

TITRE

ANNUAL ACTIVITY REPORT AERONAUTIC MEDIATION
problem of indoor air pollution in air transport

REFERENT



CIDCE international observer with UNEP
Legal expert member National Company of Environmental Justice Experts, Founding
member mediator Council of Experts
Legal Court Mediator (Ombusman) before the judicial and administrative jurisdictions
Mediator-Expert referenced aeronautical sector France AVSA-SNPNC-SPL

CABINET JURIS ECO CONSEIL

ENVIRONNEMENTAL SECURITY STRATEGY ZAC Fontenay
EXPERTISE & MEDIATION 34800 Clermont l'Hérault - France

AVSA	SNPNC	SPL
sis 2 rue MASSENA	5 Rue de la Haye	47/49 avenue Simon Bolivar
06450 Utelle	93290 Tremblay-en-France	75950 Paris cedex 19

PROCÉDURE

Referral for friendly settlements - Conventional administrative mediation

ANNÉE

2019

LANGUES

English

MOTS - CLÉS

International air law - European law - Internal law - Environmental code - Public health code - Labor code -Indoor air pollution - Aircraft cabin - ICPE - Air transport - Fume Event - Organophosphates - Toluene-benzene - Chlorinated solvents- Risk of foreseeable direct human exposure to hazardous product by direct inhalation and dermal- Maximum degree of exposure (direct exposure without protection - absence of decontamination- absence of prior information on risk incurred

S U M M A R Y

Context reminder	5
2019 referrals context.....	11
Legal framework reminder	14
Applications filed phase	21
Mediations Phase	27

EDITO

"EVERYONE HAS A RIGHT TO LIVE IN A BALANCE AND HEALTHY ENVIRONNEMENT"

(ART 1 CHART OF ENVIRONNMENT CONSTITUTIONAL LAW N° 2005-205 OF 1ER MARCH 2005 (JORF N°0051 OF 2

MARCH 2005 PAGE 3697)



L' Association for Victims of Aérotoxic Syndrome (**AVSA** FRANCE)

was created on 15/03/2016 (OJ of April 2, 2016 (CCP n ° 27.320.29.L.029) on the initiative of the combat of a captain, exposed to toxic substances during his activity, and classified unfit to fly class I in 2018. Its purpose is *"to inform, defend and advise airline staff and passengers, but also to provide all the necessary information to industry professionals and competent institutions, in the face of dangers of aerotoxic syndrome"*(Source AVSA)

L'**AVSA** defines itself as a unifier, apolitical, and wished to bring to the attention of the members, ministerial authorities and any interested person, all of the issues related to the management of indoor air pollution in aircraft (Fume Event) and its consequences (Aerotoxic Syndrome) in terms of health (exposure to a chemical risk including tricresyl phosphate), legal, national and international.

L'**AVSA** wishing to bring this issue to a benevolent, coherent and reactive spirit, chose to use the mediation tool, by contacting an experienced mediator, expert-facilitator, approved by the judicial and administrative courts, guarantor of the process of expertise mediation, to offer expertise mediation in the complex and highly technical field of aeronautics. These particular characteristics allow to raise the most technical debates with all the interlocutors of l'**AVSA**, in a peaceful and completely confidential setting. This choice is based on the characteristics of the legal tool for expert mediation:

- a flexible, confidential, responsive, accessible, and effective preventive law tool, the memorandum of agreement being enforceable if it is approved.
- partnership law tool, allowing a transversal approach to the problem with all the organizations concerned
- an evolving legal tool, guaranteeing lasting legal certainty, contributing to the strengthening of social peace and belonging to the new justice systems of the 21st century. Adapted to litigation in the environmental field, the legal tool of mediation calls upon a second legal tool which is anticipatory legal risk management, still in its infancy. These two practices provide for future environmental legal security for which Juris Eco Conseil was founded. And which fully contributes to the approach of **AVSA**.

2₀₁₈

was for **AVSA** the year of the unprecedented launch of extra-judicial transversal mediations in the aeronautical sector. His approach received a favorable opinion from professionals. The first professional union to join the **AVSA** :



Syndicat National du Personnel Navigant Commercial - FO
Président : LANFRANCHI David
Expert Qualité Air cabine : PASQUALINI Stéphane

Follow-up by the second professional union



Syndicat des Pilotes de Lignes-CFTD
Secrétaire : SCHERER Arthur
Secrétaire honoraire: FROMENT Cyril
Expert Qualité Air cabine : DELAHAYE Jean-Christophe

2₀₁₉

was for **AVSA**, **SNPNC** and **SPL** the year of the unprecedented launch of meetings, extra-judicial transversal mediations in the aeronautical sector with the cell of the President of the Republic, the Ministry of Ecological Transition and the referral of **ANSES**.

CONTEXT REMINDER

POLLUTION NATURE

The concerned pollution is an indoor air pollution in confined spaces (aircraft), known as the "*smoke event*" phenomenon, of particular gravity, materializing by direct and continuous exposure by inhalation and skin of all living beings to a chemical reaction fumes from the pyrolyzed lubricant of aircraft engines, contaminating the aircraft's "*bleed air*" system. This chemical cocktail would contain:

- x triorthocrésyl-phosphate (ToCP), an organo-phosphorus neurotoxic substance
- x tributylphosphates
- x tricrésyl phosphates
- x Benzène
- x Toluène
- x Xylène
- x chemical solvents and other pollutants retained during defrosting operations

The exposure typology poses a risk

- serious and objective
- whose probability of its occurrence remains a determining criterion for assessing the environmental health risk at work

The democratization of air transport (arrival of low-costs) from 1980 would have multiplied the phenomenon, due to the reorganization of flight plans have accelerated the work rates for crews and the permanent rotation of aircraft which does not allow a real cabin decontamination. The first cases of exposure to chemical substances date back to 1977 for a C-130 Hercules pilot

In 1993 Phosphate of tricrésyle OMS 1st report is published **Cf 1-2-3 AVSA File**
the 09/03/1993, a confidential agreement has been signed between British Aerospace, Eastwest Airlines Limited, Anses Transport Industries, registered by the Australian Senate on 08/13/2007 on the problem of this pollution. **Cf 4 AVSA File**

The 12/04/1997 was published the 1st report on Occupational Medicine at Melbourne Airport on the consequences of this pollution on aircrew, taken up by the Australian Senate which recognizes the existence of a major health problem and establishes recommendations. **Cf 5-6- AVSA File**

In 1999, a 1st Guide to biological exposure monitoring is published **Cf 7 AVSA File**

In 2000, a report from the Senate Committee on Rural and Regional Affairs and Transport is published on this same problem and its syndrom **Cf 8 AVSA File**

In 2001, a « *aérototoxic* » syndrom first definition is published by Professor Winder and Dr Jean-Christophe Balouet **Cf 9-10 AVSA File**

The 05/22/2001 is adopted the Persistans Organics Pollutions (POP) Stockholm Convention, international law treaty to protect a human healthy and environment from POP, coming into force

in 2004 in 170 countries retaining 12 pollutants on a list

In 2007

- England Toxicology committee report is published about it **Cf 11 AVSA File**
- Debate before a Australian senate about it **CF 12-13-14 AVSA File**
- UNEP reports on 12/04/2007 aimed at expanding the Stockholm Convention on Persistent Organic Pollution (POP) **Cf 14 AVSA File**
- A first testimony book is published by the Captain Susan Michaelis¹.

