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## CHALLENGES OF TRANSITION FROM JOINT AVIATION AUTHORITIES / / FEDERAL AVIATION ADMINISTRATION TO EUROPEAN AVIATION SAFETY AGENCY

### ABSTRACT

*The work presents certain challenges that occur in the process of preparation and gradual transition to the unique European agency / service of air traffic safety, as well as the interaction of EASA with other similar services / agencies in the world. The new agency, in the new legal and functional environment that is being created, has to take over painlessly and without any break, the important functions and responsibilities of the JAA/FAA related to air traffic safety and airworthiness at the European and world level.*

### KEY WORDS

*Federal Aviation Administration, European Aviation Safety Agency, transition period*

### 1. INTRODUCTION

The attitudes of a few relevant authors from the field of transition to the unique European Aviation Safety Service (EASA) are very similar in the principle matters, and the reason lies in the understandable effort not to disturb the functionality and the safety of the existing system with preparations for and the process of transition.

There is, namely, a consensus about the preservation of the benefits of the system, especially in the transition period, so as not to disrupt the balance in tasks and responsibilities, including also the general aviation safety.

Keeping of the achieved standards, regulations and norms and their implementation in the new system, as well as the creation of new ones, those harmonised at the world level, with the aim of increasing the aviation safety, these are the final objectives of transition to a unique EASA.

Furthermore, there are certain differences in opinions and tendencies regarding the method and dynamics of taking over the tasks and responsibilities of EASA. Basically, this does not mean that no consensus about the transition period or the tasks that have to be carried out so as to maintain the functionality of the system for the sake of the aviation safety has been reached. On the contrary, this only shows how much enthusiasm has been invested in creating of this new service.

New service provides also the opportunity to put things from the start in their proper places.

### 2. CHALLENGES OF INSTITUTIONAL CHANGES IN EUROPE

There are two main steps that lead to full functionality of the system, and in considering the preparation of the conditions for the transition and the process itself of transferring tasks and responsibilities from JAA/FAA to EASA, they are;

1. building of the system,
2. start of the system operation.

Furthermore, each of the mentioned steps consists of several inevitable sections, which only through their individual full functionality lead to the functionality of the whole.

Thus, the first section in building of the system is the *Legal Procedure*, the purpose of which is to realise equality of all the system members, regarding right to discussion and consultations prior to developing and accepting the legal or administration materials. Besides, there is the possibility for the independent, yet professional institutions and/or individuals to influence the decisions and attitudes.

The next section are the *Management Mechanisms in the field of airworthiness*, which are considered through three levels: Implementation Laws - adopted by the Commission; Airworthiness Regulations - created by the Service; and Recommendations and Instructions - created by the Service.

**Implementation Laws** include the issuing of certificates that cover the airworthiness, and can be issued either by the Service or the national authorities within the area under their competence. Since these laws are obligatory for the member countries as well as for those who want to become members, they will contain technical requirements for issuing and maintaining of certificates as well as the procedures that need to be followed at the national level to check their compliance with them. For the reasons of simplicity and continuity, it is most probable that the Implementation Laws will be identified as JARs, so as not to cause any unnecessary confusion in the already very carefully created texts.

**Airworthiness Regulations**, created by EASA, refer to the aeronautical products, parts, and equipment which are within the competence of EASA, and have to match certain basic characteristics. It is also indicative that the compliance with these characteristics will be certified with standard certificates or permits. Finally, this gives EASA the right to issue joint verifications of conformity of equipment and other parts.

Of course, the mechanism for the protection of the producers against possible discrimination has been embedded in the system, with a possibility of complaining about certain decisions.

Finally, **Recommendations and Instructions** have the purpose to achieve better understanding of the requirements and the procedures required from the authorities at the national level when they are requested to adjust to the EASA laws and regulations. This, of course, refers to the member countries, and especially to those that want to join the membership.

The third section in the building of the system are the *Implementation Procedures*; whereas on the one hand the procedures that need to be complied with by the member countries, have to be supplemented by laws in order to be implemented, EASA has kept a certain liberty to determine the procedures.

Since the basic characteristic of the system is the centralization in the area of issuing the manufacturers' certificates, and this differs from the procedures contained in JAA, an external expert associate has been requested to develop the proposal for the optimal procedure, which will be discussed at the meeting of the Executive Board.

The next section are the *Systems for Control and Standardisation*; EASA regulations require verification and control by the national bodies in implement-

ing the valid rules and laws, and especially of the procedures contained in them.

The significance of this section is reflected in the uniformity of the safety condition in air traffic and the environmental protection, since the certificates and clearances issued by the national body are valid without any additional checks or verifications.

The fifth section is *Personnel*, and it refers to the EASA requirement for the employment of people who would carry out certain tasks, and the corporate image lies in the quality and motivation of its employees. Since EASA will not have to perform all the tasks with their own labour, an assessment is underway regarding the number and profile of the required people, referring, namely, to the basic task - approvals and certificates.

The biggest problems in this section are the impossibility of fast personnel expansion of EASA due to financial and organisational reasons, the impossibility of the member countries to dismiss a part of their professional and necessary staff, and the social aspect of changing the workplace or country.

