

Interview with IFATSEA Director Europe

What is IFATSEA stands for?

- The International Federation of Air Traffic Safety Associations, **IFATSEA**, is a professional body representing Air Traffic Safety Electronics professionals worldwide representing 25,000 ATSEP, engineering and technical personnel in 70 countries and the members of its executive board are originated in Europe, Asia, Africa and N. S. Americas.
- IFATSEA represents ATSEP associations/unions across the globe. In Europe, IFATSEA has 34 European affiliates countries. Nevertheless, some countries i.e. Estonia, Latvia..., are not represented as there is no local association or union for ATSEP that can become member of IFATSEA.

What is the mission of IFATSEA?

Fulfilling its mission, IFATSEA managed to unite all ATSEP Engineering and technical personnel under one roof promoting and defending the professional interest of its member being the authoritative voice on the competence of air traffic safety electronics personnel.

Some characteristics and actions of our federation are the following:

- 1) Our federation operates as a purely professional body that promotes the safety, smooth operation and efficiency of the Air Navigation Services at the International level, while it abstains from any political and trade union action.
- 2) Provides technical advice for the development of new technologies, contributing so to smooth transition to future ATM/ANS systems, focusing in particular to safety.
- 3) Follows closely the envisaged adoption of new technologies by ICAO or EASA and tries to affect the development of relevant SARPS and Regulations under establishment (or Means of Compliance) in interest of ATSEP as well as to keep its members worldwide informed about the imminent evolutions.
- 4) Strives to safeguard the collective professional interests of ATSEP as well as to improve their working conditions.
- 6) Promotes cooperation with other professional organizations and groups for mutual benefit.

Few examples of European activities and current developments.

We are participating in various bodies of the European Commission:

- In ICB (Industry Consultation Body) mainly ATM/ANS consultant of European Commission.
- In EGHD (Expert Group on Human Dimension), human aspects in Single European Sky.
- In EASA regulatory groups as advisors.
- In the SESAR, the research program for the creation of the Single European Sky.

ATSEP profession

The Electrical-Electronics Engineers working in the field of Air Navigation Services, bear the professional title **ATSEP** (Air Traffic Safety Electronics Personnel).

After 02/01/2020 when the European Regulation (EU) 373 / 2017 came into force, ATSEP must be considered professionally competent for doing their job. This will be achieved through the training depicted in Annex XIII to the said regulation. In other words, ATSEP, along with ATCOs (licensed) are the only ATM/ANS profession under regulatory regime.

Definition of ATSEP and EU-discussion

- The ATSEP definition given in Regulation 2017/373 outlines the tasks of ATSEP, although the ICAO doc 10057, considers wider range of those tasks. However, according to Annex XIII to that regulation as well as to its article ATM/ANS.OR.B.005 (a)(6), the ANSP employing ATSEP has to establish procedures defining the details of ATSEP training as well as the applied competency assessment scheme, in the context of the regulation. These procedures may also comprise the recommendations of ICAO doc 10057.
- All the above, along with the local licensing scheme wherever such a scheme exist, will be subject to inspection by local NSA and EASA

ATSEP roles and tasks

- The roles and tasks of ATSEP should be in line with the training that they are being offered as per annex XIII to Regulation 2017/373 and the entailed competency they will be awarded with, which aims at ensuring the required continuity of corresponding service.
- However, new requirements for ATSEP like competency in the area of cybersecurity, not covered by the training syllabus being described in Regulation 2017/373, have already been included in the recently issued EASA Acceptance Means of Compliance of Annex XIII.
- Furthermore, the said regulation is foreseen to be updated to incorporate the upcoming technologies like extended Automation and AI applications, entailing new types of training for ATSEP to be added to existing syllabus.

