20 DECEMBER 2011

ANNEX I TO RESPONSES TO COMMENTS DOCUMENT (RCOM) ON ECHA'S DRAFT 3RD RECOMMENDATION FOR THE GROUP OF RECOMMENDED COBALT(II) SUBSTANCES - COMMENTS ON COBALT(II) SULPHATE (EC NUMBER: 233-334-2)

THIS DOCUMENT PROVIDES THE COMMENTS RECEIVED ON COBALT(II) SULPHATE DURING THE PUBLIC CONSULTATION ON THE 3RD DRAFT RECOMMENDATION FOR INCLUSION OF SUBSTANCES IN ANNEX XIV OF REACH WHICH TOOK PLACE BETWEEN 15 JUNE AND 14 SEPTEMBER 2011. ECHA'S RESPONSES TO THESE COMMENTS ARE PROVIDED IN THE ABOVE MENTIONED RCOM DOCUMENT.

N.B.: All public attachments are provided in a separate zip-file available on ECHA's website (attachments claimed confidential are not provided with the public version of this compilation of comments received).

I - GENERAL COMMENTS ON THE RECOMMENDATION TO INCLUDE THE SUBSTANCE IN ANNEX XIV, INCLUDING THE PRIORITISATION OF THE SUBSTANCE:

#	Date (Attachment provided)	Submitted by (name, Organisation/MS CA)	Comment
692	2011/09/09 15:06	Company Germany	1 Präambel Die Galvano- und Oberflächentechnik ist eine wichtige Schlüssel- und Querschnitts-Technologie und damit einer der Motoren des technischen Fortschritts. Innerhalb der Galvanotechnik bilden Zink und Zinklegierungen mit nachfolgenden Konversionsschichten für den kathodischen Korrosionsschutz von Stahlbauteilen einen besonderen Schwerpunkt mit wachsender Bedeutung. Generell kann gesagt werden, dass Zink/Zinklegierungen optimalen Korrosionsschutz mit geringstem Materialeinsatz und niedrigen Kosten ermöglichen. Wesentlicher Bestandteil des Schutzsystems ist eine Konversionsschicht, die als Nachbehandlung der metallischen Zink bzw. Zinklegierungsschicht auf deren Oberfläche erzeugt wird. 2 Allgemeines Bei diesem chemischen Verfahren werden die verzinkten Bauteile in eine Behandlungslösung, die

			dreiwertige Chrom-Verbindungen enthält, eingetaucht. Die Lösungen reagieren chemisch mit der Metalloberfläche und erzeugen dünne, ca. 30 bis 1.000 Nanometer (nm) starke Umwandlungsschichten, die sogenannten Konversionsschichten. Die Langlebigkeit von Bauteilen hängt in sehr starkem Maße von der zusätzlichen Korrosionsschutzwirkung der Konversionsschicht ab. Die Konversionsschichten verzögern den Erstangriff auf die metallische Schutzschicht aus Zink bzw. Zinklegierung. Sie werden aus diesem Grunde überwiegend zur Erhöhung der Korrosionsbeständigkeit z.B. von verzinkten Bauteilen im Automobil angewendet. Weitere Einsatzzwecke sind u.a. Verbesserung der Haftfestigkeit anschließend aufgebrachter Lackschichten. Chemische Verfahren zur Erzeugung von Konversionsschichten basierend auf dreiwertigen Chromverbindungen Es sind schon seit geraumer Zeit Lösungen, basierend auf dreiwertigen Chrom¬verbindungen, zur Erzeugung von Konversionsschichten im Einsatz. Diese Lösungen enthalten weiterhin Neutralsalze, die zum Teil auch im Lebensmittelbereich Anwendung finden. Hier sind u.a. Natriumfluorid (Zahnpasta) und Natriumnitrat (Pökelsalz) zu nennen. Die eingesetzten dreiwertigen Chromverbindungen bilden mit den Neutralsalzen Komplexe und reagieren mit der Metalloberfläche des eingetauchten Bauteils. Auf diesem Wege entstehen geeignete Chrom(VI)-freie Konversionsschichten. Es zeigt sich, dass Cr(III)-basierte Passivierungen nur dann mit hohem Korrosionsschutz möglich sind, wenn den Applikationslösungen Kobaltsalze zugesetzt werden und Kobalt mit < 2 % bezogen auf die Konversionsschicht in diese einlagert wird. Der Zusatz von Kabaltsalzen ist insbesondere erforderlich, wenn der Korrosionsschutz auch in warmen bzw. heißen Umgebungen gefordert ist (Motorraum, Bremsen, Getriebe usw. sowie Elektroteile in Gehäusen usw.). Hier sind kobalthaltige Lösungen Stand der Technik und bisher für reine Zinkschichten und Zink-Eisen-Legierungen unverzichtbar. Konversionsschichten mit einer Schichtsicke von ca. 0,2 - 1 µm werden als Dick¬schicht¬passivierung („DISP") bezeichnet. Die Anforderungen für einen beherrschten Prozess zur Erzeugung dieser Schichten sind deutlich höher als bei den bisherigen Chromatierschichten. Grundsätzlich müssen bei dreiwertigen Chromsalz-Passivierungen folgende Parameter in engen Toleranzen eingehalten werden: ☐ Konzentration der Hauptbestandteile (z.B. Cr-III und Co-II) ☐ pH-Wert ☐ Temperatur ☐ Fremdmetallkonzentration (insbesondere Eisen) ☐ Art und Umfang der Elektrolytkonvektion

			Nachträglich auf die DISP-Schicht aufgebrachte Versiegelungen oder TopCoats versehen die beschichtete Oberfläche mit einer zusätzlichen Diffusionsbarriere und verstärken den Korrosionsschutz dieser alternativen Systeme. Anzumerken ist, dass nachträglich aufgebrachte Versiegelungen/TopCoats das Korrosionsverhalten auch der konventionellen Systeme mit sechswertigen Chrom-Verbindungen erhöhen. 3 Mögliche Gesundheitsgefahren bei Einwirkung von Kobalt(II)-salzen Risiken bei der Anwendung von Passivierungs-Konzentraten, die Kobalt-II-Salze enthalten Die Kobaltsalze werden nicht unmittelbar als Feststoff zur Erzeugung der Kon¬ver¬sionsschicht angewendet, sondern bei Herstellung der Passivierungslösung in Lösung gebracht. Bei den angelegten pH-Werten zerfällt das Kobaltsalz in wassergelöste Co-Ionen und andere Bestandteile. Somit ist ein unmittelbarer Umgang des Personals der Anwender mit Co-Salzen bei dieser Verwendung nicht gegeben; eine sichere Verwen¬dung ist gegeben. Die Kobalthaltige Passivierungslösung wird bei Raumtemperatur und rein chemisch betrieben. Somit ist bei durch den Endanwender entsprechend geprüften Absaugungen an den Anlagen eine Belastung der Luft durch kobalthaltige Aerosole weit unterhalb bekannter gesetzlicher Grenzwerte (Vgl. unten, 3.2.1). Eine sichere Verwendung ist gegeben. Kobaltsalze werden als solche nicht in die Passivierungsschicht einge¬baut, sondern bei der Konversions¬reaktion in Hydroxidverbindungen umge¬wandelt. Auch in den Kon¬ver¬sionsschichten liegen also die Kobaltsalze nicht vor und können keine negativen Aus¬wirkungen auf Mensch oder Umwelt ausüben. Risiken bei der Herstellung von Passivierungs-Konzentraten, die Kobalt-II-Salze enthalten Bei der Herstellung der Konzentrate, die beim Anwender zum Betrieb einer Passivierungslösung verwendet werden, kann es kann es bei Nichtbeachtung der in der Fertigungsvorschrift vorliegenden Sicherheitshinweise bzw. Vorschriften zu einer Exposition mit Co-Salzen in Form atembarer Stäube, Aerosole oder durch Hautkontakt kommen. Akute Toxizität, dermal: Werte für eine Aufnahme löslicher Kobaltsalze über die Haut liegen nicht vor, eine sensibilisierende Wirkung auf die Haut wird aber vermutet. Akute Toxizität, Inhalation Werte zur akuten Toxizität von löslichen Kobaltverbindungen durch Inhalation liegen nicht vor. Aus zweijährigen Studien an Ratten besteht jedoch der Verdacht einer chronischen Toxizität mit

			Schädigung der Atmungsorgane. Bewertung der Messwerte Eine gesundheitliche Schädigung durch unbeabsichtigte orale Aufnahme löslicher Kobaltsalze besteht nicht. In Bereichen, wo mit Kobaltsalzen oder kobaltsalzhaltigen Gemischen gearbeitet wird, besteht ein striktes Verbot der Aufnahme von Lebensmitteln und striktes Rauchverbot. Eine unbeabsichtigte Aufnahme kann daher ausgeschlossen werden. Eine Sensibilisierung der Haut kann ebenfalls ausgeschlossen werden. Hier besteht ein ausreichender Schutz durch Anlegen von persönlicher Schutzausrüstung (Handschuhe, Schutzkleidung). Der Arbeitgeber ist verpflichtet, die Einhaltung der Verpflichtung zum Tragen persönlicher Schutzausrüstung zu kontrollieren. Die mögliche Gefährdung durch Einatmen von kobaltsalzhaltigen Aerosolen oder Partikeln wird anlagentechnisch durch geeignete Absauganlagen verhindert. Die Wirksamkeit dieser Schutzmaßnahmen wird durch regelmäßige Arbeitsplatzmessungen durch die technischen Aufsichtsdienste der Berufsgenossenschaften kontrolliert. Bei einer Messung, die 2004 in einem Betrieb durchgeführt wurde, der eine kobaltsulfathaltige Passivierung zur Passivierung von galvanisch abgeschiedenen Zinkschichten im Einsatz hat, wurde an mehreren Messstellen im Betrieb gemessen. Die Ergebnisse waren wie folgt: Messplatz Messwert Kobalt 1 < 1 mg/L gefällt werden. Derzeit gibt es für Galvaniken und diesen Parameter noch keinen Grenzwert in der AbwV bzw. im Anhang 40 zu dieser Verordnung. 5 Wirtschaftliche Bedeutung von Passivierungs- und Konversionsschichten auf Zink und Zinklegierungen 5.1 Wirtschaftliche Bedeutung der Beschichtungsbetriebe für Europa und für Deutschland Der Absatz von Passivierungen (Chrom(III)-basiert) für die galvanische Verzinkung in Europa beträgt etwa 40 Millionen Euro, davon etwa 16 Millionen € in Deutschland. Dies entspricht einem Kosten- bzw. Umsatzanteil von etwa 2,5 % bei den Galvanisierbetrieben, die Zinkbeschichtungen ausführen. Daraus errechnet sich ein Fertigungsvolumen bei den Beschichtungsbetrieben von europaweit etwa: 1.600 Millionen Euro.

			Der umsatzmäßige Anteil von Cr(III)- basierten Passivierungen beträgt etwa 95% des Marktsegments Konversionsschichten für Zink- und Zinklegierungsschichten. Die europaweite Wertschöpfung von etwa 1.600 Millionen Euro, die durch Betriebe der galvanischen Verzinkung generiert wird, ist bei einem Verwendungsverbot von Kobaltsalzen in Europa direkt betroffen. • Der Anteil an Kobalt-relevanten Anwendungen beträgt etwa 75% = 1.200 Mio Euro Die Restsumme von etwa 320 Mio € wird mit schon jetzt mit Kobaltfreien Schichten generiert, die aber in der Regel auf einem niedrigeren Qualitätsniveau liegen. Außerdem wird dieses Segment in denselben Anlagen beschichtet wie die übrige Ware. Ein Wegfall des überwiegenden Mengenanfalls führt daher zu drastisch steigenden Fixkosten-Umlagen. Die Restproduktion ist nicht mehr wirtschaftlich zu betreiben; die betroffenen Betriebe müssten schließen. Der Fertigungsanteil deutscher Betriebe am europäischen Markt beträgt etwa 40%. Das Fertigungsvolumen der Verzinkungsbetriebe beträgt damit für Deutschland etwa 640 Millionen Euro. Davon beträgt • der Anteil an Kobalt-relevanten Anwendungen etwa 75% = 480 Mio Euro 5.2 Gesamtwirtschaftliche Bedeutung der Konversionsbeschichtung 5.2.1 Beispiel Automobilindustrie in Deutschland Ein Umsatzanteil von etwa 45 % der von Verzinkungsbetrieben beschichteten Bauteile geht in die Automobilindustrie, z.B. für Gehäuse, Befestigungsschienen, Bremsenteile, Rohrleitungen, Sicherheitsschellen, Getriebe- und Stossdämpferkappen, Kraftstoffpumpen, Schrauben, usw. Laut VDA (Stand 25.03.2011) wurden in 2010 in Deutschland 5.552.409 PKW gebaut sowie 353.576 Nutzfahrzeuge. Bei einem Durchschnittverkaufspreis von in Deutschland hergestellten PKW von ca. 25.000 € (Annahme VDA) ergibt sich damit ein Fertigungsumfang von 140 Milliarden € allein in der deutschen Automobilindustrie, der zur Sicherstellung von Langlebigkeit und Funktionssicherheit zahlreiche verzinkte Bauteile erfordert (geschätzt: etwa 500 -1.000 Bauteile mit Konversionsbeschichtung auf Zink bzw. Zinklegierung pro Fahrzeug). Wenn der finanzielle Rahmen nicht berücksichtigt wird und nur die für den Automobilbau in Deutschland veredelten Artikel mit >500 Teilen pro Pkw berechnet werden, bedeutete dieses, dass ohne die Veredlung mit galvanischen Zinkbeschichtungsprozessen mehr als 2,8 Milliarden Teile pro Jahr nicht mehr in den Galvaniken bearbeitet würden. 5.2.2 Beispiel Fensterbeschlaghersteller Ein Umsatzanteil von etwa 20 % der von Verzinkungsbetrieben beschichteten Bauteile geht in die Herstellung von Beschlägen für den Fensterbau. Der Gesamtbedarf an Produkten für die galvanische Oberflächenveredlung beträgt in Europa etwa 25 Mio Euro pro Jahr, davon etwa 8 Mio

			€ für kobalthaltige Passivierungen. Der überwiegende Teil der Beschichtungen wird in Deutschland, Frankreich und Österreich ausgeführt. Die galvanische Veredlung trägt mit einem Umsatzanteil von etwa 100 Mio Euro pro Jahr zum europäischen Sozialprodukt bei bewirkt durch einen hohen Anteil manueller Arbeit gesicherte Arbeitsplätze für etwa 3.000 Menschen. Insgesamt generieren die europäischen Hersteller von Fenster- und Türbeschlägen einen Jahresumsatz von etwa 3.000 – 4.000 Mio € und beschäftigen etwa 16.000 – 20.00 Mitarbeiter. Der hohe Schutzwert der galvanisch beschichteten Bauteile trägt maßgeblich zur Langlebigkeit der hergestellten Wirtschaftsgüter, insbesondere der Fenster, bei. Ein Verbot des Einsatzes von Kobaltsalzen in Passivierungen würde den Korrosionsschutz der beschichteten Teile deutlich vermindern und damit negative Auswirkungen auf die Langlebigkeit und Nachhaltigkeit des industriellen Wirtschaftens in Europa haben. Verstärkter Rohstoffeinsatz und zusätzlicher Energieverbrauch wäre die Folge und würde die europäischen Klimaschutzziele und Senkungsbestrebungen zum CO2 Ausstoß belasten. ZUSAMMENFASSUNG Unverzichtbare Eigenschaft beschichteter Stahlteile, die in allen Bereichen von Industrie, Gewerbe und auch im Haushalt zum Einsatz kommen, ist der kathodische Korrosionsschutz mittels Zink und Zinklegierungsschichten, der durch Konversionsschichten verstärkt wird. Es ist und bleibt ständige Aufgabe der galvanotechnischen Industrie, mit neuen und/oder verbesserten Beschichtungsprozessen die Funktionalität und Langlebigkeit der Produkte zu gewährleisten. Gleichzeitig werden durch Regeneration der Prozesslösungen die Standzeiten verlängert, der Energie- und Stoffeinsatz vermindert und damit die Umwelt entlastet. Kobaltfreie Dickschichtpassivierung für Zink und Zink-Eisen-Legierungen sind derzeit in der Entwicklung. Hier ist noch eine umfangreiche Erprobung durch die Galvanisierbetriebe erforderlich; Optimierungen und Anpassungen in der Applikationstechnik müssen erarbeitet werden. Darüber hinaus ist die Laborerprobung der Schichten sowie die Funktionsprüfung und Felderprobung durch die Endnutzer erforderlich, um die Schichteigenschaften im realen Praxiseinsatz zu ermitteln, zu erproben und sicherzustellen. In weiten Bereichen sind Sicherheitsaspekte zu berücksichtigen. Wir gehen davon aus, dass eine breite Feldanwendung etwa 6 – 8 Jahre Vorlaufzeit erfordert. Daher sind für eine Beschränkung der Verwendung von Kobaltsalzen lange Übergangszeiten erforderlich sowie eine generelle Ausnahme für die Verwendung zur Herstellung von Bauteilen bestehender Serien, wie sie ja auch bei der ELV-Verordnung eingeräumt wurde. Wir fordern eine Ausnahmeregelung für die Verwendung von Kobaltsalzen (Kobalt(II)-dinitrat, Kobalt-dichlorid, Kobalt(II)-sulfat, Kobalt(II)-diacetat, Kobalt(II)-carbonat) in Lösungen zur Erzeugung von Konversionsschichten im Falle einer Aufnahme dieser Stoffe in den Anhang XIV der

			REACh-Verordnung.
1817	2011/09/14 21:23 File attached	The Federation of Finnish Technology Industries Industry or trade association Finland	- Over 95 % of the use of cobalt sulphate is as intermediate and thus should not be subject to Authorisation. - Workplace exposure is already regulated by existing community legislation (for example by exposure to carcinogens and mutagens at work; Directive 2004/37/EC). - The ECHA´s data that support the "widely-dispersive use" of cobalt sulphate is overestimated. - Cobalt sulphate can not be replaced with other cobalt substances. Thus, the basis of "regulatory effectiveness and coherence" is not correct and should not be used. - Authorisation would have negative economical effects on the European based metal production and would even result in the transfer of production to non-EU countries. - Cobalt is identified as a critical raw material in the "Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - Tackling the challenge in commodity markets and on raw materials" (see http://ec.europa.eu/enterprise/policies/raw-materials/index_en.htm). The proposal to authorise the five cobalt substances is not in line with this European strategy. Instead, emphasis should be put on the safe use of the cobalt substances. - There is no consumer exposure of cobalt sulphate.

1441	2011/09/14 10:39	Glass for Europe Industry or trade association Belgium	
1190	2011/09/13 19:57 File attached	Verband der Automobilindustrie VDA Industry or trade association Germany	• It is difficult to see why the current justification and proportionality of the relevant provisions to handle Cobalt (II) sulphate should need further approvals. National and European law already requires aspects of regulatory monitoring and control as well as to the increasing internationalization of requirements. Any additional configurable prioritization and approval of changes will only reproduce the current national requirements.

540	2011/08/19 16:51	European Catalyst Manufacturer's Association (ECMA) Industry or trade association Belgium	2.2.2.1 Manufacture and releases from manufacture: Pg 2. Cobalt sulphate is a transported isolated intermediate (i.e. raw material), in the manufacturing process of some specialty catalysts. 2.2.2.2 Uses and releases from uses: Manufacture of other chemicals: Pg 2, para 2: The European Catalyst Manufacturers Association (ECMA) can confirm that the use of Cobalt sulphate as an intermediate for the production of other cobalt compounds during catalyst manufacture is only of minor relevance compared with Cobalt dinitrate or Cobalt carbonate. Cobalt sulphate is transformed by heat treatment processes and the substance is entirely consumed in the course of the catalyst manufacturing process. This salt is not contained in the final catalyst mixture and cannot be considered as a catalyst itself. There is no intended release/exposure from the manufacturing process. Release/exposure may only occur accidentally. Volumes per sector or use: Pg 4, It is stated that 'up to 5% is used in the manufacture of catalysts and driers'. The up to 5% should only be relevant for 'drier' use. Please amend the background document. We recommend to include the volume used as intermediate during catalyst manufacturing (which might be up to 1%) in the first category and amend the statement as follows 'above 90% of the cobalt(II) sulphate in the EU is used in the production of other chemicals (feed materials for other chemicals and catalysts)'. 2.2.2.3 Geographical distribution and conclusions in terms of (organisation and communication in) supply chains: Pg 5, It is stated that 'Estimates on the number of downstream users of cobalt(II) sulphate in the EU have been provided for combined use categories by the Cobalt REACH Consortium... 10–15 sites relate to manufacture of driers and catalysts'. See comment above. The 10 -15 sites should only be relevant for 'drier' use. Please amend the background document. Comments relating to chemical inter-changeability: Given the fact that Cobalt dinitrate, Cobalt carbonate and Cobalt sulphate are used in parallel at one site depending on the catalyst manufacturing processes in place and the different intermediate stages of these processes one can derive that the three cobalt salts are not interchangeable with each other in catalyst production. The use of Cobalt sulphate as intermediate for the manufacture of other cobalt compounds in the catalyst industry is exempted from authorisation according to Article 2.8. (b) of Regulation (EC 1907/2006).

1808	2011/09/14 20:53 File attached	ACEA - European Automobile Manufacturers Association Industry or trade association Belgium	According to the available data we see no basis for an inclusion of the hard chromium plating from Chromium trioxide (-solutions) in Annex XIV of the REACH regulation. See also attached Joint association letter sent to ECHA Executive Director on 20th October 2010.
1211	2011/09/13 21:30 File attached	Company United Kingdom **Organisations having submitted the same comment or extracts of it are listed in Annex I.**	Application of divalent cobalt salts in Conversion layers in the European electroplating Industry Within the overall field of electroplating, zinc and zinc alloys and their subsequent conversion layers for the cathodic corrosion protection of steel components represent a particular area of focus which is of growing importance. The use of cobalt (II) salts with its importance for the surface treatments industry, machine and plant engineering, automotive, improving the adhesion of paint layers when they are applied and other industrial sectors, such as the construction industry in Europe, must have a future in order to maintain the specific properties achieved with the application of electrochemical corrosion protection systems using zinc and zinc alloys with subsequent conversion layers. With effect from 1 July 2007, only trivalent conversion coatings were permitted to be used for the aftertreatment of galvanized / zinc alloy coated components for new registrations of standard cars. Cr(III) based conversion coatings with high levels of corrosion protection are only possible if cobalt salts are added to the application solutions and cobalt is included in the conversion coatings as a hydroxide (damp) and oxide (dry) in proportions of < 2% with reference to the conversion layer. The addition of cobalt salts is necessary in particular if corrosion protection is required in warm or hot environments (e.g. engine spaces, brakes, gearboxes etc. and in electrical parts in housings etc.). In these cases, solutions containing cobalt are state-of-the-art and indispensable up to now for zinc layers, zinc nickel and zinc iron alloys. Conclusions Cathodic corrosion protection using zinc and zinc alloys is an indispensable characteristic of coated steel components as used in all fields of industry, the trades and in households, and this protection is reinforced and maintained by conversion layers. Electrochemical anti-corrosion coatings extend the lifetime of steel parts by a factor of 20 – 100 and, as a result, make a valuable contribution to enabling resource-saving industrial and economic processes.

			There is little practical research available on the application of cobalt-free conversion coatings. In this context, comprehensive testing by electroplating firms is needed; optimisation and adjustment of applications need to be developed. In addition to this, it is necessary for end users to carry out function testing and day-to-day testing to determine and secure the properties of the coatings in realistic conditions. In many contexts, there are also safety aspects to be taken into consideration. On the market you cannot find cobalt free conversion coatings with anything approaching the results from those which include cobalt. Prohibiting the use of cobalt salts in conversion coatings would considerably reduce the corrosion protection of the parts so coated and that would have negative effects on the durability and sustainability of industrial efforts in Europe. The result would be increased consumption of resources and energy and this, in turn, would jeopardise the European targets for climate protection and efforts to reduce CO2 emissions. European manufacturers requiring the higher performance offered by cobalt conversion layers would simply arrange for coated articles to be imported from elsewhere thereby further jeopardising the already struggling surface treatment industry within the EU. MacDermid Scandinavia cannot therefore accept the arguments to include the Cobalt Salts (cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride and cobalt(II)-acetate) into the Appendix XIV of the REACH regulations. In the event that these substances are included in Appendix XIV of the REACH regulations we request that there has to be an exception to the rules to allow the use of Cobalt(II)-Salts for the purpose of creating conversion coatings in the fields of anti-corrosion zinc and zinc-alloy plating.

