2013
Silver bromide	7785-23-1	232-076-8	Agfa Gevaert	Mar 2013
Silver iodide	7783-96-2	232-038-0	Agfa Gevaert	Mar 2013
Gold	7440-57-5	231-165-9	C. Hafner	Apr 2016
Tetrachloroauric acid	16903-35-8	240-948-4	Johnson Matthey	
Aurio(1+) 2,6,6-trimethylbicyclo[3.1.1]heptanethiolate	68365-87-7	269-858-3	Johnson Matthey	Jun 2016
Balsams, copaiba, sulfurized, mixed with turpentine, gold salts	68990-27-2	273-589-7	Heraeus	Apr 2016
Potassium dicyanoargentate	506-61-6	208-047-0	Saxonia Edelmetalle	
Silver cyanide	506-64-9	208-048-6	Saxonia Edelmetalle	Nov 2016
Potassium dicyanoaurate	13967-50-5	237-748-4	Umicore Galvanotechnik GmbH	October 2016

In GREEN = registered!

Overall status of PMC Registrations

Palladium	7440-05-3	231-115-6	Umicore NV/SA	Jan 2017
Palladium dichloride	7647-10-1	231-596-2	BASF	Jan 2017
Dihydrogen tetrachloropalladate(2-) (in solution)	16970-55-1	241-047-9	Heraeus	May 2017
Diamminedichloropalladium	14323-43-4	238-269-3	Heraeus	Jan 2017
Dichlorobis(triphenylphosphine)palladium	13965-03-2	237-744-2	Heraeus	Jan 2017
Palladium (II) di(4-oxopent-2-en-2-oate)	14024-61-4	237-859-8	Heraeus	Jan 2017
Palladium(II) acetate	3375-31-3	222-164-4	Heraeus	Oct 2016
Palladium monoxide	1314-08-5	215-218-3	Heraeus	Jan 2017
Tetraamminepalladium (II) nitrate	13601-08-6	237-078-2	Johnson Matthey	Jan 2017
Tetraamminepalladium(2+) dichloride	13815-17-3	237-489-7	Umicore AG&Co.KG	Mar 2017
Tetraamminepalladium(2+) dihydroxide	68413-68-3	270-241-6	Heraeus	May 2017
Tetrakis(triphenylphosphine)palladium	14221-01-3	238-086-9	Umicore AG&Co.KG	Mar 2017
Palladium sulphate	13566-03-5	236-957-8	Heraeus	May 2017
Tetraamminepalladium(2+) diacetate	61495-96-3	262-819-1	Umicore AG&Co.KG	Apr 2017
Disodium tetrachloropalladate	13820-53-6	237-502-6	BASF	Jan 2017
Palladium dinitrate	10102-05-3	233-265-8	Heraeus	Apr 2017
Palladium dihydroxide	12135-22-7	235-219-2	Umicore AG&Co.KG	Apr 2017
Diammonium hexachloropalladate	19168-23-1	242-854-9	Johnson Matthey	Mar 2017
Dipotassium hexachloropalladate	16919-73-6	240-974-6	C. Hafner	Feb 2017
Platinum				
Platinum	7440-06-4	231-116-1	Vale	Ongoing
Hexachloroplatinic acid	16941-12-1	241-010-7	Johnson Matthey	
Tetraammineplatinum dichloride	13933-32-9	237-706-5	Johnson Matthey	Feb 2017
Tetraammineplatinum dinitrate (in solution)	20634-12-2	243-929-9	Umicore AG&Co.KG	Ongoing
Diammineplatinum (II) nitrite	14286-02-3	238-203-3	Heraeus	
Dipotassium tetrachloroplatinate	10025-99-7	233-050-9	Heraeus	
Platinum dioxide	1314-15-4	215-223-0	Umicore AG&Co.KG	Mar 2017
Dihydrogen hexahydroxyplatinate, compound with 2-aminoethanol (1:2) (in solution)	68133-90-4	268-717-3	BASF	
Dipotassium hexachloroplatinate	16921-30-5	240-979-3	Heraeus	
Platinum dinitrate	18496-40-7	242-383-9	Heraeus	Ongoing
Platinum, 1,3-diethenyl-1,1,3,3-tetramethylsiloxane complexes / Karstedt concentrate	68478-92-2	270-844-4	Heraeus	Feb 2017
Diammonium hexachloroplatinate	16919-58-7	240-973-0	Johnson Matthey	
Dihydrogen hexahydroxyplatinate	51850-20-5	257-471-2	Johnson Matthey	Ongoing

In GREEN = registered!

Overall status of PMC Registrations

Iridium	7439-88-5	231-095-9	Johnson Matthey	May 2016
Hexachloroiridic acid, Hydrogen hexachloroiridate (IV)	16941-92-7	241-012-8	Heraeus	June 2016
Diammonium hexachloroiridate	16940-92-4	241-007-0	Johnson Matthey	May 2016
Rhodium	7440-16-6	231-125-0	Johnson Matthey	
Carbonyl(pentane-2,4-dionato-O,O')(triphenylphosphine)rhodium	25470-96-6	247-015-0	Johnson Matthey	Oct 2016
Carbonylhydrotris(triphenylphosphine)rhodium	17185-29-4	241-230-3	Umicore AG&Co.KG	Mar 2017
Dicarbonyl(pentane-2,4-dionato-O,O')rhodium	14874-82-9	238-947-9	Umicore AG&Co.KG	
Rhodium tris(2-ethylhexanoate) (in solution)	20845-92-5	244-079-1	Umicore AG&Co.KG	
Rhodium trichloride (hydrate)	20765-98-4	606-630-8	Heraeus	
Di- μ -chloro-bis(hapto-1,5-cyclooctadiene)dirhodium(I)	12092-47-6	235-157-6	Heraeus	Sept 2016
Tris(triphenylphosphine) rhodium (I) chloride	14694-95-2	238-744-5	Umicore AG&Co.KG	Mar 2017
Rhodium triiodide	15492-38-3	239-521-5	Umicore AG&Co.KG	
Dirhodium trisulphate	10489-46-0	234-014-5	Umicore AG&Co.KG	
Dirhodium trioxide	12036-35-0	234-846-9	Umicore AG&Co.KG	
Rhodium (III) acetate	42204-14-8	255-707-9	Umicore AG&Co.KG	
Rhodium trinitrate	10139-58-9	233-397-6	Johnson Matthey	
Rhodium trihydroxide	21656-02-0	244-508-2	Heraeus	
Triammonium hexachlororhodate	15336-18-2	239-364-2	Vale	
Diammonium sodium hexakis(nitrito-N)rhodate	64164-17-6	264-713-0	Vale	
Ruthenium	7440-18-8	231-127-1	Heraeus	
Ruthenium trichloride (hydrate)	14898-67-0	604-667-4	Heraeus	
Ruthenium (IV) oxide	12036-10-1	234-840-6	Heraeus	
Tris(nitrato-O)nitrosylruthenium	34513-98-9	252-068-8	Umicore AG&Co.KG	Feb 2017
Hexakis[μ -(acetato-O:O')]- μ 3-oxo-triangulo-triruthenium acetate / Ruthenium acetate	55466-76-7	259-653-7	Johnson Matthey	
Tetraammonium decachloro- μ -oxidiruthenate(4-)	85392-65-0	286-924-7	Heraeus	
Ruthenium trihydroxide	12135-42-1	235-221-3	Umicore NV/SA	
Rhenium	7440-15-5	231-124-5	KGHM Metraco	Sept 2013
Perrhenic acid (in solution)	13768-11-1	237-380-4	Heraeus	Nov 2013
Ammonium perrhenate	13598-65-7	237-075-6	Heraeus	Jul 2013
Sodium rhenate (in aq. solution)	13472-33-8	236-742-9	Climax Molybdenum	Mar 2014
Potassium perrhenate	10466-65-6	233-953-8	Heraeus	Aug 2013
Dirhenium heptasulphide	12038-67-4	234-882-5	Johnson Matthey	TBC
Refinables (ALL)				Nov 2010

In GREEN = registered!

Remaining challenges

- **TCA:** registration is delayed due to additional analytical data to be generated – new timing: Q4 2017
- **Some Rh and Ru compounds:** still missing phys-chem data for some tests are ongoing for one there are difficulties to isolate the substance.
- **HHPA 2 aminoethanol:** testing is still ongoing but so far in line with agreed timeline
- **Karstedt:** the new classification as reprotox cat. 2 will require an update of the dossier including ES and a testing proposal
- **PbO potential listing on Authorisation list**– intermediate interpretation and defense of the article 58 (2)
- **Data sharing:** activities are drastically increasing and will peak end of 2017 and early 2018



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4. Data-Sharing status

France Capon, EPMF

4.1. REACH: Overview of sold LoA

	2010	2012	2013	2016	2017	TOTAL 2010-2017
Ag	9	5	13	0	3	30
<i>Ag metal</i>	7	1	8		3	19
<i>Ag nitrate</i>	1					1
<i>Disilver oxide</i>	1	1				2
<i>Ag chloride</i>		1	3			4
<i>Ag iodide</i>		1	1			2
<i>Ag bromide</i>		1	1			2
Au	0	0	0	1	0	1
<i>Au metal</i>				1		1
Pd	0	0	0	0	2	2
<i>Pd metal</i>					1	1
<i>Pd monoxide</i>					1	1
Refinables	4	0	2	0	0	6
<i>Slags, PM metal</i>	2					2
<i>Flue dust, Ag refining</i>	1					1
<i>Waste solids, PM refining</i>	1					1
<i>Doré</i>			1			1
<i>Slimes and sludges</i>			1			1
TOTAL						39

- 8 formal requests (waiting for signature of LoA agreements) to be confirmed soon: 1 Pt, 2 Re, 2 Ag, 1 Ag dioxide, 1 Disodium tetrachloropalladate, 1 Pd
- Other informal requests received this year: 11 for Ag & Ag compounds, 1 for PM CN-, 1 for Pt, 5 for Re & Re compounds

4.2. K-REACH

- Requests received from 2 consultants representing consortia or LR
- Substances of interest:
 - Silver nitrate
 - Potassium dicyanoargentate
 - Silver cyanide
 - Dihydrogen hexahydroxyplatinate, compound with 2 amino-ethanol
- Discussions on LtU and costs are currently ongoing





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5. PMC after 2018

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Introduction - REACH is a journey...towards 2020, 2030