In 2008

- is published the French Général Inspectorate of Social Affairs (IGAS) 1st report about chemical professional exposition traceability **Cf 15 AVSA File**
- The European Commission acknowledges that « ...studies carried out² have shown that many people traveling on commercial flights have symptoms ... [...] mainly due to contamination of the air of the aircraft cabins by neurotoxic organophosphates, which would be attributable to design defects in aeration systems Even if the aerotoxic syndrome and the risks linked to this design defect are increasingly known, little effort is made to carry out research the subject and treat this matter seriously ... ».

On the military level, Professor Zagnoli, former associate professor of the army services, attached to the CHRU of Brest, publishes an article in toxicology drawn from his observations in a patient "Acute delayed and late neurotoxicity to organosphosphorus in the same patient", volume 36 n° 4- October 2008 Revue Médecine et Armées) **Cf 16 AVSA File**

in 2010

- A 05/22/2001 POP Stockholm Convention include 9 new pollutants on a list **Cf 17 AVSA File**
- The International Civil Aviation Organization (ICAO) publishes survey No. A37WP / 230TE / 133 (16/09/10) on the impact on aviation safety of exposure to oil vapors during commercial flights: "Considering that toxic fumes of aviation reactor oil can contaminate the air conditioning system during commercial flights, Considering that exposure to vapors from aviation reactor oil jeopardizes aviation safety when pilots experience acute symptoms that either lengthen their reaction times or decrease their ability to act, Since airlines are not required to filter or monitor the presence in the air conditioning system of aircraft of engine oil vapors ... [...]" **Cf 18 AVSA File**

In 2011

-the publication of a scientific article in the Toxicology Sector, co written by Dr Patrick Masson, former inspector pharmacist general, Commander of the Army health service, clearly evokes the aerotoxic syndrome: "Reaction of cresyl phosphate saligenin, organosphosphorus agent involved in the aerotoxic syndrome, to human cholinesterases: mechanistic studies using kinetics, mass spectrometry and X-ray structure analysis", Chem Res Toxicol Review, June 20, 2012, Vol. 24 (6): pages 797-808 **Cf 19 AVSA File**

In 2012 :

- a 1st Airbus smell indoor air report is published **Cf 20 AVSA File**

1 Captain Susan Michaelis, Aviation Contaminated Air Reference Manual, Susan Michaelis, 2007, 1re éd.
2 Journal Of The Association Of Neurophysiological Scientists (2008)2- Preliminary Report On Aerotoxic Syndrome(As) And The Need For Diagnostic Neurophysiological Tests- The current Debate? (Journal de l'Association des neurophysiologues (2008) 2- Rapport préliminaire sur le syndrome aérotoxique (SA) et l'utilité de tests de diagnostic neurophysiologiques. Le débat en cours?

In 2013 :

- a aerotoxic syndrom is³ «*a medical condition combining physical and neurological symptoms, caused by the short and long term effects of exposure to aircraft cabin air contaminated with atomized engine oils or other chemical agents* ». This definition follows American studies by Nicolas Matesco Matte⁴, Martin B. Hocking, Diana Hocking⁵.

- the Accident Investigation Office (BEA) publishes its 1st accident report on 07/28/2013

Cf 21 AVSA File

- the 1st Airbus Report is published on this point on 08/01/2013, followed by its 1st Airbus service information 7/11/2013 on recommendations for maintenance and total decontamination of aircraft, requiring at least approximately 48 hours

Cf 22 AVSA File

- the 1st FAA report (Report to Congress on Engine and APU Bleed Air Supplied on Pressurized Aircraft) is published on 08/16/2013

Cf 23 AVSA File

Between 2012 and 2015 :

the facts state that no procedure, checklist or training relating to the methods of identification and action in the event of a "smoke event" is implemented within the Companies for Pilots and PNCs, as for users, as well as medical personnel

In 2015 :

- 4 Air Alaska Commercial Flight Attendants (PNC) complaints are filed against Boeing Airlinair and result in confidential agreements.

- The International Civil Aviation Organization (ICAO) publishes its 1st circular 344-AN / 202 relating to "*guidance on educational practices, training and reporting on fumes*" including point 2.1.2 specifying : "*In certain cases, the fumes can weaken the faculties of the crew members and could also have an impact on the operational safety of the aircraft*".

Cf 24 AVSA File

- Safety data sheets for the engine cooling oil EXXON-MSDS-FR1 are sent by the manufacturer

Cf 25 AVSA File

- A first conventional expert report (ANALYTICA) is published

Cf 26 AVSA File

- A 2nd Airbus report (Airbus aircraft Cabin Bleed Air Contaminants report 1.11.2015). Follow-up of a 2nd maintenance procedure (Airbus Maintenance Procedure 1.11.2015)

Cf 27 AVSA File

- The French Ministry of Defense has published a strategy document for dual technologies that can be applied to the problem

Cf 28 AVSA File

- The American Aviation Federation (FAA) publishes its 2nd Aircraft Cabin Bleed Air Contaminants report, incriminating engine oils and recommending systematic decontamination

Cf 29 AVSA File

In 2016 :

- The airlines have published experience sheets

Cf 30-31-32AVSA File

- Creation of AVSA by Captain Eric Baillet, victim

-the 1st report of forensic expertise TECHNOLOGIA Air France PNC CHSCT of June 18, 2016 retains in general conclusion (Page 81) an environmental toxicological pollution of the air inside the airplane cabin and specifying the biological and chemical risks which fall from it

Cf 33 AVSA File

- A second conventional expert report of 07/05/2016 from Dr Balouet, French and European aviation justice expert, retained:

Cf 34 AVSA File

3 <https://www.economist.com/blogs/gulliver/2013/02/air-quality-planes>

4 Nicolas Matesco Matte, Aerotoxic Syndrome, vol. 27, McGill University. Institute of Air and Space Law, 2002, 86-87 p

5 Martin B. Hocking, Diana Hocking, Air Quality in Airplane Cabins and Similar Enclosed Spaces, Berlin, Springer Science & Business, 2005 (ISBN 978-3-540-25019-7,