963	2011/09/13 14:26	United Kingdom MemberState United Kingdom	Based on the prioritisation criteria and the possibility of significant workplace exposure we agree with the proposal to recommend the following substances for inclusion in Annex XIV. Cobalt (II) Sulphate Cobalt (II) diacetate However, whilst we agree that grouping certain compounds, such as transition metal salts, together is a sensible approach, there should be evidence to support their interchangability. In the case of the following cobalt compounds we are not sure that this is the case and this warrants further investigation before these substances, which only score moderately according to the prioritisation criteria, are recommended for inclusion in Annex XIV. Cobalt (II) dinitrate Cobalt (II) Carbonate Cobalt dichloride
969	2011/09/13 14:33 File attached	Industry or trade association Germany	Cathodic corrosion protection using zinc and zinc alloys is an indispensable characteristic of coated steel components as used in all fields of industry, the trades and in households, and this protection is reinforced and maintained by conversion layers. Electrochemical anti-corrosion coatings extend the lifetime of steel parts by a factor of 20 – 100 and, as a result, make a valuable contribution to enabling resource-saving industrial and economic processes. There is little practical research available on the application of cobalt-free conversion coatings. In this context, comprehensive testing by electroplating firms is needed; optimisation and adjustment of applications need to be developed. In addition to this, it is necessary for end users to carry out function testing and day-to-day testing to determine and secure the properties of the coatings in realistic conditions. In many contexts, there are also safety aspects to be taken into consideration. On the market you cannot find cobalt free conversion coatings with nearly the same results than including cobalt. Prohibiting the use of cobalt salts in conversion coatings would considerably reduce the corrosion protection of the parts so coated and that would have negative effects on the durability and sustainability of industrial efforts in Europe. The result would be increased consumption of resources and energy and this, in turn, would jeopardise the European targets for climate protection and efforts to reduce CO2 emissions. As described in the attached statements above the German Fasteners Association (DSV) cannot follow the arguments to include the Cobalt Salts (cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride and cobalt(II)-acetate) into the Appendix XIV of the REACH regulations.

			In the event that these substances are included in Appendix XIV of the REACH regulations we demand that there has to be an exception to the rules to allow the use of Cobalt(II)-Salts for the purpose of anti-corrosion, decorative and bright Cobalt-Alloy- Plating. Attached documents we would like to refer to: Central Association of Surface Treatment Professionals Germany (ZVO) "Application of divalent cobalt salts in Conversion layers in the European electroplating Industry"
1775	2011/09/14 19:26	The Cobalt Development Institute Industry or trade association United Kingdom	CDI Comments for ECHA Public Consultation for Cobalt Salts – September 2011 The Cobalt Development Institute (CDI) is an international organisation of a wholly non-profit making character which has been in existence for over 50-years. The CDI is an association of producers, users and traders of cobalt. The CDI has the following objectives: (1) Promoting the responsible and sustainable use of cobalt in all forms. (2) Consulting organisations, agencies and governments for research or investigations in all matters concerning cobalt. (3) Providing members with topical information on all cobalt matters including health & safety and environmental legislation plus regulatory affairs possibly affecting their interests. (4) Promoting co-operation between members and providing a forum for the exchange of information concerning the resources, production and uses of cobalt. Membership of the CDI includes 32 member companies from 16 countries including all the major cobalt producers. The Board of the CDI has also established three Cobalt REACH Consortia to implement REACH on behalf of the cobalt industry. A separate wholly-owned subsidiary of the CDI called CoRC (Cobalt REACH Consortium Ltd.) acts as the Secretariat to the Consortia. This submission is being made in conjunction with formal submissions made by CoRC on behalf of the Members of the Cobalt REACH Consortium, and we also provide a confidential Technical Annex(i)relating to this cobalt salt. REACH has many ambitions and compelling aims to protect EU citizens and workers from exposure to chemicals, and these are supported by Industry. Over the past five years since adoption of the REACH regulation, the cobalt industry has taken its responsibility to comply with the financial,

			technical, scientific and administrative burden. By 1st December, 2010 the registration of cobalt and the relevant cobalt compounds (18 in total) had been completed and we are currently continuing with our efforts to ensure that we contribute to the evaluation process. The Cobalt Consortium has already expended some Euro 7million and work continues for the remaining twelve substances covered by the Consortium. The Dossier (Technical Annex (i)) prepared for cobalt sulphate shows that: - the actual tonnage of cobalt sulphate used in the EU market is much lower than quoted in the ECHA consultation document from REACH registration data. - it is largely used as an intermediate (95-99% of uses in the manufacture of other chemicals, the manufacturing of driers and pigments), which is not subject to Authorisation (ii). - Of the remaining non-intermediate uses, some will be exempt, such as uses as an animal feed supplement which should be covered by Existing EU Legislation (Feed Additives Directive). - all uses identified are for industrial uses only, therefore the exposure is limited to workers and there is minimal exposure of professional users from the identified uses. - the occupational environment operates under tightly controlled conditions which are already regulated under existing Community legislation such as the exposure to carcinogens and mutagens at work directive (2004/37/EC), or the risk related to chemical agents at work directive (98/24/EC), DSD (67/548/EEC), DPD (99/45/EC). A strict control of environmental risk is ensured by the requirements of Directive 96/61/EC concerning integrated pollution prevention and control (IPPC) and Directive 2008/I/EC on the control of major accident hazards involving dangerous substances (Seveso II). - cobalt sulphate does not reach the consumer as is it not marketed as an end product and nor has it a wide-dispersive use. In the rare sectors where it is used as a non-intermediate, and would be of widespread use, any release would be negligible and insignificant for human health and the environment. - cobalt is a natural element that is essential in humans and some animal species, who are unable to synthesise sufficient quantities of Vitamin B12. While low levels of Vitamin B12 intake can be associated with diseases of deficiency, the ingestion of large amounts of Vitamin B12 has not been reported to be toxic to humans. Its ubiquitous and constant presence in the body tissues is indicative of the fact that low dietary levels of cobalt have no health impact. - although cobalt sulphate is identified as a CMR 1B by inhalation substance, guideline compliant studies indicate it may not be genotoxic in vivo. The CoRC has recently provided ECHA

			with information on a potential concentration threshold mode of action for carcinogenicity. A report on the threshold mechanism has been uploaded with this response (iii) . - no reports of carcinogenicity and genotoxicity associated with cobalt ingestion have been reported in humans or in animals. A report on Essentiality has been uploaded with this response (iv). The exposure assessments developed by the CoRC for the REACH registration demonstrate that all registered uses of cobalt sulphate can demonstrate effective control of exposure and can be considered as safe uses (i.e. RCR value
1852	2011/09/14 19:26 File attached	The Cobalt Development Institute Industry or trade association United Kingdom	CDI Comments for ECHA Public Consultation for Cobalt Salts – September 2011 The Cobalt Development Institute (CDI) is an international organisation of a wholly non-profit making character which has been in existence for over 50-years. The CDI is an association of producers, users and traders of cobalt. The CDI has the following objectives: (1) Promoting the responsible and sustainable use of cobalt in all forms. (2) Consulting organisations, agencies and governments for research or investigations in all matters concerning cobalt. (3) Providing members with topical information on all cobalt matters including health & safety and environmental legislation plus regulatory affairs possibly affecting their interests. (4) Promoting co-operation between members and providing a forum for the exchange of information concerning the resources, production and uses of cobalt. Membership of the CDI includes 32 member companies from 16 countries including all the major cobalt producers. The Board of the CDI has also established three Cobalt REACH Consortia to implement REACH on behalf of the cobalt industry. A separate wholly-owned subsidiary of the CDI called CoRC (Cobalt REACH Consortium Ltd.) acts as the Secretariat to the Consortia. This submission is being made in conjunction with formal submissions made by CoRC on behalf of the Members of the Cobalt REACH Consortium, and we also provide a confidential Technical Annex(i)relating to this cobalt salt. REACH has many ambitions and compelling aims to protect EU citizens and workers from exposure to chemicals, and these are supported by Industry. Over the past five years since adoption of the REACH regulation, the cobalt industry has taken its responsibility to comply with the financial,

			technical, scientific and administrative burden. By 1st December, 2010 the registration of cobalt and the relevant cobalt compounds (18 in total) had been completed and we are currently continuing with our efforts to ensure that we contribute to the evaluation process. The Cobalt Consortium has already expended some Euro 7million and work continues for the remaining twelve substances covered by the Consortium. The Dossier (Technical Annex (i)) prepared for cobalt sulphate shows that: - the actual tonnage of cobalt sulphate used in the EU market is much lower than quoted in the ECHA consultation document from REACH registration data. - it is largely used as an intermediate (95-99% of uses in the manufacture of other chemicals, the manufacturing of driers and pigments), which is not subject to Authorisation (ii). - Of the remaining non-intermediate uses, some will be exempt, such as uses as an animal feed supplement which should be covered by Existing EU Legislation (Feed Additives Directive). - all uses identified are for industrial uses only, therefore the exposure is limited to workers and there is minimal exposure of professional users from the identified uses. - the occupational environment operates under tightly controlled conditions which are already regulated under existing Community legislation such as the exposure to carcinogens and mutagens at work directive (2004/37/EC), or the risk related to chemical agents at work directive (98/24/EC), DSD (67/548/EEC), DPD (99/45/EC). A strict control of environmental risk is ensured by the requirements of Directive 96/61/EC concerning integrated pollution prevention and control (IPPC) and Directive 2008/I/EC on the control of major accident hazards involving dangerous substances (Seveso II). - cobalt sulphate does not reach the consumer as is it not marketed as an end product and nor has it a wide-dispersive use. In the rare sectors where it is used as a non-intermediate, and would be of widespread use, any release would be negligible and insignificant for human health and the environment. - cobalt is a natural element that is essential in humans and some animal species, who are unable to synthesise sufficient quantities of Vitamin B12. While low levels of Vitamin B12 intake can be associated with diseases of deficiency, the ingestion of large amounts of Vitamin B12 has not been reported to be toxic to humans. Its ubiquitous and constant presence in the body tissues is indicative of the fact that low dietary levels of cobalt have no health impact. - although cobalt sulphate is identified as a CMR 1B by inhalation substance, guideline compliant studies indicate it may not be genotoxic in vivo. The CoRC has recently provided ECHA

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581	2011/09/02 15:12	Company United Kingdom	Celtic would strongly disagree with the recommendation that Cobalt Sulphate is included in Annex XIV due to reasons of Socio economic background. Taking soluble Cobalt salts as a whole, there use in industry is too important and with proper Health & Safety measures (already) in place exposure can be kept to an absolute minimum. With surface treatment in mind exposure is extremely low due to the Cobalt Sulphate dissolution onto plating baths thus negating any airborne exposure. The product is crystalline and therefore dusting is not an issue.
601	2011/09/07 15:58 File attached	HSO Herbert Schmidt GmbH & Co. KG Company Germany	Chemical processes for producing conversion coatings based on trivalent chromium compounds As already stated above have been for quite some time solutions based on trivalent chromium compounds, for producing conversion coatings in use. These solutions also contain neutral salts, which are partly in the food sector. Here are inter alia Sodium fluoride (toothpaste) and sodium nitrate (pickling salt) to call. The trivalent chromium compounds are used with the neutral salts and complexes react with the metal surface of the immersed part. In this way arise suitable chromium (VI)-free conversion coatings. It is shown that Cr (III)-based passivation only with high corrosion protection is possible if the application solutions of cobalt salts and cobalt can be added with relative

1083	2011/09/13 17:34 File attached Confidential	Company United Kingdom	Cobalt (II) sulphate, CAS number 10124-43-3, EC number 233-334-2 has been classified as • carcinogen category 1B, H350i (may cause cancer by inhalation) • toxic for reproduction category 1B, H360F(may damage fertility) Due to this classification, this substance was added to the candidate list for authorisation on 15th December 2010. Manufacturers and developers of Gas Turbines agree with this classification.
1724	2011/09/14 18:09	Company Germany	Cobalt compounds General situation Among other products, our group manufactures highly specialised opto-mechanical products that have a finished metallic surface for specialised and high precision applications. This finishing process also involves an electrolytic treatment of brass in which cobalt compounds are used. However, these are isolated in elemental, metallic and hence safe form on the metal surface. As a result, the product entering the supply chain in this state contains no cobalt compounds! Areas of application: - Surface corrosion protection - Light and temperature resistant - Precision components (0.005mm thickness) Plating process: - Employees are protected throughout the entire plating process by wearing personal protective equipment including safety footwear, protective eyewear, gloves and special clothing. - In addition, employees receive annual training in the safe handling of hazardous materials. Description of the facilities: - There is an industrial ventilation system over the facility Disposal: - Conditioning by neutralisation and thermal concentration of the rinse water and subsequent off-site disposal by a company certified according to KrW/AbfG Alternatives: - There is no alternative to metal surfaces finished with cobalt compounds that has compara-

			ble technical and qualitative properties and that meets the requirements of the above-named areas of application (e.g. bonding, corrosion resistance, resistance to physical influ-ences, etc.). With alternatives such as nickel plating for example, there is only incomplete plating (microcracks). Conclusion: A ban on the use of cobalt compounds would mean our company would be compelled to close this area of surface plating. Among others, the main consequences would be as follows: - Loss of workspace - Substantial economic loss - Loss of long-standing customer loyalty
743	2011/09/12 11:18	Company Germany	Cobalt containing passivations are right now widely used to improve corrosion protection of zinc and zinc-alloy plated parts. Cobalt free passivations with similar of even improved corrosion protection are available and are also already used, so in our point of view there is no need for cobalt salts in the use of passivations.

802	2011/09/12 16:25	Please select organisation type.. Germany	Cobalt in gold electrolytes Cobalt as cobalt sulphate and cobalt carbonate is used in gold electrolytes as alloy metal and hardener. The deposited gold layers contain circa 0,3% Cobalt and is responsible for the hardness and wear resistance of the gold layers. These gold/cobalt alloys are used in the electronic industry as a common contact surface.
643	2011/09/08 18:37	Xstrata Nikkelverk AS Company Norway	Cobalt Sulphate We have serious concerns that the quality of the data in the supporting documents is insufficient for a valid Prioritisation of cobalt sulphate. It is flawed and misleading in many key respects. This important decision must be based on facts, and not speculation, to protect the integrity of the REACH process. We respectfully request that ECHA and the Member State representatives take the necessary time to correct the quality of the data in the supporting documents in all the key areas BEFORE any Prioritisation evaluation of the five cobalt compounds is attempted, in order to avoid unnecessary economic hardship to the European cobalt chemical industry and its downstream users. Our concerns are detailed as follows: 1. Ranking process - We are concerned that there has been a significant over-estimate of the risks posed by this substance in the ranking process. This appears to have been the result of a lack of detailed understanding of these substances in all the key ranking criteria. From work commissioned by the Cobalt REACH Consortium, the following elements of the ranking process criteria should be urgently reviewed before any decision is taken to place cobalt sulphate on Annex XIV: a. Tonnage – REACH registration tonnage bands have been used to estimate tonnage produced / used. This approach guarantees an overestimate of the tonnage in question because of the use of the upper end of the range in the ranking process, and also because it will ignore production volumes destined for export, which are within the scope or REACH registration, but outside the scope of Authorisation. It is our understanding from a survey recently commissioned by the Cobalt REACH Consortium that the EU/EEA tonnage of this substance, adjusted for exports

			is only third of the 10,000 mt p.a. upper end of the range used in the ranking. We are puzzled by Eurometaux confirmation of the higher number in the supporting documents, as their source would most likely have been the Cobalt REACH Consortium. Furthermore, when uses are considered, 95% of the applications are clearly out of scope of REACH. As the tonnage ranking seems very high, it is very important that this be adjusted to show the correct number here. b. Uses – Many of the uses listed in the document are not specific to cobalt sulphate, and relate to applications of other cobalt chemicals, and even cobalt metal and alloys (welding/soldering). This is misleading, especially where these uses are then stated to be related to high exposures and wide dispersive use. These statements are then inappropriately reflected in the ranking score for these criteria. Only uses of the compound in question should be considered in the Prioritisation process in line with the legislation. The current, most recent Cobalt REACH Consortium survey reveals the following end use split for cobalt sulphate: - 95% to manufacture other chemicals (includes 3% as pigments) … intermediate status. - Less than 5% as surface finishing, where many survey responses indicated "intermediate use" There are no identified 'professional uses' of cobalt sulphate with its attendance concerns for high exposure and wide dispersive use. It is critical for the integrity of the Prioritisation process that assumptions used for value judgments on wide dispersive use, non-intermediate status, etc. in the supporting document MUST be based on data, and not the absence of data, as seems to be the case here. c. 'Intermediate status' – From the Cobalt REACH consortium survey, approximately 95% to 99% of uses (above) meet the latest guideline definition of intermediate status, and so are exempt from Authorisation. Any remaining concerns as to the intermediate status of the less than 5% used in surface finishing requires a more detailed study as to the precise use in the specific surface finishing application. 'Surface finishing' is a generic term, like "the Chemical Industry" and covers many different possible processes and applications. It is not possible or correct to make assumptions without understanding what the application is and how the compound is used. We understand that the majority of surface finishing responses to the recent Cobalt REACH consortium survey indicated that they were used as intermediates. We recommend further study of this critical consideration before any decision as to Annex XIV listing. d. Wide dispersive use – the quantification of the 'wide dispersive use' has been impacted by inappropriate assumptions on the uses of cobalt sulphate, and should be adjusted for the actual applications shown above. We assume some of the concern about wide dispersive use arises from

			the use in surface finishing. This industry is often characterized by a large number of small operations. However, this needs to be investigated further for cobalt sulphate, and the specific application and number of operations. The tonnage is small, and this is expected to be reflected in a correspondingly small number of sites. It cannot be acceptable to base this ranking score on speculation, without a detailed understanding of the facts. e. Interchangeability / Substitutabilty - It is our understanding that it is not possible to substitute cobalt sulphate by the other cobalt compounds for these applications. To make any process change, even if chemically possible, would involve extensive development costs and changes to the flow diagram of the entire process. The cost of such changes would not be economic, and so means that the substances would not be interchangeable in any practical sense. We understand interchangeability is a core assumption to 'grouping' the five cobalt substance, and we recommend that this be reconsidered in the light of this information. 2. Lack of good data - The lack of detailed information in the documentation is exemplified by the widespread use of "appear to be", "seem to be", etc. prefacing the key statements about tonnages, uses, and what is in, and what is out, of the scope of Authorisation. Given the very significant economic impact on companies and employees of a decision to place substances on Annex XIV, we would strongly recommend that more time is taken to improve the quality of the data used to make the Prioritisation determination for this substance, particularly at this time of economic hardship across Europe. This important decision must be based on facts and not speculation. 3. Exposure data – We understand that much of the exposure data used in the background document dates is not specific to cobalt sulphate, and many reference refer to exposure to "cobalt". Exposure data must be on the substances in question as this is where the hazard is to be found. The REACH registrations for these substances contain a wealth of data about exposure scenarios, and risk characterisation. Given that Authorisation is a part of the REACH process, it seems 'inappropriate' to decide on the prioritisation of this substance without considering the REACH data available as the basis of the supporting document. We do not understand why this has not been done. 4. Regulatory efficiency – Given that the majority all uses of cobalt sulphate are exempt from, or outside the scope of, Authorisation, that all applications are in an industrial setting covered by existing workplace regulation, that there is therefore no consumer exposure issue, and that interchangeability is not technically or economically possible, there is no environmental or health

			benefit to be realized by placing cobalt carbonate on Annex XIV that we can identify. We do not fully understand the derived ranking score. We are concerned that the credibility of the REACH and Authorisation process could be put at risk by decisions taken on incomplete and, in some cases, misleading information. People's livelihood is at risk. The decision must be the best decision that can be made, and the best decision can only be made based on facts. 5. Economic impact - The cobalt industry is small but significant in value terms for Europe. Cobalt sulphate, as are the other cobalt compounds subject to this review, is a critical raw material that is the starting point for a range of downstream industries that are crucial to many other EU initiatives, such as clean air and energy and resource efficiency, to say nothing about the economic added value for the European economy. Catalysts produced from these substances are essential to the economy of European chemical manufacturing industry, enabling reactions to take place at low temperatures, low pressures, with wider benefits for energy and resource efficiency. Desulphurized fossil fuels are just one of the resulting products that are vital to Europe's efforts to improve the health of the population by producing clean air. All engineering companies in Europe rely on cutting tools that have employed the use of one or more of these compounds at an early stage of their manufacture. Modern electronic devices such as computers, mobile phones, and hybrid cars use rechargeable batteries, the latest generations of which use components which used at least one of these cobalt compounds in an early stage in their manufacture. Meanwhile, Cobalt has been designated a 'critical raw material' by the European Commission. There has been no impact assessment for the effect on industry or these other cornerstone EC policies as part of this Prioritisation. These products are so fundamental to our daily lives that they will continue to be produced. These downstream products will still be imported into Europe, regardless of whether any of the five cobalt substances are placed in Annex XIV or not, as they do not contain any of the five cobalt compounds. However, Annex XIV listing will create uncertainty as to the ability of European industry to produce these products in future, and downstream users will need to develop new non-European sources to protect their supply chain, taking market share away from European manufacturers. The small tonnage of uses within scope will not justify companies applying for Authorisation. Only European Industry will be adversely impacted. We believe that these decisions should not be taken lightly as their economic impact on Europe can be profound. If necessary, more time should be taken to improve the quality of the data used to make the Prioritisation determination for these substances, particularly at this time of economic hardship across Europe. Xstrata Nickel produces high purity cobalt metal, and does not produce any of the cobalt compounds under review. However, our concern is for the cobalt market in Europe as a whole,

			and for the efficacy and credibility of the REACH and the Authorisation process. To the best of our knowledge, the above statements contained here are correct, and are provided in good faith.
1499	2011/09/14 12:17 File attached Confidential	Company France	Cobalt(II) sulphate is used in a micro-nutrient solution. This formulated mixture is added to process water in the STP (sewage treatment plant). This mixture is handled only at dedicated workplace in one of our plants. It is used in internal process only, as a result there is no exposure to downstream users and consumers.

1517	2011/09/14 12:50 File attached	RECHARGE aisbl Industry or trade association Belgium	Cobalt-based substances used in batteries. RECHARGE confirms that cobalt (II) sulphate is not present as active substance in batteries placed on the market (Nickel-Metal Hydride (Ni-MH), Nickel-Cadmium (Ni-Cd), Nickel-Zinc (Ni-Zn), Lithium-Ion (Li-Ion),…). As mentioned in Tables 5 & 6 of the proposals of The Netherlands the substance, cobalt (II) sulphate is used as intermediate in preparation steps of active substances used in batteries. Cobalt (II) sulphate is not present in batteries commercially available to industrial or individual users such as consumers. Cobalt (II) sulphate is used as a precursor in the production of active substances placed in batteries and is considered as an "intermediate" under the definition of REACH. This substance is not present in the finished product (article) placed on the market. Therefore, there is no possibility of exposure of industrial and consumer battery users to cobalt (II) sulphate. The placing of this cobalt compound on the Annex XIV is not justified for the battery industry for the following reasons: • As precursors to the production of active material in batteries, it meets the definition of intermediate under REACH, • It is not placed on the end user market, • Strict control of exposure is already in place at the various steps of cobalt (II) sulphate use during the manufacture of active material for batteries both for the protection of the environment and human health. Conclusion. Therefore, we are inviting Competent Authorities and EChA not to place cobalt (II) sulphate on the list of substances subject to Authorization (Annex XIV).

1762	2011/09/14 18:59 File attached	 Company Germany	Die Fa. GEFO ist ein hundertprozentiger Lohnbearbeitungsbetrieb, der Oberflächen an die internationale Automobil-, Sanitär-, Möbel-, Leuchten- und Maschinenindustrie liefert. Die Qualität der jeweiligen Beschichtung unterliegt spezifischen Normen der Kundenbranchen. Sollte unserem Betrieb der Umgang mit Kobaltsalzen und seinen Lösungen verwehrt werden, hätte dies wirtschaftliche Nachteile zur Folge. Da Alternativprozesse die Kundenanforderungen nicht erfüllen können, wird es zu einer Abwanderung von Produktionsaufträgen in Europafremde Staaten kommen. Dies wird am Standort Europa zu einem erheblichen Wettbewerbsnachteil führen. Als Mitglied des Zentralverbandes Oberrflächen e.V. (ZVO) sind wir stets bemüht unsere Produktionslinien dem jeweiligen Stand der Technik anzupassen um umwelt- und arbeitsschutzrechtlichen Aspekten gerecht zu werden. An dieser Stelle möchten wir uns dem Kommentar der ZVO anschließen und darauf verweisen: „Kommentierung_ZVO_Cobaltsalze_galvanisch_V20110911"
531	2011/08/17 13:45	MTU Aero Engines GmbH Company Germany	Die gefährlichen Eigenschaften der betroffenen Chromate sind uns als Luftfahrtun-ternehmen wohl bekannt. Es ist auch unbestritten, dass der Einsatz und die Verwen-dung diese Stoffe nur unter sicheren Bedingungen möglich ist. Hier ist das Gesund-heitsrisiko für die Betroffenen auf das notwendige Minimum zu reduzieren. Entspre-chende Bestrebungen und Verpflichtungen zur Stoffminimierung und Substitution sind in Deutschland durch die nationale Gesetzgebung vorgegeben. An diesen The-men wird kontinuierlich gearbeitet. Ein gänzlicher Verzicht auf diese Stoffe und die damit verbundenen Verfahren ist aus heutiger Sicht erst mit der Validierung unge-fährlicher Ersatzverfahren möglich. Die dort erzeugten Ergebnisse bedürfen dann noch die Anerkennung und Zulassung aller nationalen und internationalen Luftfahrtbehörden.