Setting deadlines for protection of environment and health

Providing full information to the public

Promotion of non-animal testing

More information, more knowledge

Authorisation of substances of very high concern

Making whole industry responsible for safety

Substitution of hazardous chemicals

Maintenance and enhancement of the competitiveness of the EU chemical industry

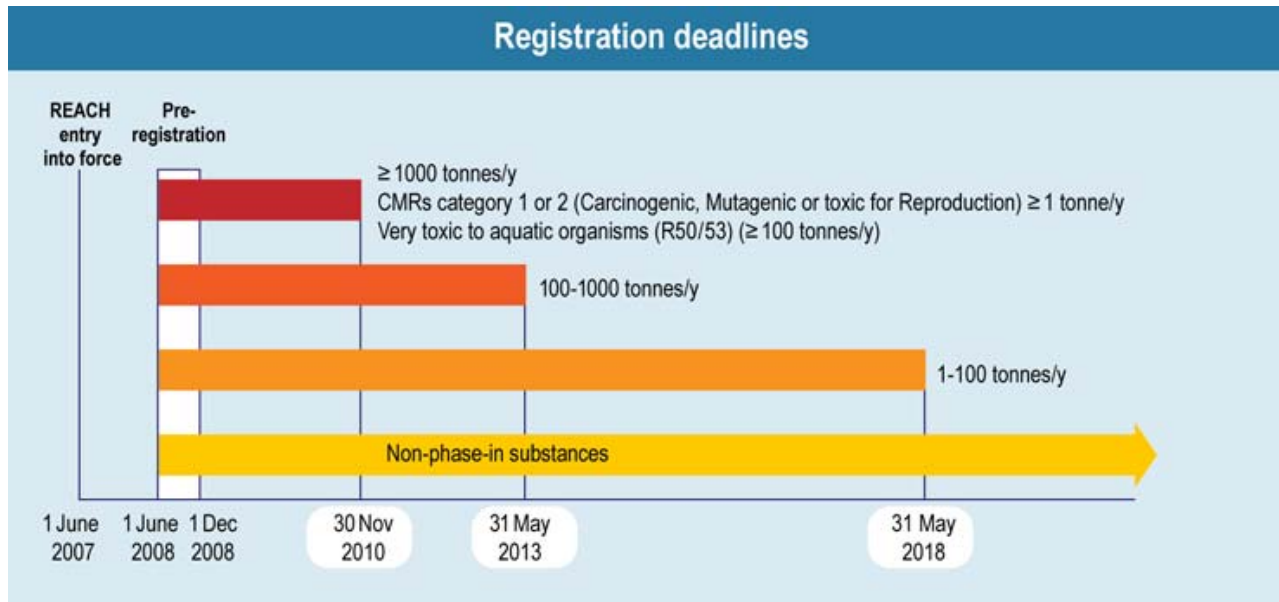
Stimulating innovation

Introduction - REACH is a journey..towards 2020, 2030

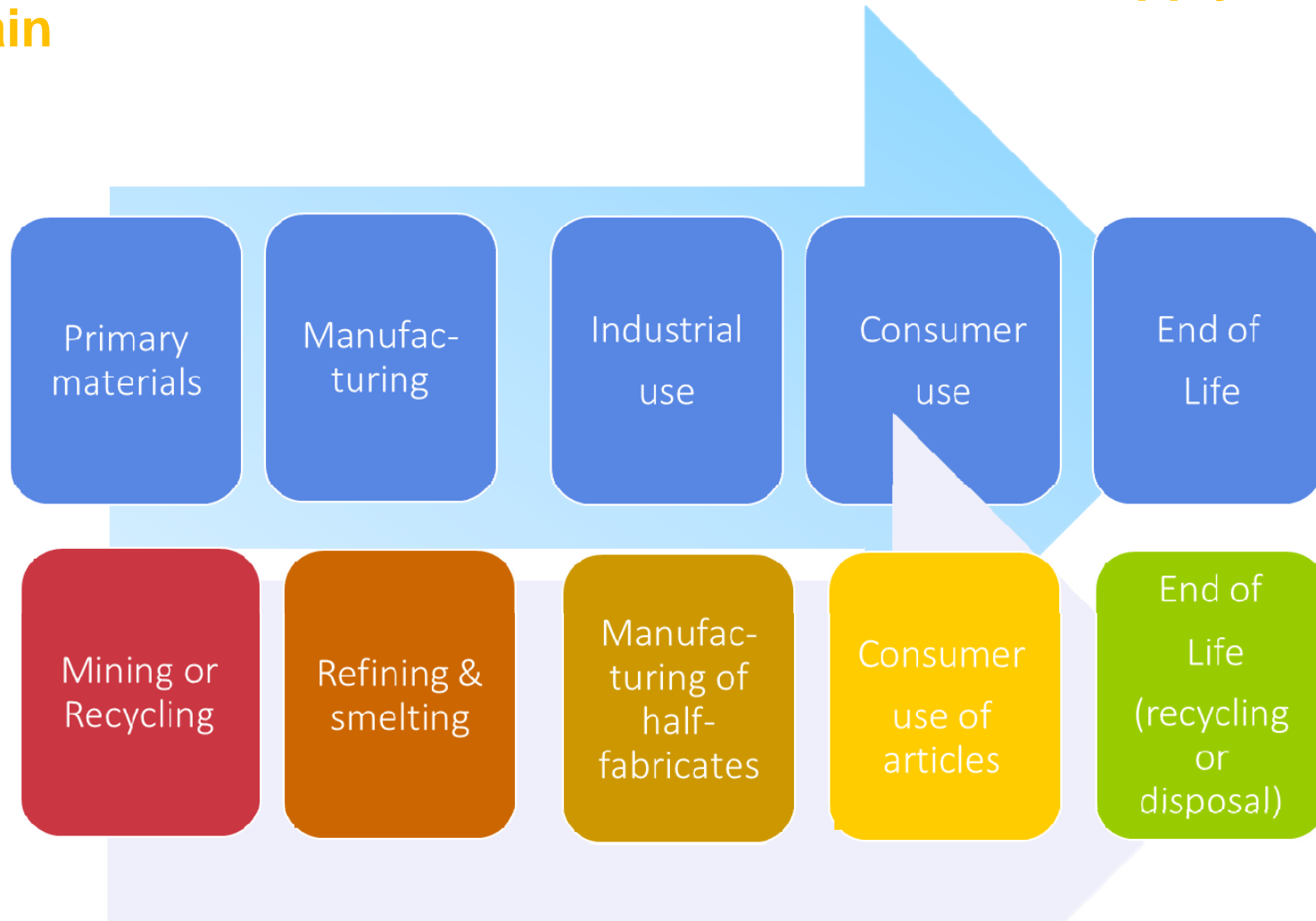
Setting deadlines for protection of environment and health



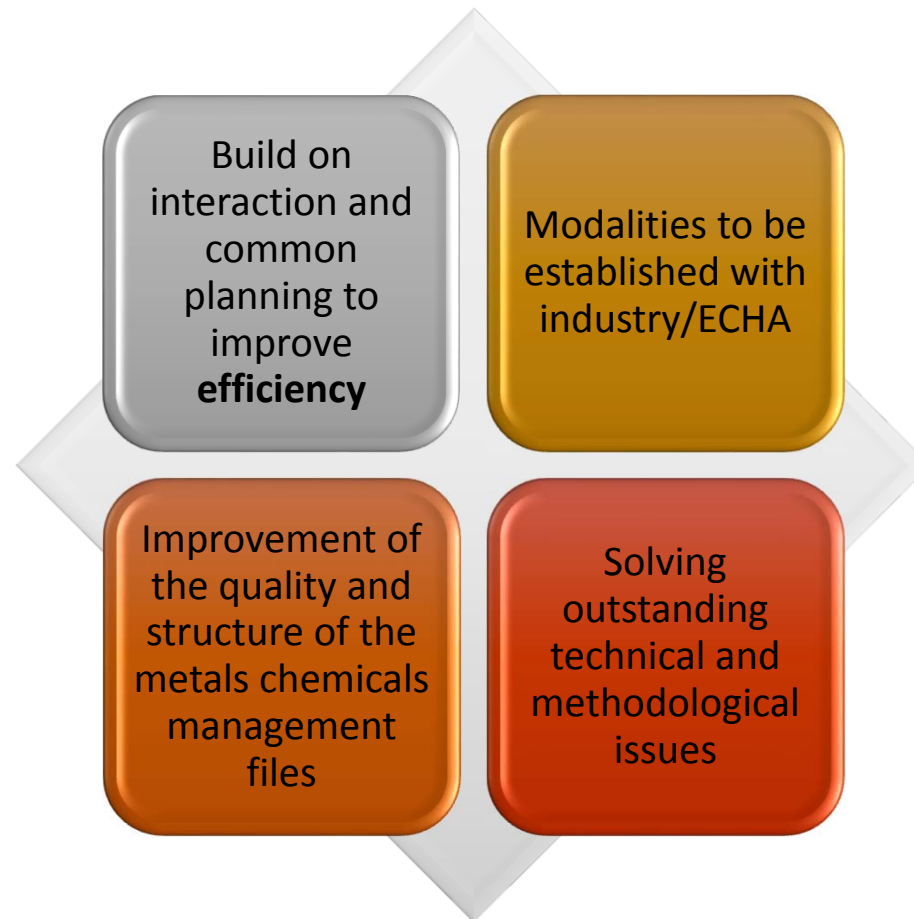
Introduction - Timelines



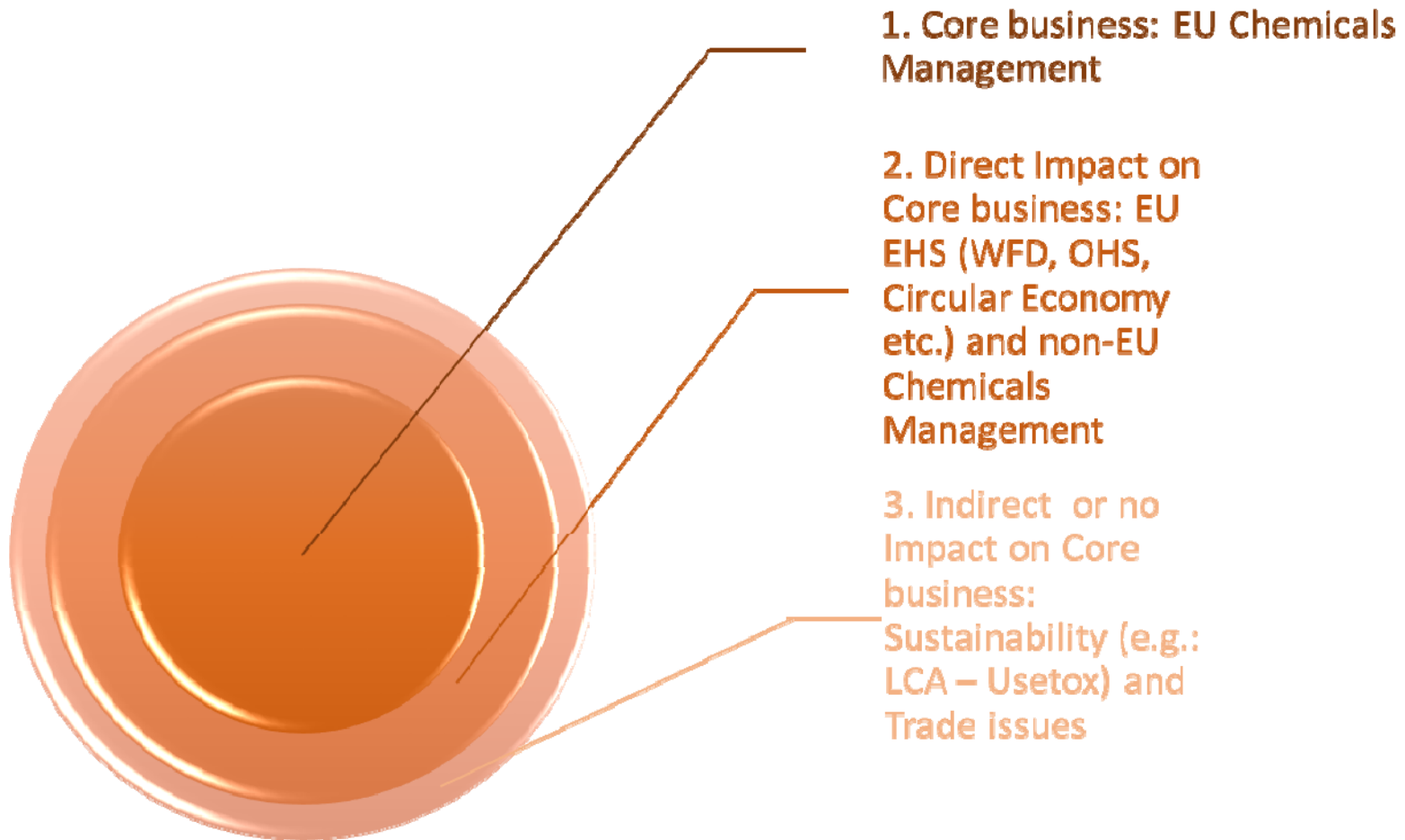
Introduction - Driver: societal control over the supply chain



An incentive: ECHA Metals sectorial approach



How to better address these trends?



New business model - one single and cost efficient structure

EPMF must move from a networking platform to a centre of excellence in chemicals management based on the knowledge and expertise developed the past 10 years



To have a wholesome overview of the regulatory threats related to chemicals management via the development and maintenance of a risk register



To understand and prevent negative impact on REACH dossiers and companies risk management measures



To create platforms and conduct ad hoc projects on a voluntary basis (“Menu approach”)



To address specific issues related to a substance (e.g.: maintenance of the REACH dossier, Evaluation of a Substance, prioritisation of a substance under WFD) or more horizontal issues (e.g.: waste and chemicals) which benefits of joint efforts and cannot be conducted individually in an efficient way (e.g.: advocacy)



To mutualize expertise or resources between the companies

Key principles of the reorganisation: membership

	Full members	Associate members
Criteria	All nationalities	All nationalities
	Companies only	National or international associations
	Mandatory to contribute to platforms and projects	Focus on advocacy
Cost sharing for admin costs	See options next slides	See options next slides
Cost sharing for REACH platforms related to registration dossiers	Idem Cost sharing formula of PMC for applicable costs	Not relevant
Cost sharing for other platforms	Equal share or based on admin cost sharing principle	Not relevant
Voting rights at Assembly level	Based on vested interest. See options next slides	Based on vested interest. See options next slides
Voting rights at Board level	1 vote per member	1 vote per member
Governance	One representative/member in the Assembly	One representative/member in the Assembly
	Eligible to the Board	Only one representing all the Association members eligible to the Board

Cost sharing of administrative costs - options

- **Option 1a:** administrative costs are shared equally between all members (full and associate members)
- **Option 1b:** administrative costs are shared equally between full members. Associate members pay a fixed share of 5 000 €
- **Option 2a:** apply a weighting factor based on the number of platforms followed by the members:
 - 1-5 platforms and associate members: weighting factor of 1
 - 6-10 platforms: weighting factor of 5
 - 11-15 platforms: weighting factor of 10
 - Above 15 platforms: weighting factor of 25
- **Option 2b:** apply a weighting factor based on the number of platforms followed by the members:
 - Associate members: weighting factor of 1
 - 1-10 platforms: weighting factor of 5
 - Above 10 platforms: weighting factor of 10
- **Option 3:** apply a weighting factor based on the HR need for each platform (on the current model of the PMC cost sharing). Associate members pay a fixed share of 5 000€

Cost sharing of administrative costs – What are admin costs?

