COMMISSION OF THE EUROPEAN COMMUNITIES

COM(93) 406 final

Brussels, 1 September 1993

Proposal for a

COUNCIL DIRECTIVE

ESTABLISHING THE FUNDAMENTAL PRINCIPLES GOVERNING THE INVESTIGATION OF CIVIL AVIATION ACCIDENTS AND INCIDENTS

(presented by the Commission)

EXPLANATORY MEMORANDUM

1. Introduction

In November 1987 the Commission organised an Air Safety Symposium aiming at providing the forum for an exchange of information and ideas on aviation safety and identifying priority areas for such action as may be appropriate at Community level.

One of the three broad themes discussed during this symposium was the investigation of aircraft accidents. The conclusions drawn from the discussions⁽¹⁾ showed clearly that although the situation was generally satisfactory in Europe, Community actions in the fields of accident investigations was needed in a number of areas.

In order to obtain more detailed information, the services of the Commission launched two specific studies which were completed in 1989:

- "Cooperation and shared utilisation of available resources in aircraft accident investigation" by Geoffrey Wilkinson, former Chief Inspector of Accidents of the United Kingdom Accident Investigation Branch; and
- "Problems raised by the double enquiry into air accidents" by Lucien Rapp, Professor at the Faculty of Law.

The results and conclusions of these studies were carefully assessed by experts from governments and industry in a number of meetings organised by the services of the Commission in 1990.

⁽¹⁾ Proceedings of the Air Safety Symposium, Office for Official Publications of the European Communities, Luxembourg, 1988

In 1991, the Commission, taking into account the comments of the experts and the discussions taking place in the international organisations, in particular ICAO and ECAC, issued a "Communication to the Council on Community initiatives concerning civil aviation incidents and accidents.

This communication included a working programme which foresees, amongst others, legislative measures in the field of accident investigation.

Consequently the proposed measure is intended to lay down strong and common foundations for the investigations carried out by the Member States at national level.

In 1992, a number of meetings with experts took place enabling the services of the Commission to draft the present proposal based on identified needs derived from shortcomings in the system.

11. Shortcomings in the present system

The present system of aircraft accident investigation is governed by the international standards and recommended practices contained in the current edition of Annex 13 to the Convention on International Civil Aviation published by ICAO.

While the process described above was taking place in the services of the Commission, a parallel evolution of thoughts was initiated in the aviation circles and in particular in ICAO.

For this reason, ICAO organised in February 1992 a very large Accident Investigation Divisional Meeting (AIG 92) attended by more than 200 delegates from more than 70 countries and organisations. A large number of proposals to modify and update Annex 13 and other relevant ICAO documents were adopted in order to try to overcome the shortcomings identified by all those experts.

The present proposal takes into account the work carried out at AIG 92 and is therefore in line with latest and foreseen ICAO requirements, turning into Community legislation a number of measures to correct shortcomings.

First of all, the objective of the investigation must be clearly expressed: namely prevention of future accidents and incidents. Experience has shown when investigating several recent accidents in Europe that difficulties can arise from national legislations which do not provide for a clear separation between the technical investigation only interested in accident prevention and the judicial inquiry seeking for faults or liability. The existence of this double inquiry creates a very complex problem that could hamper the investigation of the accident and is aggravated by the fact that judicial traditions vary from State to State.

The potential conflict of interest could be avoided by defining very clearly the status of the technical investigation and recognising a number of basic rights of the investigators to enable them to achieve their mission while respecting the legal procedures in force. The investigators and their work has also to be protected from misuse which could be counter productive by deterring the parties in an accident from cooperating by fear of subsequent legal action. Only factual information arising from the technical investigation should be available for use by the judicial authorities, analysis or conclusions should remain limited to accident prevention use.

The findings of the investigation are usually published in some form of report. The dissemination of the report including the safety recommendations derived from the investigation is of utmost importance in the interest of accident prevention. As an example, last year an accident happened in the USA with the same aircraft and in similar conditions as a Canadian accident three years earlier. The Canadian investigation report had not been officially sent to the US authorities.