New ATM Technologies and challenges for ATSEP

- ATM/ANS Systems, are becoming increasingly complex and interdependent, especially with the proposed new concepts of operation like the virtual centers, remote towers and other.
- IFATSEA participates to a certain extent in the SESAR development, monitors the evolutions, studies on regular basis how tech development / solutions impact the ATSEP profession and express opinions or even objections.
- However, regardless of IFATSEA reactions the requirements for skills of ATSEP will be inevitably changed as ATSEP will be obliged soon, to keep the existing systems up and running while will also start to deal with Artificial Intelligence, the SWIM network, complex databases, Cybersecurity issues etc.
- At ICAO and EASA level, there is a common understanding that ATSEP will be responsible for cybersecurity for the ATM/ANS functional system only and not for the cyber over the whole corporate networks.
- Short term changes foreseen in the area of:
 - **Communication**, a shift to VoIP as well as data link communications are coming requiring particularly skilful ATSEP.
 - **Navigation**: shift to space-based navigation, normally in combination with ground-based Nav aids like DME, ILS, VOR. The monitoring of satellite coms as well as the use of tools for facing potential GPS Jamming and spoofing will also be some of the new ATSEP tasks.
 - **Radar**: The primary radar is retained while the secondary will be substituted by ADS-B, C.
 - **ATM Data processing**: New functionalities so, more extensive training for ATSEP.
 - For all above the competency of ATSEP has to be approved by the ANSP through the appropriate procedures being in place, as required by regulation 2017/373.

Organisational changes, outsourcing

- The EU Regulatory regime, leaves enough room for outsourcing various activities around ATM/ANS like PWR Supply, air conditioning, Cybersecurity etc.
- Although the above three areas are considered the mostly probable ones for outsourcing, many ANSPs have already realise that it would be better to do them in house especially due to the fact their employees, contrary to those of external organizations, have deeply realized the importance of each and every function of ATM/ANS and what consequences any malfunction could bring about.

ATSEP non recruitment and impact on ATM/ANS Performance.

- The attitude of a number of States and ANSPs which haven't recruited new ATSEP since many years, is on contrary to the multitude and needs of the systems being foreseen to be operational shortly.
- In line with the potentials of the new technologies, are the performance requirements for the ATM/ANS, while the requirements of Regulation 2017/373 for safety assessment and safety support assessment, demand highly skillful ATSEP.
- The situation has to be rectified the soonest possible by recruiting new ATSEP in order to avoid unforeseeable extended outages of CNS systems particularly in remotely controlled TWRs or other ATS units.
- Furthermore, we believe that the Key Performance Indicators (KPIs) that are currently referred to Air Traffic Services have also to include the CNS as the latter is the main enabler of the former, but the continuity of service request adequate number of competent ATSEP.

Safety and contradictory Regulatory requirements

The four Key Performance Areas (KPA) currently being considered are: **safety, capacity, environment and cost-efficiency**, with the **safety** to be the overarching one, statement that is repeatedly met in EU regulations.

However, in Regulation 2017/373 for the establishment of the safety criteria, which are part of SMS, it is required that "*any permanent reduction in safety has other beneficial consequences*" which is contradicts to the abovementioned mindset.

IFATSEA has repeatedly raised this to EC and EASA and we do hope at the next update of the regulation this statement will be corrected.

COVID-19 and Current situation with ANSPs

Due to COVID-19-pandemic, global air traffic operations have been reduced to unpredicted levels. In view of financial consequences, EU showed very strong willingness to support Air Carriers at expense of ANSPs interests while for the latter, no any financial provision has been foreseen.

In addition, some ANSPs react to this crisis through the reduction of salaries, the layoffs of personnel, operating with the minimum required number of employees. This kind of reactions will potentially have unforeseeable consequences on their CNS systems availability and reliability when the COVID-19 crisis will be over, and they will not have available the ATSEP with the required expertise.

Vision of IFATSEA and proposals for the future.

IFATSEA-Europe envisions all European States to be interconnected with a fully interoperable and of high-performance ATM/ANS system where safety will be overarching.

The adoption of new technologies like datalink communication, ADS-B etc. or later SWIM network must be combined with in depth training for ATSEP (and ATCOs).

The technologies being advocated by and ATM Master Plan and SESAR, for which the cost benefit analysis (CBA) is encouraging, have to be adopted by as many as possible ANSPs in a synchronized manner, so as their operation to have real effect in performance.

High performance and achievement of European Performance Targets being established by Commission, is linked to extended investments in reliable CNS systems, in combination with competent ATCOs and ATSEP.

However, in Regulation (2019/317) while given performance is required by ATCOs, there is no any provision for Key performance indicators (KPIs) in CNS systems, while the European Regulation are repeatedly referred to ANS performance. (not simply to ATS)

IFATSEA deems that the current treatment is unfair for CNS and ATSEP as their performance has been considered for granted but also for ATCOs, as it is unfair to request certain performance without having any indication of the Availability, and Resilience of the CNS/ATM systems they depend upon.

For these reasons IFATSEA has raised the issue in relevant European fora considering that establishment of KPIs for CNS will upgrade the reputation of corresponding services.