- Salaries and salary-related costs (admin HR = AR, FC and CM)
- Office costs (loan, insurance, charges etc.)
- Meeting (e.g.: Assembly costs), travel and accomodation costs
- External costs:
 - Membership fees (Eurométaux, ICMM, HETAP, ETAP)
 - Knowledge Management tool
 - Online database for SIEF communication
 - Liability insurance
 - Legal support
 - Accountancy and audits

Horizontal costs not related to projects but to maintenance of the association!

Cost sharing of administrative costs - options

Options	Predictability	Fairness	Transparency
1a: equal share for ALL members	+	-	+
1b: fixed fee for Associate members + equal share for Full members	+	+/-	+
2a: weighting factor depending on the number of platforms	-	+	-
2b: weighting factor depending on the number of platforms	+	+	-
3: weighting factor based on HR needs for each platform	-	+	-

Management Committee recommendations

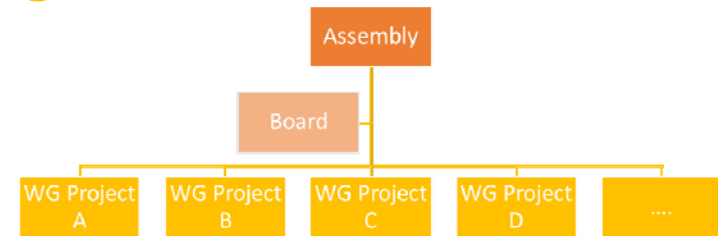
The chosen option should be:

- Simple to implement on an administrative point of view
- Fair and proportionate
- Transparent
- Predictable

Voting rights at the Assembly - Options

- **Option 1a and 1b:** one vote per member (full and associate members)
- **Option 2a:**
 - Associate members and 1-5 platforms: 1 vote
 - 6-10 platforms: 3 votes
 - 11-15 platforms: 5 votes
 - Above 15 platforms: 10 votes
- **Options 2b:**
 - Associate members: 1 vote
 - 1-10 platforms: 3 vote
 - Above 10 platforms: 5 votes
- **Option 3:** one vote per member

Key principles of the reorganisation: governance



- **Assembly**

- One representative/member (full and associate members)
- Voting rights: proportional to the financial contribution to the admin fee and based on “vested” interest for the decisions related to platforms. No decision to be taken at unanimity.
- Mandate: merge EPMF and PMC Assembly mandates
- Proposed voting rights (cf. previous slides)

- **Board**

- 4-9 representatives of full members (elected by the Assembly) including the President, Vice-President and Treasurer
- 1 representative representing all the associate members
- One voting right per member of the Board.
- Mandate: merge EPMF and PMC Board/Management Committee mandates

Key principles of the reorganisation: platforms proposal

- The topics for the platforms must be part of EPMF core business: chemicals management or have a direct impact on the core business of the association.
- If full members demonstrate a common interest for an issue not directly impacting the core business of EPMF but not handled by other associations, the Assembly can decide to include such a type of platforms/projects in the EPMF business plan.
- Platforms/Projects can be proposed by full Members or by the Secretariat and must be recommended to the Assembly by the Board.
- To be viable a project must be of interest for at least 3 full members.

Added value of mutualization: examples

- REACH registration: preparation and submission of the registration dossier
- Silver Evaluation under REACH: streamlining of the comments, interactions with Evaluating Member State and generation of additional data, as update of the registration dossier
- Ag EQS: assessment of the monitoring database and commenting on JRC proposals
- SVHC monitoring
- **Other examples of mutualisation at a multi-metallic level!**
 - Creation of a Centre of Expertise to prepare **Application for Authorisation** in a cost efficient way
 - Discussions around **inorganic UVCBs** like the refinables which are currently managed under different consortia and would benefit of a centralized work.

Key principles of the reorganisation: platforms proposal

REACH/CLP (linked to registration dossiers)	Others
1) Au metal	1) SVHC Roadmap
2) Au compounds	2) Ag EQS
3) Potassium dicyanoaurate	3) Chemicals/waste/products Roadmap
4) Ag metal (including nano)	4) Development and maintenance of Risk Register
5) Ag compounds	5) Occupational Health
6) Ag cyanide/Potassium dicyanoargentate	6) Water framework directive and PGMS
7) Ir metal	7) Hydrazine?
8) Ir compounds	8) Tax?
9) Pt metal	9) Others?
10) Chloroplatinates	
11) Karstedt	
12) Pt compounds (others)	
13) Pd metal	
14) Pd compounds	
15) Rh metal	
16) Rh III compounds	
17) Rh compounds (others)	
18) Ru	
19) Ru compounds	
20) Re	
21) Refinables	



Next steps

- **June 2017:** Present to EPMF and PMC Assemblies the action plan and amended statutes, internal rules and code of conduct
- **June 2017-December 2017:** amend the statutes, internal rules, code of conduct and action plan based on GA discussions.
- **December 2017:** Approval of 2018 PMC budget on the basis of the new structure (amending Appendix IX of the Agreement)
- **June 2018:** Formal approval of the EPMF reorganisation – election of the new Board and admission of new members
- **June 2018-December 2018:** PMC Management of current business and preparation of the termination of the PMC agreement
- **December 2018:** Full Implementation of the new structure and formal termination of PMC agreement





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6. PMC 2018 Workplan : a transition year

France Capon, EPMF

2018 WP

- Following the new structure
- WP developed on the basis of:
 - Opportunities For Improvements (OFI) tracker
 - Prioritisation criteria
- 2018: focus on development of new data to fill in critical data gaps
- 2019-2020: potential updates of some of the registration dossiers
- All platforms: there is a budget for:
 - literature review
 - IUCLID hosting
 - updates of uses and ES

2018 WP - highlights

- **Silver and silver compounds:**

- EOGRTs will be reviewed and assessed in 2018.
- Review of the uses and related exposure scenarios to ensure consistency in the exposure assessment with other PMC dossiers submitted more recently.

- **Au metal:** preliminary work on nanogold

N.B.: It is worth to note that no other work on nanoforms is foreseen so far in 2018 but this could be reconsidered for some PGMs during the next work group meeting in October.

- **Potassium dicyanoaurate:** the testing proposal for an OECD 474 (in vivo genetic toxicity) has been submitted to ECHA in 2016 and could be reviewed and assessed in 2018.
- **Chloroplatinates:** due to the high risk to see chloroplatinates screened for potential SVHC concerns, a series of improvements of the registration dossiers have been foreseen (secondary poisoning, an external peer review to better identified potential additional improvement areas)

2018 WP - highlights

- **Pt compounds (others):** OECD 422 test to address some weaknesses in the ITS/read-across on repeated-dose toxicity and reproductive toxicity for Pt nitrate.
- **Pd compounds:** external peer review of key dossiers, as an improvement of the environmental assessment including a review of the PNEC; OECD 422 test to address some weaknesses in the ITS/read-across on repeated-dose toxicity and reproductive toxicity.
- **Rh III compounds:** most of the activities will be related to mutagenicity and the follow-up of the testing proposal submitted in 2017. For all Rh compounds, a budget is foreseen for additional requests from ECHA following registration of the dossiers Q3/4 2017 and updates of the Annex III exempted dossiers (such as Rh trioxide).
- **Refinables:** it is worth to note that these dossiers will probably need to be updated thanks to the finalisation of the discussions on substance ID but also the need to refine and update the exposure assessment and exposure scenarios. However, no significant budget will be needed due to the 2015-2017 carry over.
- **Ag EQS:** limited work is expected in 2018 but follow-up on EQS proposal (if any) will be needed.

2018 WP- Draft budget (admin costs)

	PMC 2018
	Draft Budget to be invoiced
Administrative costs	591.700 €
Salaries and salary-related costs	250.000 €
Office costs	80.000 €
Meeting, travel and accommodation costs	55.000 €
External costs	186.700 €
<i>Eurométaux REACH package</i>	65.000 €
<i>ICMM membership</i>	2.700 €
<i>Knowledge Management tool</i>	10.000 €
<i>Online database</i>	3.000 €
<i>Liability Insurance</i>	6.000 €
<i>Legal support</i>	50.000 €
<i>Accountancy and audits</i>	25.000 €
<i>ETAP membership + project</i>	20.000 €
<i>HETAP membership + project</i>	5.000 €
Restructuration	20.000 €

2018 WP- Draft budget (Platform costs)

REACH Platform costs	3.772.424 €
Ag metal (including nano)	1.159.641 €
Ag compounds	956.891 €
Au metal	48.508 €
Au compounds	32.758 €
Ag cyanide/Potassium dicyanoargentate	14.922 €
Potassium dicyanoaurate	106.344 €
Pt metal	7.341 €
Chloroplatinates	189.735 €
Karstedt	52.124 €
Pt compounds (others)	210.932 €
Pd metal	8.150 €
Pd compounds	442.948 €
Rh metal	6.583 €
Rh III compounds	204.365 €
Rh compounds (others)	85.453 €
Ru metal	8.270 €
Ru compounds	128.130 €
Ir metal	7.013 €
Ir compounds	37.787 €
Re metal & compounds	8.000 €
Refinables	56.531 €
Non-REACH Platform costs	43.600 €
SVHC Roadmap	23.600 €
Silver EQS	20.000 €
TOTAL	4.407.724 €



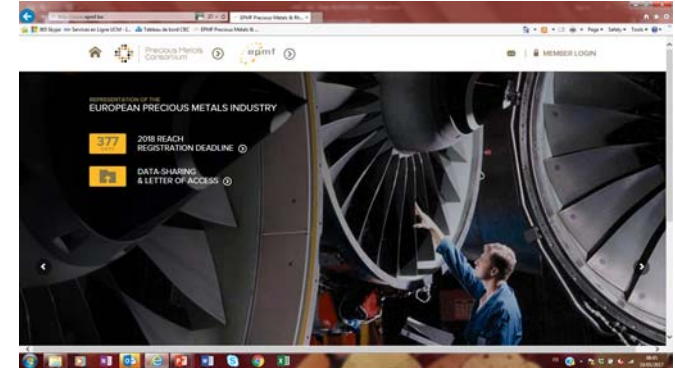
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7. Communication : new EPMF / PMC website

Audrey Rondepierre, EPMF

New website

- New website is live since the end of March at www.epmf.be
- What's new?
 - Members pages (cf. second slide)
 - Downstream users page
 - Identified uses, exposure scenarios and uses descriptors under each substance page
 - Revamp of data sharing/LoA page: addition of Membership & LoA agreements, registration status/progress
 - Document library



EPMF website: private members area

- Members should have received their personal passwords a few days before the GA

- Restricted access per sub-Assembly

- Which information can you find under the members area?

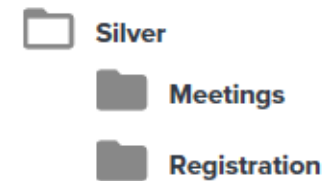
- Minutes and slides of previous meetings

- Registration dossiers: most recent versions of CSR and IUCLID submitted to ECHA



- REACH news from PMC, EM and ECHA

- List of acronyms



Suggestions?



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8. Knowledge Management System

France Capon, EPMF

Aim and objectives

- **For the Secretariat**

- Ensure that in case of change in staff or staff responsibilities the handover can be done easily
- Organize the archiving of the key documents

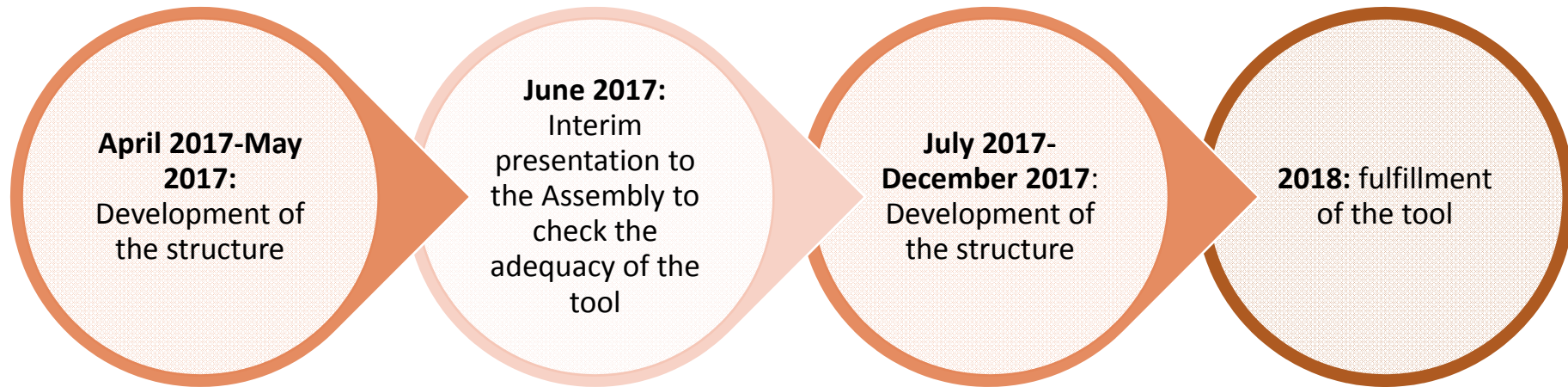
- **For PMC Members:**

- Ensure that all the studies are accessible in a comprehensive way
- Ensure that the regulatory knowledge gathered on each substance is centralized, accessible and up to date.
- Access will be allowed only to substances in company portfolio

- **For Authorities:**

- Ensure that all information can be easily exported in a format that can be used to respond to authorities requests (e.g. demonstration of in-house diligence, calls for information or public consultations, etc.). This feature can be especially important in the context of the sectoral approach which is under discussion with ECHA.