Although safety recommendations are sent to the relevant parties, very often there is no follow-up procedure to check if any action has been taken to correct the deficiencies. Such a procedure should be sufficiently flexible to allow the interested parties to either apply strictly the recommendations, apply other corrective action deemed more appropriate or reject the recommendations providing a reasonable justification is given.

In the Community, accident investigations are carried out by national bodies, the organisation of which differs greatly both with regard to the extent of their resources (human and material) and to independence vis-à-vis the national aviation authorities. The low probability of a major accident occurring in a small state does not justify a large organisation but, should such accident happen, the possibility should exist to obtain at short notice the needed resources. Expertise could be brought from other Community accident investigation bodies according to the 1980 Directive on future cooperation and mutual assistance between the Member States in the field of air accident investigation⁽¹⁾ but this cooperation could be improved if all those bodies were working according to a number of common basic principles.

In order to avoid possible conflict of interests, the investigating body should be independent of any party which could directly or indirectly have a responsibility in the cause of an accident.

⁽¹⁾ OJ no. 375, 31.12.1980

Finally, an important modification proposed is to extend to serious incidents the investigation process applied to accidents. The investigation of accidents is a reactive activity and therefore not the best means of prevention. In addition, there is fortunately a very limited number of accidents. For this reason, investigation of serious incidents to the standards employed for accidents will provide a greater source of accident prevention data than is available through the investigation of accidents alone.

III. Application of the subsidiarity principle

Due to the international nature of aviation and, in particular in the community where the liberalisation measures of air transport and the realisation of the single market will lead to more multinational operations, accident investigations will very often involve several Member States.

The small number of aviation accidents does not justify large investigation units and cooperation between units is therefore needed.

New international standards and recommended practices are definitely needed and the Community has the legal instruments to ensure a quick and efficient implementation of those standards in all the Member States.

The present proposal could be considered as a framework directive, a number of articles setting goals leaving to the Member States freedom as to the way to reach these goals. However, due to the technical nature of this subject, it has been necessary sometimes to look into some matters in more detail.

The burden for the majority of the Member States will be limited due to the fact that they already apply standards at least equivalent to those contained in Annex 13. However, some Member States and in particular the smaller ones, will have to change their legislation and invest in independent investigation units. The consultations carried out by the services of the Commission during the last five years have shown that usually in these Member States the technical authorities have recognised the need to proceed with those required changes and would welcome such a Community initiative as a support to give air safety the priority ranking it deserves.

In addition, the Commission does not claim for any additional competence in this field, but by establishing fundamental principles, it will encourage a better mutual cooperation between responsible bodies. As a consequence, the adoption of the present proposal could also permit to repeal the 1980 Directive on future cooperation and mutual assistance between Member States in the field of air accident investigation.

IV. Conclusions

The present proposal is the outcome of a long process, started in 1987 during which a wide consultation was organised at each stage. It should help the Member States to bring their accident investigation methods and legislations up-to-date and encourage them to cooperate.

Such an improvement should lead to a better understanding of accidents and incidents and therefore contribute to a more efficient safety policy and prevention of accidents.

COMMENTS ON INDIVIDUAL ARTICLES

Article 1

This article defines the general objective of the Directive which is the improvement of air safety.

Article 2

This article defines the scope of the Directive. It covers not only the investigations of accidents but also incidents. This is in accordance with recent ICAO proposals.

In paragraph 1, the scope is limited to the Community while in paragraph 2, the scope can be extended outside of the Community when an incident occurs to a Community aircraft and no investigation is carried out by the State where the incident occurred. This is due to the fact that very often, it is the State of registry of the aircraft which is better placed to carry out an investigation of an incident.

Article 3

This article defines the terms used in the Directive. These definitions are those used by ICAO except h) which is a definition used in other Community legislation on air transport $^{(1)}$.

