Key Activities

Safety oversight

Objective: To assist States in identifying deficiencies in implementing Annexes 1, 6 and 8 to the Convention on International Civil Aviation and to offer them advice and assistance in overcoming these deficiencies, including the development of additional practical documentation, the proposal of effective solutions, the preparation or adaptation of basic regulations, and on-the-job and institutional training.

One of the core functions of this programme is an assessment by a team of experts of the capacity of participating States to control effectively the level of safety for which they have responsibility. Participation by States in the programme is voluntary although, once started, not without obligations. In particular, States undertake to develop, within a period of 90 days, a plan of action to correct any deficiency which may have been found during the assessment. ICAO may also provide assistance for the development of the plan of action and its subsequent implementation. For the time being the scope of the safety oversight programme covers personnel licensing, operation of aircraft and airworthiness of aircraft. The Council is studying the possibility of extending the scope of the programme to other areas such as air traffic control and airports.

ICAO contact: Chief, Operations/Airworthiness Section at ICAO Headquarters or local regional ICAO Representative.
Responding to identified safety shortcomings in the air navigation field

Objective: To foster the implementation of safety-related Standards and Recommended Practices (SARPs) other than those covered by the safety oversight programme.

International civil aviation is a dynamic activity which takes place in a diverse and changing environment. Through regular missions by staff to States, the information received during regional air navigation meetings and more generally through constant contact with all partners in the aviation community, ICAO can identify rapidly any safety shortcoming in the air navigation field. Responses are then provided through appropriate means such as development of or amendment to regulations, establishment of specific programmes or technical co-operation projects.

ICAO contact: Chief, Operations/Airworthiness Section at ICAO Headquarters or local regional ICAO Representative.
Development of a new instrument on air carrier liability which would modernize and consolidate the "Warsaw System"

Objective: To create a universally acceptable convention which would modernize and consolidate the "Warsaw System" and bring it in line with present-day requirements

ICAO is currently engaged in the development of a new legal framework concerning air carrier liability in international air transport, especially for accidental death or injury to passengers, to modernize and consolidate the current liability regime known as the "Warsaw System", which comprises the Warsaw Convention of 1929 and certain amendments to that Convention. A draft of a new international legal instrument has been prepared under which the passenger's claim for compensation as a result of accidental injury or death is no longer artificially curtailed by low limits of liability accorded to the air carrier, but will be subject to strict liability up to a threshold of 100,000 Special Drawing Rights, and subject to fault liability principles above such threshold.

ICAO contact: Director, Legal Bureau at ICAO Headquarters or local regional ICAO Representative
Strategic Objective D

Key Activities

Improvement of over-all efficiency of regional air navigation planning mechanism

**Objective:** To strengthen the autonomy of the regional planning process and enhance the co-ordination between the adjacent regions

Air navigation is a precise process that is highly dependent upon skilled pilots and air traffic controllers working together, using numerous sophisticated electronic systems. These systems have components on the ground, in aircraft and, increasingly, even in outer space. Responsibility for the employment of the various navigation systems rests largely with each sovereign Contracting State of ICAO. Each State has numerous options for the components of its air navigation system and thus must plan well to ensure prudent and timely choices among options. Similarly, States within each geographic region must co-operatively create and update a regional air navigation plan to ensure that the national systems together form a viable, smooth working whole. Each region now has a regional air navigation planning mechanism or process, supported by ICAO and thereby enabling inter-regional co-ordination.

**ICAO contact:** Chief, Regional Affairs Office at ICAO Headquarters or local regional ICAO Representative
Co-operation with other international bodies for the establishment of a civil Global Navigation Satellite System (GNSS)

**Objective:** To enhance contacts with international organizations and ICAO partners for the establishment of a Global Navigation Satellite System (GNSS) controlled by civil aviation.

The existing Global Navigation Satellite System (GNSS) is a civil-military one. Its two major components are the Global Positioning System (GPS) operated by the United States and the Global Orbiting Navigation Satellite System (GLONASS) provided by the Russian Federation. Both systems are sophisticated and costly dual-use civil-military systems made accessible to civil aviation without charge by the two governments. ICAO nevertheless envisions the eventual creation of a multi-national civil GNSS.

