



The current study pathway was developed to represent a senior professional tower ATCO and OJTI who is supposed to be relocated to another city to start working as a rTower controller and OJTI in a multiple remote tower. His training needs are expected to deal with advanced use of the remote tower systems, as for the technical skills, and with creative thinking, digital literacy, lifelong learning among the transversal skills, so as to support motivation towards relocation and acceptance of advanced technologies.

ON THE JOB RTOWER TRAINER: Upskilling		
FORMAL TRAINING		
	Main Topic	Description of content
Theoretical Training: Learning Courses and Instruction required to being ex. Pilot	Introduction to remote aerodrome air traffic services	<ul style="list-style-type: none"> - Operating environment - Human factors aspects - Procedures for degraded modes - Concept of remote aerodrome air traffic services - Remote tower modules - Technical enablers used for remote aerodrome air traffic services - Operational applications <p>Sources: EASA 'Guidance Material on remote aerodrome air traffic services' — Issue 2 Easy Access Rules for Air Traffic Controllers' Licensing and Certification (Regulation (EU) 2015/340)</p>
	Virtual technology	<ul style="list-style-type: none"> - Advanced use of panoramic display and transition of ambient sound - Advanced use of pan tilt and zoom cameras - Advanced automatic identification and tracking of aircraft - Advanced use of Head-up display of information - Advanced facility to highlight certain objects / information (augment reality) - Advanced use of video recording and play back - Advanced use of electronic flight strips - Advanced use of visual Enhancement Technology
	Main Topic	Description of content
Practical Training: All the hands-on training,	SA	<p>Update training on SA to exclude the use of audio sound</p> <p>Monitors the meteorological conditions that impact on own area of responsibility</p> <p>Analyses the actual situation based on information obtained from data displays instead of direct monitoring</p>



which can include simulation, on-site training, supervision flying...	Visiting Aerodromes	Ensure ATCO/AFISOs are able to visit the aerodromes they are controlling to ensure their local knowledge and awareness are somewhat maintained			
	Virtual Tools	NTS; new training on virtual meeting tools for TRM meeting with local staff when needed (aerodrome staff...) as it was done face to face in the past and with remote tower it needs to be done online most of the time			
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?
Stress management	Recognise and manage stressful situations with appropriate and effective coping strategies	-The stress mechanism -His/her personal stressors -Short term and long-term coping strategy -The impact of stress on the performance -Personal characteristics that are positively and negatively impacting on his/her stress management -Personal stress symptoms	-Recognise symptoms of stress and their impact on the performance -Discuss ability for good decision making and problem solving under pressure -Discuss and analyse system/automation disturbance cases and effect on individual and team stress	Intermediate	A combination of: Theoretical training to acquire know how on - Stress mechanisms - Coping strategies - Individual characteristics that may affect stress management Mentoring Coaching Psychological support (if needed)
Digital competences	Digital competence is a combination of knowledge, skills, and attitudes with regards to the use of technology to perform tasks, solve problems, communicate, manage information. https://digital-competence.eu/dc/front/what-is-digital-competence/	-Digital competencies and their meaning -How to use digital and virtual instruments to positively accomplish tasks -The potentialities that digital tools have on the individual performance -How to solve problems using digital tools -How to facilitate the learning using virtual tools	-Analyse, interpret and critically evaluate the data, information, and digital content -Facilitate the learning and performing using virtual/digital tools -Share data, information, and digital content with others through appropriate digital technologies. To act as an intermediary, to know about referencing and attribution practices -Understand where one’s own digital competence needs to be improved or updated.	Beginner	A combination of: Theoretical training to acquire know how on - virtual communication - digital mindset - efficiency and digital tools - simulation to apply knowledge and to train the skill



			-Support others with their digital competence development. -Seek opportunities for self-development and to keep up to date with the digital evolution		
Situational awareness	Absorb information to form an overall picture, be consistently able to form an overall traffic picture based on all information available, selectively pick the right information needed for the overall picture, keep a clear overview of the situation by scanning regularly	<ul style="list-style-type: none"> -Perceptions' mechanisms -How to anticipate situations -Which information needs to be scanned -The factors that may reduce situational awareness -How to monitor ATC system and equipment' status -Meteorology and its impact on her/his area of responsibility -Her/his area of responsibility -How to integrate several sources of information -How to acquire information concerning flight data, meteorological data, electronic data, surveillance, and other means available 	<ul style="list-style-type: none"> -Monitor the operational situation Scan for specific or new information -Comprehend the operational situation Anticipate the future situation -Recognize indications of reduced situational awareness -San the traffic and incorporate the background traffic during all traffic -Consistently have a complete overview of the traffic situation -Appreciate the effect and danger of hazardous meteorological phenomena -Appreciate the effect and impact of wind -Appreciate the impact of atmospheric obscurity -Decode information from meteorological data displays -Integrate data about meteorological phenomena into provision of ATS 	<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 highlighting traffic that may cause a</p>	<p>A combination of:</p> <ul style="list-style-type: none"> - Theoretical training to acquire know how - Simulation to apply knowledge and to train the skill - Simulation to check the skill's behavioural markers - Recurrent training on the job assessment to check the skill's behavioural markers application



				<p>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>	
<p>Self-management and continuous development</p>	<p>Demonstrate personal attributes that improve performance and maintain as active involvement in self-learning and self-development</p>	<p>-Where to find info and support for improving his/her learning and development -How to recognize if a learning need occurs -How to facilitate his/her personal learning process -How to ask for objective feedback -The techniques for assessing his/her learning How to accept and elaborate feedback What a realistic goal is, an action plans and how to create it</p>	<p>-Self-evaluation to improve performance -Use feedback to improve performance -Adapt to the demands of a situation as needed -Engage in continuous development activities</p>	<p>Advanced: -Takes responsibility for own performance, detecting and resolving own errors; Improves performance through self-evaluation of the effectiveness of actions -Seeks and accepts feedback to improve performance; Maintains self-control and performs adequately in adverse situations -Changes behaviour and responds as needed to deal with the demands of the changing situation</p>	<p>A combination of: Theoretical training to acquire know how on: - learning skills - asking/receiving feedback - How to define a goal and an action plan - New know how</p> <p>Periodical feedback session from mentor/manager/supervisor</p>



				<ul style="list-style-type: none"> -Maintains, through personal initiative, awareness of developments and changes in Aviation -Participates in learning activities (e.g., team meetings, briefings and training sessions -Manages tasks effectively in response to current and future workload -Manages interruptions and distractions effectively. -Determines if and when support is necessary based on workload -Asks for help, when necessary -Delegates tasks when necessary to reduce workload -Accepts assistance, when necessary 	
Change adaptability	<p>Be able to quickly respond to changing trends, innovation, destabilization, industry shifts, and so forth.</p> <p>Quickly and efficiently respond to changes in the surrounding and be flexible in adaptation to</p>	<ul style="list-style-type: none"> -The change process and possible resistances to it -The techniques to apply when change is needed -The personal leverages to change 	<ul style="list-style-type: none"> -Look for ways to make changes work rather than only identifying why change will not work -Adapt to change quickly and easily -Make suggestions for increasing the effectiveness of changes -Show willingness to learn new methods, procedures, or techniques 	Intermediate	<p>A combination of:</p> <p>Theoretical training to acquire know how on</p> <ul style="list-style-type: none"> - change management - resistances to change - coaching - coping strategies



	new contexts and virtual scenario		-Shift strategy or approach in response to the demands of a situation		
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