- page 1 :page 1: "*the sample taken during the first flight also reveals the presence of chlorinated solvents (often carcinogenic), benzene (proven carcinogen), toluene, xylenes, many terpenes (often allergens)*"
- page 8 as "*II / B: Types of contaminants and routes of exposure. The aerosol fraction is particularly abundant, reaching up to 500,000 particles per cm³, including abundant ultra-fine, [...]. The largest particles are deposited in the form of dust or on surfaces, the smallest remain in suspension for hours or even days. By vapor / particle partition, volatiles and semi-volatiles will deposit on their surface; this is the case for organophosphates. The vapor fraction can also be abundant, and wait for mg / m³ under the most significant conditions. They are essentially Volatile Organic Compounds (VOCs), of petrochemical origin, including fuels and solvents, which are practically all neurotoxic [...]. The main route of exposure of these pollutants is by inhalation (62 m² of lung surface), while exposure by contact (1.5 m² of skin) is expected, especially for the less volatile, but also particles (hydraulic, lubricant, pesticides, solvents ...) which we know to deposit on surfaces like hundreds of samples of impregnated cotton (swipe), taken on cabin surfaces attest (two Swipe EZ are being analyzed) . "*
- page 9: *the toxicity of aircraft cabin contaminants is due to the presence of Tri-Cresyl Phosphate and other toxic substances including Volatile organic compounds (N-phenyl-1-naphthalenamine, N-phenyl, CAS no 90-30-2) ; Benzeneamine, 4-octyl-N- (4-octylphenyl), (CAS No 101-67-7).*

Manufacturers reflect on the implementation of solutions
Publication Dr JJ Ramsem about it

CF 35 AVSA File
Cf 36 AVSA File

In 2017 :

- a lot of articles has published

Cf 37 to 48 AVSA File

In 2018 :

- a **BALPA circular is published on February 15**

Cf 49 AVSA File

- followed on 03/26, by the American Aviation Federation publishes an alert bulletin (SAFO): "*Odor, fumes and / or smoke in flight events can occur without visual signals and / or apparent olfactory. To mitigate the harmful consequences on the health of passengers and crew, swift and decisive action is essential*”

Cf 51-52 AVSA File

- Hop CHSCT-PNT, subsidiary of Air France, cites the syndrome in the event of a work accident

Cf 50 AVSA File

Between 2018 and 2019:

- a large number of symposia, conferences, scientific publications, and theses demonstrate the interest in managing this problem

Cf 51 to 110 AVSA File

2019 REFERRALS CONTEXT

Have been filed in 2019, by the Initiating Party represented by:

- **the Association of Victims of the Aerotoxic Syndrom (AVSA)**, created on 03/15/2016 (OJ of April 2, 2016 (CCP n ° 27.320.29.L.029) with the aim of "informing, defending and advising the personnel of airlines and passengers, but also provide all the necessary information to professionals in the sector and to competent institutions, faced with the dangers of aerotoxic syndrome "(Source AVSA), located 2 rue MASSENA 06450 UTELLE FRANCE represented by Mme La Présidente de l'AVSA
- **the National Syndicate of Commercial Seagoing Staff, (SNPNC)** located at 5 Rue de la Haye, 93290 Tremblay-en-France represented by the President
- **the Line Pilots Union (SPL)**, located at 47/49 avenue simon Bolivar 75950 Paris cedex represented by the Secretary General

a request for mediation relating to the referral:

- **of the services of the Office of the President of the Republic** to administratively refer to the next Ecological Defense Council, on the problem of indoor air pollution in confined spaces (aircraft cabin), currently affecting the field of air transport. And be the subject of an inter-ministerial exchange within the framework of an exceptional Council of Ministers.
- **From the Ministry of Ecological Transition, Transport branch**
- **ANSES** for a hearing request to launch a cross-sectional toxicological and epidemiological study

1. The Initiating Party explained the following facts:

2. 1. Indoor air pollution in confined spaces (aircraft cabin) was the subject of several international alerts by the Federal Aeronautical Administration (FAA) and the International Civil Aviation Organization (ICAO) between 2010 and 2018
3. 2. This pollution materializes by direct and continuous exposure to fumes from a mixture of chemical substances contained in the lubricant of aircraft engines, called "Fume Event", which will disperse in the cabin and throughout the passenger compartment of the aircraft. This cocktail contains substances listed in Table 34 of occupational diseases since 1975, as well as other pollutants retained during defrosting operations.
4. 3. This pollution generates a risk of environmental health and aviation safety, serious and objective, the probability of its occurrence remains a determining criterion for assessing the need to use mediation
5. 4. international case law¹ has recognized the nature of a foreseeable and therefore reparable risk. national case law² has retained the serious and serious nature of the risk of accidental pollution and damage to the health of employees and passengers.
6. 5. the severity of the risk is characterized by the magnitude of the foreseeable damage, the resulting aerotoxic syndrome manifesting itself in an affect on the central and peripheral nervous system (irritation of the mucous membranes and the eyes, with headache going to the point of vertigo , chronic cough with difficulty concentrating, headache, feeling intoxicated, nausea, difficulty remembering, difficulty concentrating, condition of chronic fatigue, accompanied by persistent headache, multiple chemical sensitivity, viral and digestive infections, sleep disturbances, depression, chronic stress, anxiety up to psychiatric confinement or suicide)
7. 6. the seriousness of the risk falls within the field of legal certainty, the direct damage of this exposure to these employees being of the order:
 - personal through direct impairment of their cognitive and physical functions
 - environmental health through the transversality of the exposure suffered

- personal through direct impairment of their cognitive and physical functions
 - sanitary
 - environmental through the transversality of the exposure suffered professional by the loss of their class I license, because they would no longer meet, in administrative terms, the standards of medical aptitude provided for in Annex IV PART-MED of Regulation (EU) No 1178/2011 of the European Commission of 3 / 11/2011 for obtaining a class 2 and LAPL medical certificate, as well as for obtaining the class 1 medical certificate
8. The incalculable number of direct victims (flight personnel (pilots, flight attendants, flight attendants) and non-flight personnel) and by ricochet including air transport users remains undetermined for the time being.
 9. A complaint against X filed in 2016 with the public prosecutor's office of the TGI of BOBIGNY is under investigation in 2019 for endangering the life of others; to which the two professional unions will soon join
 10. In anticipation, the foreseeable, serious and serious risk of damage to the health of employees and passengers being now retained on the legal level, the initiating Party has filed with ANSES a request for a cross-sectional epidemiological study, complementary to that currently led by 3 medical teams including that of Air France, Roissy Charles De Gaulle.
 11. The choice of an amicable mediation to establish a true coherent and confidential dialogue on this issue rests on its ethical and technical characteristics. As strategic, because this legal tool being a tool of excellence for the UN, remains a peace-making tool valued internally since laws n ° 2016-1547 of November 18, 2016 and n ° 2019-222 of March 23 2019 2018-2022 programming and justice reform focusing on the culture of alternative dispute resolution.

These referrals followed on from the 2018 referrals.

Cf 2018 Report

Referral to the Mediator-Administrative Expert, qualified and competent, goes through an admissibility phase following reading and analysis of the documents transmitted, the initiating Party having filed 91 documents.