**ICAO contact:** Chief, Regional Affairs Office at ICAO Headquarters or local regional ICAO Representative

Development and follow-up of the Global Plan, regional and national plans for Communications, Navigation and Surveillance/Air Traffic Management (CNS/ATM)

**Objective:** To prepare an up-dated version of the Global CNS/ATM Implementation Plan, continue development of regional plans, and assist States working on their national plans.

A Global Plan, and regional and national plans, are essential to satellite-based CNS/ATM implementation. Such plans must be developed, where they have not been, and up-dated as needed, in particular to keep current with evolving new technologies. Follow-up is also needed to ensure a smooth interface between plans.

**ICAO contact:** Chief, Regional Affairs Office at ICAO Headquarters or local regional ICAO Representative
Safeguarding against unlawful interference

Objective: To ensure that timely action continues: a) to improve the general level of implementation of security standards; and b) to ensure that any problems arising are properly and efficiently dealt with.

Acts of unlawful interference continue to present a threat to the safety of international civil aviation. The key to safeguarding air transport against such acts is the uniform and consistent application of the Standards and Recommended Practices (SARPs) contained in Annex 17 to the Convention on International Civil Aviation. Recognizing the difficulties faced by States in implementing these SARPs, ICAO has launched a three-phase plan of action under a Mechanism for financial, technical and material assistance to States with regard to aviation security. In the assessment phase, a technical evaluation determines the extent of application of SARPs within the State. The advice phase provides the State with recommendations to overcome any deficiencies. The assistance phase is directed towards specific targets with practical technical involvement.

In evaluating a large number of international airports, ICAO has determined that deficiencies in the implementation of the provisions of Annex 17 are attributable in the main to the inadequacy of training standards and/or practices, and the Council has accordingly approved for global application the development of the ICAO Training Programme for Aviation Security. Training requirements affect all levels of personnel and therefore necessitate the development of a comprehensive range of training courses for the various groups involved, and a series of Standardized Training Packages (STPs) is under development.

ICAO contact: Chief, Aviation Security and Facilitation Branch at ICAO Headquarters or local regional ICAO Representative
Strategic Objective E

Key Activities

Flight safety and human factors

Objective: To improve safety in aviation by making States more aware and responsive to the importance of human factors in civil aviation operations through the provision of practical human factors materials and measures, developed on the basis of experience in States, and by developing and recommending appropriate amendments to existing material in Annexes to the Convention on International Civil Aviation and other documents with regard to the role of human factors in the present and future operational environments.

Human factors are a vital element in aviation safety. The growth in air traffic, the increased use of automation and the introduction of new technology and concepts such as the ICAO satellite-based Communications, Navigation and Surveillance/Air Traffic Management (CNS/ATM) systems with their associated complexity in both flight and ground operations are creating new challenges for the personnel operating the aviation system. Through the programme ICAO is providing practical human factors materials and ensuring that the experience acquired in any part of the world benefits all ICAO Contracting States. The programme also ensures that all technical standards and guidance material developed by ICAO take into account human factors consideration from the early stage of development to its implementation.

ICAO contact: Chief, Personnel Licensing and Training Section at ICAO Headquarters or local regional ICAO Representative
Prevention of controlled flight into terrain (CFIT)

**Objective:** To develop an ICAO CFIT prevention programme with associated amendments to Annex 6, Parts I and II to the Convention on International Civil Aviation and the development of guidance material; co-ordination of amendments to Annexes 1 and 4, PANS-OPS, Volumes I and II and the PANS-RAC, including the amendment of associated guidance material.

ICAO has been involved in the current efforts to reduce controlled flight into terrain (CFIT) accidents since 1991. The reaction to similar problems in the late 1960s and 1970s resulted in the introduction of the ground proximity warning system (GPWS). Although this measure significantly reduced the number of CFIT accidents it did not eliminate them. Part of the problem was that the initial version of the equipment generated false and unwanted GPWS warnings, resulting in a lack of reaction to warnings in many cases. In addition, the root causes of the CFIT accidents were not addressed.