Article 4

This article sets out the principle of the mandatory investigation of every accident and also every serious incident. This last provision is new but complies with ICAO guidelines. This article also do not prevent the investigation body to investigate any other incident if it could be beneficial to air safety. In addition, it is the responsibility of the investigation body to determine the type of investigation and the efforts to invest into it according to the knowledge that could be expected from an accident prevention point of view.

⁽¹⁾ Council Regulation (EEC) no. 2407/92 of 23 July 1992 on licensing of air carriers; OJ no. L240 of 24.8.92.

Article 5

The purpose of this article is to draw a clear dividing line between the technical investigation and the judicial enquiry. It establishes the status of the technical investigation in order to reach the objective of this Directive.

Paragraph 1 sets the general principle while paragraph 2 lists a number of minimum rights necessary for the investigators to carry out their mission.

Article 6

This article deals with the body responsible for carrying out the technical investigation of aviation accidents.

Paragraph 1 gives the general principles: permanence and independence in order to avoid possible conflict of interest or any direct or indirect involvement in the causes of any investigated accident or incident.

Paragraph 2 enables small Member States which consider that even a limited permanent structure dealing only with investigations would not be justified, to use also this structure as a safety data collection and analysis unit running for example incident reporting system, occurrences data bases etc.

Paragraph 3 deals with the minimum means necessary for such a structure to be operational.

Paragraph 4 contains some of the provisions of Council Directive 80/1266/EEC therefore enabling it to be repealed in the present proposal.

Article_7

This article obliges the investigation body to publish a report to ensure the widest possible dissemination of safety related information in the event of an accident.

Paragraph 2 sets a goal of 12 months for the completion of the report. Setting a firm deadline could be counter productive by preventing long and sophisticated research which could be needed to reach important conclusions but setting a goal is necessary to avoid complacency.

Paragraph 3 introduces a provision to enable interested parties to comment and give them an opportunity to request a revision of the report.

Article 8

This article deals with the report in the case of an incident. Due to the special nature of incidents, their greater frequency and the fact that they usually are not published, it could be counter productive to use the same procedure as in the case of accidents. It is therefore important to protect the parties involved and to limit the circulation of the report to professionals, dealing with accidents prevention or aviation safety.

Article 9

This article addresses the important issue of safety recommendations.

Paragraph 1 ensures that the dissemination of safety recommendations is achieved by addressing them to all parties concerned and sending a copy to the Commission. By receiving the safety recommendations from all the Member States it will be able to distribute them to all the investigation bodies and aeronautical authorities of the Community. This could also lay the groundwork for a future central data base of safety recommendations.

Paragraph 2 creates an obligation to follow-up at national level the measures taken by the addressees when receiving a safety recommendation: compliance or justified rejection or alternative action. It also ensures that the corrective measures will not affect Community law such as, for example, the free movement of aircraft.

Article 10

This article reinforces the protection of the technical investigation by measures to avoid its use for purposes other than its exclusive objective which is prevention of future accidents or incidents.

Paragraph 1 limits the use of the report for other purposes to the factual part of it, therefore excluding the analysis and conclusions part.

Paragraph 2 enables the investigating body to draft safety recommendations concerning shortcomings discovered during the investigation but which could be unrelated to the causes of the accident or incident without risk of these recommendations being used for purposes other than prevention.

Paragraph 3 prevents the use of the report for disciplinary action.

Paragraph 4 reinforces the protection of the investigators by preventing them to be placed in a situation where there would be a conflict of interest.

Article 11

As the provisions of this proposal go further than those contained in Council Directive 80/1266/EEC, there is no reason to maintain this Directive anymore.

Article 12 & 13

Procedural articles.

PROPOSAL FOR A COUNCIL DIRECTIVE ESTABLISHING THE FUNDAMENTAL PRINCIPLES GOVERNING THE INVESTIGATION OF CIVIL AVIATION ACCIDENTS AND INCIDENTS

THE COUNCIL OF THE EUROPEAN COMMUNITIES.