Have been attached:

the AVSA slip including 91pieces

the AVSA supplementary slip including 536 scientific publications not transmitted

LEGAL FRAMEWORK REMINDER

International air law

- **Warsaw Convention of 12 October 1929** on the unification of certain rules relating to international air transport, modified by the Hague Protocol of 1955 and the Montreal Agreement of 05/28/2009.
- **Chicago Convention of December 7, 1944** relating to the rules of public air law, managed by the ICAO (International Civil Aviation Organization)
- **Stockholm Convention of May 22, 2001**, as amended, on Persistent Organic Pollution (POP), entered into force in 2004 in 170 countries

International environmental law applicable to the aviation sector:

- **Rio Declaration of June 14, 1992**

Principle 10 (right to information and participation of all citizens)

Principle 11 (recommendation for the adoption in domestic law of effective legislative measures in environmental matters)

Principle 14 (relating to the transfer and movement of dangerous substances)

Principle 15 (relating to the precautionary principle)

- **Aarhus Convention of 25 June 1998** on access to information, public participation in the decision-making process and access to justice in environmental matters
- **European case law** (ECHR Oneryildiz v. Turkey 18/06/2002 in environmental matters)

European law

- **Framework Directive of 12 June 1989** on health and safety at work and Directive 2009/148 / EC of 30/11/1989 on minimum safety and health requirements for the workplace
- **Directive 95/50 / EC of 6 October 1995**- checks on road transport of dangerous goods on uniform procedures for checks on the transport of dangerous goods by road
- **Regulation (EC) n ° 1907/2006 of 18 December 2006**– REACH concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and establishing a European Chemicals Agency
- Directive 2008/68 / EC of 24 September 2008- inland transport of dangerous goods on the inland transport of dangerous goods
- **Regulation (EC) No 1272/2008 of the European Parliament and the Council of 16 December 2008** on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548 / EEC and 1999/45 / EC, and amending Regulation (EC) No 1907/2006 (Text with EEA relevance)
- **Regulation (EU) No 996/2010 of the Parliament and the Council of 20 October 2010**, relating to the investigation and prevention of accidents and incidents in civil aviation
- **Directive 2017/164 / EU of 31 January 2017** establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24 / EC, and amending Commission Directives 91/322 / EEC, 2000/39 / EC and 2009/161 / EU (Text with EEA relevance)

French law

- **Transport law** : General safety obligation and carrier liability
- **Consumer law** : Absence of deception on air quality, aggravated by the danger to human health (art L213-1 and L213-2 of the Consumer Code)
- **Right of access to information** : General obligation of access for employees and users of air transport to :

on the international level: principle 10 Rio Declaration of June 14, 1992

on the internal level with the law n ° 78-17 of January 6, 1978 relating to data processing, the files and freedoms; Law No. 78-753 July 17, 1978 amended on access to administrative documents;

article 7 environmental charter of 2/03/2005 (principle of information and participation) and article L.110-1 II 4 ° al Environmental

code Environmental Law

- Article 2 law n ° 96-1241 of 30 December 1996 on air and the rational use of energy (LAURE law) (right granted to everyone to breathe air which does not harm their health): «.. .constitutes atmospheric pollution the introduction by man directly or indirectly into the atmosphere or enclosed spaces of substances likely to endanger human health, to harm biological resources and ecosystems, (...) to cause excessive odor nuisance. "
- Art 1 and 7 Environmental Charter of 2004, backed by the constitution by constitutional law n ° 2005-205 of March 1, 2005
- General obligation of environmental security in view of the provisions applicable in terms of indoor air quality [articles L221-7 to L221-10 Environment Code, Law ENE n ° 2010-788 of 12 July 2010 establishing the obligation to measurement of the air quality in certain establishments receiving sensitive public and Decree no 2015-1000 of August 17, 2015 relating to the methods of monitoring the indoor air quality in certain establishments receiving the public (transpose the current regulations of Terrestrial ERP to aerial mobile ERP)]
- Principle of precaution, prevention, information and participation, polluter pays (article L110-1 Environmental Code)
- Articles L511 and R.511-1 to R.511-12 environment code (ICPE regulation)

Public health law :

- Principle of general protection of health and the environment (article L110 CSP)
- Absence of air pollution in a constrained environment (articles L1311-6 to L1311-7 CSP)
- No exposure to hazardous material (article L1335 and L1143-6 to L1143-10 CSP)
- Information and prevention obligation (articles L1142-1, L1171-1 to L1171-2 CSP)

Labor law

- Article R4412-59, R4412-60 Labor code
- Art L.4121-1 to L4121-5, L4131-4, R. 4412-76, R.4412-33, R. R4412-82, R.4722-9 to R.4722-13, R231-56-11 labor Code

Public health law

- Infringement of the principle of general protection of health and the environment (art L110 public health code)
- responsibility for air pollution in a constrained environment (art L1311-6 to L1311-7)
- exposure to hazardous material (art L1335- public health code) new articles L1143-6 to L1143-10 public health code
- breach of the information and prevention obligation (art L1142-1, L1171-1 to L1171-2 public health code)
- Individual or group actions (art L1143-1 to L1143-5 and L1143-11 to L1143-13 public health code)

Ethical framework for mediation

Specific to the mediation process

- **Confidentiality guarantee:**

Art. 131-14 CPC: *"The findings of the mediator and the statements he collects may not be produced or invoked in the course of the procedure without the agreement of the parties, or in any event in the context of another instance. "*

Art. 1531 CPC: *"Conventional mediation and conciliation are subject to the principle of*

confidentiality under the conditions and according to the procedures provided for in article 21-3 of the law of 8 February 1995 mentioned above. "

Art. L. 213-2 al. 2 CJA: *"Unless otherwise agreed by the parties, mediation is subject to the principle of confidentiality. The findings of the mediator and the statements collected during mediation may not be disclosed to third parties or invoked or produced in the context of a judicial or arbitral proceeding without the agreement of the parties. An exception to the second paragraph is made in the following cases:*

1 ° In the presence of compelling reasons of public order or of grounds related to the protection of the best interests of the child or to the physical or psychological integrity of a person;

2 ° When the revelation of the existence or the disclosure of the content of the agreement resulting from mediation is necessary for its implementation. "

Charter of the Council of State of 12/13/2017;

Part II. 2. Confidentiality:

"(a) Except in cases provided for by law or for overriding reasons of public order or on grounds relating to the protection of the best interests of the child or to the physical or psychological integrity of the person, the mediator is bound by an obligation of confidentiality.

b) He respects the confidentiality between the parties during mediation. In the event of a separate interview with a party or his counsel, he does not communicate anything to the other party without his detailed and explicit agreement.

c) He acts in accordance with the laws and reminds the parties that any proposal that does not respect public order or the interest of the third parties concerned causes the mediation to be stopped immediately.

d) After mediation, if the parties agree, the mediator may be released from this obligation of confidentiality. This may in particular be the case if the revelation of the existence or the disclosure of the content of the agreement is necessary for its implementation or execution. "

Mediation remains subject to confidentiality with regard to information, documents, discussions, emails, and proposals for agreements transmitted between the Parties, in accordance with the provisions of article 1, Directive 2008/52 / EC of May 21, 2008, and Ordinance No. 2011-1540 of November 16, 2011.

