



The current study pathway was developed to represent the professional profile of a new entrant remote tower controller, namely a student who has just received his initial remote tower controller training and is supposed to start working as a remote tower controller in the remote tower of her own city. He/she was imagined as an early adopter of new technologies and very keen on discovering new systems and applications. The training needs are expected to deal with the basic use of the remote tower systems, as for the technical skills, and with service orientation, teamwork, and decision making among the transversal skills.

NEW ENTRANT RTOWER ATCO: Skilling		
FORMAL TRAINING		
	Main Topic	Description of content
<b>Theoretical Training: Learning Courses and Instruction required to being ex. Pilot</b>	Aviation law	<ul style="list-style-type: none"><li>-ATCO licensing/certificate of competence</li><li>-Rules and regulations (reporting, airspace class, airspace structure...)</li><li>-ATS safety management (just culture, occurrence reports, safety investigation...)</li></ul>
	Air traffic management	<ul style="list-style-type: none"><li>-Provision of services: Aerodrome control service; Flight Information Service; Alerting service; ATS system capacity and air traffic flow management</li><li>-Communication</li><li>-ATC clearances and ATC instructions</li><li>-Coordination (coordination procedures, tools, and methods for coordination, ...)</li><li>-Altimetry and level allocation (terrain clearance)</li><li>-Separations: Separation between departing aircraft; Separation of departing aircraft from arriving aircraft; Separation of landing aircraft and preceding landing or departing aircraft; Time-based wake turbulence longitudinal separation; Reduced separation minima</li><li>-Airborne and ground-based safety nets</li><li>-Data display</li><li>-Operational environment (simulated): Obtain information concerning the operational environment Ensure the integrity of the operational environment; Verification of the currency of operational procedures; Handover-takeover</li><li>-Provision of an aerodrome control service: Responsibility for the provision; Traffic management process (Information gathering, observation, traffic projection, traffic monitoring, adaptability and follow up); Aeronautical ground lights; Information to aircraft by aerodrome control tower; Runway in use; Control of aerodrome traffic; Control of airborne traffic; Manage departing aircraft; Manage arriving aircraft; Manage SVFR traffic; Low visibility operations; Aerodrome control service with advanced system support (AMAN, DMAN, automated conflicts/incursions tools, alarms and resolution advisory tools, automated assistance for surface movement planning and routing, enhanced vision technology in low visibility for controllers...)</li></ul>
	Meteorology	<ul style="list-style-type: none"><li>-Meteorological phenomena (sources, instruments, and other sources of meteorological data)</li></ul>
	Aircraft Navigation	<ul style="list-style-type: none"><li>-Maps and aeronautical charts</li><li>-Instrument navigation (Navigation systems, stabilized approach, instrument departures and arrivals, Satellite-based systems, PBN...)</li><li>-Aircraft instruments</li><li>-Aircraft categories</li><li>-Factors affecting aircraft performance (take off factors, climb factors, final approach and landing factors, economic factors, environmental factors...)</li><li>-Aircraft data (Recognition of aircraft types, performance data...)</li></ul>