1565	2011/09/14 14:32 File attached	COVENTYA GmbH Company Germany	Die Verwendung von Cobalt(II)-sulphate, Cobalt(II)-dinitrate, Cobalt(II)-dichloride, Cobalt(II)-acetate und Cobalt(II)-carbonate ist für die Herstellung unserer für die Oberflächenbehandlung relevanten Produkte unabdingbar. Die Ausführungen der Kommentierung des ZVO (siehe Anhang) stimmen voll und ganz mit den Argumenten und Forderungen der Coventya GmbH überein. Auf eine Auflistung wird hier verzichtet und wir verweisen auf die Kommentare des Zentralverbandes Oberflächentechnik e. V. (ZVO) „Einsatz der zweiwertigen Kobaltsalze in Konversionsschichten in der europäischen Galvanotechnik" und „Einsatz von Cobalt(II)-sulphate, Cobalt(II)-dinitrate, Cobalt(II)-dichloride, Cobalt(II)-acetate und Cobalt(II)-carbonate in Elektrolyten zur elektrochemischen Reduktion in der europäischen Galvanotechnik". Die Coventya GmbH kann auf Grund der in den Kommentaren aufgeführten Argumenten (siehe Anhang) die Aufnahme der Kobalt-Salze in den Anhang XIV der REACh-Verordnung nicht unterstützen. Im Falle einer Aufnahme der Stoffe Kobalt(II)-dinitrat, Kobalt-dichlorid, Kobalt(II)-sulfat, Kobalt(II)-diacetat, Kobalt(II)-carbonat in den Anhang XIV der REACh-Verordnung fordert die Coventya GmbH eine Ausnahmeregelung für die Verwendung von Kobaltsalzen in Lösungen zur Erzeugung von Konversionsschichten auf Zink- und Zinklegierungsschichten bei galvanischen Korrosionsschutzsystemen, eine Ausnahme von der Zulassungspflicht für die Verwendung von Kobaltsalzen (Cobalt(II)-sulphate, Cobalt(II)-dinitrate, Cobalt(II)-dichloride, Cobalt(II)-acetate und Cobalt(II)-carbonate) zum Zwecke der Erzeugung von kobalthaltigen metallischen Schichten bei der galvanischen Beschichtung und eine Ausnahmeregelung über die Verwendung für die Herstellung von Additiven/Präparaten für die Galvanotechnik. The use of Cobalt(II)-Sulphate, Cobalt(II)-Dinitrate, Cobalt(II)-Dichloride and Cobalt(II)-Acetate is essential for the manufacture of our products are relevant for the surface treatment. The remarks commenting on the ZVO (see Appendix) votes fully agree with the arguments and requirements of Coventya GmbH. On a collection is omitted here and we refer to the comments of the Central Association of Surface Treatment Professionals Germany (ZVO) "Application of divalent cobalt salts in Conversion layers in the European electroplating Industry" and "Application of divalent cobalt salts in cobalt and cobalt-alloy-layers in the European electroplating Industry". As described in the statements (see Appendix) Coventya GmbH cannot follow the arguments to include the Cobalt Salts (cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride and cobalt(II)-acetate) into the Appendix XIV of the REACH regulations. In the event that these substances are included in Appendix XIV of the REACH regulations Coventya GmbH demand that there has to be an exception to the rules to allow the use of

			Cobalt(II)-Salts for the purpose of anti-corrosion, decorative and bright Cobalt-Alloy-Plating, the use of Cobalt(II)-Salts for the purpose of functional, decorative and bright Cobalt- and Cobalt-Alloy-Plating and an exception on the use for the manufacture of additives / supplements for electroplating.
687	2011/09/09 14:48 File attached	DSM Company Netherlands	Exemption is requested for the authorization of cobalt sulfate in fermentation processes. See below for justification

798	2011/09/12 16:11 File attached Confidential	Norilsk Nickel Harjavalta Oy Company Finland	General comments on the proposed authorisation of Cobalt Sulphate • The major uses (over 95 to 99%) of Cobalt Sulphate are as intermediates and are therefore not subject to Authorisation. • Workplace exposure is already subject to control through existing community legislation (exposure to carsinogens and mutagens at work; Directive 2004/37/EC). • The ECHA´s data supporting "widely-dispersive use" of Cobalt Sulphate is very large overestimate. • There is no consumer exposure of Cobalt Sulphate. • The Cobalt Sulphate is not inter-changeable with other cobalt substances. And the ECHA´s basis of "regulatory effectiveness and coherence" is not correct and is in fact without any true evidence in the case of five cobalt substances. • Cobalt is strategically important EU raw material (http://ec.europa.eu/enterprise/policies/raw-materials/index_en.htm). The proposal to authorise the five cobalt substances is in total contradiction with this European policy. • Authorisation would have very negative economical effects in European base metal production and would result in transfer of production to non-EU countries. This will result in decrease of EU GDP due to very high complexity of base metal, semi-product and consumer product production network using cobalt as raw material only at the very beginning of value chain of this network. Specific comments referring to the ECHA background document 2.2.1 Volume(s) imports/exports Since over 95% of the use of cobalt sulphate is as intermediate to produce other cobalt substances and cobalt metal, the volume range of 1000-10000 tonnes per year is far too high as range. The uses that are not considered as intermediates is more close to 100 tonnes per year maximum. 2.2.2.1 Manufacture and releases from manufacture The description of manufacture is not correct. There is no point dissolving other cobalt salts to sulphuric acid and then make cobalt sulphate, i.e. this way of doing is not feasible. Large portion of the cobalt sulphate is produced as side product in the production of other metals like nickel and copper. This means that cobalt is received as impurity in the nickel or copper raw materials. In order to produce pure nickel or copper end products, the solution must be purified for cobalt. It is unacceptable to use exposure data from a plant located in Russian Federation as reference of background when the potential authorisation of cobalt salts is considered within EU. And the reference study does not hold any information what so ever of the speciation of cobalt substances in the samples. This means that the data is not specific to cobalt sulphate and that data must not be used as a reference for cobalt sulphate. 2.2.2.2 Uses and releases from uses

			Since the use of cobalt sulphate as intermediate represents over 95% of all and this use will be exempted from authorisation, it would clarify the background and scope if the uses that will fall out of the scope of authorisation would be specified it this paragraph of the background document. Uses (as intermediate) does not include production of cobalt metal. Since this is one of the major cases it should be mentioned and known. The share of the specific uses of cobalt sulphate has been reported by Cobalt Consortia (CoRC) to ECHA. Since this data is known, it should be reported in this paragraph per each use. And it should be pointed out per each and every use whether the use is within or outside the scope of authorisation. This is crucial in order to have the correct perspective when the authorisation of the substance is considered. All the uses of cobalt sulphate are industrial. Therefore the professionals use should be removed on this paragraph of background document. The use of cobalt sulphate in hobby paints, cosmetics and dinnerware is not valid since they are not used in these purposes. Also the use of substances in food contact materials are outside of the scope of Authorisation. 2.2.2.3 Geographical distribution and conclusions in terms of (organisation and communication in) supply chains Since this part of background is crucial to the scoring on cobalt sulphate priority to be authorised, the presentation of supply chains must be made clear and more precise. This description seems like there is no actual data where this is based. And the data here does not take into account the uses that will fall into the scope of authorisation, it merely looks on the all uses and sites. Therefore this paragraph should only contain the sites per uses that are likely to fall in to the scope of Authorisation. Any other data should be removed. 2.3 Availability of information on alternatives The cobalt sulphate can not be used as alternative instead of other four cobalt salts. And as well those four cobalt salts can not be used as alternative in our case. Since the industrial production and use of cobalt sulphate is safe to man and the environment, based on existing exposure and emission data and the existing CSR, there is no actual basis to authorise cobalt sulphate. Due to some extent of confidential nature of the information, a more precise description of our case is attached to the confidential part of our comments. 2.4 Existing specific Community Legislation relevant for possible exemption The use of cobalt sulphate as an animal food supplement would fall within the scope of feed safety regulation (EC 178/2002). The Carcinogens Directive (90/394/EEC), Directive 98/24/CE, Directive 2004/37/CE all apply to

			CMR compounds. Risk management is already required by existing legislation as for example the carcinogens at work directive (Dir. 2004/37/EC) and the IPPC directive (Dir. 2008/1/EC). 3.1 Prioritisation The registration dossier and updates to be submitted by the end of this year show that cobalt sulphate is non genotoxic in vivo. So there is a threshold mode of action. Furthermore in the consultation document it is stated that ~98% of the use in the EU is exempt from Authorisation. The data that CoRC collected indicates that over 99% of the uses are to be exempt from Authorisation. For any uses that are not exempt, risk management is already required and implemented by the producers and users of cobalt sulphate due to the existing legislation (the carcinogens at work directive; Dir. 2004/37/EC and the IPPC directive; Dir. 2008/1/EC). Based on the small volume of the uses that will fall to the scope of authorisation a volume score of five (5) is too high. To our experience and the data of volumes volume factor is at maximum three (3) in the case of cobalt sulphate. If cobalt sulphate is used as a substance in pigments, surface treatment or corrosion inhibitors the use at these sites would be controlled under existing Community Legislation and has been shown in the REACH CSR for cobalt sulphate to have an RCR for human health below 1. The appropriate release score for this use should be 1 (non-diffuse/controlled), rather than 3 (diffuse, uncontrolled, significant) as currently proposed by ECHA. The number of sites within scope of Authorisation is unknown, but expected to be in the order of 10s of sites, so the score of 2 for site is more correct. The overall prioritization score would therefore be: 0-1 (properties) + 3 (volume) + 2 (WDU) = 5-6 ECHA states the cobalt sulphate is of high priority and should be placed on Annex XIV as there are other cobalt compounds that could replace it. Since that nearly all uses of cobalt sulphate are exempt and we disagree with the statement that other cobalt compounds could replace cobalt sulphate in its uses. Therefore the cobalt sulphate should NOT be prioritized for inclusion on Annex XIV.

721	2011/09/10 17:59	OMG Kokkola Chemicals Oy Company Finland	INTRODUCTION The company manufacturers Cobalt sulphate in Finland and supplies this substance to customer's world wide. The substance was registered under REACH in 2010 The Company is also acting as Lead Registrant (LR) for this substance. We provided a response to the first consultation conducted for Cobalt sulphate in 2010 (SVHC proposal and Annex XV dossier by the Netherlands). The company is also a member of the Cobalt REACH Consortium Ltd (CoRC) together with 49 other members representing manufacturers and/or importers of cobalt substances. It should be highlighted that some downstream users are also members of the Cobalt REACH consortium. We fully supports the joint response comments provided by the Secretariat of the Cobalt REACH Consortium on the behalf of the Consortium member companies. As a coalition, the Cobalt REACH Consortium is in a better position to answer key questions on for instance volumes and usages for the substance. VOLUME(S) IMPORTS/EXPORTS (Section 2.1.1, page 1) As a company we do not have access to consolidated information on volumes manufactured /imported in EU or to EU nor to information corrected for export. Therefore we as a company are dependent on the information consolidated by the Secretariat of CoRC. Data on tonnages from registration information presented in the consultation document indicates a volume range of 1 000 – 10 000 t/y manufactured/imported into the EU. Although it is mentioned that volumes reported by the CoRC are in the same range it would be correct to indicate that the CoRC volumes actually are less than a third of the maximum range 10 000 t/y (i.e. less than 3 300 t/y). In addition this section may give the impression that the mentioned volume (or volume range 1 000 -10 000 t/y) is expected to fall within the scope of Authorisation. It is our understanding that volumes subjected to authorization should be indicated in this section. This would give the public an overview of the tonnages and help them to take part in the public consultation. Referring to information collected by CoRC, the volumes subjected to authorisation are less than 1% of the reported CoRC tonnages. This means 1% of 3 300 t/y. This would mean that the volume subjected to authorisation would be less than 33 t/y. As mentioned in the joint response provided by CoRC this volume could also be up to 5% of 3 300 t/y (i.e. 165 t/y) depending on the interpretation of intermediate status for some uses. As a company and because of Confidential Business Information issues , we are not in the position to indicate manufactured volume , exports outsideof EU and sales within EU, and therefore we rely on information provided by the CoRC MANUFACTURE AND RELEASE FROM MANUFACTURE (Section 2.2.2.1, page 2)

			Release from Manufacture: Our manufacturing operations are located in Finland. The release into the environment is regulated by national environmental permits which include e.g. limit values for cobalt released into the sea and air, emission monitoring programs, evaluation on best available technique (BAT) and reporting to the authorities on an monthly and yearly basis. It should be highlighted that the environmental permit is not only demanding emission control but also the monitoring of any potential impact on the environment. Exposure: Exposure information included in the ECHA document is not specific to Cobalt sulphate and in addition it would be proper to present information originating from EU countries. As an manufacturer we are following national TWA limits for workers, which in Finland is 0,05 mg/m3 for Cobalt. Regular occupational exposure measurements are conducted including both stationary and personal sampling. Measurements are also conducted based on workers job description. Because of it's classification as carcinogen and toxic for reproduction (1B), manufacturing areas are marked with CMR-signs, and workers in potential contact with the substance are reported annually to a national ASA-register. Based on the aforementioned, an effective exposure control can be demonstrated and can be considered safe use. As a manufacturer and registration of Cobalt sulphate we provided together with the registration dossier a comprehensive assessment, which incorporate both the inherent exposure potential of a use in combination with recommended risk management measures. All registered uses of cobalt sulphate can demonstrate effective control of exposure and can be considered safe uses. As the registration dossier contains exposure scenarios for all identified uses of cobalt sulphate, these scenarios should be used in preference to the historic or literature values currently quoted in the background document that could be relevant to uses that are not supported under REACH or are not consistent with the exposure scenarios established for cobalt sulphate. USES AND RELEASES FROM USES (Section 2.2.2.2, pages 2 to 5) It would be beneficial to indicate uses subjected and not subjected to authorization in this section. This would give the public an overview of these and help them to take part in the public consultation. It is our understanding that the majority of cobalt sulphate produced or imported into the EU are used as an intermediate in the manufacturing of other chemicals. These should therefore be exempt from Authorisation (REACH Title 1, Chapter 1, Article 2, 8b). These intermediate uses include to the best of our understanding, manufacturing of Cobalt sulphate, manufacturing of other

			cobalt chemicals, production of driers (used in paints and inks), manufacturing of textile dyes, manufacture of inorganic pigments & frits, glass and ceramic ware, manufacturing of other substances used in batteries and catalysts. It is also our understanding, which is supported by CoRC Downstream user survey, that use of cobalt sulphate in surface treatments indicate that this use is as an intermediate as described in the REACH regulation. The animal feed usage sector is exempted under REACH. Reach Regulation No 1907/2006, Article 2: The provisions of Titles II (REGISTRATION OF SUBSTANCES), V (DOWNSTREAM USERS), VI (EVALUATION) and VII (AUTHORISATION) shall not apply to the extent that a substance is used: (b) in food or feeding stuffs in accordance with Regulation (EC) No 178/2002 including use: (iii) as an additive in feeding stuffs within the scope of Regulation (EC) No 1831/2003 of the European Parliament and of the Council of 22 September 2003 on additives for use in animal nutrition (9). However authorization dossiers are required according to the EU regulation on additives for use in animal nutrition (1831/2003). Authorization dossiers have been made for cobalt sulphate, cobalt carbonate and cobalt diasetate according to 1831/2003. These dossiers contain in section III information on safety of the additive • Risks for Workers who manufacture the cobalt salt • Workers who use cobalt salt for preparing premixtures • Users of premixtures • Risk for target species • Risk for consumers • Risk for environment It would be proper to indicate this in the consultation document so that the public would have information that this usage is already covered by another EU regulation than REACH. AVAILABILITY OF INFORMATION ON ALTERNATIVES (Section 2.3, page 6) It is not reasonable to assume that other cobalt salts could replace cobalt sulphate for all its applications. Industrial processes are usually tailored for a specific starting material, including the cation (Co) and the anion (in this case SO4), and the reaction(s) taking place are directed by this starting material. The properties of the product is therefore a result of the starting material and the reactions which have been taken place during the production. Even if the salt could be substituted chemically, there would be a number of practical considerations to take into account. No interchangeability would be possible without considerable

			development work and costs to switch from cobalt sulphate to another salt. Common uses have been identified for the purposes of generic exposure scenarios, but this does not mean that the exact use is the same, nor that it is technically or economically feasible to implement such changes. The Chemical Safety Report (CSR) demonstrate safe uses for man and environment and there is to our understanding no need to find alternatives to cobalt sulphate. EXISTING SPECIFIC COMMUNITY LEGISLATION RELEVANT FOR POSSIBLE EXEMPTION (Section 2.4, page 6) The use of cobalt sulphate as an animal food supplement would fall within the scope of feed safety regulation (EC 178/2002). The use of cobalt sulphate in animal nutrition fall within the scope of EU regulation 1831/2003. The Carcinogens Directive (90/394/EEC), Directive 98/24/CE, Directive 2004/37/CE all apply to CMR compounds. Risk management is already required by existing legislation as for example the carcinogens at work directive (Dir. 2004/37/EC) and the IPPC directive (Dir. 2008/1/EC). PRIORITISATION (Section 3.1, page 6) The data in the registration dossier and updates to be submitted by the end of this year indicate that cobalt sulphate is non genotoxic in vivo, suggesting a threshold mode of action. Based on information (intermediate uses or exempt) we find that uses of cobalt sulphate in EU are outside the scope of authorization. In case for any uses that are not exempt, risk management is already required by existing legislation for example the carcinogens at work directive (Dir. 2004/37/EC and the IPPC directive (Dir. 2008/1/EC). REFERENCES (Section 4, page 7) It was not possible to make proper assessment or comments on this section because the internet link was not working.
567	2011/08/30 22:17 File attached	Cobalt REACH Consortium Ltd (CoRC) Industry or trade association	INTRODUCTION The following joint response comments are provided by the Secretariat of the Cobalt REACH Consortium Ltd (CoRC) on behalf of the Consortium member companies. The Cobalt REACH Consortium was founded in November 2007 by the Board of Directors of the Cobalt Development Institute (CDI) to implement REACH on behalf of the cobalt industry. There are currently 50 Regular members of the Consortium. The Consortium member companies and their affiliates constitute over 80 industry companies involved in the manufacturing and/or import of cobalt substances in Europe as well as other international jurisdictions. There are also some downstream

		United Kingdom	users represented amongst the Consortium membership. The Cobalt Consortium provided joint response comments to the first consultation conducted for cobalt sulphate in 2010 (SVHC proposal and Annex XV dossier by The Netherlands). VOLUME(S) IMPORTS/EXPORTS (Section 2.1.1, page 1) Data on the tonnage of cobalt sulphate collated by the CoRC from EU manufacturers and downstream users in 2011 indicate that the maximum of the range reported in the consultation document (1,000 - 10,000tpa) derived from REACH registration data is a significant overestimate of the volume of cobalt sulphate on the EU market. The total EU tonnage of cobalt sulphate, corrected for export, is less than a third of the range maxima of 10,000 tpa. In addition, this section does not detail what proportion of the total EU tonnage is expected to fall within the scope of Authorisation. Data collated by the CoRC from EU Manufacturers and Downstream Users suggests that the majority of the cobalt sulphate tonnage (95 - 99%) is used as an intermediate. Other uses, e.g. as an animal feed, are exempt from the requirements of Authorisation. Data collated by the CoRC suggests that the proportion of the annual tonnage of cobalt sulphate expected to be within the scope of Authorisation is <1%, but could be marginally higher (e.g. up to 5%), depending on the interpretation of intermediate status for some uses. MANUFACTURE AND RELEASE FROM MANUFACTURE (Section 2.2.2.1, page 2) In addition to the manufacturing processes identified by ECHA cobalt sulphate can also be manufactured using alternative cobalt salts to those listed. The first set of exposure data reported are not specific to cobalt sulphate and, in addition, are from Russia. Data from outside the EU/EEA should not be taken into account as evidence for workplace exposure to cobalt sulphate at manufacturing and downstream use sites in the EU. These data are very unlikely to represent current cobalt sulphate emission levels from industrial processes in the EU. The second set of data is from 1994 and is also not specific to cobalt sulphate. A summary of exposure scenarios developed by the CoRC for the REACH registration of cobalt sulphate is attached to this consultation response for information. Based on these comprehensive assessments, which incorporate both the inherent exposure potential of a use in combination with recommended risk management measures, all registered uses of cobalt sulphate can demonstrate effective control of exposure and can be considered safe uses. As the CoRC REACH dossier contains exposure scenarios for all identified uses of cobalt sulphate these scenarios should be used in preference to the historic or literature values currently quoted in the background document that could be relevant to uses that are not supported under REACH or are not consistent with the exposure scenarios established for cobalt sulphate. The UK should be added to the list of manufacturing locations. USES AND RELEASES FROM USES (Section 2.2.2.2, pages 2 to 5)