It may nevertheless be lifted at the request of a Party, in the presence of overriding reasons of public order relating to the protection of the physical or psychological integrity of a person.

• **Guarantee of information and consensus:**

- Article 131-1 CPC: *"The judge seized of a litigation can, after having obtained the agreement of the parts, to appoint a third person in order to hear the parts and to compare their points of view to enable them to find a solution to the conflict between them. . . "*

- article L114-1 CJA *"When the Council of State is seized of a litigation in first and last resort, it can, after having obtained the agreement of the parts, to order a mediation to try to reach an agreement between them here according to the procedures provided for in Chapter III of Title I of Book II "*

- article L. 213-7 CJA *"When an administrative court or an administrative court of appeal is seized of a litigation, the president of the hearing body may, after having obtained the agreement of the parties, order mediation for try to reach an agreement between them. "*

- Charter of the Council of State of 12/13/2017: Part II. : *"1. Information and consent. a) The mediator takes care to deliver to the parties, before the start of mediation, clear and precise information on the modalities of its progress: confidentiality, courtesy, possibility of separate or joint interviews, possibility of interrupting mediation at any time , terms of remuneration. b) He*

ensures that the consent of the parties is free and informed and ensures that the previous information has been correctly understood. c) He takes care of the formal conditions of a loyal, courteous, effective and balanced dialogue. d) He informs people that, throughout the mediation process, they have the possibility of taking advice or having advice taken from competent professionals. Part II. 3. Respect for the freedom of the parties: a) The mediator is respectful of the freedom of the parties who have freely chosen or accepted it: they can interrupt the mediation at their discretion. b) He ensures the free consent of the parties to the mediation agreement that may be concluded. "

Specific to the mediator

- **Guarantee of impartiality and diligence**

Article L. 213-2 CJA: « *the mediator accomplishes his mission with impartiality, competence and diligence.* »

And included in the Council of State charter, I.3.

the mediator is independent, loyal, neutral and impartial I.4. the mediator is diligent. He quickly contacts the parties and ensures that they receive rapid responses on the organization of the meetings. He can request from the parties certain useful documents for a better understanding of the dispute and a better dialogue around the search for solutions. He respects the deadlines set for him by the court to carry out his mediation mission. He informs the court of the result of the mediation carried out, indicating whether or not the parties have reached an agreement.

Article 1530 CPC: “*Mediation [and conventional conciliation governed by this title are understood, in application of articles 21 and 21-2 of the law of February 8, 1995 mentioned above, of any structured process, by which two or more parties attempt to reach an agreement, without any legal procedure for the amicable resolution of their disputes.] with the help of a third party chosen by them who accomplishes his mission with impartiality, competence and diligence.* ”

- **Guarantee of competence**

- Article 131-5 CPC: “*3 ° Possess, by the present or past exercise of an activity, the qualification required having regard to the nature of the dispute; 4 ° Justify, as the case may be, training or experience adapted to the practice of mediation* ”

- Article 1533 CPC: “*2 ° Possess, by the present or past exercise of an activity, the required qualification having regard to the nature of the dispute or justify, as the case may be, training or experience adapted to the practice of mediation.* ”

-Article R. 213-3 of the CJA: “*The natural person who ensures the mediation mission must have, by the present or past exercise of an activity, the qualification required having regard to the nature of the dispute. It must also justify, as the case may be, training or experience adapted to the practice of mediation.* ”

Charter of the Council of State of 12/13/2017:

Part I: “I.2. the mediator is competent: a) he has at least five years' professional experience in the field of litigation; b) he has a qualification in mediation techniques: he justifies training in mediation or significant experience in this field, the quality of which is appreciated by the court; c) he undertakes to update and improve his theoretical and practical knowledge. by regularly informing themselves about the legal news in their area of competence as well as the latest in negotiation methods and developments in alternative dispute resolution; - by participating in events around alternative dispute resolution methods (symposia, workshops, debates, etc.) or training on these themes

- **Guarantee of good repute**

- Article 131-5 CPC: “*1 ° Not to have been the subject of a conviction, incapacity or forfeiture*

mentioned on the bulletin n ° 2 of the criminal record;

2 ° Not to have been the author of facts contrary to honor, probity and good morals having given place to a disciplinary or administrative sanction of dismissal, radiation, revocation, withdrawal of approval or authorization ; "

concerning conventional mediation in article 1533: "1 ° Not to have been the subject of a conviction, incapacity or forfeiture mentioned in bulletin no. 3 of the criminal record; " - Council of State Charter of November 2017, part I.1. : "The mediator offers guarantees of probity and good repute The natural person who ensures the execution of the mediation mission must meet the following conditions: a) Not having been the subject of a conviction, incapacity or forfeiture mentioned in the bulletin n ° 2 of the criminal record, b) Not to have been the author of facts contrary to honor, probity and good morals which gave place to a disciplinary or administrative sanction of dismissal, radiation, revocation, withdrawal of authorization or authorization. In the event that prosecutions or legal proceedings have been brought against him and are likely to jeopardize his independence and impartiality, the mediator must inform the court before any appointment. In the event that such prosecutions or procedures occurring after his appointment could compromise the impartiality of his mission, the mediator must also inform the court and the parties to the mediation. The court, the parties or the mediator can then, if they wish, end the mediation "

- **Guarantee of independence**

- article 131-5 CPC: "the mediator must:" 5 ° Present the guarantees of independence necessary for the exercise of mediation "

- Charter of the Council of State of 12/13/2017, Part I.3. "The mediator is independent, loyal, neutral and impartial: a) independent: The mediator must not initiate or continue mediation without having informed the court and the parties to the mediation of the circumstances which could affect his independence or lead to a conflict of interest, or be considered as such. This obligation remains throughout the procedure. These circumstances include:

- any personal or professional relationship with one of the parties;

- any financial or other interest, direct or indirect, in the outcome of the mediation;

- the fact that the mediator or one of his associates or collaborators acted in a capacity other than that of mediator for one of the parties.

In similar cases, the mediator can only accept or continue mediation if the parties expressly agree. »

- **Liability Guarantee**

- Charter of the Council of State of 12/13/2017, Part I: "I.5. the mediator is disinterested; he has no financial interest in the outcome of the mediation. It only contributes to the search for an agreement in the sole interest of the parties. He is not remunerated by a percentage on the result. »

Mediation process

Mediation takes place through physical interviews, telephone, letters, e-mails, and various investigations carried out with the Parties and the various professional bodies. The Parties and Third Parties may be accompanied by their respective advisers. They can have recourse to any expert, external consultant, who can make it possible to specify missing technical elements, serving for the good progress of the mutual agreement procedure.