	Human factors	<ul style="list-style-type: none"> <li>-Information processing</li> <li>-Factors affecting health and well-being (Fatigue, Stress,)</li> <li>-Threat and error management</li> <li>-Teamwork</li> <li>-Systems</li> <li>-Communication</li> </ul>
	Equipment and systems	<ul style="list-style-type: none"> <li>-Voice communications</li> <li>-Automation in ATS</li> <li>-Controller working position</li> <li>-Future equipment</li> <li>-Equipment and systems limitations and degradation</li> </ul>
	Professional environment	<ul style="list-style-type: none"> <li>-Familiarization on the field</li> <li>-Airspace users</li> <li>-Provision of services and user requirements Environmental protection</li> </ul>
	Abnormal and emergency situations	<ul style="list-style-type: none"> <li>-Abnormal and emergency situations (ABES)</li> <li>-Skills improvement (Communication effectiveness, avoidance of mental overload, Air / ground cooperation...)</li> <li>-Procedures for abnormal and emergency situations (Application of procedures for ABES, radio failure, unlawful interference, and aircraft bomb threat, strayed or unidentified aircraft, runway incursion, interception of civil aircraft...)</li> </ul>
	Aerodromes	<ul style="list-style-type: none"> <li>-Aerodrome data, layout, and coordination</li> <li>-Movement area</li> <li>-Obstacles</li> <li>-Miscellaneous equipment</li> </ul>
	Introduction to remote aerodrome air traffic services	<ul style="list-style-type: none"> <li>-Operating environment</li> <li>-Human factors aspects</li> <li>-Procedures for degraded modes</li> </ul>
	Virtual technology	<ul style="list-style-type: none"> <li>-Basic use of a panoramic display &amp; transition of ambient sound</li> <li>-Basic use of pan tilt and zoom cameras</li> <li>-Basic automatic identification and tracking of aircraft</li> <li>-Basic use of facility to highlight certain objects / information (augmented reality)</li> <li>-Basic use of visual Enhancement Technology</li> </ul>
	<b>Main Topic</b>	<b>Description of content</b>
<b>Practical Training: All the hands-on training, which can</b>	Demonstration	<p>The process by which the OJTI controls the traffic whilst showing the student the correct method(s) of executing control tasks or procedures and simultaneously explaining his actions</p> <p>Demonstrate&amp; Explain:</p> <ul style="list-style-type: none"> <li>-Use language understood by student</li> <li>-Check comprehension / understanding</li> <li>-Be precise</li> </ul>



<b>include simulation, on-site training, supervision flying...</b>		<ul style="list-style-type: none"> <li>-Emphasise safety features</li> <li>-Before, during, after</li> <li>-Cause and effect</li> <li>-Involve student actively</li> <li>-Testing questions</li> </ul>
	Talk Through	<p>The OJTI retains R/T and students are required to make executive decisions and tell OJTI exactly what to do with the aircraft and when.</p> <ul style="list-style-type: none"> <li>- Require the student to tell you exactly what to do with the aircraft, and when</li> <li>- Student to observe situation first, make executive decisions</li> <li>- If decisions sound and valid, transmit</li> <li>- If not, transmit correct instruction, then discuss his decision</li> <li>- Often follows the demonstration phase, precedes monitoring</li> </ul>
	Monitoring	<p>Monitor the trainee's thought processes and working practices with a view to giving objective and accurate feedback.</p> <p>When the Student able to make executive decisions, and to communicate them on the R/T</p> <p>With note taking from the trainer.</p> <p>And "aide memoire"</p> <ul style="list-style-type: none"> <li>- What is the student doing well?</li> <li>- Why is it working successfully for the student?</li> <li>- How is it possible to build on this success?</li> <li>- What is not going so well or what is going wrong?</li> <li>- What could be a possible reason?</li> <li>- How could this have been avoided?</li> <li>- What should be done in future to avoid repetition?</li> </ul>
	Debriefing	<ul style="list-style-type: none"> <li>- To identify the trainee's strengths and weaknesses</li> <li>- To reinforce what the trainee has learnt</li> <li>- To aid a trainee's self-analysis</li> <li>- To discuss and determine any remedial training needs</li> </ul>

#### TECHNICAL COMPETENCES

Competence	Competence Description	Knowledge	Skill	Level	Preliminary Training Topics
<b>Name</b>	<b>Short competence description</b>	<b><i>The individual should have knowledge of...</i></b>	<b><i>With this skill someone should be capable of....</i></b>	<b><i>Beginner Intermediate Advanced</i></b>	<b><i>How to acquire the skill?</i></b>