Having regard to the Treaty establishing the European Economic Community, and in particular Article 84§2 thereof,

Having regard to the proposal from the Commission (1),

Having regard to the Opinion of the European Parliament (2),

Having regard to the Opinion of the Economic and Social Committee (3),

Whereas the opening of the internal market and the liberalisation of air transport will increase the air traffic operations, in particular these involving crew, aircraft and undertakings from different Member States:

Whereas a high general level of safety in the single market requires harmonised procedures to the extent that there will be less direct links between individual Member States and individual operators; whereas operations in the Community will involve more multilateral contacts between Member States and operators and therefore there will be a need for general principles to enable Member States to apply the same high level of accident prevention measures;

Whereas a high general level of safety in civil aviation in Europe should be maintained and all efforts should be made to reduce the already limited number of accidents and serious incidents:

⁽¹⁾ O.J. N° C...

⁽²⁾ O.J. N° C... (3) O.J. N° C...

Whereas account should be taken of the Convention on International Civil Aviation, signed in Chicago on 7 December 1944, which provides for implementation of the measures necessary to ensure the safe operation of aircraft; whereas account should also be taken in particular of the Annex 13 to the said Convention which provides international standards and recommended practices for aircraft accident investigation;

Whereas the expeditious realisation of technical investigations of civil aviation accidents and incidents would improve air safety in helping to prevent the occurrence of such accidents and incidents;

Whereas international standards provide for the investigation of accidents to be carried out under the responsibility of the State where the accident occurs, if investigation of incidents is not carried out by the State where the incident occurs, this investigation should be carried out by the State of registry;

Whereas investigation of serious incidents should be carried out in a similar way to investigation of accidents;

Whereas air safety requires accident investigations to be carried out in the shortest possible time, investigators should be able to proceed to their tasks with the greatest freedom allowed by the legal system;

Whereas investigation of civil aviation accidents and incidents should be carried out by an independent body to avoid any conflict of interest and any possible involvement in the causes of the occurrence being investigated; whereas this body should be suitably equipped and its tasks could include other prevention activities;

Whereas it is important for accident prevention to publish the findings of accident investigations in the shortest time possible while giving opportunity to interested parties to comment on these findings; Whereas the particular nature of incidents should be taken into account when circulating the findings of incident investigation;

Whereas the safety recommendations resulting from an accident or Incident investigation should be duly taken into account;

Whereas the technical investigation should only be used for prevention purposes, only factual information collected during the investigation should be allowed to be used to apportion blame or liability;

HAS ADOPTED THIS DIRECTIVE:

Article 1 - Objective

This Directive aims at improving air safety by facilitating the expeditious realization of investigations, the exclusive objective of which is prevention of future accidents or incidents.

Article 2 - Scope

- This Directive shall apply to investigations of civil aviation accidents and incidents occurring in the territory of the European Community taking into account the international obligations of the Member States.
- 2. This Directive shall also apply outside the territory of the European Community to investigations of serious incidents involving aircraft registered in a Member State or operated by an undertaking established in a Member State, when such an investigation is not carried out by another State.

Article 3 - Definitions

For the purposes of this Directive

- a) 'Accident' means an occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which:
 - 1) a person is fatally or seriously injured as a result of:
 - being in the aircraft, or
 - direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or
 - direct exposure to jet blast,

except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or

- 2) the aircraft sustains damage or structural failure which:
 - adversely affects the structural strength, performance or flight characteristics of the aircraft, and
 - would normally require major repair or replacement of the affected component,

except for engine failure or damage, when the damage is limited to the engine, its cowlings or accessories; or for damage limited to propellers, wing tips, antennas, tires, brakes, fairings, small dents or puncture holes in the aircraft skin; or