Step 1- Preparation of mediation

1. Receipt of a request accompanied by all documents useful for understanding the problem

2. Study of the admissibility of the request

Step 2 - Launching methods

1. within 30 days of acceptance by the mediator (Transmission to the parties of the mediation agreement and of the financial directives / procedures)

Step 3 - Initiation of mediation

Opening - Exchanges - Search for solutions - Conclusion

Step 4 - Outcome of mediation

1. If the parties agree to an agreement, drafting of a favorable closing settlement report and drafting of a memorandum of understanding with the possibility of judicial approval

2. If the parties do not agree on a solution, drafting of an adverse closing PV and freedom of the parties to use any settlement process. The minutes may indicate: "dispute settled before initiation of mediation - Absence of a party not to participate in mediation - Withdrawal of a party to continue mediation - The points in dispute have not been settled and the parties are found in an impasse which ended the mediation- Certain points in dispute have been settled and the parties have decided to compromise on the outstanding points- Classification by the mediator, empowered to classify a case according to confidential reasons ”

Non-adversarial rule

The mutual agreement procedure is not subject to the adversarial principle: the Parties and Third Parties can communicate freely with the Mediator and provide any useful documents for the smooth running of the process. The Mediator can only transmit these documents with the express agreement of the party concerned.

Role of the Mediator

The Mediator accomplishes his mission with impartiality, competence and diligence. He is independent and neutral. It is not subject to an obligation of result and its responsibility cannot be engaged on this account.

Roles of the Parties to Mediation

The Parties and their counsel declare that they have the quality and the power to participate in mediation and to conclude an agreement. They hereby undertake to participate in mediation interviews in accordance with the rules indicated by the Mediator. They hereby undertake to inform the Mediator of any legal proceedings in progress, related to the subject of the mediation. They hereby undertake, in the event of agreement, to draw up a transaction protocol, supervised by the Mediator, and to execute it. The agreement reached by the Parties may not affect rights of which they are not free. Judicial approval giving enforceability to said protocol remains at the discretion of the Parties but may be suggested by the Mediator, in view in particular of the complexity of the dispute resolved.

APPLICATIONS FILED PHASE

I - PHASE OF RECEPTION OF LEGAL AND TECHNICAL DOCUMENTS

All of the documents stamped and deposited at the same time as the referral is based on present scientific literature relating to the Fume Event, transmitted by the Association of Victims of the Aerotoxic Syndrome, which can be consulted by simple written request, with transmission of a secure link, according to the provisions of law n ° 2018-727 of August 10, 2018 for a State in the service of a trusted company.

1- Nature of the stated exhibition

On reading the documents transmitted, the risk exposed by the Initiating Party would be a risk:

- of safety and aviation safety by foreseeable direct human exposure of dangerous product by direct inhalation and dermal route
- the degree of exposure of which would be maximum (direct exposure without protection - absence of decontamination - absence of prior information on the risk incurred) because the presence of:
 - **Anti-linesterase organophosphates**, phosphoramides and heterocyclic anti-cholinesterase carbamates (Table of occupational diseases- INRS 2018-General scheme RG 34 -Decree n ° 51-1215 of 03/10/1951. OJ of 21/10/1951 and corrigendum OJ of 28/10 / 1951 Professional poisoning by contracted diethyl thiophosphate and paranitrophenyl).
 - **Benzene and Toluene** (Table of occupational diseases- INRS 2018- RG 4 BIS- Gastrointestinal disorders caused by benzene, toluene, xylenes and all products containing it) RG 13-Professional poisonings by nitrates and chloronitred derivatives of hydrocarbons benzene
 - **chlorinated solvents** (Table of occupational diseases-INRS2018- RG84 Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and their mixtures; liquid halogenated hydrocarbons; nitro derivatives of aliphatic hydrocarbons; alcohols; glycols, ethers of glycol; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamide; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide)
 - **Toluene and Xylene** (Table of occupational diseases-INRS2018-RG4 BIS- RG 13-RG84) Other chemical products (Table of occupational diseases-INRS2018-RG6-RG9 - RG23 - RG33 - RG36 and 36BIS - RG37 and 37BIS-RG42-RG44-RG61 and 61BIS- RG64-RG66BIS-RG70 and 70BIS- RG75-)

A total of 17 GR for France

In 2019, no toxicological study was carried out by employers, hence:

- referral of the Mediator by AVSA to amicably seize the ANSES in May 2019. The SNPNC and the SPL joined the latter

II - PARTS STUDY PHASE

On reading the documents, it is noted in 2019

- a clash between 2 positions:

- *on the one hand, the aeronautical industry and the air authorities which recognize from May 2012 the existence of Fume Event but which retain that there is no overshooting of TWA / CMA thresholds in air quality therefore no "risks" in the legal sense of article 3 of the EEC Directive n ° 96-82 of December 9, 1996 (the risk is "the probability that a person will suffer harm or harmful effects for his health in the event of 'exposure to danger')*

- *on the other, unions, victims' associations and medical experts who note a gap between:*

- recognition of this risk by ICAO and the FAA since 2010
- theft incidents transcribed by the BEA since 2013
- the presence of judicial and conventional expertise
- European Aviation Bureau (BEA) flight incident reports since 2013
- the return of medical monitoring of exposed patients revealing high **toxicological biomarkers** thanks to 7 existing tests:

1-hair test

2-dress test

3-blood test on the level of IgG antibodies (immunoglobulin), acetylcholinesterase (AChE) and presence of active T lymphocytes

4- Antibody tests by serum profile to determine the rate of autoantibodies against MBP, MAG, MAP-2, tubulin, CamKII and that of GFAP suggesting brain damage:

- neurogenesis research, i.e. neurofilament proteins (NFP), protein associated with microtubules-2 (MAP-2)
- search for tau proteins associated with microtubules (tau proteins), tubulin, calcium-calmodulin kinase II (CaMKII) and alpha syncuelin (alphaSNCA)
- research of myelinogenesis (basic protein of myelin (MBP); Glycoprotein associated with myelin (MAG) and neurofascin-155 (NFS 155)
- Gliogenesis research (glial fibrillar protein protein (GFAP) and protein S-100B, which are specific markers of lesions of the central nervous system)

5-Urine test relating to research into the determination of transmuconic acid, presence of diphenyl triphenyl phosphate (TPHP) present in engine cooling oils like NYCO PETROLEUM, creating, if they are 6.9> MAX MSDS, risks of infertility and miscarriage, presence of Bromopropane N-acetyl (propyl) cysteine (NAPR), creating if they are 56> MAX risks of infertility, presence of neurotoxic Organophosphates Dimethylphosphate (DMP) creating s 'they are 8.3> 60 of the risks of infertility and miscarriage, Presence of neurotoxic Organophosphates Diethylphosphate (DEP) creating if they are 27> MAX of the risks of infertility and miscarriage.