<b>Traffic and Capacity management</b>	Ensure a safe, orderly, and efficient traffic flow and provide essential information on environment and potentially hazardous situations	How to manage the traffic situation, achieve optimal operational Performance, disseminate flight information, inform pilots of essential traffic and weather information	<ul style="list-style-type: none"> <li>-Manage arriving, departing traffic using prescribed procedures</li> <li>-Take aircraft performance into account when issuing clearances and instructions</li> <li>-Use a variety of techniques to effectively manage the traffic (e.g., speed control, vectoring, traffic sequencing, assigning climb/descent rate)</li> <li>-Act when appropriate to ensure that demand does not exceed sector capacity</li> <li>-Inform pilots of essential traffic and weather information</li> </ul>	<p><b>Beginner:</b> can manage traffic but is still limited in the variety of techniques available for vectoring/sequencing... may not yet have routine behaviours. Is not yet able to anticipate and apply appropriate actions to ensure sector capacity is not exceeded</p> <p><b>Advanced:</b> demonstrate skills to apply all relevant methods for the best management of arriving and departure traffic. Taking aircraft performance into account is routine and sector/rwy capacity is never exceeded. Appropriate measures to anticipate are always taken</p>	<ul style="list-style-type: none"> <li>-Initial training: learn prescribed procedures. Learn potential separation techniques, aircraft performance and factors impacting traffic management</li> <li>-Start to train on simulator with easy and standard scenario. Appreciate the application of procedure in practice. Received feedback on action and repeat scenario on simulator to start developing skills</li> <li>-Unit training: For initial training for an aerodrome control rating: The trainee will be able to demonstrate an integrated performance of all the competencies under the following conditions: a) within the simulated aerodrome environment described in Unit Operations Manual; b) with all levels of traffic up to a maximum of thirty-five aircraft/hour; c) with a maximum of fifteen aircraft being simultaneously controlled and a maximum of three active conflicts to be resolved at any one time; d) without assistance from the instructor; and e) using all the tools available in the simulated environment</li> </ul>
<b>Criteria application</b>	Apply sequence criteria correctly	How to recognise all the conflicts in time during all traffic complexities, solve them and maintain at least the required minimum separation. The trainee provides separation of landing aircraft and preceding landing or departing aircraft with time-based wake turbulence longitudinal separation. in establishing the departure and arrival sequences	<ul style="list-style-type: none"> <li>-The sequence criteria need to be a skill-based behaviour while maintaining separation</li> <li>-Separation is maintained in all situations for landing and departing aircraft</li> </ul>	<p><b>Beginner:</b> trainee still has difficulty recognising and solving all conflicts in time, using the required minima, as he still must get acquainted with the live environment</p> <p><b>Intermediate:</b> trainee can recognise all conflicts in time during low and moderate complexity traffic, solve them and maintain at least the required minimum separation</p>	<p>Initial training: A minimum of thirty formative assessments have been completed. The candidate is ready to undertake summative assessment when four formative assessments indicate that the candidate is demonstrating an integrated and consistent performance. ICAO doc 10056)</p> <p>Unit training: n the case of unit training, this is a reference to the local operating documentation e.g., National Manual of ATS, local operating procedures, letters of agreement etc. In the case of initial training, the local operating documentation may not apply at this stage but would be introduced later at the unit training phase. For the purposes of the training specification, the sources documents should be listed that will be used for developing these procedures e.g., ICAO Doc 4444 and/or National Manual of ATS</p>