- 3) the aircraft is missing or is completely inaccessible;
- b) 'Serious injury' means an injury which is sustained by a person in an accident and which:
 - 1) requires hospitalisation for more than 48 hours, commencing within seven days from the date the injury was received; or
 - 2) results in a fracture of any bone (except simple fractures of fingers, toes, or nose); or
 - 3) involves lacerations which cause severe haemorrhage, nerve, muscle or tendon damage: or
 - 4) involves injury to any internal organ; or
 - 5) involves second or third degree burns, or any burns affecting more than 5 per cent of the body surface; or
 - 6) involves verified exposure to infectious substances or injurious radiation;
- c) 'Fatal injury' means an injury which is sustained by a person in an accident and which results in death within 30 days of the date of the accident;
- d) 'Causes' means action(s), omission(s), event(s), condition(s), or a combination thereof, which led to the accident or incident;

- e) 'Investigation' means a process conducted for the purpose of accident and incident prevention which includes the gathering and analysis of information, the drawing of conclusions, including the determination of cause(s) and, when appropriate, the making of safety recommendations;
- f) 'Investigator-in-charge' means a person charged, on the basis of his qualifications, with the responsibility for the organisation, conduct and control of an investigation;
- g) 'Flight recorder' means any type of recorder installed in the aircraft for the purpose of complementing accident/incident investigation;
- h) 'Undertaking' means any natural person, any legal person, whether profit-making or not, or any official body whether having its own legal personality or not;
- i) 'Incident' means an occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation;
- J) 'Serious incident' means an incident involving circumstances indicating that an accident nearly occurred.
 - A list of examples of serious incidents can be found in the Annex to this Directive:
- k) 'Safety recommendation' means a proposal of the investigation body of the State conducting the investigation, based on information derived from the investigation, made with the intention of preventing accidents or incidents.

Article 4 - Mandatory investigation

- Every civil aviation accident or serious incident shall be subjected to an investigation, the scope of which shall be determined by the investigation body taking into account the objective of this directive.
- 2. This does not prevent Member States to take measures to enable the investigation of other incidents when the investigation body may expect to draw air safety lessons from it.

Article 5 - Status of the investigation

- The Member States shall define, in the framework of their respective internal legal systems, a legal status of the investigation that shall enable the investigators-in-charge to achieve their mission, in the most efficient way and within the shortest time.
- 2. Without prejudice to the internal legal procedures in force and in cooperation with other authorities of the Member States responsible for the judicial enquiry, the provisions of paragraph 1 shall allow in particular:
 - unimpaired access to the site of the accident or incident as well as to the aircraft or its wreckage;
 - immediate controlled removal of debris, bodies or components for examination or analysis purposes;
 - immediate access to and use of the contents of the flight recorders and any other recordings;
 - immediate examination of, or taking of samples from, the bodies of victims or persons involved;

- examining witnesses;
- full access to any relevant information or records held by the owner, the operator, the maintenance organisation or the manufacturer of the aircraft and by the authorities responsible for civil aviation or airport operation.

Article 6 - investigation body

- 1. The Member States shall ensure that the conduct of investigations is entrusted to a permanent civil aeronautical body. This body shall be functionally independent in particular of the national aeronautical authorities responsible for airworthiness, certification, flight operation, maintenance, licensing, air traffic control or airport operation.
- Notwithstanding paragraph 1, the activities entrusted to this body can be extended to the gathering and analysis of air safety related data in as far as these activities do not affect its independence and entail no regulatory, normative or administrative responsibility.
- 3. The body referred to in paragraph 1 above shall be given the means required to carry out its responsibilities independent from the authorities referred to above and should be able to obtain sufficient resources to do it. Its personnel shall benefit from a statute giving the necessary protection and guarantees of independence. It shall comprise at least a suitably trained investigator to exercise the function of investigator—in—charge in the event of a civil aviation accident or serious incident.

- 4. If necessary, the body conducting an investigation may request the assistance of bodies from other Member States to supply:
 - a) installations, facilities and equipment for:
 - the technical investigation of wreckage and aircraft equipment and other objects relevant to the investigation.
 - the evaluation of information from flight recorders.
 - and the computer storage and evaluation of air accident data.
 - b) accident investigation experts to undertake specific tasks but only where an investigation is opened following a major accident.