			The section on uses in the background document is not specific to the identified uses of cobalt sulphate and does not clearly identify or distinguish between those uses of cobalt sulphate that are outside of the scope of Authorisation and those uses that are likely to be subject to Authorisation. The CoRC would welcome any revision to section 2.2.2.2 that allows the identified uses of cobalt sulphate that are within scope of Authorisation to be clearly distinguished from the identified uses that are clearly outside of the scope of Authorisation (e.g. general exempted uses). In addition, it would be beneficial if uses were listed within each section from the largest to the smallest tonnage. Data collated by the CoRC from EU manufacturers and downstream users in 2011 indicate that the identified uses of cobalt sulphate and their respective proportions are as follows: Approximately 95 % of EU tonnage is used as an intermediate in the manufacture of other chemicals (and therefore exempt from Authorisation, REACH Title 1, Chapter 1, Article 2, 8b), these uses can be further summarised as: -Manufacture of other chemicals. ~ 90% of EU tonnage. -Manufacture of inorganic pigments. Low, <3% of EU tonnage -Manufacture of batteries. Very low, <1% of EU tonnage -Manufacture of catalysts. Very low, <<1% of EU tonnage -Manufacture of textile dyes. Very low, <<1% of EU tonnage -Manufacture of drier and/or pigment in paints/inks. Very low, <<1% of EU tonnage. Use in surface treatment. Low, < 5% of the EU tonnage. Use as an animal feed supplement. Very low, <1% EU tonnage. Use as an oxygen scavenger/corrosion prevention in industrial water systems. Very low, <<1% of the EU tonnage. The majority of the cobalt sulphate produced or imported into the EU is used as an intermediate in the manufacture of other chemicals (~95%). This includes the use in the production of pigments, dyes, other chemicals, batteries and catalysts. Use of cobalt sulphate for the manufacture of active substances for the production of batteries always holds intermediate status, which in the overwhelming majority of cases is as a non-isolated intermediate. Use of a substance as an intermediate is exempt from Authorisation under REACH, and therefore these tonnages should be considered outside of the scope of authorisation for prioritization. The majority information on the use of cobalt sulphate in surface treatments collated from EU Manufacturers and Downstream Users indicate that this use is as an intermediate as described in the REACH regulation and the registration dossier. However, it may be that some cobalt sulphate is used as a substance in certain surface treatment applications. Approximately 1 % of the EU tonnage is used as an animal feed supplement. This use is also exempt from Authorisation under REACH, and therefore these tonnages should be considered

			outside of the scope of authorisation for prioritization. Some use as an inorganic pigment has also been identified as a substance use. Use as a corrosion inhibitor has also been identified in the REACH dossier as a substance use and in the ECHA consultation document, but the CoRC are only aware of very low volume used for this purpose. The reported use of cobalt sulphate as a drier and/or pigment has been revised by the CoRC. It is now considered unlikely that cobalt sulphate is used directly in paints and inks as either a dryer or a pigment. The tonnage assigned to cobalt sulphate in this use relates to an intermediate use during the manufacture of driers or pigments. We consider that the vast majority of uses of cobalt sulphate in the EU are exempt from Authorisation. As noted, an updated summary of exposure scenarios developed by the CoRC for the REACH registration of cobalt sulphate is attached to this consultation response. The ECHA background document states that all the identified uses of cobalt sulphate are industrial, but that it is assumed that the produced mixtures and articles will also be handled by professionals and consumers. We consider that this assumption by ECHA, as it is currently reported, is unjustified and this contention should be supported by reference to additional compelling data in a revised version of the background document. All uses of cobalt sulphate identified in its REACH registration dossier are for industrial uses only and either relate to intermediate use or an end use. Therefore, the exposure of professional users (in particular via inhalation, which is the critical exposure route) from the uses identified in the REACH dossier is not expected to occur. The data reported for consumer exposure to cobalt salts (hobby paints, cosmetics and dinnerware) are not specific to cobalt sulphate (but relate to cobalt metal) and should be revised or omitted from the background document as they are not directly relevant to cobalt sulphate. In addition, the use of substances in food contact materials are outside of the scope of Authorisation. The CoRC do not consider there to be any consumer uses of cobalt sulphate. GEOGRAPHICAL DISTRIBUTION AND CONCLUSIONS IN TERMS OF (ORGANISATION AND COMMUNICATION IN) SUPPLY CHAINS (Section 2.2.2.3, page 5) Currently the numbers of sites are reported for different groupings of uses than identified previously, and in a way that does not allow the numbers of sites for uses that may be candidates for Authorisation to be identified. This section could be made clearer by identifying the uses that are within scope of Authorisation. As the complexity of the supply chain is one of the factors that feeds into the prioritisation score this section should relate solely to the geographical distribution and supply chain of the uses that are potential candidates for Authorisation. CoRC would welcome that the structure of section 2.2.2.3 be changed to only include uses in scope of Authorisation. As such, the estimates of the number of downstream sites and users would be considerably lower

			than currently reported in the consultation document. We agree that the number of manufactures and importers is relatively small but argue that for the very limited number of uses that may be in scope of Authorisation that the number of downstream users would also be low. AVAILABILITY OF INFORMATION ON ALTERNATIVES (Section 2.3, page 6) It is not reasonable to assume that other cobalt salts could generally replace cobalt sulphate for its applications. Although common uses may have been identified for the purposes of generic exposure scenarios, this does not mean that the exact use is the same, nor that it is technically or economically feasible to implement such changes. Industrial processes are usually designed for a specific salt and it would not be a simple matter of replacing one salt with another. Even if the salt could be substituted chemically there would be a number of practical considerations to take into account. No interchange-ability would be possible without considerable development work and costs to switch from cobalt sulphate to another salt. As nearly all uses of cobalt sulphate are exempt from Authorisation and the REACH CSR has demonstrated that these uses are safe for man and the environment, alternatives do not need to be sought. A small number of uses (as a pigment in some cases, and potentially as a corrosion inhibitor) may be within scope of Authorisation. No information is available on potential alternatives for either of these uses. EXISTING SPECIFIC COMMUNITY LEGISLATION RELEVANT FOR POSSIBLE EXEMPTION (Section 2.4, page 6) The use of cobalt sulphate as an animal food supplement would fall within the scope of feed safety regulation (EC 178/2002). The Carcinogens Directive (90/394/EEC), Directive 98/24/CE, Directive 2004/37/CE all apply to CMR compounds. Risk management is already required by existing legislation as for example the carcinogens at work directive (Dir. 2004/37/EC) and the IPPC directive (Dir. 2008/1/EC). PRIORITISATION (Section 3.1, page 6) The data in the registration dossier and updates to be submitted by the end of this year indicate that cobalt sulphate is non genotoxic in vivo, suggesting a threshold mode of action. We acknowledge that ECHA have taken account of the new data indicating that cobalt sulphate has a threshold concentration for carcinogenicity in the scoring for inherent properties. Based on volumes reported in the background document up to 98% of the use in the EU of cobalt sulphate is likely to be outside of the scope of Authorisation. Data recently collated by the CoRC from EU Manufactures and Downstream Users indicate that the volume outside of the scope of Authorisation could be between 95 to >99%, dependent on the interpretation of intermediate use. For any uses that are not exempt, risk management is already required by existing legislation for example the carcinogens at work directive (Dir. 2004/37/EC and the IPPC directive (Dir.

			2008/1/EC). The consultation document states that a relatively high volume is within scope of Authorisation. However, the consultation document also reports that ~98% of the volume used in the EU is used in applications that are likely to be outside of the scope of Authorisation, and data collected by CoRC concurs with this. Based on a total EU tonnage of <3000tpa and ~2% as non-intermediate, a volume score of 3 would be more appropriate. If cobalt sulphate is used as a substance in pigments, surface treatment or corrosion inhibitors the use at these sites would be controlled under existing Community Legislation and has been shown in the REACH CSR for cobalt sulphate to be safe uses (i.e. have an RCR for human health below 1). The appropriate release score for this use would therefore be 1 (non-diffuse/controlled), rather than 3 (diffuse, uncontrolled, significant) as currently proposed by ECHA. The number of sites within scope of Authorisation is unknown, but expected to be in the order of 10s of sites, so a score of 2 for site is considered by the CoRC to be more appropriate than the 3 proposed by ECHA. The overall prioritization score would therefore be: 0-1 (properties) + 3 (volume) + 2 (WDU) = 5-6 The consultation document reports that recycling of imprinted paper and coated articles may be an uncontrolled release, but does not qualify what cobalt compound is released from this paper, or coated articles. Further information should be sought by ECHA before this route of exposure is attributed to cobalt sulphate. ECHA states the cobalt sulphate is of high priority and should be placed on Annex XIV as there are other cobalt compounds that could replace it. We argue that nearly all uses of cobalt sulphate are exempt and we disagree with the statement that other cobalt compounds could replace cobalt sulphate in its uses. We therefore do not believe that cobalt sulphate should be prioritized for inclusion on Annex XIV. REFERENCES (Section 4, page 7) Please note that the internet links provided under '4. References' are no longer working. Without being able to retrieve the information on which the Annex XV is based it is not possible for independent third parties to make a proper assessment and comments.

805	2011/09/12 16:38	Saft Company France	INTRODUCTION: Saft is an active member of the Cobalt REACH Consortium Ltd (CoRC). We participated to the Joint Response Comments submitted on 30 August 2011. USES IN BATTERIES: Cobalt sulphate is used to manufacture active substances for batteries. In this use, cobalt sulphate is further transformed to be incorporated into battery electrodes. Use of cobalt sulphate for the manufacture of active substance for the production of batteries ALWAYS HOLDS INTERMEDIATE STATUS. This use concerns Li-ion, alkaline rechargeable (such as industrial Ni-Cd) batteries and Ni-MH batteries (used in HEV and EV vehicles) which are used in energy storage applications. The use of batteries for energy storage provides environmental benefits. GEOGRAPHICAL DISTRIBUTION: The number of sites using cobalt sulphate for the purpose of manufacturing active materials for batteries is maximum 2. In these 2 plants, this substance has intermediate status and is known as non-isolated in the largest of the two. AVAILABILITY OF INFORMATION ON ALTERNATIVES: It is not necessary to comment on alternatives for this use that is OUTSIDE THE SCOPE OF AUTHORISATION (INTERMEDIATE USE). PRIORITISATION: AS a NON-ISOLATED INTERMEDIATE in the manufacturing of active substance for battery electrodes, cobalt sulphate should NOT be prioritized for inclusion on Annex XIV. Putting cobalt sulphate through Authorisation would not contribute to a higher level of human health and environmental protection as: - this is a NON-ISOLATED INTERMEDIATE (it is not present in the battery) - the substance is already controlled under existing legislation, - there is no consumer exposure.

1781	2011/09/14 19:41 File attached Confidential	Company Germany	Kobalt(II)-salze finden bei mbw in den Cr(III)-haltigen Passivierungslösungen für Zn- und Zn-Legierungsschichten Anwendung. Vorrangig wird dabei Kobalt(II)-nitrat verwendet. Andere Kobaltsalze sind für die o. g. Passivierungen jedoch grundsätzlich möglich. Arbeitsschutz: Bei sachgemäßer Anwendung der kobalthaltigen Lösungen und Verwendung der vorhandenen persönlichen Schutzausrüstung besteht keine Gefährdung für die Mitarbeiter. Die persönliche Schutzausrüstung besteht dabei aus geeigneter Arbeitskleidung sowie chemiebeständigen Handschuhen. Aufgrund der vorhandenen Absaugeinrichtungen kann eine Gefährdung durch Stäube und/oder Nebel ausgeschlossen werden. Alternativverfahren: Aufgrund der hohen Korrosionsschutzanforderungen an Zink- und Zinklegierungsschichten gibt es zu kobalthaltigen Passivierungslösungen keine adäquaten Alternativen. Passivierungsschichten ohne Kobalt erfüllen die Anforderungen der Kunden, welche vorrangig aus der Automobilindustrie stammen, nicht. Vergleichbare Korrosionsergebnisse können nur mit Chrom(VI)-haltigen Lösungen erreicht werden. „Mit der EU-Richtlinie 2000/53/EG des Europäischen Parlaments über Altfahrzeuge sowie nachfolgend der EU-Richtlinie 2002/95/EG (Elektroschrottverordnung) wurde der Einsatz von Chromatierschichten für Pkw und Elektrobauteile verboten.“ (Quelle: Kommentar des Zentralverbandes Oberflächentechnik e.V. (ZVO) zum Thema Vorschlag zur Priorisierung von Cobalt(II)-sulphate, Cobalt(II)-dinitrate, Cobalt(II)-dichloride, Cobalt(II)-acetate und Cobalt(II)-carbonate zur Aufnahme in den Anhang XIV der REACh Verordnung im Zuge der public consultation bis zum 14.09.2011 - Einsatz der zweiwertigen Kobaltsalze in KONVERSIONSSCHICHTEN In der europäischen GALVANOTECHNIK. – als Anlage hochgeladen) Weitere Betrachtungen In dem als Anlage hochgeladenen bereits oben zitierten Kommentar des ZVO sind die Auswirkungen für die Wirtschaft zu entnehmen. Dem ist grundsätzlich nichts hinzuzufügen. Die Erzeugung von in kobalthaltigen Lösungen passivierten Zink- und Zinklegierungsschichten erfolgt branchenübergreifend für viele Kunden. Einen hohen Anteil stellen dabei international agierende Partner der Automobil- und Fensterbeschlagindustrie dar. Bei einen Verbot der Kobaltsalze entsteht der mbw-Gruppe ein deutlicher internationaler Wettbewerbsnachteil. Auch die Auswirkungen auf die bestehenden nationalen Geschäftsbeziehungen dürften erheblich sein. Die Fortführung der Geschäftsbeziehung ist damit erheblich gefährdet. Verbunden damit ist die Gefährdung der ca. 300 Arbeitsplätze der mbw-Gruppe. Einen hohen Anteil des Umsatzes wird mit Kunden aus der Automobil- und Fensterbeschlagindustrie erzielt. Bei einen Verbot der Kobalt(II)-salze wäre die mbw-Gruppe mit ca. 300 Mitarbeitern deutschlandweit so stark betroffen, dass eine Fortführung der

			Geschäftsbeziehungen und somit der Erhalt der Arbeitsplätze ernsthaft gefährdet ist. „Ein Verbot des Einsatzes von Kobaltsalzen in Passivierungen würde den Korrosionsschutz der beschichteten Teile deutlich vermindern und damit negative Auswirkungen auf die Langlebigkeit und Nachhaltigkeit des industriellen Wirtschaftens in Europa haben. Verstärkter Rohstoffeinsatz und zusätzlicher Energieverbrauch wäre die Folge und würde die europäischen Klimaschutzziele und Senkungsbestrebungen zum CO2 Ausstoß belasten.“ (Quelle: Kommentar des Zentralverbandes Oberflächentechnik e.V. (ZVO) zum Thema Vorschlag zur Priorisierung von Cobalt(II)-sulphate, Cobalt(II)-dinitrate, Cobalt(II)-dichloride, Cobalt(II)-acetate und Cobalt(II)-carbonate zur Aufnahme in den Anhang XIV der REACh Verordnung im Zuge der public consultation bis zum 14.09.2011 - Einsatz der zweiwertigen Kobaltsalze in KONVERSIONSSCHICHTEN In der europäischen GALVANOTECHNIK. – als Anlage hochgeladen)
846	2011/09/12 19:15 File attached	LKS Kronenberger GmbH Metallveredlungswerk Company Germany	LKS Kronenberger GmbH Metallveredlung will give the same comments to Cobalt(II)-Disulphate like done by Cobalt(II)-Chlorid. To avoid repeating the same arguments many times please see our comments on Cobalt(II)-Chlorid made at the same day !

967	2011/09/13 14:33 File attached	EUROBAT Industry or trade association Belgium	Most Cobalt salts already have to be sourced outside of the European Union either directly or in mixtures. The battery industry believes that adding Cobalt (II) dinitrate and Cobalt (II) sulphate to Annex XIV of the REACH Regulation will produce adverse effects on the EU-based production of the mixtures it uses for the production of batteries. We believe it is critical for the security of supply of the European battery industry to ensure that production capacity of the substances we use remains operational in Europe. An authorisation requirement for these substances will not prevent their use, as it is our understanding that they are widely used as intermediates in various industries as is the case in the battery industry, but will surely hamper the production of mixtures in the EU. In order to allow the future production of mixtures used by the battery industry in Europe, we therefore recommend that Cobalt (II) dinitrate and Cobalt (II) sulphate should not be included under Annex XIV of the REACH Regulation.
992	2011/09/13 15:01 File attached	Dörre Galvanotechnik GmbH Company Germany	Our company cannot follow the arguments to assume the cobalt-salts into the appendix XIV of the REACH regulations. According to this, we agree with the former statement of the Central Association of Surface Treatment Professionals Germany (ZVO). Link : http://www.zvo.org/uploads/media/Kommentierung_ZVO_Cobaltsalze_galvanisch_V20110911_ENGLISCH.pdf Another aspect is the global market. The ban of cobalt-salts would weaken the euroean industry, especially the export-oriented mechanical engineering. After the real-estate crisis 2007-2010 and the Euro-crisis, started in 2011, another self-made mechanical-engineering-crisis would damage Europe. As small company of craftsmanship, we estimate, that our company is going to loose up to 50% of the workplaces if cobalt-salts were assumed into the appendix XIV of the REACH regulations.

804	2011/09/12 16:33	Company United Kingdom	Our company provides comments as EU producer of Cobalt sulphate. Our company is member of the Cobalt REACh Consortium and as such, participated to its mapping exercise and provided information on tonnages, manufacture, uses and releases; aggregated results from this exercise are available from the Consortium and in the REACh registration dossier. Manufacture and releases from manufacture (section 2.2.2.1. – page 2): Russia is out of EU; as such, we consider the data from Russia not appropriate to give information on current practices in EU. We do not think that exposure data reported in the Lison study from 1994 are relevant to describe the current EU manufacturing releases: this study appears not to be specific to Cobalt sulphate exposure and is quite old to be representative of current practice. Updated exposure data from manufacture have been provided in REACh registration dossiers (prepared by Cobalt REACh Consortium) and can be used as reference. UK should be added to the countries with production facilities. Uses and releases from uses (section 2.2.2.2. – pages 2 to 5): We confirm the following uses on customers' information: • Use as intermediate to produce other chemicals – exempted from Authorisation: This includes the use of Cobalt sulphate to obtain dyestuff and uses in ceramics applications. • Use in animal feed - exempted from Authorisation: Use in animal feed is covered by the feed safety regulation (EC 178/2002) and, as such, is exempted from Authorisation. • Use in surface treatments applications: This includes plating and passivations applications. • Use as catalyst: Cobalt sulphate is used as catalyst in chemical organic synthesis. Customers confirmed that the catalyst is not present in further process steps and as such, the potential exposure (if some) will be limited to a small numbers of workers. • Use in formulations: Cobalt sulphate is used in pigments formulations as well as trace element in fertilizers formulations. • Use as water treatment chemical: Cobalt sulphate is used in mixtures as water treatment chemical. We do not think that the exposure data from Danish Environmental Agency are relevant: they appear not to be specific to Cobalt sulphate. Similarly, the dust concentrations measured in production facilities and refineries have not been identified to be specifically Cobalt sulphate dusts. We also consider the study on porcelain dinnerware (1970's) too old to be representative of

			current practices; once again, we do not know if results are specific to Cobalt sulphate. Updated exposure data from uses have been provided in REACh registration dossiers (prepared by Cobalt REACh Consortium) and can be used as reference. Main exposure route is inhalation which is not at risk for solution physical form (around 50% of our tonnage) in good handling practices. Cobalt sulphate in solid form is a crystal, so therefore the inhalation risk is minimal. Availability of information on alternatives (section 2.3. – page 6): Even a number of common uses have been registered for Cobalt sulphate and other salts, The assumption of mutual substitution is incorrect. Customers confirmed that the uses of Cobalt sulphate are specific and no substitution is available including the substitution by any other Cobalt salt. Existing specific Community Legislation relevant for possible exemption (section 2.4. – page 6): The use of Cobalt sulphate in animal feed falls under the scope of food safety regulation (EC 178/2002) and, as such, is exempted from Authorisation. As per REACh legislation (Title 1 – Article 2 - 8b), intermediate uses are exempted from Authorisation. Cobalt sulphate is used as intermediate to obtain dyestuff. Ceramic applications are also recognized as intermediate uses. On top of that, CMR compounds are already covered by other legislations including: the Carcinogens Directive 90/394/EEC, Directive 98/24/CE, Directive 2004/37/EC and IPPC directive (Dir. 2008/1/EC) cover already risk management of carcinogens at work. Global comments on prioritization (section 3.1. – page 6): Based on information gathered, we do not think that Cobalt sulphate should be placed on Annex XIV. Reasons are the followings: • Uses in animal feed and to manufacture other chemicals falls under Authorisation exemptions, • For risk management, uses not exempted from Authorisation are already covered by other legislations, • Assumption on interchangeability is not correct and uses are specific to Cobalt sulphate only, • New data available tend to show a carcinogen threshold mechanism.

793	2011/09/12 16:02 Company Germany	Dr.Kubitz GmbH	Over the top, especially if one considers that small amounts of Co and thus Co-salts are ubiquitous and that only minute amounts are used for e.g. one important application described below (automatic distance and angel measuring based on the magnetoresistiv principle)
625	2011/09/08 11:52 File attached Confidential	Praxair Surface Technologies Ltd., Swindon, Wiltshire, SN3 3HX, UK Company United Kingdom	Praxair Surface Technologies strongly disagrees with the recommendation that Cobalt Sulphate is included in Annex XIV. We think that the need to get an authorization for cobalt salts is disproportionate. This substances have been identified as being strategically important for the EU and they provide a multitude of environmental and energy effects. Site and Quantity: We only use Cobalt Sulphate at in Weston Super Mare, UK. The Weston yearly Tonnage is 3 metric tonnes Exposure to workers: The Weston facility has 20 workers who come directly into contact with Cobalt Sulphate salts. With surface treatment in mind exposure is extremely low due to the Cobalt Sulphate dissolution into plating baths thus negating any airborne exposure. The volume is relatively low and the use of cobalt sulphate in plating baths is not widely dispersive. Occupational exposure is covered by existing legislation. The risks during processing are adequately controlled. Exposure to end consumers: The customer parts that are coated using Weston Cobalt Sulphate process has no consumer exposure to the Cobalt Sulphate as the Cobalt Sulphate has been electrical chemical reduced to Cobalt. That means there is no threat of exposure for the end consumer. Consumer exposure is negligible. Cobalt Sulphate is not incorporated in this form in the final coating the "consumer" gets from us. Cost effectiveness: To get an authorization for cobalt sulphate for the use "surface treatment" will be extremely costly

			and will therefore decimate our special industry and the whole European industry. The EU R&D innovation platform will be negative influenced by a necessary authorization. Both production of cobalt sulphate and the use of Cobalt Sulphate in plating baths will be moved to non EU states where laws are much less severer than within the EU. We are only moving production and the use of Cobalt Sulphate into countries where regulations are not so strict than in the EU and where also protection of workers has not the same rating as we have it in the EU.
1580	2011/09/14 14:47	Company United Kingdom	Reason for use: this company uses cobalt sulphate (supplied within a solution) to passivate zinc cobalt plating yellow. Tonnage: we use approx 4kg/year of cobalt sulphate. Release: no cobalt sulphate remains in the passivated plating, so users of the plated item are not exposed to cobalt sulphate from it. Annual air monitoring shows the plating employees (approx 12 of them) are exposed to levels of

1528	2011/09/14 13:06 File attached Confidential	Safran-Group Company France	Safran is a member of ASD (European Aerospace and Defence Association) and fully support the comment which has been uploaded by our it on this substance (Cobalt (II) Sulphate:150a253c-a88d-433f-ab64-a79ccfb0cf62). This comment is additional to the following one that Safran has done : cobalt sulfate 3ef7d21a-eecd-48a7-94ba-c28bb913b976 As these comments highlight critical business issues, they are placed in a confidential attachment. Non confidential comments : The entry of cobalt sulphate in Annexe XIV would create a critical business issue for the Safran-Group.
1179	2011/09/13 19:35	Safran Group Company France	Safran is a member of ASD (European Aerospace and Defence Association) and fully support the comment which has been uploaded by our it on this substance (Cobalt (II) Sulphate:150a253c-a88d-433f-ab64-a79ccfb0cf62) Several companies of the Safran Group use a surface treatment which uses cobalt sulphate. We therefore do not use cobalt sulphate directly, but we are expressing a high level of concern with a possible placement of this substance in the Annexe XIV, because no available substitution technology can be available before something like 10 years. The purpose of the surface treatment using cobalt sulphate is to coat the surface of the parts with cobalt in order to enhance corrosion, wear and oxidation resistance at high temperature. This substance is used by a very small number of surface treatment suppliers to which our parts are sent for applying the coating. The process is an electrolytic coating process. Cobalt surface is put in the baths and our suppliers have confirmed that this substance is not present on the parts after the treatment. The total number of parts that are coated with this process is extremely low (

1549	2011/09/14 14:25 File attached	Enthone GmbH Please select organisation type.. United Kingdom	See attached
616	2011/09/08 09:47 File attached	Schaeffler Technologies GmbH & Co. KG Company Germany	see attached statement

1187	2011/09/13 19:52 File attached	Galvano Röhrig GmbH Company Germany	Sehr geehrte Damen und Herren, wir möchten und können auf oben genannten Stoff nicht verzichten. Der Stoff wird als Legierungszusatz in unserem Goldelektrolyten benötigt. Unsere Kundschaft fordert diesen einen Farbton, will auch nicht auf Alternativen umsteigen. Dem abgeschiedenen Metall können bis jetzt keine nachteiligen Eigenschaften zugeordnet werden. Da wir in Deutschland als Störfallbetrieb mit Grundpflichten geführt werden, sind auch alle Maßnahmen getroffen, um Schaden von Natur, Umwelt und den beteiligten Mitarbeitern fernzuhalten. Sollte der Stoff verboten werden fällt ein Segment unseres dekorativen Beschichtungsangebotes weg. Dies bedeutet Umsatzeinbußen, die zu Arbeitsplatzverlusten führen kann. Bitte lesen Sie hierzu auch die Ausarbeitung des Zentralverbandes Oberflächentechnik e.V. (ZVO)
1828	2011/09/14 21:42	Industry or trade association Germany	Some of our member companies produce portable products with batteries. According to our information the producers of the batteries use Cobalt(II) sulphate as intermediates. Our understanding of the REACH regulation is that intermediates are exempt and we consider this to be appropriate and would oppose the suggestion that Cobalt(II) sulphate for that use effectively be banned.
1652	2011/09/14 16:22	PortugalPortuguese Environment Agency MemberState Portugal	Taking into consideration the wide dispersion use of the substance Cobalt(II) sulphate, we consider that this substance fullfills the prioritisation criteria. We therefore support ECHA’s recommendation for inclusion of this substance in annex XIV. We also support the proposed application and sunset date.