<b>Monitoring</b>	Switch in time from monitoring to ensured separation	The switch from monitoring to a positive control action during all traffic complexities is timely and correct, resulting in a continuous safe control of traffic. The trainee should be able of paying attention to all traffic and apply control actions in time showing consistency in all his decisions	Be able to monitor execution of action in addition to the monitoring of aircraft and identification of potential conflicts or problem. The switch on time from monitoring to ensured separation is an essential skill for a safe and efficient flow of traffic/ throughput	The switch from monitoring to a positive control action during low and moderate traffic complexity is timely and correct, resulting in a continuous safe control of traffic. During high traffic complexity the trainee may find it difficult to pay attention to all traffic and apply control actions in time	Unit training: Observe experts doing the job on the field. Manage traffic being coached and assessed by expert. Develop skills and routine by doing the job under supervision. Formative assessments are a part of the learning process. Instructors provide feedback to the trainee on how they are progressing toward the interim or final competency standard. This type of assessment enables the trainee to progressively build on competencies already acquired and should aid learning by identifying gaps as learning opportunities
<b>Terrain clearance</b>	Ensure terrain clearance	How to provide planning, coordination, and control actions appropriate to the rules for minimum safe height and terrain clearance. The trainee should respond to available ground-based safety nets warnings	Appreciate areas of responsibility. Control zone, traffic circuit, manoeuvring area, movement area, vicinity. Maintain separation between aircraft and terrain	Provide planning, coordination, and control actions appropriate to the rules for minimum safe height and terrain clearance	Content support: Terrain clearance dimensions, minimum safe altitudes, transition level, minimum flight level, minimum sector altitude
<b>Safety buffers</b>	Build in Safety buffers	How to recognise conflicts in time and can apply adequate safety buffers during all traffic complexities consistently	<ul style="list-style-type: none"> <li>-Issue hazard and safety alerts to the flight crews when necessary</li> <li>-Provide assistance and acts, when necessary, to ensure safety of aircraft in area of responsibility</li> <li>-Persevere in working through problems without impacting safety</li> <li>-Increases safety margins when deemed necessary</li> </ul>	<p><b>Beginner:</b> trainee still has difficulty recognising and solving all conflicts in time, using the required minima, as he still must get acquainted to the live environment. Therefore, safety buffers are not always applied.</p> <p><b>Intermediate:</b> trainee can recognise conflicts in time and can apply adequate safety buffers during low and moderate complexity traffic.</p> <p><b>Advanced:</b> consider how the evolution of a situation may always have an impact on safety and anticipate safety buffers accordingly when needed</p>	Content support: Prevention of incidents, safety improvement



<b>Aircrafts differences</b>	Consider difference in aircraft performance, categories, and characteristics	The many differences in aircrafts characteristics and performance to anticipate well future traffic situations	<ul style="list-style-type: none"> <li>-AIRCRAFT CATEGORIES</li> <li>-Wake turbulence</li> <li>-Application of ICAO approach categories</li> <li>-FACTORS AFFECTING AIRCRAFT PERFORMANCE</li> <li>-Climb factors</li> <li>-Cruise factors</li> <li>-Descent and initial approach factors</li> <li>-Final approach and landing factors</li> <li>-Economic factors</li> <li>-AIRCRAFT DATA</li> <li>-Performance data</li> </ul>	Beginner: explain the wake turbulence effect and associated hazards to the succeeding aircraft. Appreciate the techniques used to prevent hazards associated with wake turbulence on succeeding aircraft. Intermediate: Integrate the influence of factors affecting aircraft during climb; Appreciate the influence of factors affecting aircraft on take-off. Advanced: integrate information from aircraft instruments provided by the pilot in the provision of ATS; Integrate consideration of economic factors affecting aircraft	Learners shall assess and integrate aircraft performance in the provision of ATS Content support: Aircraft performance, aircraft categories, aircraft approach capabilities, Speed, mass, air density, cabin pressurization, wind, and temperature
<b>Flexibility of trying different solutions</b>	Have the flexibility of trying different options while learning individual techniques such as: radar identification, mode C verification; traffic information, vectoring techniques... Manage traffic in accordance with procedural changes	How to integrate the individual techniques into structured work in the simulator	<ul style="list-style-type: none"> <li>-Evaluate possible outcomes of different control actions</li> <li>-Select an appropriate plan in time to achieve safe and effective flow of aerodrome traffic</li> <li>-Balance the workload against personal capacity</li> </ul>	Beginner: at this level the trainee finds it difficult to adjust plans when necessary. Instead, he sticks to solutions learned during the Pre OJT-Phase and doesn't show flexibility when the situation requires adjustment Advanced: at this level the trainee can adjust his plan during all traffic complexities when required	
<b>Working in different roles</b>	Be introduced to working in different role of Tower controller, ground controller, clearance delivery	The way to distribute the routine tasks between the different controllers, managing the coordination, delegation, combination of role depending on traffic load and situation	Organize pertinent data on data displays. Analyse pertinent data on data displays	Beginner: explain the responsibility for the provision of an aerodrome control service. Describe the division of responsibility. Appreciate the influence of operational requirements	Content support: Information displayed, strip marking procedures, electronic information data displays, actions based on traffic display information
<b>Management of non-routine situations</b>	Detect and respond to emergency and unusual situations related to aircraft operations and manage degraded modes of ATS operation	How to manage emergency and unusual situations related to aircraft operations. He/ she should manage degraded modes of ATS operations	<ul style="list-style-type: none"> <li>-Recognize, from the information available, the possibility of an emergency or unusual situation developing</li> <li>-Determine the nature of the emergency</li> <li>-Prioritize actions based on the urgency of the situation</li> <li>-Decide upon the most appropriate type of assistance that can be given</li> </ul>	Beginner: respond to distress and urgency messages and signals. Know ICAO Annex 10, ICAO Doc 4444: Guidelines for controller training in the handling of unusual/emergency situations  Advanced: Manage the general functions of	During some exercises severe CAT and thunderstorms are present causing aircraft to request alternative FLs and diversions around weather. Some exercises contain emergencies or degradations in the ATM equipment. Four of the summative exercises shall contain one of the following: severe weather, failure of flight data processing system, emergency. Each exercise shall contain one of the following:



			<ul style="list-style-type: none"> <li>-Follow prescribed procedures for communication and coordination of urgent situations</li> <li>-Provide assistance and acts, when necessary, to ensure safety of aircraft in area of responsibility</li> <li>-Detect that ATS systems and/or equipment have degraded.</li> <li>-Assess the impact of a degraded mode of operation</li> <li>-Follow prescribed procedures for managing, coordinating, and communicating a degraded mode of operation</li> <li>-Create solutions when no procedure exists for responding to non-routine situations</li> </ul>	<p>aerodrome control. Manage the suspension of VFR operations</p>	<p>diversion, Mode C error, radio communication failure, non- adherence to flight level, inability to comply with an ATC instruction.</p> <p>The trainee is competent to provide an integrated performance of all performance criteria in non-complex, normal, and busy levels of traffic, using non-complex, simulated area surveillance airspace</p>
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## KEY BEHAVIOURAL SKILLS AND COMPETENCES

Competence	Competence Description	Knowledge	Skill	Level	Preliminary Training Topics
Name	Short competence description	The individual should have knowledge of...	With this skill someone should be capable of....	Beginner Intermediate Advanced	How to acquire the skill?
Situational awareness	<ul style="list-style-type: none"> <li>-Absorb information to form an overall picture</li> <li>-Consistently be able to form an overall traffic picture based on all information available</li> <li>-Selectively pick the right information needed for the overall picture</li> <li>-Keep a clear overview of the situation by scanning regularly</li> </ul>	<ul style="list-style-type: none"> <li>-The perceptions' mechanisms</li> <li>-How to anticipate situations</li> <li>-How to scan the right information</li> <li>-The factors that may reduce situational awareness</li> <li>-How to monitor ATC system and equipment' status</li> <li>-The meteorology and its impact on her/his area of responsibility</li> <li>-The personal area of responsibility</li> <li>-How to acquire information concerning flight data, meteorological data, electronic</li> </ul>	<ul style="list-style-type: none"> <li>-Monitor the operational situation Scan for specific or new information</li> <li>-Comprehend the operational situation</li> <li>-Anticipate the future situation</li> <li>-Recognize indications of reduced situational awareness</li> <li>-Be able to scan the traffic and incorporate the background traffic during all traffic</li> <li>-Consistently have a complete overview of the traffic situation</li> <li>-Appreciate the effect and danger of hazardous meteorological phenomena</li> <li>-Appreciate the effect and impact of wind</li> <li>-Appreciate the impact of atmospheric obscurity...</li> <li>-Decode information from meteorological data displays</li> </ul>	<p>Beginner:</p> <p>the trainee has still problems to form an overall picture from the magnitude of information available in the operational environment. Routinely scans surveillance data during low to medium traffic and can be observed de-collapsing menus and radar labels to obtain addition information. May fail to scan the complete screen during high traffic and only concentrate on specific area</p> <p>Intermediate:</p> <p>routinely scans the surveillance data during all traffic levels. Can be observed accessing data from flights in other sectors and</p>	<p>A combination of:</p> <ul style="list-style-type: none"> <li>-Theoretical training to acquire know how</li> <li>-Simulation to apply knowledge and to train the skill</li> <li>-Simulation to check the skill's behavioural markers</li> <li>-Recurrent training on the job assessment to check the skill's behavioural markers application</li> </ul>