6-Biopsy of subcutaneous fat (demonstrating the presence of additives after cessation of professional activity)

7-Electro-neuro-myographic examination (demonstrating lack of motor and sensitive conduction speed)

III - ADMISSIBILITY OF REQUESTS

I- The distinction between danger and risk in law

As a reminder, danger is a non-legal concept defined as a potential source of damage, with regard to a thing or a person. French case law has retained the concept of "awareness of the danger".

The concept of risks is legally defined: In international law as the probability that a person will suffer harm or harmful effects for his health in the event of exposure to a danger. In European law, article 3 of EEC Directive No. 96-82 of December 9, 1996 defines risk as "*the probability that a specific effect will occur in a given period or in specific circumstances*". The notion of risks remains linked to a "probable" element

- The request for referral was admissible because it related to the notion of risk and not of danger

II- The concept of risk to aviation safety

In domestic law, article 1 of law 2001-1062 of 15 November 2001 on daily security defines security as "*a fundamental right. It is a condition for the exercise of freedoms and the reduction of inequalities. As such, it is a duty for the State, which oversees, throughout the territory of the Republic, the protection of people, their property and the prerogatives of their citizenship, the defense of their institutions and national interests, respect for the laws, the maintenance of peace and public order ...*". *The Constitutional Council held that security had an objective with a "constitutional" value [...]*⁶ .

- The request for referral was admissible because it involved a dialogue based on an air risk which generates an air safety disorder in terms of:
 - breach of aviation security
 - preservation of environmental health
 - absence of maximum traceability of environmental risks taking into account the evaluation methods used, because even if the aircraft meet in terms of normative criteria by not exceeding the authorized TWA / CMA thresholds, it has not been demonstrated that they are not free from the risk of any harm. And this failure to establish the causal link between the external exposure of Man to the material, is a risk of health damage and damage caused⁷. As for asbestos

6 Cons. const., décis. n° 94-352 DC, 18 janv. 1995, Rec. p. 170, consid. nos 2, 8 et 16

7 Cass, soc, arrêt du 28 février 2002, n° 00-13.172; Cass, civ, arrêt du 10 avril 2008, n° 07-15.758 ; Cass, civ, arrêt du 15 mai 2008, n° 07-17.119; Cass, civ, arrêt du 3 juillet 2008, n° 07-18.689 ; Cass, civ, arrêt du 6 octobre 2008, n° 08-00009; Cass, civ arrêt du 23 octobre 2008, n° 07-20817; Cass, civ, arrêt du 14 janvier 2010, n° 08-21.121 ; Cass, Civ, arrêt du 4 novembre 2010, n° 09-68903; Cass, Civ, arrêt du 16 juin 2011 n°10-20303; Cass, civ, arrêt du 4 décembre 2012, n° 11-26294; Cass, Civ, arrêt du 23 mai 2013, n° 12-18858; Cass, soc, arrêt du 25 septembre 2013, n° 11-20.948; Cass, civ, arrêt du 2 avril 2014, n° 12-29825 ; Cass, civ, arrêt du 3 mars 2015, n° 13-26175

III- On the nature of the repeated incidents of Fume Event

As a reminder, the regulatory framework for safety investigations is set out in Annex 13 to the Chicago Convention on International Civil Aviation of December 7, 1944 and Regulation (EU) No. 996/2010 of the Parliament and Council of 20 October 2010, relating to the investigation and prevention of accidents and incidents in civil aviation.

A large number of flight incidents linked to a Fume Event phenomenon are not declared to the Aviation Investigation Bureau (BEA). Because they are not called "accidents".

EU Regulation No. 996/2010 only establishes a list for "serious" incidents and it is up to the operators and the national aeronautical authorities to assess the seriousness of these incidents.

However, this redundancy of an incident generates a major serious risk latent to aviation safety and security. Knowing that they remain anxiety-provoking for cabin crew.

This gravity was moreover appreciated by the Australian judge as "foreseeable" therefore reparable (High Court of Australia. *Turner v. Eastwest Airlines* September 6, 2010) and "serious and serious" for the Court of Cassation in France (Cass, room Social 19 December 2012, appeal number 11-11799) causing irreversible consequences (TASS 27 Nov 2018 CPAM Corse C. Ms R).

The United States Supreme Court in the *Air France v Sacks* case of January 15, 1985 (470 US.392 (1985)) clearly stated that there was "no" accident "if the injuries resulted from the internal reaction of a passenger to normal, normal and except normal driving There has been a clear tendency to liberalize the definition of "accident" within the meaning of section 17. Courts have repeatedly authorized an extension of the term "accident" to include, injuries from a passenger's sexual assault, assaults involving intoxicated passengers and deaths from deep vein thrombophlebitis.

It would therefore be a continuation of this reasoning to any actor in civil aviation who is aware of it, to alert the supervisory authority responsible for Company surveillance or aircraft monitoring. To initiate corrective actions.

- The request for referral was admissible to allow each Party to assess these two concepts

IV- At the request of the Initiating Party

In this case, the referrals were based on:

- a request for mediation with the ministries and services of the State being able to allow a scientific, technical and legal dialogue, objective under confidentiality between the Parties taking into account:

1- contradictory medical and scientific data from the international scientific community publishing on the subject, both on the civil and military levels:

- Article by Pr Zagnoli. former Associate Professor of the Armed Forces, attached to the Brest CHRU, "*Delayed and late acute neurotoxicity to organosphates in the same patient*", tome36 n ° 4- October 2008 *Medicine and Army Review* **Cf AVSA File**
- Article co-authored by Dr Masson Patrick, former inspector general pharmacist, Commander of the Army health service, "*Reaction of cresyl phosphate saligenin, organosposphorus agent involved in the aerotoxic syndrome, to cholinestérases humaines:*

mechanistic studies using kinetics, mass spectrometry and X-ray structure analysis ", *Revue Chemical Res Toxicol*, June 20, 2011, Vol. 24 (6): page 797–808

See AVSA file

2- theses on the subject

See AVSA file

3- of the referral to the ANSE in 2017

See AVSA file

4- the lack of implementation by the Ministry of surveillance placing the medical services in charge of the management of civil and military aircrew, as well as the CPAM in the impossibility of not putting an end to the suspected pollution. While the Administrative Court and the Administrative Court of Paris retained in 2014 that any medical file "*complete and well communicated, ... [...] is the guarantee of a fair appreciation of the hospital care and in parallel of the efficiency of the defense, as much in judicial expertise as in CCIs or courts, of hospital services ... [...]*"

5- the medical risk of foreseeable damage, taking into account the generated disorders observed (respiratory, neuro-cognitive, cardiac, digestive) recorded in the medical files and the absence of ministerial expertise on research:

- carcinogenic, mutagenic or toxic agent (art R4412-60 Labor Code)
- managerial risk policies (art R4412-59 and L4121-1 labor code)
- of controls allowing an objective risk assessment by labor inspectors and occupational medicine (art R. 4722-13 R4722-9, R4722-10 to R4722-13, 4412-76, R.4412-33, R. R4412 -82 labor code) and implementation of preventive measures and means provided (art R. 4412-67 R. 4412-73 labor code) to avoid liability for failure to prevent (art R231-56-11 same code) as well as endangering the life of others on a criminal level, and contractual liability
- the absence of modified job fitness sheets following exposure (art R231-56-11 labor code)

6- the existence of an "accident" in the light of the American jurisprudence of the Air France Supreme **Court v Sacks of January 15, 1985 (470 US.392 (1985))**

– the existence of a foreseeable and therefore reparable risk identified by the Australian High Court of Australia.