1446	2011/09/14 10:48 File attached	A.M.P.E.R.E. DEUTSCHLAND GmbH Company Germany	The electroplating and surface treatment industry is, at the same time, both a key technology and a cross technology and, as a result, a driving force for technological advancement. In the field of electroplating, cobalt salts are used in particular in the manufacture of coatings made of metallic cobalt-alloys. Within the overall field of electroplating, zinc and zinc alloys and their subsequent conversion layers for the cathodic corrosion protection of steel components represent also a particular area of focus which is of growing importance. Cobalt- and cobalt-alloy-plating is a field of special interest whose importance continues to grow from both an economic and technical point of view. The added value gained from refining surfaces contributes to a strengthening of Europe as an economic region and secures the competitive edge of European products on the world's markets. To save resources and reduce CO 2 one has to have durable products with optimised technical properties. Zinc and zinc alloy coatings with the conversion layers deposited on them make a considerable contribution to achieving these aims as a result of their corrosion-protection properties. It can be generally said that zinc & zinc alloys provide optimum corrosion protection for a minimum use of materials and at low costs. The need to save resources necessitates the ability to produce durable commodities which have optimised technical properties. As a result of their mechanical properties, e.g. high hardness levels in gold application, cobalt including coatings makes a crucial contribution to these aims. The use of cobalt (II) salts with its importance for the surface treatments industry, machine and plant engineering, automotive, improving the adhesion of paint layers when they are applied and other industrial sectors, such as the construction industry in Europe, must have a future in order to maintain the specific properties achieved with the application of electrochemical corrosion protection systems using zinc and zinc alloys with subsequent conversion layers. Further industries which are concerned are bathroom and furniture fittings, consumer articles, the watch and clockmaking and jewellery industries, medical technology and many other industrial fields in Europe will be referred to and the specific reasons explained as to why electrochemical cobalt- and cobalt-alloy-plating must remain an option in the future. Because of the following reasons we cannot follow the arguments to include the Cobalt Salts (cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride and cobalt(II)-acetate) into the Appendix XIV of the REACH regulations.

1056	2011/09/13 16:54	Company France **Organisations having submitted the same comment or extracts of it are listed in Annex I.**	The aerospace industry does not use cobalt sulphate directly, but is expressing a high level of concern with a possible placement of this substance in the Annexe XIV. This substance is used by a very small number of surface treatment suppliers to which our parts are sent for applying the coating. The process is an electrolytic coating process. Cobalt surface is put in the baths and our suppliers have confirmed that this substance is not present on the parts after the treatment. The total number of parts that are coated with this process is extremely low (
1231	2011/09/14 01:08 File attached	CETS aisbl Industry or trade association Germany	The aim of this report is to focus upon the shortcomings of the Annex XV dossier for the substancees cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride, cobalt(II)-acetate and cobalt(II)-carbonate. In particular, its intermediate use in plating industry. At the outset, cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride, cobalt(II)-acetate and cobalt(II)-carbonate were part of the third priority list of existing substances under the legal framework of Regulation 793/93. The use of Cobalt(II) salts by the plating industry should be regarded as an intermediate in accordance with the definition of Article 3(15) of REACH. ECHA's interpretation of the concept of 'intermediate' (as given in its June 2010 clarification document) excludes substances used as surface treatments, e.g. Cobalt(II) salts used in metal finishing. However, the conclusion reached in the clarification document of June 2010 cannot be supported. The abovementioned clarification document was reviewed by two independent legal experts at the request of Industry. In Cefic's position paper of December 2010, the followed was reported: "Both legal advisory statements conclude that the interpretations for intermediates as elaborated in the [clarification] document go far beyond the Article 3 (15) of the REACH Regulation and therefore the concept of intermediates was narrowed tremendously by ECHA, Commission and the Member States." That position was subsequently endorsed by Cefic itself (see December 2010 document) and supported in a number of recent petitions made by Industry associations, such as AIAS and the Institute of Metal Finishing. In this connection, it is worthwhile noting at the outset that ECHA's guidance document for the

			preparation of an Annex XV dossier on the identification of substances of very high concern states in its point 3.3.4 that, "certain types of information, including exposure-related information, are needed for the later process used to prioritize the substances for inclusion on Annex XIV, once the dossier has been accepted." The guidance then continues to make reference to 'available' information on exposures. 1. Occupational safety a. No risk in application of Cobalt(II) salts for the end-consumer or industrial client since only pure Cobalt metal is deposited on the substrate and there is no Cobalt(II) salt on top of the plated parts. b. Safe handling of the solutions to minimize the risk for the co-workers for dermal or respiratory tract absorption (as evidenced by of regular medical visits and vaccination of the co-workers involved). 2. Alternative processes There are a variety of familiar alternatives for Cobalt plating. These alternatives do not include one universal substitute process, capable of replacing Cobalt plating on a one to one basis (For details see attachment). 3. Overall implications: a. The application of Cobalt plating shows a high socio-economic benefits due to the functional properties in a wide range of products (For details see attached document). 4. Summarized comments: Metallic layers with a cobalt or cobalt alloy surface are well established and widely used in the market place. The tendency in the electronic industry and other industrial sectors continues to emphasise the look and technical advantages cobalt or cobalt alloys while taking into account the existing quality standards. Long-term studies of the alternatives demonstrate the irreplaceability of cobalt or cobalt alloy surfaces made using electrolytes containing cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride, cobalt(II)-acetate and cobalt(II)-carbonate for most applications. The finish color, corrosion protection and solderability offered by layers made using cobalt or cobalt alloy electrolytes is noticeably poorer, which has a negative effect on the lifetime of the products to which the process is applied. This necessitates increased use of raw materials which is contrary to achieving sustainability targets set by European programmes. 5. Resulting requirements: 1. According to the available data there is no basis for an inclusion of the Cobalt(II) salts in Annex XIV of the REACh regulation. 2. In the case of an inclusion it is absolutely necessary to realize a derogation rule for the

			application of Cobalt plating.
1096	2011/09/13 17:52 File attached	Central Industry or trade association Germany	The Central Association of Surface Treatment Professionals Germany (ZVO) herewith comments Application of divalent cobalt salts in cobalt or cobalt alloy layers in the European electroplating Industry: In the following the summarizing arguments and comments will be presented. For the detailed statements we do refer to the uploaded document. The comments are also valid for the other Cobalt Compounds. ---------- Cobalt (II) Sulphate, Cobalt (II) Dinitrate, Cobalt (II) Dichloride, Cobalt (II) Acetate and Cobalt (II) Carbonate a. Electrohemical processes for generating Cobalt and/or Cobalt-Alloy layers based on Cobalt compounds - These processes involve immersing the components to be coated in an aqueous cobalt salt solution. Metallic cobalt is deposited by the process of electrochemical reduction as metal themselves or in cobalt-alloys. - Cobalt and cobalt-alloy plating is considered to be the most desirable final finish for a majority of electroplated consumer goods and electronic equipment. Other surfaces cannot provide the same levels of quality and economy - The addition of cobalt-salts is necessary in particular if hardness is required in Gold alloy depsosits. - The result of this coating process is that the final surface of the component contains only metallic cobalt, which is a completely harmless substance from a consumer viewpoint.

			b. Potential health hazards - There are no figures available for absorption of soluble cobalt salts through the skin, but a sensitising effect on the skin is believed to exist. - No figures on acute inhalation toxicity of soluble cobalt compounds are available. However, two-year tests on rats indicate that there may be a hazard of chronic toxicity including damage to the respiratory tract. - Health hazards through unintentional oral intake of soluble cobalt salts do not exist. Wherever cobalt salts or compounds containing cobalt salts are handled, there are strict prohibitions in force to prevent eating, drinking and smoking. Unintentional intake can, therefore, be discounted. - Sensitisation of the skin can also be excluded. Sufficient protection exists by applying personal protective equipment (PPE). Employers are required to monitor the compliance of staff with the prescribed use of PPE. - If existing safety regulations are not adhered to, there are potential health hazards in handling cobalt (II) salts in day-to-day production environments, which is why workers must be subjected to regular health checks in order to detect any possible health damage at an early stage. It is important to note that, in coatings firms, only fluid mixtures are used for generating cobalt gold alloy layers. - Preventative health checks are required for workers who may be at risk from inhalation of cobalt compounds in the shape of respirable dust or aerosols or who may have skin contact. - To protect its workers, companies are required to take suitable measurements in the workplace to determine the extent of any effects of cobalt compounds and, in this way, to monitor the long-term effectiveness of the protective measures implemented – e.g. the efficiency of air extractors. - The employer is required to commission an approved doctor to carry out the preventative examinations. The requirement for an "approved" doctor is to ensure that he/she has the necessary technical knowledge, understands the technical equipment and work environment and is able to implement the regulations as required. c. Environmental protection when dealing with conversion layers - Solutions containing cobalt for generating cobalt or cobalt alloy layers require electricity. The application usually takes place at temperatures between 25 and 40°C. Where appropriate technical equipment has been installed on site, such as an air extractor, this manufacturing process does not generate any hazardous aerosols and the air in the workplace will not be contaminated in fact, - Cobalt is found in aqueous solutions as a cation. By adjusting the pH value to the alkaline range, the cobalt can be precipitated out as cobalt hydroxide at < 1 mg/L. There is currently no limit value in the German Waste Water Regulations for electroplating firms or in Appendix 40 to the regulations.

			d. Economic importance of electrochemical cobalt plating Cobalt and cobalt-alloy plating is considered to be the most desirable final finish for a majority of electroplated consumer goods and electronic equipment. Other surfaces cannot provide the same levels of quality and economy. The economic advantage is in the attractive appearance of the surface and the high degree of hardness in different alloys, chemical resistance and toxicological harmlessness, achieved with very little effort. Products plated in this way can be expected to have a long service lifetime. To cite just one example, consider the decorative cobalt-tin or cobalt-gold alloy plating of taps and fittings in sanitary installations. Even where they are subjected to tough professional use and cleaned with abrasive cleaners, these cobalt included surfaces will provide decades of protection on high-grade taps and similar parts. The technical and decorative cobalt alloy surface is thus a contribution to careful use of natural resources. e. Resulting Requirments > As described in the statements above the Central Association of Surface Treatment Professionals Germany (ZVO) cannot follow the arguments to include the Cobalt Salts (cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride and cobalt(II)-acetate) into the Appendix XIV of the REACH regulations. > In the event that these substances are included in Appendix XIV of the REACH regulations we demand that there has to be an exception to the rules to allow the use of Cobalt(II)-Salts for the purpose of anti-corrosion, decorative and bright Cobalt-Alloy-Plating.
661	2011/09/09 12:00	Assogalvanica Industry or trade association Italy	The factor calculated (high: 14-15) is considered to be disproportionate. In particular, the value for substance dispersion (environment, workplace and end-users) (3) appears excessive. Since the use of dangerous chemicals is regulated and subject to the control of chemical risk (for example in Italy, Legislative Decree 81/08) a score of 1 is proposed. Referring to the galvanic industry, the risk of exposure to cobalt sulphate is not significant because of the extremely small quantities used. Consequently, the proposed new priority value for the substance is: Inherent properties (IP) 0-1 0= CMR with effect threshold 1= CMR without effect threshold Volume (V) 5 Relatively high: 100-1000 t/y Uses: wide dispersiveness (WDU): 3*1=3

			Site# 3 high Release 1 Non-diffuse/controlled Total value: TOT = (IP) + (V) + (WDU) = (0-1) + (5) + (3) = 8-9 moderate priority
1422	2011/09/14 09:52	Germany MemberState Germany	The German CA supports the ECHA proposal on prioritisation of cobalt(II) sulphate due to its carcinogenic properties and toxicity for reproduction, high volume and widespread uses. Supplementary Note: Conclusion, taking regulatory effectiveness considerations into account, page 7: We agree that all cobalt(II) compounds on the Candidate List should be treated equally with respect to prioritisation, because of the overall addition of divalent cobalt as the toxicologically relevant species from different cobalt(II) sources.

1082	2011/09/13 17:29	University of Nottingham Academic institution United Kingdom	The presence of cobalt salts and, in particular, cobalt sulphate and dichloride in Annex XIV was a major blow to the research efforts made over a period of 10 years that have been put into the development of electroplated alloys containing cobalt. The major aims of this work were to find replacement coatings for 'hard' (or 'engineering') chromium and also cadmium coatings both of which are used extensively in automotive and aerospace applications. During this period of research, the funding providers, the EC and the UK national government (providing close on 3 million euro), accepted the argument that the environmental threat posed by cobalt salts was significantly less than of cadmium or hexavalent chromium. This we believe is still the case, particularly as the evidence provided for the listing of cobalt salts is weak and not well substantiated compared with the cases for cadmium and hexavalent chromium. Under these circumstances, it is likely that it will be the case that these novel cobalt-based coatings, for which the EC will have paid handsomely, will be produced and exploited in countries outside the EU. There was never a case by REACH against the use of Co metal or Co-containing alloys for their use in engineering practice and that is still the case. The whole matter concerns the use of listed cobalt salts in plating solutions and the possibility that the salts could contaminate the electrodeposited alloy product (this issue is, we understand, being put to legal judgement by the Surface Engineering Association in the UK and other bodies in Europe). The case we have put in previous representations to REACH on the replacement of cadmium by zinc-cobalt alloy coatings will have to depend on the above legal judgement. This current document concentrates on matters surrounding the deposition of cobalt-tungsten alloys as a replacement for hard chromium coatings. These alloys of cobalt possess enhanced tribological properties when compared with those based on nickel. Such properties are currently in significant demand for moving parts in engines and drives as they reduce friction and, as a result, reduce fuel consumption which is one of the major considerations in the current EC planning for the environment. The major step forward in research on the electroplating of cobalt alloy coatings has been the production of nano-structured materials of high stability with grain sizes of 5 nano-meters. This has conferred exceptionally low coefficients of friction approaching 0.1 on these deposits that can operate in non-lubricated conditions i.e. providing better conditions than hard chromium which has to operate in lubricated conditions to reach values of this level (in non-lubricated conditions most metals/alloys operate at coefficient of friction values of 0.6 or more). At the present stage, the basic research on Co-W deposition has been completed and patents have been filed by Goodrich Ltd and by the University of Nottingham. Goodrich are now engaged in development work at a pilot scale to electroplate parts for use in conjunction with engine and drive parts for aeroplanes produced in Europe and USA. It is expected that these developments will take place over a period of 2 years.

			The case which is being made in this response concerns exemption for authorisation for two processes: (1) the preparation of the electroplating bath; (2) the operation of the bath to produce the Co-W alloys.
1064	2011/09/13 17:04	Agoria Industry or trade association Belgium	The prioritization of the different cobalt salts does not seem appropriate for Agoria. The classification makes these substances surely eligible to be prioritized but there are serious doubts on the claimed widespread use of cobalt dichloride as well as on the lack of clear exposure which has an impact on the prioritization. Agoria does not believe that these cobalt salts should be prioritized at this stage. The reported quantity for the different cobalt salts in the Annex XV dossier, are not reflecting the actual reality within the EU. In global the actual use is significantly less than the volume mentioned in the Annex XIV files. On top of this between 90 to 99% of the use is an intermediate use which is exempted from the authorization procedure. (cobalt sulphate >97%, cobalt diacetate > 90%, cobalt carbonate > 94%, cobalt dinitrate > 99% and cobalt dichloride > 99%) This means that the volume of cobalt dichloride in the scope of the authorization procedure is negligible according to our estimations. The exposure to cobalt salts is furthermore well controlled as is documented by the Chemical Safety report submitted for the REACH registration for these cobalt salts. The CSR includes an exposure scenario for each identified and reported use and each of these exposure scenario resulted in a risk characterization ratio below 1. This means that all identified uses of cobalt salts within the EU are well controlled. Cobalt salts are also already controlled by different existing legislations to protect human health as well as the environment. The carcinogen at work directive (2004/37/EC) imposes the need for a risk management at the work place including the taking of the necessary risk management options. Also the IPPC directive (2008/1/EC) is providing the framework for limiting the impact on the environment. The general restriction of the supply of CMR’s for supply to the general public is

			also limiting the consumer exposure. (REACH) On the potential substitution there is a general misconception regarding interchangeability. Cobalt salts cannot be substituted by other cobalt salts in most of the applications. In nearly all cases this is neither technical nor economically feasible to implement such a substitution. In this respect we are not supporting at all the grouping of all cobalt salts to be prioritized which is according to our information done out of 'fear' of this NON-existing potential for substitution. The socio-economic impact of the authorization is clearly underestimated according to Agoria. First of all, we are confused of the diverging signals given, taken into account that cobalt was identified as a critical raw material within the Raw Materials Initiative of the European Commission linked to the economic importance in different future technologies such as batteries, combating air pollution. In this report the substitution potential is described as: "Substitutes for cobalt are constantly being sought mainly because of the metal price volatility. However, due to the unique properties of cobalt, there are limited options for substitution and almost all substitutes result in reduced product performance." This seems a conflicting signal with this proposal to prioritize cobalt salts for authorization and thus affecting even further the long term availability for cobalt salts. The different cobalt salts are used in a broad range of applications the following sectors: - The use as catalysts in the oil refining, synthetic fibres, plastics, desulphurised fuels, oxidation catalyst for the car industry, esterfication, - Hardmetals - Rechargeable batteries for industrial applications, hybrid cars, computers, power tools, phones, - Electroplating such as anodizing, wear resistance, electronics, corrosion resistance, - Other applications such as animal feed, ceramics, tyres, inks/dyes, paint driers, pigments, biotechnology. Several of these applications, in which cobalt salts are used, in general as an intermediate, contribute strongly to the evolution to a more sustainable society. Finding alternatives is not that easy given the broad applications, the technical and economic challenges linked to substitution. The cobalt salts are not found in the final product given that it is mostly used as an indispensable intermediate within the value chain. This means also that exposure to the end-consumer can be exempted.

1831	2011/09/14 22:00 File attached Confidential	Cobalt REACH Consortium Ltd (CoRC)/Cobalt Development Institute (CDI) Industry or trade association United Kingdom	The Secretariat of the Cobalt REACH Consortium Ltd (CoRC) has prepared a Technical Annex for this cobalt substance to support the Joint Response Comments that have been submitted (separately) into the current consultation. The preparation of the Joint Response Comments has involved participation of the Consortium member companies who are the major manufacturers/importers of cobalt substances in Europe, as well as several Downstream Users that are also members of the Consortium. Further information has also been collected from industry stakeholders using two surveys: a stakeholder mapping survey, and a supply/value chain study. These studies were undertaken in order to collate and refine information available from the cobalt industry on volumes, exposure and uses. The surveys were cascaded along the supply chains to gather a more complete picture of the uses and supply/value chains than has been available previously. Information collected from the responses to these two surveys has been combined and summarised and is presented in the supporting Technical Annex to the Joint Response Comments. A copy of the Technical Annex document has been submitted into the current consultation as a CONFIDENTIAL attachment. The Consortium has also prepared a collation of the short-form versions of the Exposure Scenarios for this cobalt substance as an appendix to the Technical Annex. A copy of this accompanying document is also provided as a CONFIDENTIAL attachment. There are two other appendices to the Technical Annex which include papers that present further information regarding the threshold mechanism for cobalt compounds, and the essentiality of cobalt compounds. These two papers have been submitted into the current consultation (separately) as attachments to the response comments provided by the CDI (Cobalt Development Institute).

910	2011/09/13 12:08	Company France	The use of cobalt (II) sulphate doesn't meet the criteria of priorisation. There is no other substitute with equivalent properties in aeronautical maintenance. For many applications and processes, this substance is irrempleacable.
1154	2011/09/13 18:49 File attached	Individual Italy	The use of Cobalt sulfate in surface treatment doesn’t meet the criteria of prioritisation. Very low exposition for automatic process. Cobalt sulfate is used in the galvanic industry not as a substance but as a mixture. Environmental exposure controlled by regulation.

1186	2011/09/13 19:49 File attached	DALIC Company France	The use of cobalt sulphate in wet surface treatment doesn't meet the criteria of prioritization: - Very low exposition for closed processes like DALISTICK and for BRUSH Plating under controlled conditions, - Very low quantity of solutions used with these processes, - Very occasionally/ few employee exposed, - No consumer exposure with the dangerous substance, - Environnemental exposition controlled by regulations.
909	2011/09/13 12:06 File attached	AIA-CP Company France	The use of cobalt(II) sulphate in surface treatment doesn't meet the criteria of priorisation; please see the enclosed letter

747	2011/09/12 11:30	Company France	The use of cobalt(II) sulphate in surface treatment doesn't meet the criteria of priorisation.
620	2011/09/08 10:31	CEPE Industry or trade association Belgium	There is no use of Cobalt sulphate neither in paints nor in inks. Cobalt sulphate is used in the synthesis of drying agent for paints and printing inks. This is an intermediate use, which should be exempted from Authorisation. Because cobalt sulphate is mainly used as an intermediate to manufacture other chemicals its inclusion into the Annex XIV of REACH should not be prioritized.

1123	2011/09/13 18:11	Individual Germany	This Comment is provided on behalf of the following organizations: ☐ Atotech Deutschland GmbH ☐ Atotech Österreich GmbH ☐ Atotech CZ, a.s. , Česká Republika ☐ Atotech SK, s.r.o., Slovenská Republika ☐ Atotech France ☐ Atotech Italia S.r.l. ☐ OOO Atotech-Chemeta, Lithuania ☐ Atotech Nederland B.V. ☐ Atotech Poland ☐ Atotech España S.A ☐ Atotech Skandinavien AB ☐ Atotech Slovenija, proizvodnja kemicnih izdelkov, d.d. ☐ Atotech UK Ltd. Comment on the applied approach of prioritization Article 58 paragraph 3 of the REACH regulation defines 3 criteria for the substances to be prioritized for inclusion in Annex XIV: (a) PBT or vPvB properties or (b) Wide dispersive use or (c) High volumes. To (a) None of the proposed Cobalt salts has PBT or vPvB properties. ECHA uses a scoring system for the determination of substances for prioritization of SVHC for inclusion in the List of Substances Subject for Authorization taking into account the aforementioned 3 criteria. The weighting of the single scoring results is as follows: - PBT or vPvB properties: 18% - Wide dispersive use: 41% - Volumes: 41%. There is no justification for this weighting based on the REACH regulation. Following ECHA's explanation for the weighting, the substances on the Candidate List are a defined as a selection of substances with very severe hazard properties. However the European Commission chose to highlight PBT and vPvB properties over e.g. CMR properties in the REACH regulation (e.g. Art. 58, para. 3) as risks of first mentioned substances are deemed to be higher. Keeping this in mind the weighting should be equal throughout the 3 criteria as otherwise the hazard (PBT and vPvB) properties would be underestimated against the volume and the wide dispersive use.

			To (b) The term 'wide-dispersive use' is explained in Chapter R.16.2.1.6 of the Guidance on Information Requirements and Chemical Safety Assessment as follows: 'Wide-dispersive use refers to many small point sources or diffuse release by for instance the public at large or sources like traffic. … Wide-dispersive use can relate to both indoor and outdoor use'. In the Technical Guidance Document for Risk Assessment of new and existing substances and biocides (2003, Chapter 5) this term is defined as follows: 'Wide-dispersive use refers to activities which deliver uncontrolled exposure. Examples relevant for occupational exposure: Painting with paints; spraying of pesticides. Examples relevant for environmental/consumer exposure: Use of detergents, cosmetics, disinfectants, household paints.' In addition, the ECETOC Report No. 93 on Targeted Risk Assessment (Appendix B) states: 'A substance marketed for wide-dispersive use is likely to reach consumers, and it can be assumed that such a substance will be emitted into the environment for 100% during or after use.' Definitions above do clearly not apply for the use of cobalt containing solutions in industrial application. Such applications are strictly controlled equipment-technology-wise, personnel-training-wise, safety-wise and personnel-safety wise respectively. Furthermore strict requirements apply for waste water and exhaust air cleaning technology. Consequently the use is absolutely not comparable with "sources like traffic", "painting with uncontrolled exposure" or (outdoor) "spraying of pesticides". In contrary to the definition of ECETOC Report No. 93 the substance never reach consumers and exposure to environment is minimal as a result of aforementioned measures. ECHA disregards the given definitions of wide dispersive use and postulates that this criterion can be regarded as directly driven by the number of sites. ECHA defines already a number of 100 sites in Europe where cobalt salts are used as "high" (maximum scoring = 3). The "Guidance on Information Requirements and Chemical Safety Assessment" gives traffic as an example for "many small point sources" with 240 million point sources in total. For the scoring the "number of sites" is multiplied by "Release". Here an inconsistency is present in the evaluation of the use of cobalt(II)sulphate in industrial surface treatment: • It is noted that the number of sites of use is unknown, however rated as "high". • It is stated that "Releases and exposure to workers might be controlled in most instances, however some of the uses appear to have a potential for significant worker exposure". Consequently the majority of uses is controlled and should be rated accordingly (score '1'). Assuming that few cases have a potential for high exposure does not justify the classification as "wide-dispersive use", which would base on a high number of point sources with uncontrolled

			exposure. In addition the approach of ECHA disregards the fact that the number if sites is not relevant for exposure of workers but the number of workers in contact with the concerned substance. For surface treatment application in industrial settings the number of persons working near the process solutions is very low. It can be estimated by 1-2 persons per site for automated systems and 4-5 persons per site for non-automated systems. Regulatory effectiveness ECHA extends the scoring approach with a verbal-argumentative evaluation. This shall facilitate the determination of the regulatory effectiveness of the authorization process. Considering that there are no existing alternatives for different uses of cobalt salts there will be no environmental or human health benefit as an authorization has to be granted for this specific technology. But this process will result in considerable costs and workload for the companies affected, resulting in downsides competition-wise on global level as other economies will simply continue using the substance without any bureaucratic hurdles. It should be the aim of European authorities that existing technology and operational conditions are optimized there where the exposition elevated. Please note here that this is only the case for some exceptions. Regulatory effectiveness would be much higher if consistent exposure and emission standards are agreed throughout Europe and forcefully controlled by member states authorities. Conclusion It is to note that cobalt salts in surface treatment applications do neither fulfill the criteria "PBT or vPvB properties" nor "wide-dispersive use" and regulatory effectiveness is also not present for this case. Consequently neither facts nor the formal process justify a prioritization of cobalt salts for REACH Annex XIV.