Timing



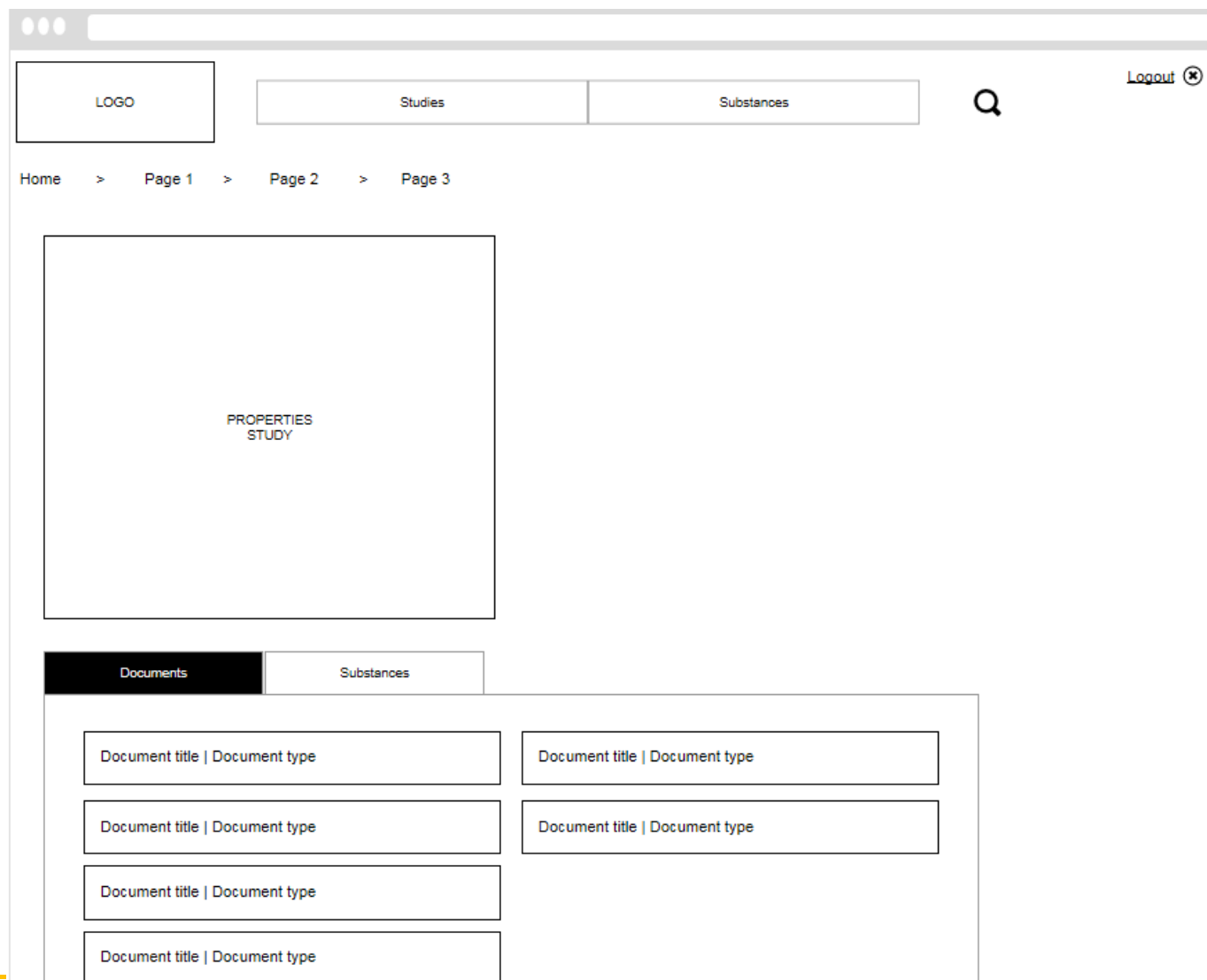
Structure

- Studies organized as follows:
 - Phys-chem: by tested substance
 - Envi: by tested substance
 - HH: by tested substance
- RAAF by group of substances/ITS
- Data reviews
- Literature review (summary and outcome but no access to the references due to copyright issue but to the link or company owner)
- Legal documents by RMM
 - Classification (e.g.: CLH report)
 - Substance Evaluation (e.g.: Final Decision)
 - Authorisation (e.g. Annex XV, prioritisation list etc.)
 - Etc.
- Other?

Draft - Wireframe

The wireframe depicts a web application interface. At the top, there is a header area containing a logo placeholder, two navigation tabs labeled 'Studies' and 'Substances', a search icon, and a 'Logout' link with a close icon. Below the header is a breadcrumb trail: 'Home > Page 1 > Page 2 > Page 3'. The main content area features a 2x4 grid of items, each labeled 'SUBSTANCEGROUP Silver'. Below this grid is a section titled 'Recent changes:' which contains four columns. The first and third columns are labeled 'Study title', and the second and fourth columns are labeled 'Document title'.