When available, such assistance should be given, as far as possible free of charge.

<u>Article 7</u> - Accident report

- 1. Any investigation of a civil aviation accident shall be the subject of a report in a form appropriate to the accident. This report shall point out the exclusive objective of the investigation mentioned in article 1 of this Directive and contain, where appropriate, safety recommendations.
- The investigation body shall publish the report in the shortest possible time while endeavouring not to exceed 12 months after the accident date.
- 3. The draft report is submitted for comments to any party which the investigation body considers the investigation to be of particular importance and it shall give a deadline for the submission of comments.

Article 8 - incident report

- 1. Any investigation about an incident involving civil aviation shall be the subject of a report in a form appropriate to the type and to the gravity of the incident, and shall contain where appropriate relevant safety recommendations. This report shall, as far as possible, protect the anonymity of the parties involved in the incident.
- 2. This report shall be the subject of as wide a circulation as possible to the parties likely to benefit from the findings of the aforementioned report.

Article 9 - Safety recommendations

- The reports and the safety recommendations referred to in Article
 7.1 and 8.1 shall be addressed to persons, undertakings or national aeronautical authorities concerned and copied to the Commission.
- 2. The Member States shall take the necessary measures in order to ensure that the safety recommendations from the investigation body are duly taken into consideration and acted upon where appropriate without prejudice to the Community law and in particular that concerning the functioning of the internal market.

Article 10 - Liability

- The analysis and conclusions drawn from the investigation or arising from it shall not be used to apportion blame or within the context of proceedings to determine liability.
- 2. A safety recommendation does not by itself create a presumption of blame or liability for an accident or incident.
- 3. Investigation reports shall not be used for disciplinary action.
- 4. The Member States shall, in the context of Articles 5 and 6, take the necessary measures to protect investigators from involvement in litigation proceedings intended to apportion blame or liability arising from an accident or incident.

Article 11

The Council Directive 80/1266/EEC of 16 December 1980 is repealed.

Article 12

- The Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive not later than 1 January 1996. They shall forthwith inform the Commission thereof.
- 2. When the Member States adopt these provisions their texts shall refer to this Directive or shall be accompanied by such a reference when officially published. The Member States shall decide what method to use to make this reference.

Article 13

This Directive is addressed to the Member States.

Annex

List of examples of serious incidents

The incidents listed are typical examples of serious incidents. The list is not exhaustive and only serves as guidance to the definition of "Serious Incident".

- A near collision requiring an avoidance manoeuvre or when an avoiding manoeuver would have been appropriate to avoid a collision or an unsafe situation.
- Controlled flight into terrain (CFIT) only marginally avoided.
- An aborted take-off on a closed or engaged runway, or a take-off from such runway with marginal separation from obstacle(s).
- A landing or attempted landing on a closed or engaged runway.
- Gross failure to achieve predicted performance during take-off or initial climb.
- All fires and smoke in the passenger compartment, in cargo compartments or engine fires, even though such fires are extinguished by the use of extinguishing agents.
- Any events which required the emergency use of oxygen by the flight crew.
- Aircraft structural failure or engine disintegration which is not classified as an accident.
- Multiple malfunctions of one or more aircraft systems that seriously affects the operation of the aircraft.

- Any case of flight crew incapacitation in flight.
- Any fuel state which would require the declaration of an emergency by the pilot.
- Take-off or landing incidents. Incidents such as undershooting, overrunning or running off the side of runways.
- System failures, weather phenomena, operation outside the approved flight envelope or other occurrences which could have caused difficulties controlling the aircraft.
- Failure of more than one system in a redundancy system which is mandatory for flight guidance and navigation.

ISSN 0254-1475

COM(93) 406 final

DOCUMENTS

EN

07

Catalogue number: CB-CO-93-444-EN-C

ISBN 92-77-58958-2