1393	2011/09/14 09:02 File attached Confidential	SurTec Deutschland GmbH Company Germany	We agree with the attached document: "Comments by The Central Association of Surface Treatment Professionals Germany (ZVO)on the subject of Proposals for Prioritising Cobalt (II) Sulphate, Cobalt (II) Dinitrate, Cobalt (II) Dichloride and Cobalt (II) Acetate for Inclusion in Appendix XIV of the REACH Regulations in connection with the public consultation up to 14 September 2011 Application of divalent cobalt salts in Conversion layers in the European electroplating Industry"
718	2011/09/10 12:02 File attached	Adolf Krämer Metallveredlung GmbH & Co KG Company Germany	We made surface technologie for automotive, windcraft, solar and so on. For high corrosion resistance in off shore or winter geographic lands we need Cobalt for the corrosion resistance. Without cobalt and Cr-VI you´ve got a ressistance from minus 90%! For us means we lost round about 70 peoples and 8 Mio € turn around.

1461	2011/09/14 11:10 File attached	Arnold Umformtechnik GmbH&Co.KG Member of Würth Company Company Germany	We object recommendation to include the substance in Annex XIV and the prioritisation of the substance Availiability of Alternatives o alternatives are still in development, but until now the altenatives do not reach the performance an process capability of cobalt containing zinc protection solutions . o the alternatives are much more expansive o there is a big gap in cost/performance ratio Assured handling in shop floor: o the assured handling at electroplating shops is achieved by providing and using personal protective equipment We refer to Comments by The Central Association of Surface Treatment Professionals Germany (ZVO) on the subject of Proposals for Prioritising Cobalt (II) Sulphate, Cobalt (II) Dinitrate, Cobalt (II) Dichloride and Cobalt (II) Acetate for Inclusion in Appendix XIV of the REACH Regulations.
998	2011/09/13 15:11 File attached	Stiefler GmbH Company Austria	We refer to attached data files: Kommentierung_Passivierungen-Co-Deutsch.pdf Kommentierung_Passivierungen-Co-ENGLISCH.pdf If Cobalt-compounds are generally included into ANNEX XIV, we must stop electroplating with zinc and its alloys in few cases, especially where high corrosion resistance is required and use of chromium-(VI) is forbidden.

921	2011/09/13 12:47 File attached	Company Germany	We refer to attached data files: 2011-09-08_Anschreiben_ECHA_fuer_Ausnahmeantrag_allgemein Kommentierung_Passivierungen-Co-ENGLISCH/Deutsch If Co-salts are generally included into ANNEX XIV, our customers must stop electroplating with zinc and its alloys in few cases, especially where high corrosion resistance is expected and use of Chromium-(VI) is forbidden.
851	2011/09/12 19:28 File attached	Company Germany	We refer to attached data files: Kommentierung_Passivierungen-Co-Deutsch.pdf Kommentierung_Passivierungen-Co-ENGLISCH.pdf If cobalt-salt-compounds are generally included into ANNEX XIV, we must stop electroplating with zinc and its alloys in few cases, especially where high corrosion resistance is required and use of chromium-(VI) is forbidden.

1674	2011/09/14 16:54	Health and Environment Alliance International NGO Belgium	We support the inclusion of Cobalt sulphate to Annex XIV
977	2011/09/13 14:46	Sweden MemberState Sweden	We support the prioritisation of cobalt sulphate for inclusion in Annex XIV. The substance has high priority due to relatively high volume and wide dispersive use.

576	2011/09/01 13:47 Company Belgium	Umicore NV/SA	We would like to emphasize the following: • The actual EU tonnage of cobalt sulphate is less than a third of the range maxima of 10.000 tpa as reported in the consultation document. In addition approx. 95-99% is used as intermediate and therefore exempted from authorization, suggesting the volume of cobalt sulphate in scope of authorization is negligible. • A REACH registration dossier and chemical safety report were submitted for cobalt sulphate by the end of 2010. This includes an exposure scenario for each identified and supported use, each resulting in a risk characterization ratio below 1. Therefore it can be safely assumed that all uses of cobalt sulphate in the EU are well controlled and the criteria of 'wide dispersive use' are not met. • Cobalt sulphate is already controlled by existing legislation to protect human health and environment. As an example risk management is already imposed by the carcinogens at work directive (2004/37/EC) and the IPPC directive (2008/1/EC). Furthermore all CMR compounds are restricted for supply to the general public, excluding consumer exposure (REACH, Annex XVII, entry 28-30). • There is a misconception regarding interchangeability. It should be noted that cobalt sulphate cannot be easily substituted by other cobalt salts in its applications. In nearly all cases it is neither technically and/or economically feasible to implement such a change. Based on the above Umicore is of the opinion that including cobalt sulphate in Annex XIV seems disproportionate. In addition to the above we support the comments made by the Cobalt REACH Consortium (CoRC).
1863	2011/09/15 12:26 Company Germany	REISSER-Schraubentechnik GmbH, Member of Würth Group	Wir erheben Einspruch gegen die Aufnahme in Anhang XIV und die Prorisierung der Substanz Englisch: We object recommendation to include the substance in Annex XIV and the prioritisation of the substance

1595	2011/09/14 14:58 File attached	Dr.Hesse GmbH & Cie. KG Company Germany	Wir halten die vorgeschlagene Priorisierung nicht für gerechtfertigt und fordern die Ablehnung einer Aufnahme von cobalt(II) sulphate in den Anhang XIV. Die Aufnahme von Stoffen in Anhang XIV erfolgt nach Artikel 58 REACH-Verordnung. Absatz 3 des genannten Artikels definiert drei Kriterien für die prioritär aufzunehmenden Stoffe: (a) PBT or vPvB properties; or (b) wide dispersive use; or (c) high volumes. Zu (a) PBT or vPvB properties cobalt(II) sulphate hat weder PBT- noch vPvB-Eigenschaften. Zu (b) wide dispersive use Weiter treffen die von der ECHA aufgeführten Definitionen für einen „wide dispersive use" in keinster Weise auf die industrielle Anwendung von cobalt(II) sulphate in Behandlungslösungen zur Erzeugung von Konversionsschichten zu. Es handelt sich um streng kontrollierte Anwendungen mit definierten Anforderungen an die Anlagentechnik, an die Ausbildung des Bedienungspersonals, an Sicherheitsvorkehrungen und persönliche Schutzausrüstung sowie an die Abluftbehandlung und Abwasserreinigung. Zudem entspricht die Anwendung im Bereich der Galvano- und Oberflächentechnik keiner der genannten Beispiele für „Wide-dispersive use refers to activities which deliver uncontrolled exposure: Painting with paints, spraying of pesticides, use of detergents, cosmetics, disinfectants, household paints". Klarzustellen ist hier weiterhin, dass in unserem Anwendungsbereich keine Weitergabe von cobalt(II) sulphate an den Endverbraucher stattfindet. Co wird nicht in Form des Nitrates in die Konversionsschicht eingebaut, sondern als Mischoxid. Wir verweisen in diesem Zusammenhang auch auf den Verzicht der FDA zur Festlegung eines Grenzwertes für Cobalt für „dinnerware" wie im Annex XV report zu Cobalt(II) dinitrate unter 1.2.2 aufgeführt. Eine Einstufung mit Release: 3 (diffuse / uncontrolled / significant) wie im „Draft background document for cobalt(II) sulphate" ist für die Anwendung in der Oberflächentechnik also nicht zutreffend. Daher wäre eine Einstufung mit score=1 korrekt. Zu c) high volumes Die verwendete Menge cobalt(II) sulphate in der Galvano- und Oberflächentechnik liegt in Europa signifikant unter 1000 t und entspricht damit nicht den Bedingungen für „high volumes" Bezüglich der von der ECHA ergänzten Bewertung nach „regulatory effectiveness" ist zu sagen, dass aufgrund der technischen Alternativlosigkeit (siehe Anlage) für die beschriebene Verwendung von cobalt(II) sulphate keine Verbesserung für den Schutz der Umwelt und der menschlichen

			Gesundheit erreichbar. Eine Zulassungspflicht durch Aufnahme in den Anhang XIV würde nur zu deutlich höheren Kosten und einer verminderten Wettbewerbsfähigkeit der Europäischen Unternehmen im globalen Wettbewerb führen. Insgesamt stellen wir fest, dass für die Verwendung von cobalt(II) sulphate in der Oberflächentechnik weder das Kriterium „PBT or vPvB properties" noch das Kriterium „wide dispersive use" erfüllt ist und darüber hinaus eine „regulatory effectiveness" ebenfalls nicht gegeben ist. Auch sind die verwendeten Mengen in der Oberflächentechnik nicht in einer Größenordnung, die eine Priorisierung zur Authorisierung rechtfertigen. Die vorgeschlagene Priorisierung ist daher nicht gerechtfertigt und wir fordern die Ablehnung einer Aufnahme von cobalt(II) sulphate in den Anhang XIV. Im – aus unserer Sicht nicht gerechtfertigten – Falle der Aufnahme von cobalt(II) sulphate in den Anhang XIV der REACh-Verordnung fordern wir zumindest eine Ausnahmeregelung für die Verwendung von Co(II)-Salzen zum Zwecke der Erzeugung von Konversionsschichten auf Zink- und Zinklegierungsschichten bei galvanischen Korrosionsschutzsystemen und verweisen dabei auf das ZVO-Papier (siehe Anlage): Kommentar des Zentralverbandes Oberflächentechnik e.V. (ZVO) zum Thema Vorschlag zur Priorisierung von Co(II)-sulphate, Cobalt(II)-dinitrate, Cobalt(II)-dichloride, Cobalt(II)-acetate und Cobalt(II)-carbonate zur Aufnahme in den Anhang XIV der REACh Verordnung im Zuge der public consultation bis zum 14.09.2011: Einsatz der zweiwertigen Kobaltsalze in Konversionsschichten in der europäischen Galvanotechnik zu diesem Thema, an dessen Erarbeitung wir beteiligt waren und das Arbeitsschutzaspekte, wirtschaftliche Bedeutung und die Bewertung von Alternativtechnologien ausführlich beleuchtet.

781	2011/09/12 15:24 File attached	Schaal Oberflächensysteme GmbH & Co KG Company Germany	Wir schließen uns des Kommentars des Zentralverbandes der Oberflächentechnik an. Siehe weiter unten
550	2011/08/24 14:04	WWF European Policy Office International NGO Belgium	WWF supports the prioritisation for inclusion in Annex XIV because of its high volume within the scope of authorisation and the potential for significant exposure.

II - TRANSITIONAL ARRANGEMENTS. COMMENTS ON THE PROPOSED DATES:

#	Date (Attachment provided)	Submitted by (name, Organisation/MS CA)	Comment
1652	2011/09/14 16:22	PortugalPortuguese Environment Agency MemberState Portugal	
1441	2011/09/14 10:39	Glass for Europe Industry or trade association Belgium	
567	2011/08/30 22:17 File attached	Cobalt REACH Consortium Ltd (CoRC)	24 months to submit an application would seem reasonable and longer than some of the other substances listed. However the sunset date of 18 months seems very short considering the time it would take to implement a change in process or substitution at an industrial scale for the uses in scope of Authorisation. A minimum period of 36 months would be more reasonable.

		Industry or trade association United Kingdom	
1817	2011/09/14 21:23 File attached	The Federation of Finnish Technology Industries Industry or trade association Finland	At least 24 months to submit application is required. For the sunset date a minimum of 48 months is required.
798	2011/09/12 16:11 File attached Confidential	Norilsk Nickel Harjavalta Oy Company Finland	At least 24 months to submit application is required. Sunset date of 18 months would be too short. A minimum of 48 months is required.

531	2011/08/17 13:45	MTU Aero Engines GmbH Company Germany	Aufgrund der komplexen Zulassungsverfahren in der Luftfahrtindustrie sehen wir die-se Fristen als zu kurz an und schlagen eine Verlängerung um bis zu 5 Jahren bzw. eine Verlängerung bis zum Vorliegen weiterer fundierter Daten und Untersuchungen vor. Ziel sollte es selbstverständlich sein, weiter zu versuchen diesen Stoff bzw. die eingesetzten Verfahren zu substituieren.
721	2011/09/10 17:59	OMG Kokkola Chemicals Oy Company Finland	Comments on the proposed dates: 24 months to submit an application would seem reasonable. The sunset date of 18 months seems very short considering the time it would take to implement a change in process at an industrial scale. A minimum period of 36 months would be more reasonable.
625	2011/09/08 11:52 File attached Confidential	Praxair Surface Technologies Ltd., Swindon, Wiltshire, SN3 3HX, UK Company United Kingdom	For the case cobalt sulphate is put to Annex XIV we strongly ask the ECHA to industry more time to prepare the data for authorization.

1123	2011/09/13 18:11	Individual Germany	If the cobalt salts are included in Annex XIV in the near future the proposed timeframe is too short for several reasons: • Article 55 says that it is the aim to "ensure the good functioning of the internal market" by progressively replacing SVHC by "suitable alternative substances or technologies where these are economically and technically viable". The regulation specifically uses the word "progressively" implying that the users must be granted an appropriate timeframe for the transition from one technology/substance to another, where possible. • The authorization process is new and has never been used before. This implies that the applicants as well as all associated supporting entities need time to adapt to this new requirement in order to be able to provide information and documentation in accordance with regulation's requirements. 18 months are not an appropriate timeframe considering that o small and medium users need external support for this process, o users may wish to organize in groups for cost sharing, o users have to select appropriate supporters, o documents need to be finalized including reviews etc., o the capacity of supporting entities is limited. • Five cobalt salts are present in ECHA's draft recommendation for inclusion on Annex XIV. As these salts and chromium trioxide are used for surface treatment, this sector of industry does not have the capacity of handling two authorization processes at a time. Surface treatment shops usually are small to medium size companies that do not have the capacity to handle regulatory requirements of this extent as dedicated personnel is required. • Transitions to new technologies or new requirements involve a considerable complex process, investments and time. A complex process involving the whole supply-chain is triggered. Solely qualification processes for example for electronics applications take several years from the developed technology until application at the final product. Clearly these processes are very complex as the final product's properties may be safety-relevant.
910	2011/09/13 12:08	Company France	It is too short too study and find a substitute.

1083	2011/09/13 17:34 File attached Confidential	Company United Kingdom	No comments
1082	2011/09/13 17:29	University of Nottingham Academic institution United Kingdom	None

805	2011/09/12 16:38	Saft Company France	NOT RELEVANT as cobalt sulphate holds INTERMEDIATE STATUS in the manufacturing of active material for battery electrodes.
1775	2011/09/14 19:26	The Cobalt Development Institute Industry or trade association United Kingdom	Please refer to the following document for technical details: 1) final Joint Response Comments (JRC) on the five cobalt salts that were submitted into the present ECHA stakeholder consultation on Tuesday 30 August 2011 2) Technical Annex to the Cobalt Reach Consortium's (CoRC) Joint Response to ECHA's Consultation on the Proposed Inclusion of cobalt sulphate in Annex XIV of REACH (submitted September 2011)
1852	2011/09/14 19:26 File attached	The Cobalt Development Institute Industry or trade association United Kingdom	Please refer to the following document for technical details: 1) final Joint Response Comments (JRC) on the five cobalt salts that were submitted into the present ECHA stakeholder consultation on Tuesday 30 August 2011 2) Technical Annex to the Cobalt Reach Consortium's (CoRC) Joint Response to ECHA's Consultation on the Proposed Inclusion of cobalt sulphate in Annex XIV of REACH (submitted September 2011)

1549	2011/09/14 14:25 File attached	Enthone GmbH Please select organisation type.. United Kingdom	See attached
1808	2011/09/14 20:53 File attached	ACEA - European Automobile Manufacturers Association Industry or trade association Belgium	See attachment.

1231	2011/09/14 01:08 File attached	CETS aisbl Industry or trade association Germany	Should cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride, cobalt(II)-acetate and cobalt(II)-carbonate be prioritised for Annex XIV inclusion, it is imperative that the application and sunset dates be extended. As a non-threshold carcinogen, an application for authorization for the Cobalt salts will need to include a socio-economic analysis. Given the complexity of the supply chains of articles subject to surface treatment, additional time is needed. In that respect, the following dates should apply: application date (date for submitting applications for authorisation): July 2015 ; and sunset date: January 2017. A failure to grant additional time would have the practical effect of transforming the Annex XIV listing into an outright ban.
661	2011/09/09 12:00	Assogalvanica Industry or trade association Italy	Since cobalt sulphate is considered not to be included in Annex XIV, new deadline and sunset date are proposed to be set whenever more detailed information are available about the intermediate definition and the any possible replacement substances to cobalt salts.
804	2011/09/12 16:33	Company United Kingdom	Taking into account the time needed for eventual changes in industrial process or substitution at industrial scale, we think it is reasonable to propose a sunset date 36 months after the application date.

1179	2011/09/13 19:35	Safran Group Company France **Organisations having submitted the same comment or extracts of it are listed in Annex I.**	The aerospace industry requests that cobalt sulphate be exempt from Annex XIV of REACH for surface treatment. If this is unacceptable to ECHA, the aerospace industry requests the longest possible timescale to identify, test and qualify alternative substances capable of meeting the demanding corrosion protection requirements at high temperature. If ECHA follows previous practice, it is likely that cobalt sulphate will enter Annex XIV in January 2013, with a likely "Sunset date" of 3 years later, in January 2016. However, applications for Authorisation for the continued use of cobalt sulphate would have to be completed and submitted 18 months before the "Sunset date"; July 2014 by the latest. This represents insufficient time to complete the necessary R&D programmes required to produce qualified alternatives to cobalt sulphate. An extension of several years is essential for all concerned, so that an appropriate total lead time of 10 years is available in order to develop and qualify new technologies.
793	2011/09/12 16:02	Dr.Kubitz GmbH Company Germany	The development of a substitute material for magnetic materials is, if at all, not possible in the avalable time
550	2011/08/24 14:04	WWF European Policy Office International NGO Belgium	The timelines foreseen for transitional arrangements are too long. They should be shortened to an application date of 12 months (sun set date 30 months) after the date of inclusion in Annex XIV to ensure better protection for health and environment as soon as possible. This corresponds with the Commission Service estimate that the average time needed (for the preparation of a new application for authorisation) amounts to roughly 12 months, as mentioned in the Guidance on inclusion of substances in Annex XIV (p.35).

890	2011/09/13 11:45	European Aviation Safety Agency European Institution Germany	This chemical substance is used in manufacturing and or maintenance of aviation products and parts. It might not be easy to find an alternative substance that would have the same attributes and or performance and the banning of such substance may therefore have a negative impact on aviation safety. We invite the ECHA to consider a possible exemption for the use in aviation applications or an appropriate transition period. The European Aviation Safety Agency is willing to contribute to a discussion on such exemption or transition.
977	2011/09/13 14:46	Sweden MemberState Sweden	We agree with the proposed dates.
1154	2011/09/13 18:49 File attached	 Individual Italy	We need an extension of the deadlines (30 months as mentioned in the recommendation). Please see the enclosed letter.

1186	2011/09/13 19:49 File attached	DALIC Company France	We need an extension of the deadlines (48 months instead of 24 months as mentioned in the recommendation). Please see the enclosed letter.
747	2011/09/12 11:30	Company France	We need an extension of the deadlines.
909	2011/09/13 12:06 File attached	AIA-CP Company France	We need an extension of the deadlines; please see the enclosed letter

1863	2011/09/15 12:26	REISSER-Schraubentechnik GmbH, Member of Würth Group Company Germany	Wir widersprechen den vorgeschlagenen Zeitpunkten Englisch: We object the proposed dates.

III - COMMENTS ON USES THAT SHOULD BE EXEMPTED FROM AUTHORISATION, INCLUDING REASONS FOR THAT:

#	Date (Attachment provided)	Submitted by (name, Organisation/MS CA)	Comment
1169	2011/09/13 19:14 File attached	Company United Kingdom **Organisations having submitted the same comment or extracts of it are listed in Annex I.**	Relating to Article 58(2) of the REACH regulation it is hereby proposed to exempt the use of Chromium trioxide (-solutions) from the authorisation requirements. Article 58(2): Uses or categories of uses may be exempted from the authorisation requirement provided that, on the basis of the existing specific Community legislation imposing minimum requirements relating to the protection of human health or the environment for the use of the substance, the risk is properly controlled. In the establishment of such exemptions, account shall be taken, in particular, of the proportionality of risk to human health and the environment related to the nature of the substance, …. In the EU, human health and environmental aspects for safe handling of Chromium trioxide (-solutions) are regulated by the following laws and regulations: • EC 1907/2006 (REACH-regulation) • EC/1272/2008 (GHS-regulation) • 2002/95/EC (ROHS)

			• 2002/96/EC (WEEE) • 196/82/EC (Seveso-II-RL) • 2010/75/EU (IVU) • 2000/60/EC (WRR) • 98/249/EC For all these reasons we file for an exemption of the application of solutions containing cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride, cobalt(II)-acetate and cobalt(II)-carbonate in galvanic surface treatment technologies.
692	2011/09/09 15:06	Company Germany	Antrag auf eine Ausnahmeregelung für die Verwendung von Cobalt-II-Salzen gemäß Artikel 58(2) der REACH Verordnung. Artikel 58(2): Verwendungen oder Verwendungskategorien können von der Zulassungspflicht ausgenommen werden, sofern - auf der Grundlage bestehender spezifischer Rechtsvorschriften der Gemeinschaft mit Mindestanforderungen an den Schutz der menschlichen Gesundheit oder der Umwelt bei der Verwendung des Stoffes - das Risiko ausreichend beherrscht wird. Bei der Festlegung derartiger Ausnahmen ist insbesondere die Verhältnismäßigkeit des mit der Art des Stoffes verbundenen Risikos für die menschliche Gesundheit und die Umwelt zu berücksichtigen Entsprechend den europäischen und nationalen Regularien ist gewährleistet, dass die nationale Gesetzeslage in Deutschland eine ausreichende Sicherheit von Mensch und Umwelt garantiert: In der EU ist die Sicherung von Mensch und Umwelt beim Gebrauch von Chromtrioxid und seinen Lösungen gewährleistet durch die konsequente Umsetzung der folgenden gesetzlichen Regelungen: • EG 1907/2006 (REACH-Verordnung) • EG/1272/2008 (GHS-Verordnung) • 2002/95/EG (ROHS) • 2002/96/EG (WEEE) • 196/82/EG (Seveso-II-RL) • 2010/75/EU (IVU) • 2000/60/EG (WRR) • 98/249/EG In Deutschland werden diese Aspekte zusätzlich durch folgende Verordnungen erweitert bzw. umgesetzt: • Chemikaliengesetz • Störfallverordnung • Gefahrstoffverordnung

			• Bundesimmissionsschutzgesetz • Arbeitsstättenverordnung, ASR • Verordnung zur arbeitsmedizinischen Vorsorge • Arbeitsschutzgesetz • Kreislaufwirtschafts- und Abfallgesetz • Wasserhaushaltsgesetz • Abwasserverordnungen • Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen • TrwS, TRGS • Berufsgenossenschaftliche Vorschriften • Betriebssicherheitsverordnung Der sichere Umgang wird wesentlich im Rahmen der Bundes-Immissions-Schutz-Verordnungen (12. BimSchV) und der Störfallverordnung (StöfallV), §§ 8 und 9, geregelt. Einie sichere Handhabung mindestens für die Unternehmen, die den einfachen Pflichten der Störfallverordnung unterliegen, ist bereits gegeben, wie dargestellt. Aus diesen Gründen beantragen wir eine Ausnahmeregelung für die Verwendung von Cobalt-II-Salzen in Passivierungslösungen der galvanischen Oberflächenbeschichtung.
1652	2011/09/14 16:22	PortugalPortuguese Environment Agency MemberState Portugal	

1231	2011/09/14 01:08 File attached	CETS aisbl Industry or trade association Germany	• Use of Cobalt(II) sulphate for plating National and European law already require aspects of regulatory monitoring and control as well as to the increasing internationalization of requirements. Any additional configurable prioritization and approval of changes will only reproduce the current national requirements. Taking these experiences into account an inclusion of cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride, cobalt(II)-acetate and cobalt(II)-carbonate for plating in Annex XIV of the REACh regulation is not necessary. Relating to Article 58(2) of the REACH regulation it is hereby proposed to exempt the use of cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride, cobalt(II)-acetate and cobalt(II)-carbonate from the authorisation requirements. In accordance with the provisions of REACh the risk of the application is properly controlled by European and national laws. In the EU, the human health and environmental aspects for safe handling of Cobalt(II) salts are regulated the following laws and regulations: • EG 1907/2006 (REACH-regulation) • EG/1272/2008 (GHS-regulation) • 2002/95/EG (ROHS) • 2002/96/EG (WEEE) • 196/82/EG (Seveso-II-RL) • 2010/75/EU (IVU) • 2000/60/EG (WRR) • 98/249/EG
576	2011/09/01 13:47	Umicore NV/SA Company Belgium	According to REACH Title 1, Chapter 1, Article 2, 8b all intermediate uses are exempted from Authorisation. We are therefore of the opinion that all supported uses to which PC19 is assigned (cfr. registration dossier) should be specifically listed as being exempted in the recommendation for prioritisation of ECHA.