Draft - Wireframe



Draft - Wireframe

LOGO

Studies Substances

Logout

Home > Page 1 > Page 2 > Page 3

PROPERTIES
SUBSTANCEGROUP
SILVER

SUBSTANCE
Disilver oxide

SUBSTANCE
Disilver oxide

SUBSTANCE
Disilver oxide

SUBSTANCE
Disilver oxide

SUBSTANCE
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Disilver oxide

SUBSTANCE
Disilver oxide

Studies Documents

Study title

Study title

Study title

Study title

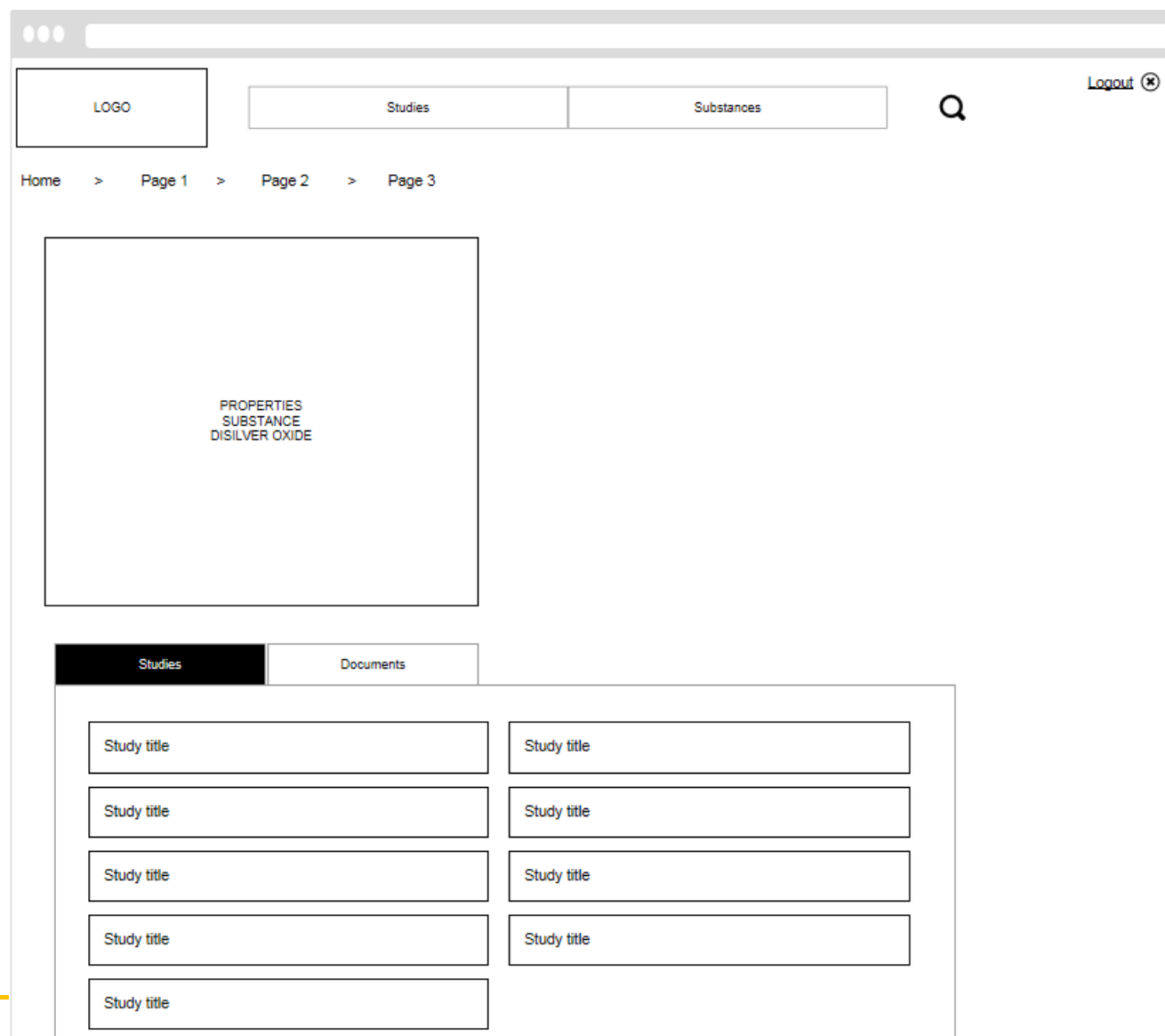
Study title

Study title

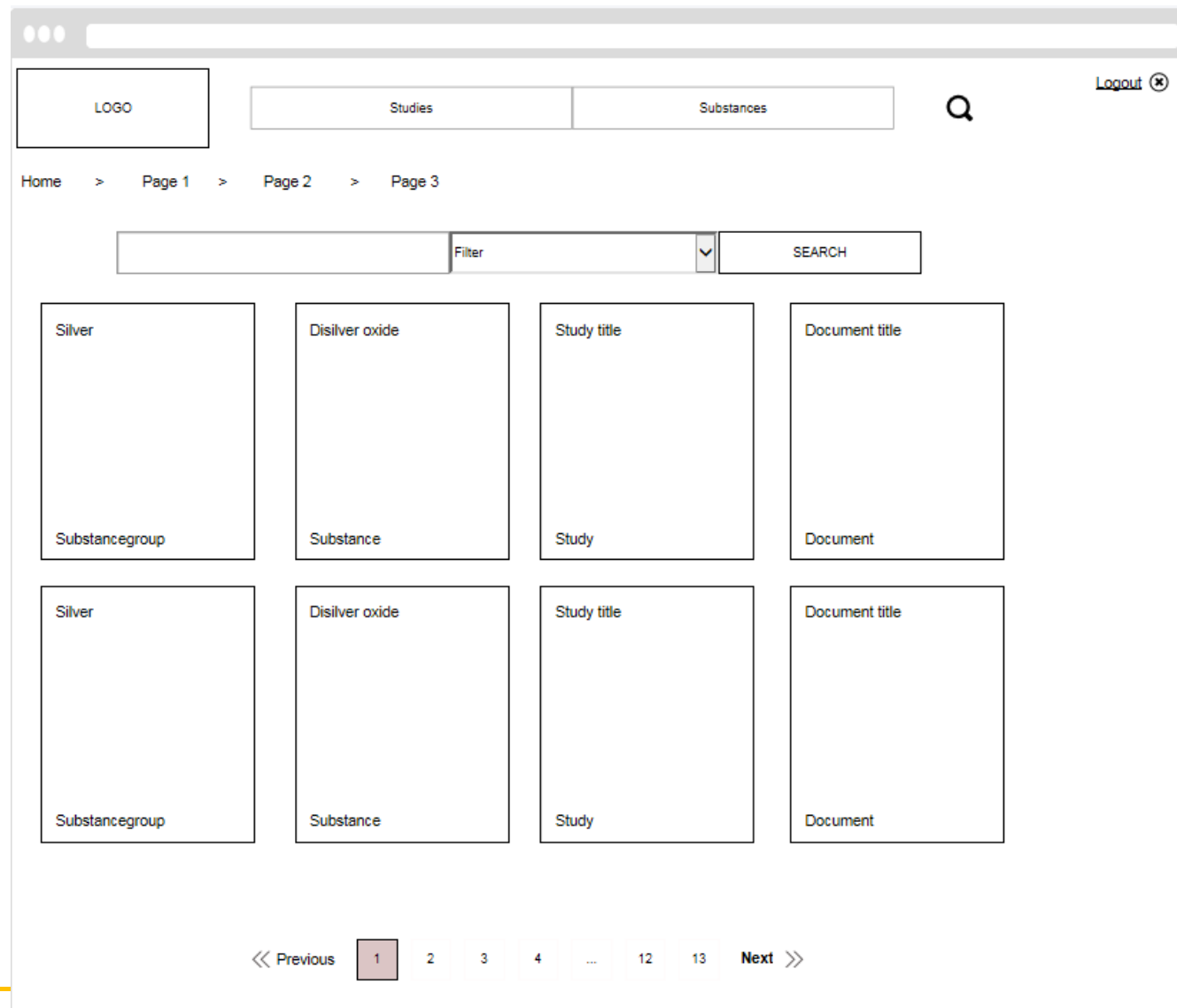
Study title

Study title

Draft - Wireframe



Draft - Wireframe





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9. Closing remarks

Guy Ethier, Umicore

PMC General Assembly dinner: Gasometer - Hohwiesenweg 6, 75175 Pforzheim

Group 1 – leaving at 06:00 from the Lobby of the Park Hotel (25 p)	Group 2 – leaving at 06:20 from the Lobby of the Park Hotel (25 p)
<p>Katrien ARIJS Cas BADENHORST Martin BAKER Bodo BERKNER and Ursula BERKNER Francisco BOO Roland BRASCH Patrice CORBIAU Vincent DUNON Maxime ELIAT Rudolf ELLER Guy ETHIER Thomas FREY Rob GARRETT Roland GERNER Wouter GHYOOT Daniel GLOWACKI Rudi-Werner HARTMANN Wilfried HELD and Dagmar HELD Hitoshi KOSAI Kamil KOZUB Marie-Laure LEDRICH Cédric LEGER Jörn MUEHLENFELD</p>	<p>France CAPON Jelle MERTENS Martina NERI Mario ORSENIGO Juha PARKKINEN and Tiina LAUREN Angelika PETRI Nissanka RAJAPAKSE Philipp REISERT and Carmen REISERT Audrey RONDEPIERRE Heinz-Günter SCHENZEL and Martina SCHENZEL Michael SEEBAUER Michael SHEPHERD Marc SIMON Chrétien SIMONS Clémence SIRET Georg STEINER Erik TEUBEL Michael THIEL and Bettina THIEL Mika TOIVOLA Steven VERBERCKMOES Holger ZITT</p>



THANK YOU

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1. Welcome and Introduction

Guy Ethier, Umicore

1.1 Confidentiality and Competition Law

DO	DON'T
<u>Application of competition law</u>	
Art. 101 and 102 TFEU may be applicable to the conclusion of any preliminary agreement and activities of any preliminary phase.	Don't assume that conflicts with competition law are excluded simply by the fact that the Agreement complies with the provisions of the REACH Regulation.
<u>Consultation in Matters of Competition Law</u>	
Consult an in-house legal expert or the compliance officer of your company or an external lawyer whenever there are uncertainties respecting compliance with competition law. Stop all meetings/discussions which are not in compliance with these Compliance Guidelines until a legal expert has been involved.	Don't assume that these Compliance Guidelines deal with all competition law issues exhaustively. Basically, compliance with Art. 101 and 102 TFEU can be determined only on the basis of market impact in each individual case. These Compliance Guidelines may therefore be regarded only as a means of providing general conduct recommendations.
<u>Activities in any preliminary phase and at any other stage of operation of the Consortium</u>	
Restrict cooperation within the scope of the preliminary phase to the initially defined goals and purposes of the cooperation.	Pursuant to Art. 101 and 102 TFEU, activities which have the object or the effect of preventing, restricting and/or distorting competition are prohibited within the scope of this Agreement, including: <ul style="list-style-type: none"> - Coming to agreement, including arrangements or collusions, about prices, markets and customers (see Art. 101 paragraph 1 a)-e) TFEU); - Joint boycotting of other companies; - The unjustified unequal treatment of trade partners; - The abusive exploitation of a dominating market position.
<u>Exchange of Confidential Information</u>	
Involve a Trustee for the exchange of Confidential Information.	The exchange of Information concerning market behaviour and having the object or the effect of preventing, restricting and/or distorting competition is inadmissible; in particular, this relates to : <ul style="list-style-type: none"> - Production capacities; - Productions or sales volumes; - Import volumes; - Market shares; - Price policy; - Distribution and marketing terms; - Marketing strategies; - Information regarding the relationship with suppliers.
<u>Documentation on Cooperation</u>	
Keep minutes of all meetings which detail the subject of the meeting. In case of uncertainty, have the contents of the minutes reviewed by an external legal expert prior to sending them to all parties of the Agreement. Stop all meetings which are not in compliance with these Guidelines until a legal expert has been involved.	

1.2 Tour de table, quorum and apologies

Cf. attendance list

Quorum is reached: 62 %

1.3 Approval of the agenda 1 June 2017

1. Welcome and Introduction

- 1.1. Confidentiality and Competition Law
- 1.2. Tour de table, quorum and apologies
- 1.3. Approval of the agenda

2. PMC after 2018 : wrap up and approval

3. Update on PMC Projects

- 3.1. Ag projects
- 3.2. Refinables projects
- 3.3. Au Projects
- 3.4. PM CN Projects
- 3.5. Ir projects
- 3.6. Pd projects
- 3.7. Pt projects
- 3.8. Rh projects
- 3.9. Ru projects
- 3.10. Re projects
- 3.11. SVHC Roadmap project

4. A.O.B., next meetings and closing remarks



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2. PMC after 2018 : wrap up and approval

France Capon, EPMF

Outcome of 31st May discussion

- TO BE COMPLETED ON 31st MAY



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3. Update on PMC Projects



3.1 Ag Project: Status – Substance Evaluation

Katrien Arijs

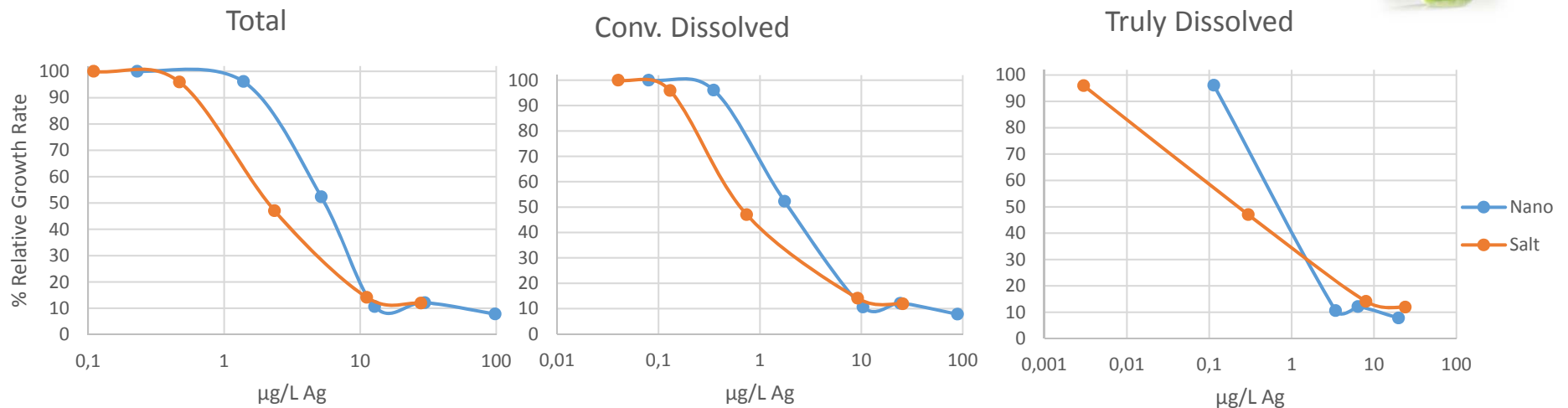
- **Final decision** received 6 Jul 2016: further information required to clarify the initial concerns:
 1. Information on **ecotoxicity** only on the **smallest Ag nanoform** with highest specific surface area covered by Ag registration dossier
+ **phys-chem** characterisation of tested form
 2. Information on **fate** of nanoAg in soil pore water and the soil solid fraction **only** in case any of the ecotox tests show higher toxicity for nanoAg as compared to ionic silver
 3. Information on the **uses** for each individual nanoform registered
- **Timing** split: 12 months if soil fate testing not needed (13 Jul 2017) and 30 months if soil fate testing needed (14 Jan 2019)
- **Testing request 1 + data collection request 3 finalised**

3.1 Ag Project: Key milestones – Substance Evaluation

Katrien Arijs

Ecotoxicity testing (1)

- Comparison of toxicity of smallest nanoAg form registered and ionic silver (as AgNO_3)
 - Direct comparison of EC_x values from (as far as possible) identical tests
 - If nanoAg displays 'greater toxicity' than ionic silver in any of the tests, then additional testing of fate of nanoAg in soil required
- **Algae** growth inhibition test - OECD 201 (Growth rate response curve 0-72 hrs)



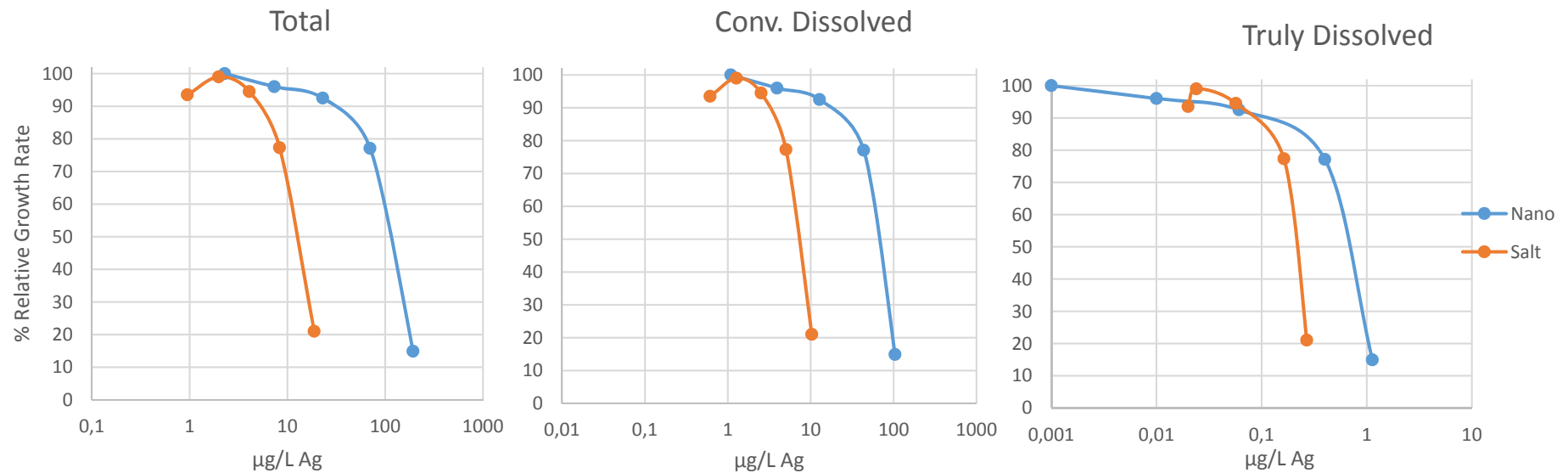
→ In all silver fractions, silver nitrate is more toxic than nanosilver

3.1 Ag Project: Key milestones – Substance Evaluation

Katrien Arijs

Ecotoxicity testing (2)

- *Daphnia magna* reproduction test - OECD 211 (Reproduction response curve 0-21d)