		<p>data, surveillance, and other means available</p> <ul style="list-style-type: none"> <li>-How to integrate several sources of information</li> </ul>	<p>-Integrate data about meteorological phenomena into provision of ATS</p>	<p>highlighting traffic that may cause a conflict in own sector</p> <p>Advanced: routinely scans the surveillance data during all traffic levels and efficiently obtains additional information through menus and radar labels, as required</p>	
<b>Self-management and continuous development</b>	<p>Demonstrate personal attributes that improve performance and maintain an active involvement in self-learning and self-development</p>	<ul style="list-style-type: none"> <li>-How to find info and support for improving his/her learning and development</li> <li>-How to recognize if a learning need occurs</li> <li>-How to facilitate his/her personal learning process</li> <li>-How to ask for objective feedback</li> <li>-The techniques for assessing his/her learning</li> <li>-What a realistic goal and action plan are, and how to create them</li> <li>-How to accept and elaborate feedback</li> </ul>	<ul style="list-style-type: none"> <li>-Self-evaluate to improve performance</li> <li>-Use feedback to improve performance</li> <li>-Adapt to the demands of a situation as needed</li> <li>-Engage in continuous development activities</li> </ul>	<p>Advanced:  <ul style="list-style-type: none"> <li>-Takes responsibility for own performance, detecting and resolving own errors; Improves performance through self-evaluation of the effectiveness of actions</li> <li>-Seeks and accepts feedback to improve performance; Maintains self-control and performs adequately in adverse situations</li> <li>-Changes behaviour and responds as needed to deal with the demands of the changing situation.</li> <li>-Maintains, through personal initiative, awareness of developments and changes in Aviation</li> <li>-Participates in learning activities (e.g., team meetings, briefings, and training sessions)</li> <li>-Manages tasks effectively in response to current and future workload</li> <li>-Manages interruptions and distractions effectively.</li> <li>-Determines if, and when, support is necessary based on workload</li> <li>-Asks for help, when necessary</li> <li>-Delegates tasks when necessary to reduce workload</li> <li>-Accepts assistance, when necessary</li> </ul> </p>	<p>A combination of: Theoretical training to acquire know how on:</p> <ul style="list-style-type: none"> <li>- learning skills</li> <li>- asking/receiving feedback</li> <li>- How to define a goal and an action plan</li> <li>- New know how</li> <li>- Periodical feedback session from mentor/manager/supervisor</li> </ul>