1064	2011/09/13 17:04	Agoria Industry or trade association Belgium	Agoria propose to integrate clearly the fact that most of the uses of the different cobalt salts are used as intermediate and thus exempted from the authorization procedure.
1762	2011/09/14 18:59 File attached	Company Germany	Antrag auf eine Ausnahmeregelung für die Verwendung von Kobaltsalzen (-lösungen) gemäß Artikel 58(2) der REACH Verordnung. Artikel 58(2): Verwendungen oder Verwendungskategorien können von der Zulassungspflicht ausgenommen werden, sofern - auf der Grundlage bestehender spezifischer Rechtsvorschriften der Gemeinschaft mit Mindestanforderungen an den Schutz der menschlichen Gesundheit oder der Umwelt bei der Verwendung des Stoffes - das Risiko ausreichend beherrscht wird. Bei der Festlegung derartiger Ausnahmen ist insbesondere die Verhältnismäßigkeit des mit der Art des Stoffes verbundenen Risikos für die menschliche Gesundheit und die Umwelt zu berücksichtigen Entsprechend den europäischen und nationalen Regularien ist gewährleistet, dass die nationale Gesetzeslage in Deutschland eine ausreichende Sicherheit von Mensch und Umwelt garantiert: In der EU ist die Sicherung von Mensch und Umwelt beim Gebrauch von Kobaltsalzen und seinen Lösungen gewährleistet durch die konsequente Umsetzung der folgenden gesetzlichen Regelungen: • EG 1907/2006 (REACH-Verordnung) • EG/1272/2008 (GHS-Verordnung) • 2002/95/EG (ROHS) • 2002/96/EG (WEEE) • 196/82/EG (Seveso-II-RL) • 2010/75/EU (IVU) • 2000/60/EG (WRR) • 98/249/EG In Deutschland werden diese Aspekte zusätzlich durch folgende Verordnungen erweitert bzw. umgesetzt: • Chemikaliengesetz • Störfallverordnung • Gefahrstoffverordnung • Bundesimmissionsschutzgesetz

			• Arbeitsstättenverordnung, ASR • Verordnung zur arbeitsmedizinischen Vorsorge • Arbeitsschutzgesetz • Kreislaufwirtschafts- und Abfallgesetz • Wasserhaushaltsgesetz • Abwasserverordnungen • Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen • TrwS, TRGS • Berufsgenossenschaftliche Vorschriften • Betriebssicherheitsverordnung Der sichere Umgang wird wesentlich im Rahmen der Bundes-Immissions-Schutz-Verordnungen (12. BimSchV) und der Störfallverordnung (StöfallV), §§ 8 und 9, geregelt. Aus diesen Gründen beantragen wir, die Fa. GEFO GmbH & Co. KG, eine Ausnahmeregelung für die Verwendung von Kobaltsalzen und seinen Lösungen in den Prozessen unserer galvanischen Oberflächenbeschichtung.
709	2011/09/09 18:16	Dr.-Ing. Max Schloetter GmbH & Co. KG, Geislingen/Steige Company Germany	As a consequence to the requirements oft he EU-regulations 2000/53/EG (End-of-life vehicles) and 2002/95/EG (RoHS) our company Dr.-Ing. Max Schlötter has developed passivation solutions free of chromium (VI). These alternative processes are based on chromium(III)-compounds. In order to achieve the minimum specified corrosion resistance, as they are demanded for example from the European automotive industry, it is necessary to use cobalt salts together with the chromium salts in these chromium(VI)-free passivations. Cobalt free processes are under evaluation. For some special applications with lower requirements cobalt-free passivations are already available. But for the more stringent requirements of the automotive industry it is still necessary to use the cobalt-containing chromium(III)-passivations. Possible risks by use of cobalt-containing passivation solutions All additives delivered for the make up of cobalt containing passivations are delivered in liquid form. Any risk of inhalation of dust is therefore excluded. The process of passivation of zinc-plated parts is made by immersing the parts into the solution. There is no formation of aerosols. Any uptake by dermal contact can also be excluded. For all employeers working with the cobalt-containing solutions it is mandatory to use personal protections, like gloves etc. The use of these personal protections is controlled by the employers or their deputies. Results from personnel monitoring of cobalt in the air at the workplace by external institutes showed results of less than 0,001 mg/m³.

			Oral uptake of cobalt-containing solutions can be excluded. In all areas, where cobalt-containing passivations are used, it is strictly prohibited to eat, drink or smoke. This is again controlled by the employers or their deputies. In the passivation layers the cobalt salts are not contained as they are used in the passivation solutions, but in a water-insoluble form of cobalt oxides or cobalt hydroxides. There is no risk that by handling of the passivated parts any uptake of cobalt compounds by dermal contact could happen. The standard EN 15205 describes a method to detect traces of chromium (VI) in passivation layers produced in chromium(III)-passivations. For this purpose the passivated parts are leached in boiling water for 10 minutes. Any chromium(VI), which might be present in the layer, is leached out by this method and can be analyzed in the solution. The same test was used to test whether there is any leaching of cobalt compounds. The solution after boiling was analyzed by ICP for cobalt. The test was made for 10 different samples. The leaching of cobalt was less than 0,1 µg/cm². Conclusion At the present time the substitution of cobalt salts in chromium(III)-passivations is not possible for all applications. For parts requiring a very high corrosion resistance as demanded for example by the automotive industry, it is for the time being still necessary to use the cobalt-containing chromium(III)-passivations. A safe use of the cobalt-containing passivations is possible. We ask therefore for an exemption of the authorization of cobaltsulphate for the application in chromium(III)-passivations.
1517	2011/09/14 12:50 File attached	RECHARGE aisbl Industry or trade association Belgium	As an intermediate in the Manufacturing of a battery, Cobalt (II) Sulphate should be exempted from the Authorization process according to REACH Regulation Title I, Chapter I, Article 2 (8) (b).

1154	2011/09/13 18:49 File attached	Individual Italy	Automated processes and enclosed processes in surface treatment should be exempted, as well as activities covered by IED directive. In the galvanic industry, cobalt sulfate is used in trivalent chromium conversion layers on zinc. Also in process of plating (layers Sn – Co) an article with a protective film to improve corrosion resistance. Passivation with trivalent chromium and cobalt sulfate has been created to replace hexavalent chromium passivation. Cobalt sulfate enhances corrosion resistance of zinc passivation part.
747	2011/09/12 11:30	Company France	Automated processes and enclosed systems in surface treatment should be exempted, as well as activities covered by the IED directive.
846	2011/09/12 19:15 File attached	LKS Kronenberger GmbH Metallveredlungswerk Company Germany	Because of a safety application, properly controlled risks by German laws regulations and according to article 58 (2) we file/demand an exemption of the application of Cobalt(II)-Disulphate in surface treatment processes/galvanic surface treatment technologies.

1798	2011/09/14 20:32 File attached Confidential	 Company France	Catalyst used in reaction of organic synthesis. COSO4 is used as a catalyst in organic synthesis. It is handled only at dedicated workplace in one of our european plants. It is used always only by properly trained and authorized personnel with procedural and control technologies to minimize emission and exposure: our use is not wide dispersive. It is used in internal process only, as a result there is no exposure to downstream users and consumers.
967	2011/09/13 14:33 File attached	EUROBAT Industry or trade association Belgium	Cobalt (II) dinitrate and Cobalt (II) sulphate are used as intermediates in preparation steps of active substances used in batteries. They are not present in batteries available to industrial or individual users. There is no substitution possible between Cobalt (II) dinitrate and Cobalt (II) sulphate and other Cobalt salts in the production process of batteries. The production of mixtures for use by the battery industry should be exempted from authorisation – for example under article 58.2 of the REACH Regulation - since these Cobalt salts are only used as intermediates in battery production.
625	2011/09/08 11:52 File attached Confidential	Praxair Surface Technologies Ltd., Swindon, Wiltshire, SN3 3HX, UK Company United Kingdom	Cobalt Sulphate is an indispensable substance used – in our case - in plating baths for surface treatment (about 5% of all the uses) and can not be replaced at the moment as it offers wear resistance at elevated temperatures. As the Weston Coated product enhance the wear resistances of the component, thus reducing the need to produce more components and using valuable resource thus reducing the overall environmental impact. The fuel efficiency is also increased by the Weston coating also reducing the overall Environmental impact. The coatings are for corrosion, wear and oxidation protection as well as modification of other surface properties such as friction and flow. Our products and services save our customers in fuel costs, replacement parts and repairs by keeping their equipment running longer and efficiently. Industries for which these products are of critical importance include aerospace, chemical processing, general manufacturing, industrial gas turbine and oil & gas. Aerospace application is the most critical point for the case Cobalt Sulphate will be forbidden.

1441	2011/09/14 10:39	Glass for Europe Industry or trade association Belgium	Cobalt sulphate is used as an intermediate for glass manufacturing. Therefore it should be exempted from Authorisation pursuant Article 2(8b) of REACH Regulation. In the document attached (section IV of the present consultation), Glass for Europe wishes to address to ECHA a few statements, concerning the use of the substance cobalt sulphate, by flat glass manufacturers. In particular, Glass for Europe highlights the intermediate status of raw materials used to produce glass, the control of risk exposure to raw materials in the workplace and issues linked to the potential substitution of cobalt sulphate by another substance.
661	2011/09/09 12:00	Assogalvanica Industry or trade association Italy	Cobalt sulphate is used in the galvanic industry not as raw material but as a mixture provided by third-party companies. The preparation is used in making/integrating water solutions utilized in "sealing" operation of final products. In particular, the mixture is diluted until the concentration varies from 0.1 to 0.5%. Professional exposure during processing is not significant because of the quantities used. Moreover, operational procedures and chemical analysis are required by law in the workplace. The spontaneous release of cobalt salts from final products appears to be non-significant. This would mean that, at least in the galvanic industry, the global diffusion of contaminant in normal conditions of use would be negligible. A time range is desirable in order to conduct a complete survey on potential release. The current state of industrial research does not propose alternative substances (of minor threat) able to provide the same performance in terms of quality and durability of the final product. In addition, the lesser durability will create more waste and the need for more recycling. An alternative technology (as qualitative as the present) will not be available before 10 years ahead. In the galvanic industry, cobalt sulphate is used in a particular treatment bath called passivation. The process consists of plating an article with a protective film (few µm) to improve corrosion resistance. The articles involved in this type of process belong to metal smallwares category. All market sectors are concerned (domestic and industrial tools, indoor/outdoor furnishing, cars, electronics, computer, etc). Therefore, the high commercial and socio-economic importance of cobalt sulphate in the galvanic industry is evident. Since in Italy the average size of the approximately 2000 galvanic companies is small to medium, the possible inclusion of cobalt sulphate inside of annex XIV would entail additional costs hardly sustainable by factories already affected by the current recession climate. It is therefore conceivable that the renunciation of the use of cobalt salts, would result in exiting the business to the advantage of non-EU competitors. The competitiveness of Italian and EU

			companies, in other words, would be damaged. For all the reasons above, it is suggested that at least the use of cobalt sulphate in the galvanic industry should be exempt from any authorization.
731	2011/09/12 10:00	Company Germany	Cobalt(II) sulfate is used as precursor in processes for making positive active materials for NiCad and NiMeH secondary batteries. Along with the rapid development of mobile electric devices and appliances, there is an increased demand for NiCad and Nickel Metal Hydride batteries having high energy density as well as high power rating. In this respect Cobalt(II)sulfate plays a decisive role as electroconductive agent to improve capacity and rate capability of the nickel hydroxide electrodes for enhanced alkaline batteries. Cobalt(II) sulfate cannot be chemically interchanged with other substances to provide the same electrochemical function in alkaline batteries. According to state of the technology the engineering use of Cobalt(II) sulfate is carried out in closed process systems under strictly controlled conditions. Thus any danger for environment or operator is prevented.
1202	2011/09/13 20:26 File attached	European Biogas Association International NGO Czech Republic	Cobalt(II) sulphate is an indispensable element of methanogenic bacteria metabolism, as it is the source of the trace element Cobalt. Cobalt is needed as a catalytic element for chemical reactions catalyzed by various Cobalt-based enzymes. Biogas production and utilization is an integral part of many environmental technologies like sewage sludge treatment, bio-waste treatment and also an important part of agricultural manure treatment in sustainable agriculture. Furthermore biogas utilization is an important pillar of the European bioenergy policy. The near term goals of biogas development are defined in National Renewable Energy Action Plans in all the 27 Member States.

721	2011/09/10 17:59	OMG Kokkola Chemicals Oy Company Finland	Comments on uses that should be exempted, including reasons for that: We consider the following uses as intermediates and should therefore be exempt: • manufacturing of cobalt sulphate • manufacturing of other cobalt chemicals, • production of driers or pigments, • manufacturing of textile dyes, • manufacture of inorganic pigments & frits, glass and ceramic ware, • manufacturing of other substances used in batteries and catalysts. • use in surface treatments Authorisation under REACH is not required when a substance is used in food or feeding stuffs in accordance with Regulation (EC) No 178/2002. Use as animal feed additive is also exempt from authorisation (EU 1831/2003).
793	2011/09/12 16:02	Dr.Kubitz GmbH Company Germany	Co-sulfate is being used as ingredient for an electrolyte that permits the deposition of a Co-coating with unique magnetic parameters. These coatings are magnetically coded and serve for as scale for in automatic angular and distance measuring e.g. in the machine tool industry. There advantage over all competing systems is robustness anainst dirt and adverse environmental conditions and their modest requirements for space. They are contained in some products of at least one major ball bearing manufacturer. (In the product there remains no cobaltsulfate but only the Co-metal).
1781	2011/09/14 19:41 File attached Confidential	Company Germany	Die mbw-Gruppe kann auf Grund der oben angeführten Argumente die Aufnahme der Kobalt-Salze in den Anhang XIV der REACh-Verordnung nicht unterstützen. Im Falle einer Aufnahme der Stoffe Kobalt(II)-dinitrat, Kobalt-dichlorid, Kobalt(II)-sulfat, Kobalt(II)-diacetat, Kobalt(II)-carbonat in den Anhang XIV der REACh-Verordnung fordert die mbw-Gruppe eine Ausnahmeregelung für die Verwendung von Kobaltsalzen in Lösungen zur Erzeugung von Konversionsschichten auf Zink- und Zinklegierungsschichten bei galvanischen Korrosionsschutzsystemen.

601	2011/09/07 15:58 File attached	HSO Herbert Schmidt GmbH & Co. KG Company Germany	Economic importance of coating operations for Europe and for Germany Sales of passivation (chromium (III)-based) and chromate (chromium VI)-based) for galvanizing in Europe is around 40 million euros, of which about 16 million € in Germany. This corresponds to perform a cost or revenue share of around 2.5% in electroplating, the zinc coatings. This represents a production volume in Europe during the coating operations of approximately: 1.600 million €. The turnover moderate proportion of Cr (III) - based passivation is about 95% of the market segment conversion coatings for zinc and zinc alloys. The remaining sales accounted for 5% of chromium (VI)-based chromate is approximately 10% of the treated surface. The European added value of approximately € 1,600 million, which is generated by companies in the electro-galvanization, is a ban on the use of chromium (VI) - and especially of cobalt salts in Europe directly affected. • The percentage of chromium (VI)-related applications is approximately 5% = 80 million € • The proportion of cobalt-related applications is approximately 75% = € 1,200 million The remaining sum of approximately € 320 million will be generated with already with cobalt and chromium (VI)-free layers, which are but usually at a lower level of quality. In addition, this segment is coated in the same facilities as the rest of goods. The withdrawal of the vast amount of attack will therefore drastically increasing fixed cost allocations. The remaining production is no longer economical to operate, would have to close the affected farms. The share of German manufacturing companies in the European market is about 40%. The production volume of galvanizing for Germany amounts to approximately EUR 640 million. Thereof is • the proportion of chromium (VI)-related applications around 5% = 32 million € • the proportion of cobalt-relevant applications, about 75% = € 480 million 5.2 Overall Economic Impact of the conversion coating 5.2.1 Example: Automotive Industry in Germany A revenue share of about 45% of the coated parts of galvanizing goes into the automotive industry, eg for housing, mounting rails, brake parts, piping, safety clamps, gear and shock absorber caps, fuel pumps, screws, etc. According to VDA (as of 25/03/2011) have been built in Germany in 2010, 5,552,409 cars and trucks 353 576. With an average selling price of products produced in Germany by car of about 25,000 € (acceptance VDA) results in a production volume of € 140 billion alone in the German automotive industry, to ensure longevity and reliability requires numerous galvanized components (estimated at about 500 -1 000 components with a conversion coating on zinc or zinc alloy per vehicle).

			If the financial part is not taken into account and only be charged for the automotive industry in Germany finished product with> 500 parts per car, this meant that without finishing with galvanic zinc coating processes more than 2.8 billion pieces per year, not only in the electroplating were processed. 5.2.2 Example of window fittings manufacturer A revenue share of about 20% of the coated parts of galvanizing goes into the manufacture of fittings for the window. The total demand of products for the galvanic surface treatment in Europe is about 25 million € per year, of which approximately € 8 million for cobalt-containing passivation. The majority of the coatings is carried out in Germany, France and Austria. The galvanic finishing contributes with a share of about € 100 million per year for the European national product caused by a high proportion of manual labor secured jobs for 3,000 people. Generate a total of European manufacturers of window and door hardware has annual sales of about 3000-4000 million € and employs about 16,000 - 20.00 employees. The high conservation value of the electroplated components contributes significantly to the durability of the manufactured goods sector, in particular the window at. A ban on the use of cobalt salts in passivation would reduce the corrosion protection of coated parts, and thus clearly have a negative impact on the longevity and sustainability of industrial economic activity in Europe. Increased use of raw materials and additional energy consumption would result and would reduce Europe's climate protection goals and aspirations for the burden of CO2 emissions. SUMMARY Essential property of coated steel parts used in all areas of industry, commerce and even in households is used, the cathodic corrosion protection by zinc and zinc alloy layers, which is amplified by conversion layers. It is and remains an ongoing task of the electroplating industry, with new and / or improved functionality and durability of the coating processes to ensure the products. At the same time through the regeneration process solutions to extend the service life, reduced energy and material use and thus reduces pollution. Cobalt-free thick film passivation for zinc and zinc-iron alloys are currently in development. As at time of testing in many cases can replace the conventional thick film passivation with cobalt salts. However, to date there is only a limited field experience. Here is an extensive testing is required by the galvanic shops; improvements and adjustments in the application of technology must be developed. In addition, the laboratory testing of the layers and the functional testing and field testing is required by end-users to determine the film properties in real practical use to try and make sure. In large areas of security aspects are taken into account. The HSO Herbert Schmidt GmbH & Co. KG therefore assumes that a broad application field,

			especially in the automobile industry about 6 - 8 years requires lead time. Therefore necessary to restrict the use of cobalt salts long transition periods and a general exception for the use for the manufacture of components of existing series, as indeed it was also granted in the ELV regulation. The HSO Herbert Schmidt GmbH & Co. KG requested an exemption for the use of cobalt salts (cobalt (II) dinitrate, cobalt dichloride, cobalt (II) sulfate, cobalt (II) diacetate, Cobalt (II) carbonate) solutions in the production of conversion layers in case of intake of these substances in Annex XIV of the REACH regulation. The use of chromium trioxide / chromic acid for the purpose of chromate of zinc, zinc-alloy layers and the production of conversion layers on light metals should be for a transitional period of about 10 years for special applications (eg aviation, military equipment, spare parts for the automotive industry, optical industry) of the authorization requirement in the case of absorption of these substances are released into Annex XIV of the REACH Regulation.
531	2011/08/17 13:45	MTU Aero Engines GmbH Company Germany	Eine Ausnahme von der Zulassungspflicht für die Luftfahrtindustrie ist anzustreben. Um die Sicherheit im Bereich der Luftfahrt weiter aufrecht erhalten zu können, ist es zwingend erforderlich, galvanische Verfahren mit gefährlichen Stoffen zu betreiben. Kobalt(II)sulphat wird in der MTU Aero Engines GmbH als Beschichtungszusatz für Flugtriebwerksbauteile eingesetzt. Dies geschieht in Deutschland (hier liegt eine sehr restriktive Anforderung der Che-mikalien- und Umweltgesetzgebung vor) nach dem Stand der Technik. Der Schutz der Mitarbeiter ist jederzeit durch die technischen-, organisatorischen- und persönli-chen Schutzmaßnahmen sichergestellt. Eine Einschränkung dieser Anwendung hätte zur Folge, dass die Sicherheit bestimmter Flugtriebwerkbauteilen nicht mehr gewähr-leistet werden kann. Dem Anspruch der Luftfahrtindustrie, sichere Verkehrsmittel zu erstellen um damit die Sicherheit eines zukunftsträchtigen Verkehrsbereiches zu ge-währleisten, ist nur mit besonderen, international festgeschriebenen Verfahren zu erfüllen. Demzufolge, um die Sicherheit der Bauteile weiter aufrecht erhalten zu kön-nen, ist damit zu rechnen, dass über die Verlagerung entsprechender Verfahren ins außereuropäische Ausland nachgedacht wird. Mit der potentiellen Verlagerung würden Teile von Hochtechnologie in Europa verlo-ren gehen. Außerdem ist bekannt, dass in einigen außereuropäischen Ländern ver-schiedene Gefahrstoffe nicht als solche eingestuft sind. Durch Verlagerung von Pro-duktion und Verfahren in diesen Ländern ist mit einer höheren Gefährdung der Um-welt und der Mitarbeiter zu rechnen.

1863	2011/09/15 12:26	REISSER-Schraubentechnik GmbH, Member of Würth Group Company Germany	Einsatzgebiete: o chemische Industrie o Galvanikindustrie o Korrosionsschutz o Oberflächenbehandlung o Oberflächenschutz o Passivierung von Zink und Zinklegierungsbeschichtungen Verfügbarkeit von Alternativen o Sind noch in der Entwicklung, jedoch können die Eigenschaften von cobalt-haltigen Passivierungen bis heute nicht erreicht werden. o oder extrem teuer o Preis-Leistungsverhältnis stimmt nicht Sichere Handhabung in den Betrieben: o Die sichere Handhabung der Substanzen in galvanischen Betrieben sind durch entsprechende Schutzausrüstungen gewährleistet, Englisch: Applications: o chemicals industry o electroplating industry o protechtion against corrosion o surface treatment o surface protection o protection of zinc and zinc alloy plating Availiability of Alternatives o alternatives are still in development, but until now the altenatives do not reach the performance an process capability of cobalt containing zinc protection solutions . o the alternatives are much more expansive o there is a big gap in cost/performance ratio Assured handling in shop floor: o the assured handling at electroplating shops is achieved by providing and using personal protective equipment

910	2011/09/13 12:08	Company France	Electrodeposition : electroplated as Co metal with nickel. Application in military aeronautics
687	2011/09/09 14:48 File attached	DSM Company Netherlands	Exemption is requested for the authorization of cobalt sulfate in fermentation processes. Arguments are: - the volumes are very low - essential trace element for biological processes - uses at the fermentation facilities are contained - after use of fermentation no further exposure to humans and/or the environment - see for further information attached document
998	2011/09/13 15:11 File attached	Stiefler GmbH Company Austria	General permission for passivation of electroplated zinc and its alloys – see attached files SU 3 PC 7, 14 PROC 1 - 5, 13 - ERC 1, 2, 4, 5 SU10 PC 14 PROC 1- 5 - ERC 2, 5 SU10 PC 14 PROC 1- 5 - ERC 2, 5 SU 17

			PC 14 PROC 1- 5, 13 - ERC 2, 5 we refer to attached Datafiles: 2011-09-08_Anschreiben_ECHA_fuer_Ausnahmeantrag_allgemein.DOC Ausnahmeregelung Cobalt_englisch/deutsch.DOC
921	2011/09/13 12:47 File attached	Company Germany	General permission for passivation of electroplated zinc and its alloys – see attached files SU 3 PC 7, 14 PROC 1 - 5, 13 - ERC 1, 2, 4, 5 SU10 PC 14 PROC 1- 5 - ERC 2, 5 SU10 PC 14 PROC 1- 5 - ERC 2, 5 SU 17 PC 14 PROC 1- 5, 13 - ERC 2, 5

1179	2011/09/13 19:35	Safran Group Company France	Given the facts that : Ø the total quantity of cobalt sulphate is very small Ø the substance is used only in the process and by a very little number of companies Ø the process is implemented by professional companies which apply the relevant safety rules in their facility for handling the substance Ø the exposure scenarios in the processing facilities are limited thanks to the dissolution of the substance in the baths Ø the substance does not remain on the parts, The Safran Group requests that cobalt sulphate be exempt from Annex XIV of REACH for surface treatment.
1446	2011/09/14 10:48 File attached	A.M.P.E.R.E. DEUTSCHLAND GmbH Company Germany	In the event that these substances are included in Appendix XIV of the REACH regulations we demand that there has to be an exception to the rules to allow the use of Cobalt(II)-Salts for the purpose of anti-corrosion, decorative, bright and functional Cobalt-Alloy-Plating.
1187	2011/09/13 19:52 File attached	Galvano Röhrig GmbH Company Germany	In Anbetracht oben genannter Fakten bitten wir Sie zu prüfen, eine generelle Ausnahme für die Nutzung dieses Stoffes, aufgrund der gegebenen Gesetzeslage in Deutschland, auszusprechen.