→ In all silver fractions, silver nitrate is more toxic than nanosilver

3.1 Ag Project: Key milestones – Substance Evaluation

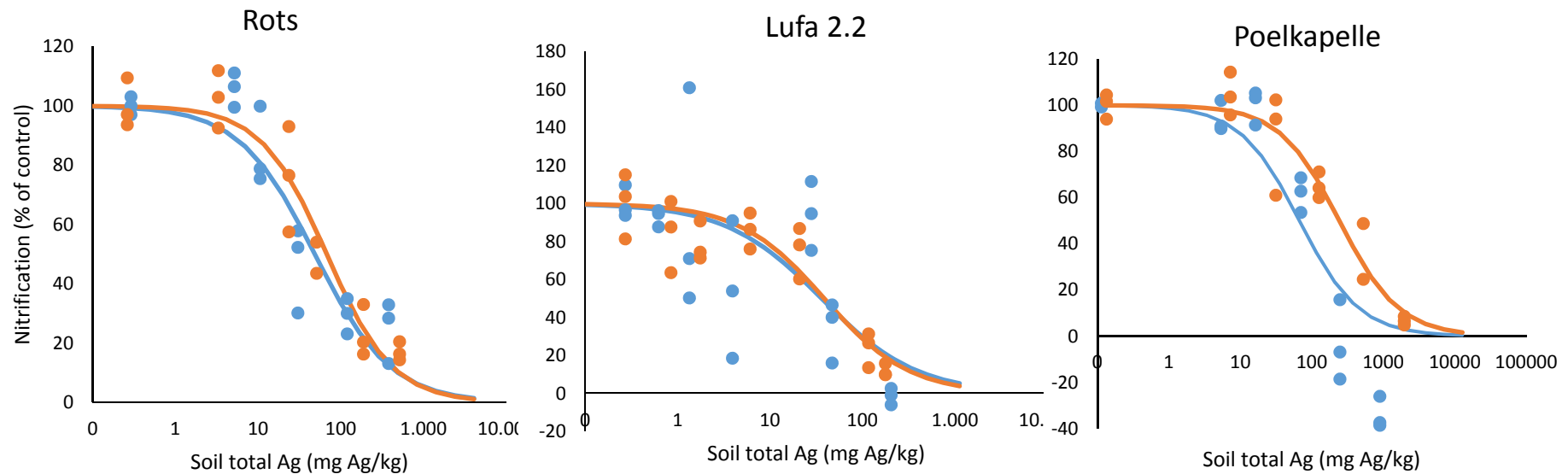
Katrien Arijs

Ecotoxicity testing (3)

- **Soil microorganisms** nitrification test - OECD 216 (PNR 0-14d)



- **Nanosilver**
- **Silver nitrate**



→ In 1 soil, silver nitrate is more toxic than nanosilver

→ In 2 other soils no significant difference

3.1 Ag Project: Key milestones – Substance Evaluation

Katrien Arijs

Phys-chem characterisation

- 2 Ag nanoforms registered under REACH: granulometry, specific surface area, surface treating agents, density, point of zero charge
- T/D testing only on smallest Ag nanoform

Information on uses

- Only 2 forms of nanoAg currently registered under REACH, < 3 t/a
- One industrial use and 2 ES for nanosilver will be included in the dossier:
 - 1) Manufacture of nanosilver
 - 2) Use of nanosilver at industrial site in sintering processes for production of electronics
- No nanosilver present in the end product (transformed to ‘bulk’ silver layer): further service life covered with existing ES for Ag as the form is not nano anymore
- Limited release to environment

3.1 Ag Project: Next steps – Substance Evaluation

Katrien Arijs


- Inclusion results testing / data collection in Ag dossier
- Ecotox testing: nanoAg not more toxic than AgNO₃
 - LR + 2 co-registrants nanoAg to update their dossier by 13 July 2017
- In addition to gathering information on uses of the two nanoAg forms, ongoing parallel review of uses of Ag and Ag compounds

3.1 Ag Project: Status – CLH proposals SCAS

Katrien Arijns

	Ag REACH	Ag BPR
Scope	PMC Ag project includes eight substances/Dossiers: 1. Silver 2. Disilver oxide 3. Silver nitrate 4. Disilver sulphate 5. Disilver carbonate 6. Silver chloride 7. Silver bromide 8. Silver iodide	ESTF single core active substance dossier supporting eight substances: 1. Silver 2. Silver (reaction mass with SiO2) 3. Silver chloride (reaction mass with TiO2) 4. Silver nitrate 5. Silver sodium hydrogen zirconium phosphate 6. Silver phosphate glass 7. Silver zinc zeolite 8. Silver copper zeolite
Under review by	RIVM, Dutch CA	KEMI, Swedish CA
CLH	Not a requirement (only as a possible conclusion from the SEv itself)	Requirement

Proposed future entry in Annex VI of CLP Regulation

 Carc. 2, H351 Repr. 1B, H360D Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Acute 1. M-factor=100 Aquatic Chronic 1, H410 Aquatic Chronic 1. M-factor=100 		Repr. 2 Skin Irrit. 2 Eye Dam. 1 Aquatic Acute 1 Aquatic Chronic 1	H361d H315 H318 H400 H410
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3.1 Ag Project: Next steps – CLH proposals SCAS

Katrien Arijs

- Kemi:
 - Draft CARs (Competent Authority Reports) and CLH proposals for silver zeolite, silver copper zeolite and silver sodium hydrogen zirconium phosphate should be available by **mid March 2017** → public consultation over summer?
 - Draft CAR and CLH proposal for elemental silver postponed and planned for June (but could become Sep)
- Silver copper zeolite: joint commenting with European Copper Institute
- SID of silver substances on agenda Biocides Working Group Meeting III-2017 (29 May - 2 June 2017)

3.1 Ag Project: Status – Water Framework Directive

Katrien Arijs

- **Monitoring based exercise JRC (Joint Research Centre):** silver mentioned in short list of substances under further consideration for EQS derivation
- EQS dossier for silver drafted:
 - EQS of 10 ng/L proposed vs REACH PNEC of 40 ng/L
 - No proper technical discussion yet in which stakeholders could participate so should not be considered finalised
- Further process:
 - Prioritisation exercise postponed: same time as overall WFD review + more holistic approach
 - European Commission proposed process and timeline for review of Priority Substance list / Watch List:
 - PS list: confirmation of PNEC and finalisation of sound EQS, in order to draw final conclusion on shortlisting
 - Silver: more monitoring data needed
 - Output of review PS list and use of work: EQSs harmonised at EU-level → MSs encouraged to take into account shortlisted substances at national level
 - Output of review PS list may include identification of substances for which analysis shows potential risk at EU level, but for which insufficient monitoring data to conclude → considered for inclusion in WL

3.1 Ag Project: Next steps – Water Framework Directive

Katrien Arijs

1. Review EQS (Environmental Quality Standards)/ PNEC (Predicted No-Effect Concentration)

- EQS derived by JRC taking into account 2012 RIVM report on ERL (Environmental Risk Limit) for silver and REACH registration dossier → not enough taxonomic groups to use SSD approach
- ➔ Datasets used not up to date with most recent knowledge
 - Build robust, up to date ecotox dataset (implications REACH dossier to be considered!); possible revised PNEC by autumn 2017

2. Review monitoring data

- Gather publicly available data + contact MS / JRC
- Check EQS exceedances

3. Advocacy at MS level

- Expectation that some MS may take silver forward as RBSP (River Basin Specific Pollutant)
- Focus on priority MS (DE, FR, NL?)
- Coordinate with Eurometaux Water TF / other commodities where possible



3.1 Ag Project: 2018 outlook

Katrien Arijs

- All platforms
 - Literature review
 - Update of uses and exposure scenarios
 - Dossier evaluation: EOGRTS (Extended One-Generation Reproductive Toxicity Study)

- Silver metal
 - Substance evaluation (2nd tier – soil fate testing)
 - CLH proposals

3.2 Refinables Project: Status

Vincent Dunon

Substance Identification (SID):

SID discussion with ECHA during site visit Umicore, Hoboken.

→ Further refinements and clarifications to the SIDs ongoing.

3.2 Refinables Project: Key milestones (1)

Vincent Dunon

ECHA-SID site visit Umicore, Hoboken:

- The SIP template is considered a valid tool for SID refining
- Composition is the first information regulators will look at in UVCBs, followed by source and process: registrants need to report quantitative (on decisive parameters/key information) and qualitative (on indicative parameters/support information) data
- Complete SID description requires expected and unexpected speciation as based on chemical knowledge, process information, substance characterization or available modelling analyses, XRD/NMR/Raman/...
- The relevance of the elemental analysis was (re)explained by industry, while ECHA explained the need to receive metal speciation description.

3.2 Refinables Project: Key milestones (2)

Vincent Dunon

REACH Intermediate Task Force:

The proposed refinement strategy is as follows:

SID will be reported in Joint Submission (JS) and legal entity (LE) specific dossiers:

- **JS:** SIP describes the joint submission. SIP description needs to report all information that is necessary to define the UVCB and describe known speciation and characteristics relevant for further risk assessment (RA)
- **LE** specific data are reported and must fit within the SIP boundaries: constituents that are decisive for the UVCB identification need to be reported quantitatively and to meet analytical reports indications provided in IUCLID Section 1.4
- **IU Section 1.4** allows reporting of *qualitative* and *quantitative* analyses: use both fields!

3.2 Refinables Project: Next steps

Vincent Dunon

Dossier maintenance

- **Substance identification (SID):**
 - Finalisation SID review
 - Speciation testing **if needed**
- **Effects assessment and classification:**
 - Classification review following SID review
 - T/D testing & phys-chem testing for splitted dossiers
 - Validation testing **if needed**
- **Exposure and risk assessment:** MvE (Men via the Environment) assessment, combined toxicity, update exposure & risk assessment
- **Compilation of IUCLID 6 files & Registration Dossiers**

3.2 Refinables Project: 2018 outlook

Vincent Dunon

Refinables:

- Rolling maintenance
- External expert review of the dossiers

3.3 Au Project: Status

Vincent Dunon

Dossier	CAS	Status
Gold	7440-57-5	Registered by LR in April 2016
Balsams, ...	68990-27-2	Registered by LR in April 2016
Aurio(1+)...	68365-87-7	Registered by LR in June 2016
Tetrachloroauric acid	16903-35-8	Testing ongoing

3.3 Au Project: Key milestones

Vincent Dunon

TCA:

- Combined Repeated dose toxicity testing (OECD 422) ongoing

3.3 Au Project: Next steps

Vincent Dunon

TCA:

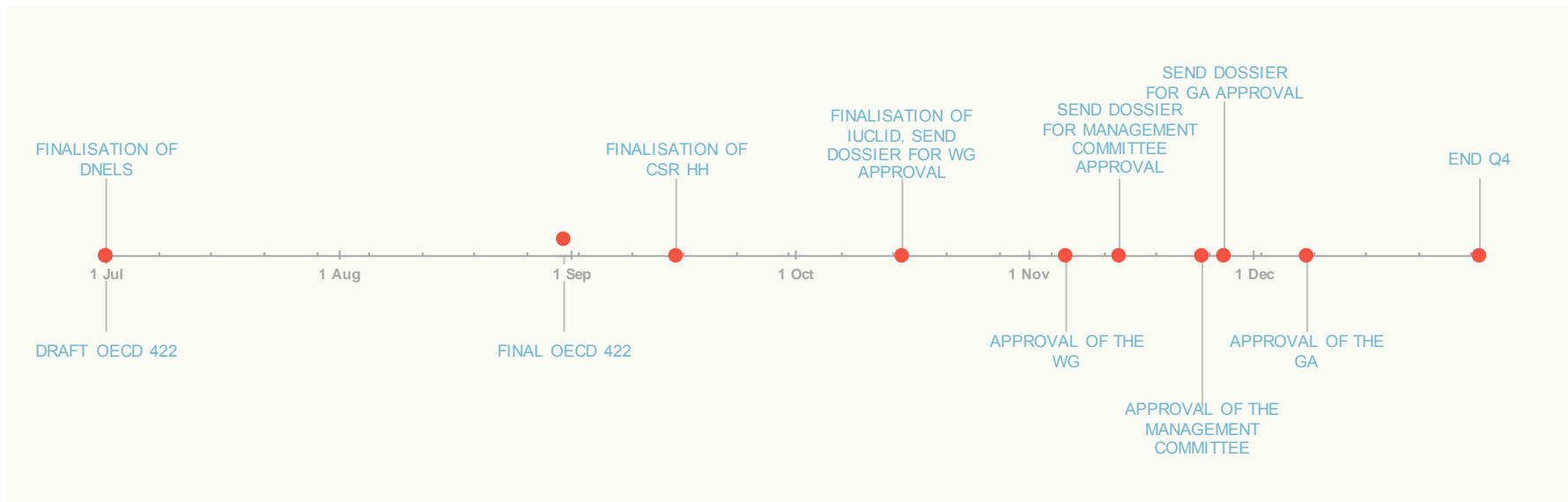
- Finalization OECD 422
 - Additional histopathology needed
- Derivation of DNELs
- Drafting Occ Exposure Scenarios

→ Deadline for registration moved to Q4 2017, due to additional testing.