The ICAO programme for the prevention of CFIT is being conducted in co-ordination with the industry and State regulatory authorities and in co-operation with the Flight Safety Foundation (FSF). The initial objective of the programme is to reduce the annual occurrence of CFIT accidents by fifty per cent by the year 1998. The programme seeks the involvement of all management and operational personnel in civil aviation. The programme includes: education in the CFIT problem; review of policies and procedures; training; the improvement of equipment and instruments. Stress is laid on the human aspects of the CFIT problem and its contributory factors. The comprehensive approach to the problem also involves amendments to Annex 6 (Operation of Aircraft) and to Procedures for Air Navigation Services (PANS), along with preparation of guidance material.

**ICAO contact:** Chief, Operations/Airworthiness Section at ICAO Headquarters or local regional ICAO Representative.
Environmental protection

Objective: To respond on a worldwide basis to environmental problems that may be associated with civil aviation

In recent years, there has been increasing concern regarding the environmental impact of civil aviation. The two main problems are aircraft noise and aircraft engine emissions. While ICAO has already established noise and emission standards that new aircraft and engines must meet, new challenges lie ahead, including the possible introduction of a new generation of supersonic aircraft.

Aircraft noise levels are being reduced in the vicinity of most airports, as operations of certain more noisy aircraft types (the so-called “Chapter 2” aircraft) are phased out in accordance with a worldwide policy framework adopted by the ICAO Assembly in 1990. Once most of these aircraft have gone, however, noise levels could begin to increase again as a result of the continuing growth of air traffic.

When ICAO’s standards for aircraft engine emissions were first introduced, the main environmental concern was the local air quality in the vicinity of airports. More recently the focus has shifted to determining aviation’s impact on the global atmosphere, for example its contribution to problems such as climate change. Once aviation’s impact has been more clearly defined, ICAO will be in a position to identify what action is called for.

The Organization’s extensive work on environmental protection matters, including amendments to Annex 16 to the Convention on International Civil Aviation and the potential application of economic instruments, is largely undertaken by the Council through its Committee on Aviation Environmental Protection.

ICAO contact: Co-ordinator, Environmental and Air Transport Programmes at ICAO Headquarters or local regional ICAO Representative
Technical co-operation

Objective: To assist States in the implementation of projects aimed at mobilizing human, technical and financial resources for the safe and efficient development and operation of civil aviation

The Programme. – ICAO has had long experience providing advice and assistance to developing countries in meeting their international obligations in adhering to ICAO Standards and Recommended Practices and in implementing Air Navigation Plans, enhancing safety and security of operations and developing the civil aviation sector in general, including human resource development. In a normal year the Technical Co-operation Bureau will execute over 100 varied technical co-operation projects, some very large, costing over U.S. $10 million, others relatively small, costing U.S. $100 000 or less. The assistance is provided in the form of advisory or operational assistance, on-the-job and institutional training, and procurement of civil aviation equipment and systems.

The ICAO Advantage. – With all the expertise of the Organization behind its technical co-operation programme, ICAO understands the problems of the developing world and knows from experience how to overcome these. ICAO knows that the transfer of technology in a field as sophisticated as civil aviation takes time, patience and determination. Drawing on resources within the Organization and throughout the world to achieve the best results, the ICAO Technical Co-operation Programme has only one aim: to serve the best interests of the countries it assists in an objective manner. It is operated on a non-profit, impartial and therefore more cost-effective basis, dedicated to making civil aviation safe, efficient and responsive to national and international needs.

ICAO contact: Director, Technical Co-operation Bureau at ICAO Headquarters or local regional ICAO Representative
Regulation of international air transport services

Objective: To provide guidance for States on new regulatory arrangements to ensure progressive change towards market access, effective and sustained participation and fair competition in international air transport.