Thus, the five mentioned sections, that is, their solutions will provide the preconditions for the *Start of the system operation*.

When all the basic sections in the building of the system are fulfilled, then the Start of the system operation may begin, that is, by transferring certain jobs i.e. responsibilities, together with the implementation of personnel policy.

**The task of issuing new certificates** and approvals is divided into the European and the import products. Regarding European products there shouldn't be any greater problems, though, contrary to expectations, there should be neither any problems with the import products since EASA has the possibility to treat them as European ones or to unilaterally accept the certificates of other foreign competent bodies.

**Transition of current tasks regarding issuing of certificates** and approvals will not be disrupted in order to maintain the continuity of the teams working on certain projects. Of course, a part of the tasks will be left at the national level with subsequent transition of the responsibility to EASA. Related to the import products (non-European), the attitude is also to keep the existing national or multinational teams, respecting the procedure for joined multinational teams in issuing the certificates.

**Transition of tasks and jobs regarding type certification of products** should be realised with the minimum possible breakdown or ambiguities regarding the responsibilities for certain jobs related to the control. EASA should, namely, issue type certificates based on the idea of implementing the Regulation 21, which legally approves to the country-manufacturer the validity of all the differences if these are approved

also by the member state. Since this is a time-consuming process and requires certain harmonisation of the process of transferring responsibility, the idea is to keep the existing JAA functions in this domain until final transition. The estimated time necessary for the responsibility transition for non-European products is three years and for the European ones, which only have the national certificates, it is 42 months at the most. For those products that have passed the JAA process, the new certification is expected to occur when the new system begins functioning.

**Transition of approvals for modifications and repairs** has been conceived to be implemented in the same manner as regarding the type certification. However, minor modifications at the national level are not completely excluded, and they will be referred to as the qualified national bodies on behalf of EASA.

**For the transition of approvals for parts and equipment**, the issuing of approvals by EASA has been planned, whereas the evaluation of conformity will proceed at the national level. The process of transferring responsibility should follow the same steps as in the process of transition regarding products.

**Approvals to design organisations** will be issued by EASA, except in the cases of bilateral agreements which exclude an organisation from such approval.

Finally, it should be noted that a clear vision of administrative and institutional EASA framework indicates which tasks have to be carried out prior to the transition of the system functions from the national aviation authorities towards EASA. Thus, the leading principles in establishing the mentioned framework should include: continuity in the air traffic safety functioning, minimum load on the industry, clarity of roles and responsibilities, implementation of the decisions made by the community should not be postponed, distinguished experts should continue working in the environment that provides them with personal satisfaction and system efficiency, the JAA co-ordination model needs to be kept until the new system gains full confidence.

### 3. EASA AND CHALLENGES AT WORLD LEVEL

The work of the FAA and the orientation regarding preparations for the easiest transition of airworthiness and the continuity of airworthiness functions into a new unique system of EASA, represents a necessary and significant factor for high-quality harmonised functioning of both services, as well as of the industry related to the operation of these services.

The transition period until the full functioning of EASA can and must be considered as a chance for joint work with the aim of improving aviation safety

and for the continuity in the throughput of aircraft products and services.

From the perspective of a non-European country, EASA represents a challenge and an opportunity, and the most important two for the USA authorities are: to *insure easy transition into a unique aviation whole*, especially from the aspect of airworthiness continuity, and to *attend to the relations with the new authority through bilateral agreements with EU*.

Regarding the transition from the national aviation authorities to the EASA system, several principles have been set that need to be complied with:

1. indisputable responsibility for the safety in using the existing aircraft fleet, as well as in the cases of danger, incidents and accidents;
2. throughput of aircraft products and services must not be discontinued, which is to be achieved by clear regulations related to the certification of aircraft, maintenance system and repair;
3. transparency in the development of the basic working requirements and licensing, so as not to disrupt the existing harmony between the USA and other parties in the field of safety.

Non-compliance with these principles could have multiple consequences, of economic, social and operative character.

As the basis for the future bilateral co-operation between FAA and EASA, the focus is on the readiness and required intense engagement and involvement by FAA in the development of all EASA materials, along with joint understanding and trust. Furthermore, relative absence of satisfaction and worries expressed by FAA have been caused by the past superficial involvement of the FAA experts in creating the transitional environment towards EASA. Emphasis has been placed on the need for determined and firm management of the procedures, in order to insure the maximum level of safety with no deviations. Since the experience in procedure management represents an important factor, the co-operation should be realised as soon as possible. Regarding the airspace safety, the attitude is that those requirements, regarding the technical aspect, which are guided by special interests, social or economic, or that are subject to market influence, should be avoided.

FAA has clearly defined attitudes regarding the evaluation of the bilateral partner, even though a multinational one, and FAA will continue to comply with these attitudes in the future. One of them is the need for trust, i.e. assessment of the EASA capability to realise its mandate by making decisions for each single segment of the taken over responsibility. The assessment of the EASA capability should start only after the procedures and structure have been insured and implemented and after the responsibility system has been established.