3.3 Au Project: Timeline

Vincent Dunon

Timeline TCA 2017



3.3 Au Project: 2018 outlook

Vincent Dunon

Au metal:

- Rolling maintenance
- Nano-Gold literature review

Au compounds:

- Rolling maintenance
- Potential updates for physchem endpoints

3.4 PM CN- Project: Status

Vincent Dunon

Dossier	CAS nr	Status
AgCN	506-64-9	Registered by LR in November 2016
KAu(CN) ₂	13967-50-5	Registered by LR in October 2016
KAg(CN) ₂	506-61-6	Ongoing

3.4 PM CN- Project: Key milestones

Vincent Dunon

KAg(CN)₂:

- Combined Repeated dose toxicity testing (OECD 422), study completed
- Finalization of the Occupational Exposure Scenarios

3.4 PM CN- Project: Next steps

Vincent Dunon

KAg(CN)₂:

- Finalization OECD 422
 - Draft report revised → no toxicity observed
 - Additional supportive analytics → draft July '17
- Preparation of dossier for approval and registration
 - Complete IUCLID dossier available Jun '17
 - Start approval process without final OECD 422 report

3.4 PM CN- Project: 2018 outlook

Vincent Dunon

AgCN / KAg(CN)₂:

- Rolling maintenance

KAu(CN)₂:

- Rolling maintenance
- Dossier evaluation: *In vivo* mutagenicity testing proposal



3.5 Ir Project: Status

Jelle Mertens

Substance	CAS	EC	LR	Status
Iridium	7439-88-5	231-095-9	Johnson Matthey	REGISTERED May 2016
Hexachloroiridic acid, Hydrogen hexachloroiridate (IV)	16941-92-7	241-012-8	Heraeus Deutschland GmbH and Co. KG	REGISTERED June 2016
Diammonium hexachloroiridate	16940-92-4	241-007-0	Johnson Matthey	REGISTERED May 2016



3.5 Ir Project: Key milestones

Jelle Mertens

- No major actions required / identified

3.5 Ir Project: Next steps

Jelle Mertens

- No immediate actions required / identified

3.5 Ir Project: 2018 outlook

Jelle Mertens

- Literature review
- Ir metal and Ir compounds:
 - Update REACH dossiers to IUCLID6 files
 - Review phys-chem sections (desktop + eventually testing)

3.6 Pd Project: Status

Maxime Eliat

Substance	CAS	EC	LR	Status	
Palladium	7440-05-3	231-115-6	Umicore NV/SA	REGISTERED	Jan 2017
Palladium dichloride	7647-10-1	231-596-2	BASF	REGISTERED	Jan 2017
Dihydrogen tetrachloropalladate(2-) (in solution)	16970-55-1	241-047-9	Heraeus	REGISTERED	May 2017
Diamminedichloropalladium	14323-43-4	238-269-3	Heraeus	REGISTERED	Jan 2017
Dichlorobis(triphenylphosphine)palladium	13965-03-2	237-744-2	Heraeus	REGISTERED	Jan 2017
Palladium (II) di(4-oxopent-2-en-2-oate)	14024-61-4	237-859-8	Heraeus	REGISTERED	Jan 2017
Palladium(II) acetate	3375-31-3	222-164-4	Heraeus	REGISTERED	Oct 2016
Palladium monoxide	1314-08-5	215-218-3	Heraeus	REGISTERED	Jan 2017
Tetraamminepalladium (II) nitrate	13601-08-6	237-078-2	Johnson Matthey	REGISTERED	Jan 2017
Tetraamminepalladium(2+) dichloride	13815-17-3	237-489-7	Umicore AG&Co.KG	REGISTERED	Mar 2017
Tetraamminepalladium(2+) dihydroxide	68413-68-3	270-241-6	Heraeus	REGISTERED	May 2017
Tetrakis(triphenylphosphine)palladium	14221-01-3	238-086-9	Umicore AG&Co.KG	REGISTERED	Mar 2017
Palladium sulphate	13566-03-5	236-957-8	Heraeus	REGISTERED	May 2017
Tetraamminepalladium(2+) diacetate	61495-96-3	262-819-1	Umicore AG&Co.KG	REGISTERED	April 2017
Disodium tetrachloropalladate	13820-53-6	237-502-6	BASF	REGISTERED	Jan 2017
Palladium dinitrate	10102-05-3	233-265-8	Heraeus	REGISTERED	April 2017
Palladium dihydroxide	12135-22-7	235-219-2	Umicore AG&Co.KG	REGISTERED	April 2017
Diammonium hexachloropalladate	19168-23-1	242-854-9	Johnson Matthey	REGISTERED	Feb 2017
Dipotassium hexachloropalladate	16919-73-6	240-974-6	C. Hafner	REGISTERED	Feb 2017



3.6 Pd Project: Key milestones

Maxime Eliat

- Submission of 17 out of 19 Palladium dossiers registered without issues
- Dihydrogen tetrachloropalladate and Tetraamminepalladium dihydroxide:
 - Non-standard waivers for phys-chem endpoints have been rejected by ECHA MCC
 - Organized additional phys-chem testing
 - Resubmission was successfully completed on the 30th of May

3.6 Pd Project: Next steps

Maxime Eliat

- The 19 substances from the palladium group have been registered



3.6 Pd Project: 2018 outlook

Maxime Eliat

- All platforms:
 - Literature review
 - Review phys-chem sections (desktop + eventually testing)
- Pd compounds:
 - Data gaps for mammalian tox testing (RDT/reprotox)
 - Expert review 4 dossiers
 - Update Read-Across (e.g. separate PNECs Pd(II) vs Pd(IV))
 - Improve exposure scenarios (e.g. occupational assessment Pd nitrate)
 - Update AnnexIII dossiers to AnnexVII (e.g. PdO dossier)

3.7 Pt Project: Status

Maxime Eliat

Substance	CAS	EC	LR	Status	
Platinum	7440-06-4	231-116-1	Vale	Sent to LR for registration	
Hexachloroplatinic acid	16941-12-1	241-010-7	Johnson Matthey	Put on shelf for later registration	End of 2017
Tetraammineplatinum dinitrate (in solution)	20634-12-2	243-929-9	Umicore AG&Co.KG	Sent to LR for registration	
Diammineplatinum (II) nitrite	14286-02-3	238-203-3	Heraeus	Restarted after withdrawal from the scope	
Dipotassium tetrachloroplatinate	10025-99-7	233-050-9	Heraeus	Put on shelf for later registration	End of 2017
Dihydrogen hexahydroxyplatinate, compound with 2-aminoethanol (1:2) (in solution)	68133-90-4	268-717-3	BASF	HH testing running	
Dipotassium hexachloroplatinate	16921-30-5	240-979-3	Heraeus	Put on shelf for later registration	End of 2017
Platinum dinitrate	18496-40-7	242-383-9	Heraeus	Sent to LR for registration	
Platinum, 1,3-diethenyl-1,1,3,3-tetramethyldisiloxane complexes / Karstedt concentrate (in solution)	68478-92-2	270-844-4	Heraeus	REGISTERED	Feb 2017
Diammonium hexachloroplatinate	16919-58-7	240-973-0	Johnson Matthey	Put on shelf for later registration	End of 2017
Dihydrogen hexahydroxyplatinate	51850-20-5	257-471-2	Johnson Matthey	Sent to LR for registration	
Tetraammineplatinum dichloride	13933-32-9	237-706-5	Johnson Matthey	REGISTERED	Feb 2017
Platinum dioxide	1314-15-4	215-223-0	Umicore AG&Co.KG	REGISTERED	Mar 2017



3.7 Pt Project: Key milestones

Maxime Eliat

- 11 platinum dossiers finalised and approved
 - platinum metal
 - 5 platinum compounds (2 registered)
 - 4 chloroplatinates (put on the shelf until end of 2017)
 - Karstedt Concentrate (registered)

3.7 Pt Project: Key milestones

Maxime Eliat

- Karstedt concentrate
 - Dossier submission by LR in line with the agreed deadline with Reconcile
 - After registration full mammalian toxicity dataset became available to assess classification
 - Classified as Reproductive toxicant cat 2 (Repr2) acknowledging a regulator might consider it Cat 1B, Testing proposal for EOGRTS will be included
 - DNELs have been derived
 - Exposure scenarios started, drafts expected during summer

3.7 Pt Project: Next steps

Maxime Eliat

- Follow up on the submissions until registration number is granted by ECHA
- Continue the Karstedt Concentrate update and discussions with Reconcile
- Finalise diammineplatinum nitrite (Annex III dossier – approval via fast-track)
- Finalise HHPA-2AE once the report from the OECD 422 is available



3.7 Pt Project: 2018 outlook

Maxime Eliat

- All platforms:
 - Literature review
 - Review phys-chem sections (desktop + eventually testing)
- Chloroplatinates
 - Update dossiers with secondary poisoning assessment
 - Expert review 1 dossier
- Karstedt Concentrate
 - Additional testing to strengthen dossier (waivers, repeat testing...)
- Pt compounds:
 - Update AnnexIII dossiers to AnnexVII (eg PtO₂)
 - Data gaps for mammalian tox testing (eg RDT and reprotox for Pt nitrate)
 - Expert review dossier

3.7 Pt Project: AoA on Chloroplatinates – main conclusions

- Chloroplatinates - **central role in the manufacture and recycling of platinum** and common starting point of all platinum chemistry, as intermediate for manufacture of other platinum compounds.
- The main use of platinum is **in exhaust catalysts for the automotive industry**. Chloroplatinates have, however, been replaced by alternative platinum substances and are **no longer used** in the EU for this purpose.
- **Industrial catalysts: no available, technically suitable alternative** to the chloroplatinic substances CPA and DTCP used in the manufacture of reforming catalysts, dehydrogenation catalysts and other platinum catalysts used for different specialised purposes.
- If chloroplatinates should be phased out from the use as pre-cursors for platinum catalysts **intense research and development will have to be carried out to identify and qualify alternatives**. It is expected that substitution will entail massive investments in R&D, production equipment, training etc.

3.7 Pt Project: AoA on Chloroplatinates – main conclusions

- Platinum catalysts play a key role in **hydrosilylation processes** for the production of silicones. Earlier chloroplatinic acid was commonly used for this purpose but **has in the EU been fully replaced by other platinum compounds**. Chloroplatinates are, however, **intermediates and platinum source in the production of the platinum containing catalysts currently used in hydrosilylation**.
- Chloroplatinates have in the EU a **very limited use in surface treatment** as they in general have been replaced by other platinum compounds for this use. Only for **certain special heat resistant coatings**, low volumes of ammonium hexachloroplatinic acid is still in use, and **cannot be easily replaced**.



3.7 Pt Project: AoA on Chloroplatinates – next steps

- Draft report available for comments **by 9th June 2017**

N.B.: Points of attention:

- Some of the economical statements are weak
 - Illustrations and diagrams could be improved
 - Classification of Platinum(II) tetraammine dihydroxide must be checked
-
- Finalisation of the report **end of June 2017**
 - Review existing draft **RMOa** on Clpts and **update** it with AoA conclusions

3.8 Rh Project: Status

Jelle Mertens

Substance	CAS	EC	LR	Status	
Rhodium	7440-16-6	231-125-0	Johnson Matthey	<i>Under approval</i>	1-10 tpa
Carbonyl(pentane-2,4-dionato-O,O')(triphenylphosphine)rhodium	25470-96-6	247-015-0	Johnson Matthey	REGISTERED	AnnexIII
Carbonylhydrotris(triphenylphosphine)rhodium	17185-29-4	241-230-3	Umicore AG&Co.KG	REGISTERED	AnnexIII
Dicarbonyl(pentane-2,4-dionato-O,O')rhodium	14874-82-9	238-947-9	Umicore AG&Co.KG	<i>Under approval</i>	AnnexIII
<i>Rhodium tris(2-ethylhexanoate)</i>	<i>20845-92-5</i>	<i>244-079-1</i>	<i>Umicore AG&Co.KG</i>	<i>Additional PC testing required</i>	<i>AnnexIII</i>
Rhodium trichloride (hydrate)	10049-07-7	233-165-4	Heraeus	<i>Under approval</i>	AnnexIII
Di- μ -chloro-bis(hapto-1,5-cyclooctadiene)dirhodium(I)	12092-47-6	235-157-6	Heraeus	REGISTERED	AnnexIII
Tris(triphenylphosphine) rhodium (I) chloride	14694-95-2	238-744-5	Umicore AG&Co.KG	REGISTERED	AnnexIII
Rhodium triiodide	15492-38-3	239-521-5	Umicore AG&Co.KG	<i>Under approval</i>	AnnexIII
<i>Dirhodium trisulphate</i>	<i>10489-46-0</i>	<i>234-014-5</i>	<i>Umicore AG&Co.KG</i>	<i>Additional PC testing ongoing</i>	<i>AnnexIII</i>
Dirhodium trioxide	12036-35-0	234-846-9	Umicore AG&Co.KG	<i>Under approval</i>	AnnexIII
Rhodium (III) acetate	42204-14-8	255-707-9	Umicore AG&Co.KG	<i>Under approval</i>	AnnexIII
Rhodium trinitrate	10139-58-9	233-397-6	Johnson Matthey	<i>Under approval</i>	1-10 tpa
Rhodium trihydroxide	21656-02-0	244-508-2	Heraeus	<i>Under approval</i>	AnnexIII
Triammonium hexachlororhodate	15336-18-2	239-364-2	Vale	<i>Under approval</i>	AnnexIII
Diammonium sodium hexakis(nitrito-N)rhodate	64164-17-6	264-713-0	Vale	<i>Under approval</i>	10-100 tpa