Turner v. Eastwest Airlines September 6, 2010

– the degree of imputability and the existence of a serious risk of accidental pollution, serious enough characterized by the amount of foreseeable damage, likely to harm the health of the employee and passengers retained by the French judge since 2012

Cass, social chamber December 19, 2012, appeal number 11-11799

– the existence of risks creating irreversible sequelae in a PNC

TASS 27 Nov 2018 CPAM Corse C. Mme R

MEDIATIONS PHASE

I- COLLECTIVE MEDIATIONS

According to the 4 requests for collective mediation in 2018 from:

- the DGAC
- the Ministry of Solidarity and Health
- the Ministry of Ecological and Solidarity Transition
- the Ministry of Ecological and Solidarity Transition, transport branch.

Were trained on 5/11/2018:

- 4 difficulty reports

Following their reception, the Mediator-Expert received letters from the departments concerned and 3 lifting reports were then drawn up on 01/15/2019 and 02/02/2019 concerning:

- the DGAC
- the Ministry of Solidarity and Health
- the Ministry of Ecological and Solidarity Transition.

A response from the DGAC was received, which ended the process positively

No response has been received from the Ministry of Ecological and Solidarity Transition, transport branch, since then, and no lifting report could be drawn up.

No response has been received from the Ministry of Solidarity and Health, for which mediation therefore remains currently blocked.

A certain number of exchanges were established with the Ministry of Ecological and Solidarity Transition, but faced with the lack of response, a second difficulty report was drawn up sent to the Parties on 20/01/2020.

Following the mediation request filed in May 2019 by AVSA for referral to the ANSES, to which the SNPNC and the SPL are concerned:

- the referral received a favorable opinion and the 3 organizations were heard in December 2019

According to collective mediation requests in July 2019 from:

- Cabinet of the President of the Republic to enjoin it to refer to the Ecological Defense Council on the problem of indoor air pollution in air transport.

A difficulty report was drawn up on 09/17/2019 for lack of response

II - NATIONAL AND INTERNATIONAL INDIVIDUAL MEDIATIONS

On the international level

Following a first mediation on the international level by the referral to CIDCE for UNEP and its outcome by presenting the request to integrate the mediation tool to the problem of indoor air pollution, in the Montevideo 2019 program- 2029.

Was launched in February and then in September 2019, the referral to the same Center to integrate the mediation tool in exchanges with UNEP during the working meeting of the Environment Management Group -Nexus Dialogue on Sustainable Infrastructure of February 26, 2019 and the Sixth Meeting of the Aarhus Convention Working Group on Access to Information from October 2 to 4, 2019 in Geneva. By proposing to discuss emissions and transfers of pollutants (Article 5.9 of the Convention) in the light of the Kiev Protocol of 23 May 2003 on the registers of releases and transfers of pollutants transposed into European law⁸ which has established since 2005, the obligation⁹ all operators to file a polluting emission declaration on the website¹⁰.

These referrals have received a favorable opinion.

On the European level,

the Mediator-Expert received a request for Italo-Swiss cross-border mediation which was taken up by a Swiss trade union and its counsel for reasons of presence on the territory

The Mediator-Expert was also contacted by AVSA members following the 18 mediations previously launched in 2018 with the CPAM, CRPN, DGAC; CMAC employers

Mediations with the CPAMs have received a favorable opinion and most are in progress

Mediations with the CRPN received a favorable opinion and had a favorable outcome

Mediations with employers have received both an unfavorable opinion, the subject of a difficulty report forwarded to counsel for referral to courts, and a favorable opinion.

Mediations with the HIA, which initially received a favorable opinion, were frozen for direct referral to the DGAC, which only gave favorable opinions (inter-service referrals).

All the referrals have made it possible for national and international professional unions to react quickly, which are actively interested in the tool of mediation.

Constraints encountered by the Mediator-Expert in 2019:

- Lack of awareness of the aerotoxic syndrome by doctors, medical instructors, employers, CPAM, CRPN
- Lack of knowledge of the regulatory framework applicable to employer mediation
- Ignorance of the regulatory framework applicable to administrative mediation (art L114-1 L231-5 paragraph 1 and 2, L213-7 CJA) by the State instructing services:
 - Lack of inter-service administrative completeness (slow communication)
 - No transmission of inter-service medical documents (CEMA - Medecine du travail-HIA Percy)

8 Règlement Européen UE 166/2006 du 18 janvier 2006, entré en vigueur le 24 février 2006. Et ratifié par la France le 10 juillet 2009.

9 Arrêté du 31 janvier 2008 relatif à la déclaration annuelle des émissions polluantes des installations classées soumises à autorisation (NOR DEVP0773558A)

10 <https://prtr.eea.europa.eu/#/diffemissionsair>

- Inter-service communication difficulties
- Return of lost or unaccounted for documents
- Delay or failure to deal with the amicable request within a reasonable time
- Absence of Poles of expertise other than HIA Percy for France
- Lack of knowledge of possible mediation procedures by flight personnel:
 - Absence of internal notes to Companies on the issue of exposure
 - Lack of culture on technical and legal inter-service-personal dialogue
 - Complexity of requests to be made (tailor-made requests)
 - Difficulties related to missing or lost parts
 - Difficulties in tracking requests by flight personnel

Possible improvements in 2020:

- Improve the culture of mediation and dialogue in the aeronautical sector to discuss on a confidential basis the security anticipation of risk in this sector with all unions of flight personnel, medical instructor services, employers, CPAM, CRPN, advice. This for the purpose of consistent and anticipatory regulation of unacceptable anxiety-provoking risks.

The 03/03/2020

The Expert Mediator referenced in this file

Laure Singla

**Mediator-Biodiversity Environment Expert referenced Aeronautical sector
France AVSA-SNPNC-SPL**

PhD International Environmental Law

International Environmental Law Expert

CIDCE international observer with UNEP

Legal Expert to the Court of Appeal of Montpellier specialties D-04.05

Strategy and general company policy, D-05 social conflicts, E.03.01 Air
pollution and E- 08.01 Air transport (Uses-users)

Member National Company of Environmental Justice Experts (CNEJE)

Legal Mediator (ombusman) to the judicial and administrative jurisdictions,
founding member Council of Experts and Mediators before the Jurisdiction
(CEMJ)

University lecturer in public law and environmental law

SFDE member, Former member JSF-GRAINE LR and volunteer
administrator LPO Hérault

CEO SAS Juris Eco Conseil