The great advantage lies in creating the new umbrella organisation for aviation safety, such as EASA, and the reason is that a new start means that the things may be placed into their proper places from the very beginning. Furthermore, clarification of possible misunderstandings that may exist in the relations at national levels or within JAA, and management of all the processes in the joint body, represent additional advantages for EASA, and the most important thing is the creation of the European common safety standards in air traffic.

A possible problem may appear in case a certain regulation was imposed on a member country, which is not in compliance with her national law, since the process of legal adjustment might take long enough to cause economic losses or serious problems in the air traffic safety. Therefore, standardisation at a national level represents a challenge in itself, and at the international level the challenge lies in the fact that EU will apply for membership in ICAO, and the member countries decide on the admission - including the EU members, which will cause certain changes, and this means that there will have to be changes in the Chicago Convention as well.

As conclusion, FAA has clearly defined the areas that require or will require harmonisation and understanding, and has offered models, mainly to keep certain JARs, until new regulations and procedures are developed and implemented. It has also identified areas that require engagement of work teams of experts and has proposed areas that need to be solved in the final phase or among the last ones, as well as those that need to be complied with in the future work as well, as much as possible. For this to be feasible, high level of co-operation and trustworthiness is needed, and the first basic step is in the creation of a joint FAA and EASA work team with the aim of planning the steps during transition and focusing on the procedures that would lead towards a bilateral agreement.

#### 4. IMPROVED AIR TRAFFIC SAFETY

Although general aviation, at the first glance, does not represent a factor which needs to be specially singled out from the preparation process and the gradual transition to EASA, this is more than necessary. The reason lies in the fact that this "secondary" and sometimes marginalised, less important branch of aviation is gaining an increasing share in the transport of passengers and goods.

The result is the development and application of strategic directives in raising and strict implementation of rules related to aviation safety, and in connection with the change of general climate regarding GA, the culture of GA itself, and connection of the safety system of the "Big" and the "Small". Only full involve-

ment of GA in the safety systems and mechanisms, certification procedures and airworthiness regulation, setting of improved conditions in design and construction of aircraft and equipment, requirements for staff qualifications, and stricter application of these, higher standards and rules of airworthiness, usage and maintenance, will contribute to the improvement of the overall air traffic safety of all the traffic system participants.

#### 5. GENERAL PLAN OF TRANSITION TO EASA AND THE FACTOR OF TIME

The given time for organising EASA is the middle of 2003. However, there are many intermediate steps which have to be implemented so that the agency could start on the given date by partial process of taking over the authorities and responsibilities, all the way to full functioning. The plan, i.e. the time schedule is presented in Appendix 1.

Legal regulations, as one of the most important factors keeping neck and neck with the organisation itself, have to pass the process of second reading and acceptance in the Parliament, as well as the estimation of differences by the Council, and finally the approval by the Committee, thus automatically providing the precondition for the functioning and operation of the organisation.

Organising EASA is a process in itself, which is developing parallel and depending on the previous one, so that the most important thing is the report of the consulting organisation about the necessary form and content of the organisation, followed by the appointment of the general manager and the process of staff recruitment.

The texts of single sections of EASA need to be completed until the beginning of 2003, with exceptions regarding airworthiness regulations and requirement specifications for the spare parts and equipment, which have to be completed by August 2003.

Consequently, the process of transition of authorities and responsibilities, and taking over of single activities starts in the first quarter of 2002 and lasts until January 2003, of course, with continuous functioning and activities of JAA until the end of 2003.

#### 6. CONCLUSION

The European Aviation Safety Agency (EASA) represents the efforts to improve functionality and safety of air traffic, as well as harmonization of the European and world standards in aviation.

The advantages of the existing systems will be kept by being embedded into the new system, especially in the transition period, new standards will be devel-

oped, adjusting the differences at the world level, thus increasing also the overall safety of air traffic.

The dynamics of the transition has been well planned, and the determination in establishing the organisation is a factor which guarantees safe transition and future high-quality functioning. Therefore, it is necessary to note once more the best characteristic of the process of reorganisation of the new service; new service means also an opportunity to put the things in their proper places from the beginning and to solve certain open questions of individual entities in the organisation and the organisation with the environment.

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#### SAŽETAK

#### IZAZOVI PRIJELAZA SA JOINT AVIATION AUTHORITIES / FEDERAL AVIATION ADMINISTRATION NA EUROPEAN AVIATION SAFETY AGENCY

U radu su prikazani određeni izazovi koji se javljaju u procesu pripreme i postupnog prijelaza na jedinstvenu Europsku agenciju/sluzbu sigurnosti zračnog prometa kao i interakcija EASA-e sa drugim istoznačnim službama/agencijama u

svijetu. Nova agencija, u novom pravnom i funkcionalnom okružju koji se stvara, mora bezbolno i bez prekida preuzeti važne funkcije i odgovornost od JAA/FAA vezano uz sigurnost zračnog prometa i plovidbenosti na europskoj i svjetskoj razini.

#### KLJUČNE RIJEČI

FAA, EASA, sigurnost zračnog prometa, prijelazni period

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