3.8 Rh Project: Key milestones

Jelle Mertens

- REACH dossiers Rh metal and 9 Rh compounds prepared and under approval
 - Diammonium sodium hexakis (nitrito-N)rhodate (10-100 tpa): exposure scenarios included (qualitative approach)
 - 2 Annex VII dossiers: Rh metal and Rh trinitrate
(note: decrease tonnage band Rh metal, 10-100 tpa dossier reviewed by WG and saved for potential future registration)
 - 7 Annex III exempted dossiers
- Rh sulphate: additional phys-chem testing initiated
- Rh(III) genotoxicity:
 - AMES testing Rh trihydroxide finalised: non-mutagenic
 - Bioelution testing of 5 Rh(III) compounds initiated

3.8 Rh Project: Next steps

Jelle Mertens

- Continue approval process – internal deadline June 2017

! Please, respect deadlines for reviewing / approval

- Rh(III) genotoxicity:
 - Bioelution testing: dissolution in artificial gastric bodyfluid (water soluble <-> poorly water soluble Rh(III) compounds). Results expected <summer '17
 - Revise Rh(III) grouping for mutagenicity (if required!) and testing/registration strategy for genotoxicity
- Additional Phys-Chem testing:
 - Rh sulphate: testing running at Siemens, registration file available end 2017 (Annex III exempted)
 - Rh tris(2-ethylhexanoate): isolation/characterization ongoing

3.8 Rh Project: 2018 outlook

Jelle Mertens

- All platforms:
 - Literature review
 - Review phys-chem sections (desktop + eventually testing)
- Rh(III) compounds
 - Update AnnexIII dossiers to AnnexVII (eg Rh trioxide)
 - Follow-up Rh(III) mutagenicity testing proposals/testing strategy

! Pending actions following registration in Q3-4 2017 (~manual completeness check)

3.9 Ru Project: Status

Jelle Mertens

Substance	CAS	EC	LR	Status	
Ruthenium	7440-18-8	231-127-1	Heraeus	<i>Dossier being prepared</i>	10-100 tpa
Ruthenium trichloride (hydrate)	10049-08-8	233-167-5	Heraeus	<i>Dossier being prepared</i>	10-100 tpa
Ruthenium (IV) oxide	12036-10-1	234-840-6	Heraeus	<i>Dossier being prepared</i>	AnnexIII
Tris(nitrato-O)nitrosylruthenium	34513-98-9	252-068-8	Umicore AG&Co.KG	REGISTERED	Feb 2017
Hexakis[μ -(acetato-O:O')]- μ 3-oxo-triangulo-triruthenium acetate / Ruthenium acetate	55466-76-7	259-653-7	Johnson Matthey	<i>Dossier being prepared</i>	AnnexIII
Tetraammonium decachloro- μ -oxodiruthenate(4-)	85392-65-0	286-924-7	Heraeus	<i>Dossier being prepared</i>	10-100 tpa
<i>Ruthenium trihydroxide</i>	12135-42-1	235-221-3	<i>Umicore NV/SA</i>	<i>PC testing required</i>	<i>AnnexIII</i>



3.9 Ru Project: Key milestones

Jelle Mertens

- Mammalian tox testing RuCl₃ and TetradoRu finalised, draft/final reports received
- REACH dossiers Ru metal and 4 Ru compounds under preparation
 - Ru metal (10-100 tpa)
 - RuCl₃ and TetradoRu (10-100 tpa): exposure scenarios required
 - 2 Annex III exempted dossiers
- Ru trihydroxide: additional phys-chem testing initiated

3.9 Ru Project: Next steps

Jelle Mertens

- Prepare draft dossiers by 7 June for WG review (7-26 June)
 - WG approval: 7 July – 11 August
 - Mgt Cttee approval: 18 August – 1 September
 - SA approval: 8 September – 22 September
 - Ready for registration by Lead Registrant: 30 September
- Additional Phys-Chem testing Ru trihydroxide (testing running at Siemens, registration <end 2017, Annex III exempted)

3.9 Ru Project: 2018 outlook

Jelle Mertens

- All platforms:
 - Literature review
 - Review phys-chem sections (desktop + eventually testing)
- Ru compounds:
 - Update AnnexIII dossiers to AnnexVII (eg Ru(IV) oxide)

! Pending actions following registration in Q3-4 2017 (~manual completeness check)

3.10 Re Project: Status & key milestones

Katrien Arijs

- 5/6 dossiers (sodium rhenate, ammonium perrhenate, perrhenic acid, potassium perrhenate and rhenium) completed and submitted in 2013 and 2014
- Yearly literature review - no need for updates
- 1 remaining dossier (dirhenium heptasulphide) not yet submitted

3.10 Re Project: Next steps

Katrien Arijs

- Dirhenium heptasulphide dossier to be submitted once necessary information from LR received
- Except for some light dossier maintenance work (literature review and subsequent update of dossiers), no further work anticipated

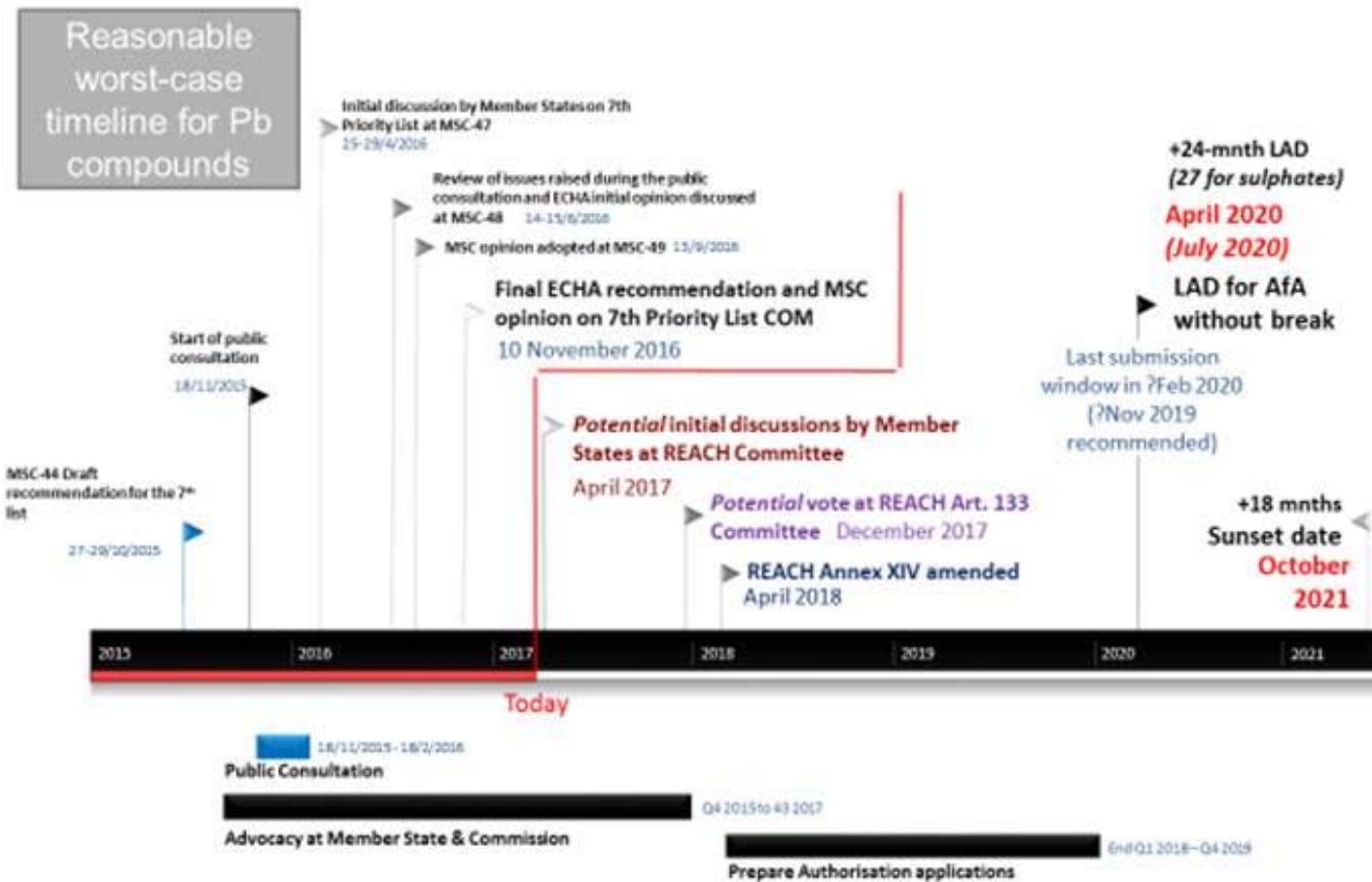
3.10 Re Project: 2018 outlook

Katrien Arijs

- Literature review
- Improvements/updates of CSR and IUCLID

3.11 SVHC Roadmap Project: PbO listing status

France Capon



3.11 SVHC Roadmap Project: PbO related activities

Clarifications of intermediate uses

- **STEP 1:** 15 May 2017, An informal workshop to promote technical exchange discussions for involved metal sectors and user application sectors
- **STEP 2:** June-September. Stimulate the development of sectorial technical / guidance summary papers aiming at providing best communication recommendations for the sectors of concern
- **STEP 3:** October-November (tbc) Second workshop or webinar to review guidance's and define suggestions for examples for communication and possible publication by ECHA

As things stand, a few PMC members may have to submit AfAs may have to be submitted for use in fire assaying above 1t/y... Except if use can be exempted under 58.2 – legal advise will be requested



**Informal workshop on
Clarifying Intermediate/Article Status in
Complex Specific Cases, like Inorganic
Materials**

3.11 SVHC Roadmap Project: Monitoring strategy

France Capon

How to be more efficient?

- Identification of critical substances for Precious Metals industry by companies
- List of critical substances to be consolidated by Secretariat
- Starting point for the monitoring
- Identification of monitoring tools ongoing (e.g.: Chemycal, Chemtrack, DeHaviland)

3.11 SVHC Roadmap Project: 2018 outlook

France Capon

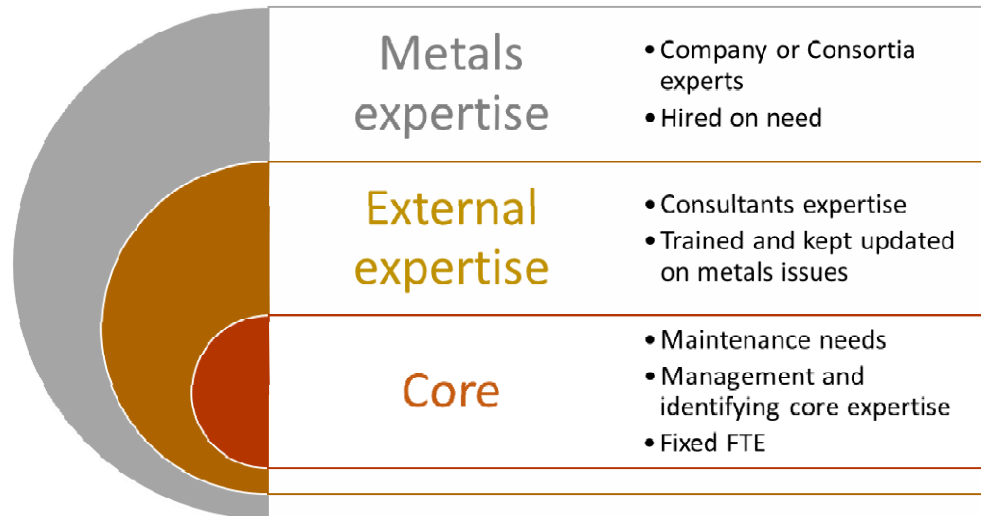
- SVHC monitoring
- Contribution to a Metals Authorisation Expert Centre:
 - Provide best Authorisation knowledge on an expertise basis
 - Provide flexibility in resource and time/workload management
 - Provide independence and CBI protection
 - Not-for profit coordination function



3.11 SVHC Roadmap Project: 2018 outlook

France Capon

- Contribution to a Metals Authorisation Expert Centre:



start small
but start

2017 – pilot case under discussion





Precious Metals
Consortium

4. A.O.B., next meetings and closing remarks

Guy Ethier, Umicore

4. A.O.B., next meetings and closing remarks

- Next General Assemblies:
 - > Brussels, 5 and 6 December 2017
 - > Brussels, 5 and 6 June 2018





THANK YOU

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