<b>Workload management</b>	<ul style="list-style-type: none"> <li>-Adapt workload to the traffic complexity</li> <li>-Manage personal efficiency and work tempo</li> <li>-Remain concentrated with various traffic levels</li> <li>-Skill to be consistently concentrated and alert throughout the whole duty period</li> </ul>	<ul style="list-style-type: none"> <li>-The strategies on traffic workload management.</li> <li>-What needs attention</li> <li>-The alert</li> </ul>	<ul style="list-style-type: none"> <li>-Manage workload</li> <li>-Good strategies to handle the traffic have been developed</li> <li>-Ask for support from team members and able to assist them when required</li> <li>-Maturity balancing own workload with service delivery</li> <li>-Show responsibility and maturity for her/his work and team members</li> </ul>	<p><b>Beginner:</b> as the trainee is getting used of the live environment s/he may have difficulty adapting to different workloads. It is still difficult</p>	<p><b>A combination of:</b></p> <ul style="list-style-type: none"> <li>-Theoretical training to acquire know how</li> <li>-Simulation to apply knowledge and to train the skill</li> <li>-Recurrent training on the job assessment to check the skill's behavioural markers application</li> <li>-Simulation to check the skill's behavioural markers</li> </ul>
<b>Teamwork</b>	<ul style="list-style-type: none"> <li>Operate as a team member building relationship based on trust and cooperation to make the team strong and performative</li> </ul>	<ul style="list-style-type: none"> <li>-The team dynamics</li> <li>-How to foster collaboration</li> <li>-How to provide feedback in a respectful and assertive way</li> <li>-The team dysfunctions</li> <li>-The roles in the organization</li> </ul>	<ul style="list-style-type: none"> <li>-Foster an atmosphere of open communication</li> <li>-Encourage team participation and cooperation</li> <li>-Use feedback to improve overall team performance</li> <li>-Provide both positive and negative feedback constructively</li> <li>-Accept both positive and negative feedback objectively</li> <li>-Show respect and tolerance for other people</li> <li>-Carry out actions and duties in a manner that fosters a team environment</li> </ul>	<p><b>Beginner:</b></p> <ul style="list-style-type: none"> <li>-states the relevance of TRM</li> <li>-identifies reasons for conflict</li> <li>-describes actions to prevent human conflicts</li> <li>-describes strategies to cope with human conflicts</li> </ul> <p><b>Advanced:</b></p> <ul style="list-style-type: none"> <li>assists the pilot, collects appropriate information relevant for the situation</li> <li>Identifies the information that must be passed between Air Traffic Services (ATS) and the airport authority</li> </ul>	<p><b>A combination of:</b></p> <ul style="list-style-type: none"> <li>-Theoretical training to acquire know how on team dynamics</li> <li>-How to work in international teams</li> <li>-How to work in team</li> <li>-Roles and responsibility connected to the role and the other team members, stakeholder, possible counterparts</li> <li>-Teambuilding activities</li> <li>-Recurrent team's retrospectives/ debriefing focused on team</li> <li>-Periodical feedback session from mentor/manager/supervisor</li> </ul>
<b>Communication</b>	<ul style="list-style-type: none"> <li>-Make all communications in a clear and concise way</li> <li>-Use standard phraseology or non-standard phraseology where needed</li> <li>-Monitor the frequency and responds to pilots' calls or requests in time</li> <li>-Obtain and verify acknowledgements and read backs when required</li> </ul>	<ul style="list-style-type: none"> <li>-The communication processes</li> <li>-The difference of communication processes'</li> <li>-The communication pitfalls</li> <li>-The impact of interferences on communications</li> <li>-The radiotelephony phraseology</li> <li>-How a clear and concise message looks like</li> <li>-The existence of communication styles</li> <li>-How to change style according to the situation</li> </ul>	<ul style="list-style-type: none"> <li>-Select appropriate mode of communication</li> <li>-Demonstrate effective verbal communication</li> <li>-Demonstrate effective communication in written, automated, and other non-verbal communication</li> <li>-Demonstrate the ability to modify his/her style according to the receiver</li> <li>-Write or inputs messages according to protocol or in a clear and concise manner where protocol does not exist</li> <li>-Communicate relevant concerns and intentions</li> </ul>	<p><b>Beginner:</b> Trainee still has problem to use and understand nonstandard phraseology and frequently used expressions therefore instructions may not always be understood. Trainee gets used to the live environment and to different voices and accents. s/He finds it hard to manage his workload and priorities and monitor the sector frequency because he may be concentrating on other items. Consequently, pilot calls are missed or not reacted upon in a timely manner. He gets easily distracted by his surroundings. Trainee may miss wrong readbacks or react</p>	<p><b>A combination of:</b></p> <ul style="list-style-type: none"> <li>-Theoretical and experiential training to acquire know how on:</li> <li>the communication process works and the possible pitfalls</li> <li>-How to ensure effective communication at work</li> <li>-Phraseology and standard protocol</li> <li>-Active listening and assertive communication</li> <li>-Communication styles</li> <li>-Recurrent team's retrospectives/ debriefing focused on the communication in the team</li> <li>-Periodical feedback session from mentor/manager/supervisor</li> <li>-On the job training on phraseology and standard protocols</li> </ul>