The focus of economic regulation in civil aviation is constantly changing as the air transport industry, which has long been the subject of economic controls and protection, adjusts to broader globalization and liberalization trends. The ICAO World-wide Air Transport Conference in 1994 addressed this situation and began the task of mapping out guidance to assist States and the industry in moving from a controlled to a more open, competitive and less regulated environment. ICAO is building on the work of the Conference by developing guidance, where needed, on economic regulation for this transition; guidance which will facilitate not just the transition process towards liberalization but will also ensure the opportunity for States to participate in air transport.

ICAO contact: Chief, Economic Policy Section at ICAO Headquarters or local regional ICAO Representative
Air transport product distribution

**Objective:** To enhance fair competition among airlines and among computer reservation systems (CRS) and afford international air transport users access to the widest possible choice of options in order to meet their needs.

The air transport sector is a leader in the development and application of communications and information technology. In this the computer has become an indispensable tool for airline efficiency, cost control and revenue enhancement, and nowhere more so than in the marketing and selling of its product, aircraft space. The emergence of powerful global computer reservation systems, with significant potential for market dominance, has raised issues of possible competitive abuse; some States and regions, and at the global level, ICAO, have developed regulatory codes to ensure fairness, non-discrimination, transparency and accessibility to these systems, with obligations not only on the States but also on the systems themselves and on airlines and the travel intermediaries who use them. ICAO's Code of Conduct on the Regulation and Operation of Computer Reservation Systems, which was most recently revised in June 1996, will be kept under constant review and updated, as necessary, to take account of rapidly evolving technological and commercial developments in airline product distribution, such as the Internet.

**ICAO contact:** Chief, Economic Policy Section at ICAO Headquarters or local regional ICAO Representative

Trade in services

**Objective:** To study the applicability to international air transport of the principles and concepts in the General Agreement on Trade in Services (GATS) and promote in the World Trade Organization (WTO-OMC) the mandate, objectives and work of ICAO.

The inclusion by the Uruguay Round of trade negotiations of all service industries in the General Agreement on Trade in Services (GATS) has added an additional institutional regulatory focus and approach to liberalization for air transport. While the coverage of air transport by the GATS is restricted to aircraft repair and maintenance, selling and marketing and computer reservation systems, the World Trade Organization (WTO-OMC), which administers the GATS, is committed to begin a review of this coverage by the year 2000. Consequently, the future regulatory application of the GATS to air transport will necessitate close monitoring of developments in WTO-OMC and other interested organizations, as well as co-operation with them so that air transport's input and involvement is effective and beneficial to this industry.

**ICAO contact:** Chief, Economic Policy Section at ICAO Headquarters or local regional ICAO Representative
Strategic Objective G

Key Activities

TRAINAIR

Objective: To improve the quality of and to standardize aviation training on a worldwide basis

Safety and efficiency of international civil aviation is the responsibility of the personnel that manage, operate and maintain its systems. These professionals must not only possess high individual skills, but in order for an international system to function safely and efficiently, they must be able to work together as an “international team”. To achieve this, it is essential that the team members receive the same high quality of training throughout the world. ICAO is committed to working with its Contracting States to advance worldwide quality standards in civil aviation training. The TRAINAIR programme is an important element in ICAO’s strategy to achieve this goal.

TRAINAIR works directly with civil aviation training centres and helps them in using a modern, proven and standardized training development process. As all participants in this programme prepare their training materials using the same process and standards they can easily use each other’s products. An integral part of the programme is an international training resource sharing system established by ICAO. This system enables participating training centres to share freely materials produced by other participants throughout the world. Thus, TRAINAIR enables the participants to improve both the quality of their training and, at the same time, its cost-efficiency.

In the future, air navigation systems will truly help to advance the world towards a “global village”. Today, the technology exists to create a seamless global air navigation system. A seamless air navigation environment, however, will require more than the technologies alone to function effectively. It will require an international team that has been prepared to perform their jobs in such an environment. ICAO is actively working with States as they prepare for that future through the TRAINAIR programme.

ICAO contact: Chief, TRAINAIR Central Unit at ICAO Headquarters or local regional ICAO Representative