1186	2011/09/13 19:49 File attached	DALIC Company France	In surface treatment, closed processes like DALISTICK or processes saving CO2 and energy like DALISTICK and BRUSH PLATING, should be exempted, as well as activities covered by the strict regulations concerning health & safety and environment in reason of the existing surveillance of companies by the states. This should apply in particular to companies, which have already provided great efforts to fulfill the requirements of these regulations. For the others, it should be preferable to organize or reinforce regulations and the use of the protection measures rather than to favour their closing for economical reasons. Processes, like DALISTICK and BRUSH PLATING should be also exempted because they are sold (with solutions) and used in the whole world for local repair or local treatment on new parts (e.g. in railways, energy or print industry). Please see the enclosed letter.
1096	2011/09/13 17:52 File attached	Central Industry or trade association Germany	In the event that these substances are included in Appendix XIV of the REACH regulations we demand that there has to be an exception to the rules to allow the use of Cobalt(II)-Salts for the purpose of anti-corrosion, decorative and bright Cobalt-Alloy-Plating.
620	2011/09/08 10:31	CEPE Industry or trade association Belgium	Intermediate uses of cobalt sulphate, including the manufacture of drying agents for paints and printing inks, should be exempted according to article 2 (8) b from the REACH Regulation.

851	2011/09/12 19:28 File attached	Company Germany	Passivation of electroplated zinc and its alloys See data file: Ausnahmeregelung Cobalt_englisch/deutsch.DOC
1775	2011/09/14 19:26	The Cobalt Development Institute Industry or trade association United Kingdom	Please refer to the following document for technical details: 1) final Joint Response Comments (JRC) on the five cobalt salts that were submitted into the present ECHA stakeholder consultation on Tuesday 30 August 2011 2) Technical Annex to the Cobalt Reach Consortium's (CoRC) Joint Response to ECHA's Consultation on the Proposed Inclusion of cobalt sulphate in Annex XIV of REACH (submitted September 2011)
1852	2011/09/14 19:26 File attached	The Cobalt Development Institute Industry or trade association United Kingdom	Please refer to the following document for technical details: 1) final Joint Response Comments (JRC) on the five cobalt salts that were submitted into the present ECHA stakeholder consultation on Tuesday 30 August 2011 2) Technical Annex to the Cobalt Reach Consortium's (CoRC) Joint Response to ECHA's Consultation on the Proposed Inclusion of cobalt sulphate in Annex XIV of REACH (submitted September 2011)

1190	2011/09/13 19:57 File attached	Verband der Automobilindustrie VDA Industry or trade association Germany	Relating to Article 58(2) of the REACH regulation it is hereby proposed to exempt the use of Cobalt (II) sulphate from the authorisation requirements. In accordance with the provisions of REACh the risk of the application is properly controlled by the German laws. see annex
1549	2011/09/14 14:25 File attached	Enthone GmbH Please select organisation type.. United Kingdom	See attached
1669	2011/09/14 16:42 File attached	FEFANA asbl and TREAC EEIG Industry or trade association Belgium	see attached pdf file

1808	2011/09/14 20:53 File attached	ACEA - European Automobile Manufacturers Association Industry or trade association Belgium	See attachment.
1595	2011/09/14 14:58 File attached	Dr.Hesse GmbH & Cie. KG Company Germany	siehe Erläuterungen unter "General comments"
1056	2011/09/13 16:54	Company France	The aerospace industry requests that cobalt sulphate be exempt from Annex XIV of REACH for surface treatment.. Finally, it is important to note that current production and legacy products will need to be maintained and possibly repaired throughout their life. It is essential that compatible corrosion protection products are available – for this reason cobalt sulphate should be exempt from the requirements of Annex XIV for surface treatment.

1050	2011/09/13 16:47	Company Germany	The aerospace industry requests that cobalt sulphate be exempt from Annex XIV of REACH for surface treatment.. Finally, it is important to note that current production and legacy products will need to be maintained and possibly repaired throughout their life. It is essential that compatible corrosion protection products are available – for this reason cobalt sulphate should be exempt from the requirements of Annex XIV for surface treatment.
964	2011/09/13 14:28	Aerospace and Defence Industries of Europe Industry or trade association United Kingdom	The aerospace industry requests that cobalt sulphate be exempt from Annex XIV of REACH for surface treatment.. Finally, it is important to note that current production and legacy products will need to be maintained and possibly repaired throughout their life. It is essential that compatible corrosion protection products are available – for this reason cobalt sulphate should be exempt from the requirements of Annex XIV for surface treatment.
1082	2011/09/13 17:29	University of Nottingham Academic institution United Kingdom	The electroplating bath which has been developed to produce Co-W alloy coatings which have low coefficient of friction properties in the absence of a lubricants is made up from the following chemicals:- Cobalt Sulphate (0.05 M); Sodium Tungstate (0.050 M); Sodium Gluconate (0.55M); Sodium Chloride (0.50 M), 0.65M boric acid The solution is operated at pH 6 and at a temperature of 80°C. After the solution is prepared, the cobalt exists in a fully-complexed gluconate form, mainly as [Co(C6H11O7)2(C6H10O7)]2- anion. The excess of Sodium Gluconate (0.55M) present ensures that a very low level of Co2+ ions is present in the bath (in the neighbourhood of 0.1%. This mechanism has been demonstrated by UV spectroscopy, voltammetry and calculations of the % of ionic species from stability data(1). Thereafter, the concentration of the Cobalt Gluconate complex is maintained by its dissolution from cobalt anodes and recycling of gluconates as Co deposition occurs. The bath also contains tungstate which, in the absence of gluconate or other complexing agent, readily forms insoluble cobalt tungstates. Thus, sulphate ions in the bath are relegated to the role of spectator ions and play no further role in the bath chemistry. In this

			situation, Cobalt Sulphate used in the initial set up of the bath can be classified as an intermediate under the interpretation given by the ECHA paper (2) published in May 2010. Under Article (15) of REACH, an intermediate is defined as a substance that is manufactured and consumed in or used for chemical processes in order to be transformed into another substance. There are three categories of intermediate: non-isolated, on-site isolated and transport isolated. In the existing plating process described above, Cobalt Sulphate could be classified as a transported isolated intermediate, i.e. manufactured at one site and consumed and used at another. Whilst there are exemptions and authorisation for use of such intermediates they need registration etc. Developments have now been made which can be described as two processes:- (1) the preparation of a cobalt- tungsten plating bath which does not involve the manufacture of cobalt sulphate salt; this could take place either at a supply house or separately in the plating shop . The source of cobalt for the bath could be either cobalt metal or Cobalt Oxide, neither of which are under consideration for REACH registration. The proposed sequence of preparation of the plating bath involves a: ● Reaction of Cobalt Oxide or cobalt metal with sulphuric acid and gluconic acid to form a complexed Cobalt Gluconate solution, ● Neutralisation of the acid by the addition of Sodium Hydroxide ● Addition of Sodium Tungstate, Boric Acid and Sodium Chloride. (2) Thereafter, the plating bath produced under (1) would be operated and coatings prepared. At this stage there would little opportunity for the electroplate to be contaminated by Co2+ ions and the reformation of cobalt sulphate as Co2+ will be at level of the order of 0.1%. The bath would be maintained by the dissolution of Cobalt metal anodes and the addition of sodium gluconate to the bath as required.. At no stage thereafter would a cobalt salt on the REACH list be used in bath maintenance. The product of the deposition process will be cobalt-tungsten alloy coatings which can only be formed in the presence of the complexed cobalt ions. Low levels of cobalt could be transferred to rinsing water but as complexed gluconates, and these could be handled by conventional plating bath and water purification techniques. Such changes in preparation of the plating bath will, it is believed, influence the REACH category to be changed to 'on site intermediates' i.e. whereby any Cobalt Sulphate which is manufactured will be immediately consumed in a chemical process at one and the same site. The on-site intermediate is isolated for the very short period between its creation and use in the chemical process of complexing by the gluconate. It is understood that such exemption covering isolated intermediates does concern each of the four aspects of REACH (registration, authorisation, evaluation and restriction) i.e.

			• Exemption from Chapter 1 of title 11 (registration), • Reduced registration requirements, • Exemption from title V11 (authorisation) as per article 2(8), • Exemption from substance dossier evaluation, • Exemption from new/amended restrictions. Once the plating solution is produced either in the plating shop or remotely at a Supply House, the solution does not contain a REACH listed substance. It can then be transported from Supply House to plating shop without authorisation. At the plating shop, it will be maintained under conventional plating practices to ensure composition is maintained and thus no Co2+ or cobalt sulphate will reform. The approach of a Supply House producing the plating solutions would mean that there would only be a small number of sites (estimated at 1 to 9) in Europe that would present the possible small risks of exposure to the listed cobalt salts even if expansion of the deposition process were then to be expanded to many plating shops. References (1) 'Establishing Relationships Between Bath Chemistry, Electrodeposition and Microstructure of Co-W Alloy Coatings Produced from a Gluconate Bath' DP Weston, SJ Harris, PH Shipway, NJ Weston and GN Yap, Electrochimica Acta, 55, 2010, 5695-5708. (2) Definition of intermediates as agreed by Commission, Member States and ECHA on 4 May 2010, Reference: ECHA-10-G-13-EN, Publ.date: 05/2010
1083	2011/09/13 17:34 File attached Confidential	Company United Kingdom	The manufacturers of gas turbines for a variety of applications would like to draw the attention of the EC, ECHA and the Competent Authorities for the Member States to two particular applications of cobalt (II) sulphate which are: • Vital for the safety of various critical gas turbine components across many industry sectors • Used in a well-controlled environment, resulting in very few individuals across industry being exposed • Used in low volumes • Not considered to be wide dispersive use The consequences of elimination of cobalt (II) sulphate on gas turbine and engine manufacture are disproportionately high in the extreme. As a consequence of these issues (outlined in the technical supporting information attachment), we would like to ask that the use of cobalt (II) sulphate in the application of the two specific coatings be excluded from the scope of Authorisation.

1817	2011/09/14 21:23 File attached	The Federation of Finnish Technology Industries Industry or trade association Finland	The use of cobalt sulphate as an intermediate in order to manufacture other chemicals is exempted for authorisation (REACH Title 1, Chapter 1, Article 2, 8b). Specific uses considered as intermediates are as following: - Manufacture of cobalt sulphate and the use of cobalt sulphate in the production of cobalt metal. - Manufacture of cobalt sulphate and the use of cobalt sulphate in the production of cobalt carbonate. - Industrial use of cobalt sulphate in surface treatment processes. - Manufacturing and industrial use of batteries using cobalt sulphate. - Industrial use of cobalt sulphate in the manufacturing of textile dyes. - Industrial use of cobalt sulphate in the manufacturing of inorganic pigments and frits, glass and ceramic ware. - Industrial use of cobalt sulphate in the manufacture of chemicals and in other wet-chemical processes.
540	2011/08/19 16:51	European Catalyst Manufacturer's Association (ECMA) Industry or trade association Belgium	The use of Cobalt sulphate as intermediate for the manufacture of other cobalt compounds in the catalyst industry is exempted from authorisation according to Article 2.8. (b) of Regulation (EC 1907/2006).
804	2011/09/12 16:33	Company United Kingdom	The use of Cobalt sulphate in animal feed falls under the scope of food safety regulation (EC 178/2002) and, as such, is exempted from Authorisation. As per REACh legislation (Title 1 – Article 2 – 8b), intermediate uses are exempted from Authorisation. Cobalt sulphate is used as intermediate to obtain dyestuff. Ceramic applications are also recognized as intermediate uses. On top of that, CMR compounds are already covered by other legislations including: the Carcinogens Directive 90/394/EEC, Directive 98/24/CE, Directive 2004/37/EC and IPPC directive (Dir. 2008/1/EC) cover already risk management of carcinogens at work.

1705	2011/09/14 17:40 File attached Confidential	Company Netherlands	The use of cobalt(II) sulphate (as a water treatment chemical) in a formulated mixture for adding this mixture to process water as a nutrient solution should be exempted from the authorisation requirement. This use is also mentioned on page 3 of the draft background document for cobalt(II) sulphate. Cobalt is essential for the growth and activity of microorganisms that perform the purification processes, like the conversion of pollutants to methane. For further information we refer to the attached documents.
890	2011/09/13 11:45	European Aviation Safety Agency European Institution Germany	This chemical substance is used in manufacturing and or maintenance of aviation products and parts. It might not be easy to find an alternative substance that would have the same attributes and or performance and the banning of such substance may therefore have a negative impact on aviation safety. We invite the ECHA to consider a possible exemption for the use in aviation applications or an appropriate transition period. The European Aviation Safety Agency is willing to contribute to a discussion on such exemption or transition.
1580	2011/09/14 14:47	Company United Kingdom	Use as a passivating agent should be exempted: small quantities are used, there is no exposure to the general public, and exposure to workers can be kept to an insignificant level. Inclusion in Annex XIV is unlikely to generate any significant environmental or health benefits; but could result in job losses if ready plated parts are imported from outside the EU.

805	2011/09/12 16:38	Saft Company France	Use of cobalt sulphate as a non-isolated intermediate to manufacture active material for battery electrodes is EXEMPT FROM REACH, according to REACH (Title 1, Chapter 1, Article2, 1c).
798	2011/09/12 16:11 File attached Confidential	Norilsk Nickel Harjavalta Oy Company Finland	Use of cobalt sulphate as an intermediate to manufacture other chemicals is exempt (REACH Title 1, Chapter 1, Article 2, 8b). Specific uses considered as intermediates are listed below: • Manufacture of cobalt sulphate and use of cobalt sulphate in the production of cobalt metal. • Manufacture of cobalt sulphate and use of cobalt sulphate in the production of cobalt carbonate. • Industrial use of cobalt sulphate in surface treatment processes (intermediate use). • Manufacture and industrial use of batteries using cobalt sulphate (intermediate use). • Industrial use of cobalt sulphate in the manufacture of inorganic pigments & frits, glass and ceramic ware (intermediate use). • Industrial use of cobalt sulphate in the manufacture of textile dyes (intermediate use). • Industrial use of cobalt sulphate in the manufacture of chemicals and in other wet-chemical processes as intermediate.
567	2011/08/30 22:17 File attached	Cobalt REACH Consortium Ltd (CoRC) Industry or trade association United Kingdom	Use of cobalt sulphate as an intermediate to manufacture other chemicals is exempt (REACH Title 1, Chapter 1, Article 2, 8b). Specific uses considered as intermediates are listed below: -Manufacture of cobalt sulphate and use of cobalt sulphate in the production of cobalt carbonate. -Industrial use of cobalt sulphate in surface treatment processes (intermediate use). -Manufacture and industrial use of batteries using cobalt sulphate (intermediate use). -Industrial use of cobalt sulphate in the manufacture of inorganic pigments & frits, glass and ceramic ware (intermediate use). -Industrial use of cobalt sulphate in the manufacture of textile dyes (intermediate use). -Industrial use of cobalt sulphate in the manufacture of chemicals and in other wet-chemical processes as intermediate. Authorisation under REACH is not required when a substance is used in food or feeding stuffs in

			accordance with Regulation (EC) No 178/2002.
1123	2011/09/13 18:11	Individual Germany	Uses where cobalt salts can not be replaced Corrosion Protection Conversion Layers Despite extensive research and development activities there is currently no alternative to cobalt salts in corrosion protection conversion layers if very high corrosion protection is required. Particularly the following industries depend on these coating systems and would be heavily affected if the high level of corrosion protection would be jeopardized by inclusion of cobalt salts in Annex XIV: ☐ Automotive industry ☐ Aerospace industry ☐ Defense ☐ Other parts of industry where corrosion protection is vital for safety Hard Gold Coating Gold-cobalt layers are used in manufacturing of electronic equipment (contactors) and jewellery. The addition of cobalt is essential for the required characteristics of the layer: hardness, abrasion resistance and microstructure. Alternatives: ☐ Gold-nickel: significantly different characteristics of the surface. Particularly reduced hardness, solderability and long-term stability limit applicability in electronics. ☐ Gold-iron: No industrial application and very limited experiences about long-term stability ☐ Cyanide-Gold: Partially applicable for decorative applications (jewellery). Advantage from the health, safety and environmental point of view is doubtful. Tin-Cobalt Coating Tin-cobalt layers are used for decorative plating (substitute for decorative chrome plating). For barrel plating (screws and other small parts) chrome plating is not applicable and no alternative for tin-cobalt plating is available. Safe use

			The background documents for cobalt sulphate and cobalt dichloride state that "Releases at workplaces in industrial settings seem to be controlled in most cases but some processes, involving handling of powder forms of the substance have a potentially significant exposure potential for industrial workers." No handling of powder form of cobalt salts take place in industrial surface treatment. No other indications of significant exposure of workers or emissions to the environment are provided in the background documents or in the Annex XV reports. Existing specific Community regulations and national exposure limit ensure that risks are properly controlled. PPORD The product and process oriented research and development (PPORD) should be clearly exempted from the authorization process. Please note the following reasons: a. Alternative technology development has to use cobalt salts in order to develop further. Restrictions would hinder PPORD from fulfilling his role in the REACH framework. b. Following Article 55, the aim of the authorization is to control the risks from SVHC. In order reduce the risks from SVHC the need for PPORD is evident, which may result in optimized processes reducing the risks for human health and the environment. c. Personnel's exposure in PPORD is significantly reduced against production processes as the time of exposure is reduced, the throughput is lower by decimal powers and usually equipment with latest safety measures is used.
909	2011/09/13 12:06 File attached	AIA-CP Company France	utomated processes and enclosed systems in surface treatment should be exempted, as well as activities covered by the IED directive; please see the enclosed letter

1461	2011/09/14 11:10 File attached	Arnold Umformtechnik GmbH&Co.KG Member of Würth Company Company Germany	We recommend exemptions for following applications : o chemicals industry o electroplating industry o protechtion against corrosion o surface treatment o surface protection o protection of zinc and zinc alloy plating
682	2011/09/09 13:53	 Company Germany	We suggest that all steps in the process of using cobalt sulfate in scientific R&D should be exempted from authorization. This should cover the steps starting from manufacture of the substance (already exempted), filling and refilling into packages, and preparation of formulations till the use in scientific R&D. The use of these formulations for scientific R&D (< 1t/a) is already exempted. Cobalt sulfate is a substance used for scientific R&D, e.g. as catalyst. The substance will only be supplied in packages used in laboratories, e.g. small bottles. Cobalt sulfate is used in the laboratory by industrial and professional users that are well-trained.

IV - COMMENTS ON USES FOR WHICH REVIEW PERIODS SHOULD BE INCLUDED IN ANNEX XIV, INCLUDING REASONS FOR THAT:

#	Date (Attachment provided)	Submitted by (name, Organisation/MS CA)	Comment
964	2011/09/13 14:28	Aerospace and Defence Industries of Europe Industry or trade association United Kingdom	It is essential that when this substance is subject to review, the performance of any alternative substances is considered both in terms of the performance specifications of the industry and the need to be compatible with corrosion protection treatments on existing and legacy components.
1652	2011/09/14 16:22	PortugalPortuguese Environment Agency MemberState Portugal	
1441	2011/09/14 10:39	Glass for Europe Industry or trade association Belgium	

1817	2011/09/14 21:23 File attached	The Federation of Finnish Technology Industries Industry or trade association Finland	ECHA has not proposed review periods for any uses during this prioritisation. Any review period should be developed based on a full understanding on the supply chain for cobalt sulphate. This kind of data is not available at the moment and would require further investigation of supply chains. ECHA should not set review periods until sufficient data are available.
798	2011/09/12 16:11 File attached Confidential	Norilsk Nickel Harjavalta Oy Company Finland	ECHA has not proposed review periods for any uses during this prioritisation. Any review period would need to be developed based on a full understanding on the supply/value chain for cobalt sulphate. Such an understanding is not available at present and would only be possible given sufficient time to investigate the supply/value chain further. ECHA must not to set review periods until suitable robust data are available and agreed with the industry.
1056	2011/09/13 16:54	Company France	It is essential that when this substance is subject to review, the performance of any alternative substances is considered both in terms of the performance specifications of the industry and the need to be compatible with corrosion protection treatments on existing and legacy components.
1050	2011/09/13 16:47	Company Germany	It is essential that when this substance is subject to review, the performance of any alternative substances is considered both in terms of the performance specifications of the industry and the need to be compatible with corrosion protection treatments on existing and legacy components.

1863	2011/09/15 12:26	REISSER-Schraubentechnik GmbH, Member of Würth Group Company Germany	no comment
1083	2011/09/13 17:34 File attached Confidential	 Company United Kingdom	No comments
625	2011/09/08 11:52 File attached Confidential	Praxair Surface Technologies Ltd., Swindon, Wiltshire, SN3 3HX, UK Company United Kingdom	no comments

1775	2011/09/14 19:26	The Cobalt Development Institute Industry or trade association United Kingdom	Please refer to the following document for technical details: 1) final Joint Response Comments (JRC) on the five cobalt salts that were submitted into the present ECHA stakeholder consultation on Tuesday 30 August 2011 2) Technical Annex to the Cobalt Reach Consortium's (CoRC) Joint Response to ECHA's Consultation on the Proposed Inclusion of cobalt sulphate in Annex XIV of REACH (submitted September 2011)
1852	2011/09/14 19:26 File attached	The Cobalt Development Institute Industry or trade association United Kingdom	Please refer to the following document for technical details: 1) final Joint Response Comments (JRC) on the five cobalt salts that were submitted into the present ECHA stakeholder consultation on Tuesday 30 August 2011 2) Technical Annex to the Cobalt Reach Consortium's (CoRC) Joint Response to ECHA's Consultation on the Proposed Inclusion of cobalt sulphate in Annex XIV of REACH (submitted September 2011)
747	2011/09/12 11:30	Company France	Sealing of aluminium in anodization process.
1549	2011/09/14 14:25 File attached	Enthone GmbH Please select organisation type.. United Kingdom	See attached

1808	2011/09/14 20:53 File attached	ACEA - European Automobile Manufacturers Association Industry or trade association Belgium	See attachment.
1082	2011/09/13 17:29	University of Nottingham Academic institution United Kingdom	Use of electroplating bath as stated above for purposes of ongoing development work at Goodrich Actuator Systems, Wolverhampton, UK.
567	2011/08/30 22:17 File attached	Cobalt REACH Consortium Ltd (CoRC) Industry or trade association United Kingdom	We acknowledge that ECHA have not proposed review periods for any uses during this prioritisation. Any review period would need to be developed based on a full understanding on the supply/value chain for cobalt sulphate. Such an understanding is not available at present and would only be possible given sufficient time to investigate the supply/value chain further. We would urge ECHA not to set review periods until suitable robust data are available.

531	2011/08/17 13:45	MTU Aero Engines GmbH Company Germany	Wir sind der Überzeugung, dass in einem Zeitrahmen von 5 – 7 Jahren, bei entsprechender Datenlage, Zulassungen neu bewertet werden könnten.