		<ul style="list-style-type: none"> <li>-The technique of active listening</li> </ul>		<ul style="list-style-type: none"> <li>too slowly, due tempo, stress, and attention management problems</li> </ul> <p>Intermediate:</p> <ul style="list-style-type: none"> <li>Speaks clearly during moderate traffic levels but may speak too quickly if under stress. Can communicate accurate information without any unnecessary additional information. During high traffic levels may occasionally have difficulties expressing him/herself clearly</li> </ul> <p>Advanced:</p> <ul style="list-style-type: none"> <li>speaks clearly, accurately, and concisely during all traffic situations. Ensure effective communication in all circumstances including the case where standard phraseology is not applicable</li> </ul>	<ul style="list-style-type: none"> <li>-Simulations</li> </ul>
<b>Problem solving and decision making</b>	<ul style="list-style-type: none"> <li>-Find and implement solutions for identified hazards and associated risks</li> <li>-Make well timed decisions</li> <li>-Set priorities correctly</li> <li>-Take initiative and acts accordingly</li> </ul>	<ul style="list-style-type: none"> <li>-The existing rules and the existing procedures</li> <li>-The possible solutions to apply in specific situations</li> <li>-The concept of priority and urgency</li> <li>-The priorities in specific situations are</li> <li>-The impact on safety that some actions may have</li> <li>-The problem-solving techniques</li> </ul>	<ul style="list-style-type: none"> <li>-Determine possible solutions to an identified problem Prioritize effectively</li> <li>-Manage risks effectively</li> <li>Implements an appropriate solution to a problem</li> <li>-Evaluate possible outcomes of different control actions</li> <li>-Determine the situations that have the highest priority</li> <li>-Execute plan in a timely manner</li> <li>-Persevere in working through problems without impacting safety</li> </ul>	<ul style="list-style-type: none"> <li>Beginner:</li> <li>Makes predominate use of vectoring to achieve separation. Will occasionally use speed control when prompted but applies the technique with difficulty, often leaving the instruction to late or not applied correctly</li> </ul> <p>Intermediate:</p> <ul style="list-style-type: none"> <li>Uses vectoring and ROC/ROD techniques effectively. Applies speed control correctly but may need to be prompted to act early to use speed control</li> </ul> <p>Advanced:</p> <ul style="list-style-type: none"> <li>Uses vectoring, ROC/ROD and speed control effectively</li> </ul>	<ul style="list-style-type: none"> <li>A combination of:</li> <li>-Theoretical and experiential training to acquire know how on: Existing rules and procedures; Possible solutions to apply in specific situations; Potential hazards; How to set priorities in specific situations; Element to assess to define the situation not safe; Problem solving skill; Recurrent team's retrospectives/ debriefing focused on the application of problem solving in specific situation</li> <li>-Periodical feedback session from mentor/manager/supervisor</li> <li>-On the job training to evaluate the good application of solutions, critical situation management and priority setting.</li> <li>-Simulations</li> </ul>
<b>Coordination</b>	Manage coordination between personnel in operational positions and with other affected stakeholders	<ul style="list-style-type: none"> <li>-How to determine the need for coordination</li> <li>-How to select appropriate method of coordination</li> <li>-How to perform coordination</li> </ul>	<ul style="list-style-type: none"> <li>-Coordinate with personnel in other operational positions and other stakeholders, in a timely manner</li> <li>-Select coordination method based on circumstances, including urgency of coordination, status of facilities and prescribed procedures</li> </ul>	<ul style="list-style-type: none"> <li>Advanced:</li> <li>Identifies the need for coordination. Uses the available tools for coordination. Initiates appropriate coordination. Analyses effect of coordination requested by an adjacent position/unit. Selects, after negotiation, an appropriate course of action. Ensures the agreed course of action is carried out</li> </ul>	<ul style="list-style-type: none"> <li>A combination of:</li> <li>-Theoretical training to acquire know how</li> <li>-Simulation to apply knowledge and to train the skill</li> <li>-Recurrent training on the job assessment to check the skill's behavioural markers application</li> <li>-Simulation to check the skill's behavioural markers</li> </ul>



			<ul style="list-style-type: none"><li>-Coordinate the movement, control, and transfer of control for flights using the prescribed coordination procedures.</li><li>-Coordinate changes of status of operational facilities such as equipment, systems, and functions</li><li>-Coordinate changes of status of airspace and aerodrome resources</li><li>-Use clear and concise terminology for verbal coordination</li><li>-Use standard ATS message formats and protocol for non-verbal coordination</li><li>-Use clear and concise non-standard coordination methods when required</li><li>-Conduct effective briefings during position handover</li></ul>		
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