

NGAP SYMPOSIUM

3 - 4 December 2014 How will aviation professionals learn in the future?

About Airways New Zealand Airways Training ATC Training in the Future Our Journe

Introduction to Airways NZ

Our 800 staff provide air traffic control and technical services, surveillance, communication, flight inspection, mapping and airspace design expertise for approximately 6% of the worlds airspace (30 million square km)



- New Zealand's ANSP Military and civil, domestic and oceanic
- World's first commercial ANSP State Owned Enterprise 1987
- Innovative, pragmatic, engineering solutions
- → Long-standing international cooperation
- Major CANSO contributor
 Former Chair & DG, Current ExCom

Domestic

Aircraft movements annually	1 million
Oceanic movements annually	58,000
Oceanic movements annually	44 peak hr
Area control centers	2
International airports	6
Control towers	16
Staff	800
Annual ANS Revenue	US\$120m

International

Engagements in 75 countries
US\$16m p.a.
ATS Training
ATC Simulators
CNS/ATM Consulting
Procedure design and charting (GEAD)
ANSP Revenue Management (Flightyield)
Flight Inspection







AIRWAYS TRAINING PORTFOLIO

Competency Based Training



SureSelect **Recruitment tools**



ATS Training



Total Control Simulator



Aviation English



Study Abroad



SUPPORTED BY

Cutting Edge Training Technologies









► E-Learning

iLearn

VV Enroute & VV Approach



► AKO 051

GLOBAL CAMPUSES



UAE Puerto Rico **New Zealand** China

Academic Qualifications



► NZ Certificate in Air Traffic Services (Level 5), NZ Diploma in ATS (Level 6) National Diploma in Air Traffic Services (Level 7) Academic recognition of programmes towards a Bachelor of Aviation Management, through Massey University





How will aviation professionals learn in the future?

Airways took a customer centred approach to gain a better understand the expectations of our future learners and also the employers:-

NextGen Learners

- What were their career aspirations / expectations as future aviation professionals?
- What were their preferences / expectations for the learning environment?



ANSP's Employers

- What were the essential skills and attributes they were looking for in future aviation professionals?
- What was important with regards to training?



NextGen Learners

As aviation professionals they are looking for:-Career development

- opportunities To travel and work
 - Transferable tertiary
 - qualifications Flexibility and to be well
 - paid (return on investment)

As learners they expect:-

- Flexible study options 24/7
- Seamless mobile learning opportunities
- Personalised learning experiences
- Social learning technologies
- Learner orientated
- Networked learning environment





Aviation Industry - Employers

Workforce requirements

- Have the right skills and knowledge
- High performing, motivated, and safe.
- Educated workforce engaged in life-wide learning
- Flexibility and return on investment

Training expectations

- Safe and employment ready graduates
- Cost effective training programmes
- Successful training outcomes – minimise training failures
- Training pipeline aligned with workforce requirements













Airways Response...

The key messages from Nextgen learners and employers determined Airways approach to the education and training of future aviation professionals.

A connected learning environment where:-

Trainees gain

- A technology enabled learning environment
- Mobility and flexible study options 24/7
- Transferrable skills and knowledge
- Employability, choice and return on investment



Employers gain

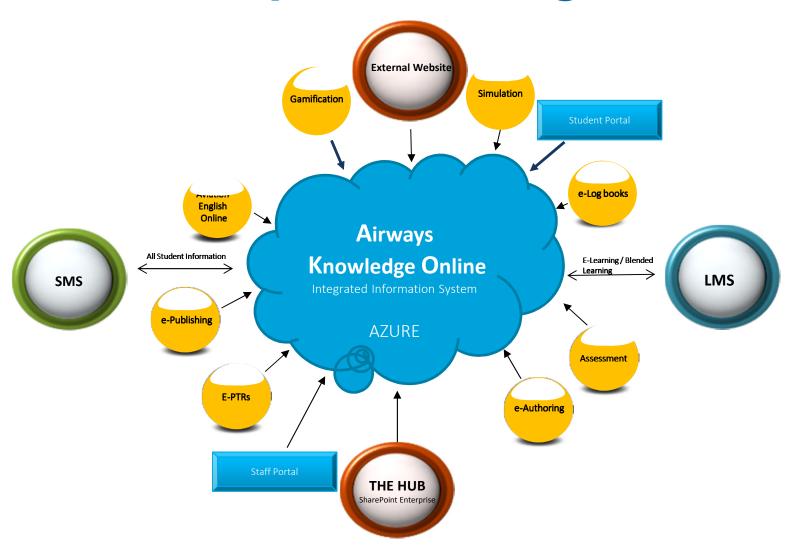
- Relevant, safe, employment ready graduates
- A reduction in the total cost of training
- Successful training outcomes
- Educated workforce engaged in lifewide learning





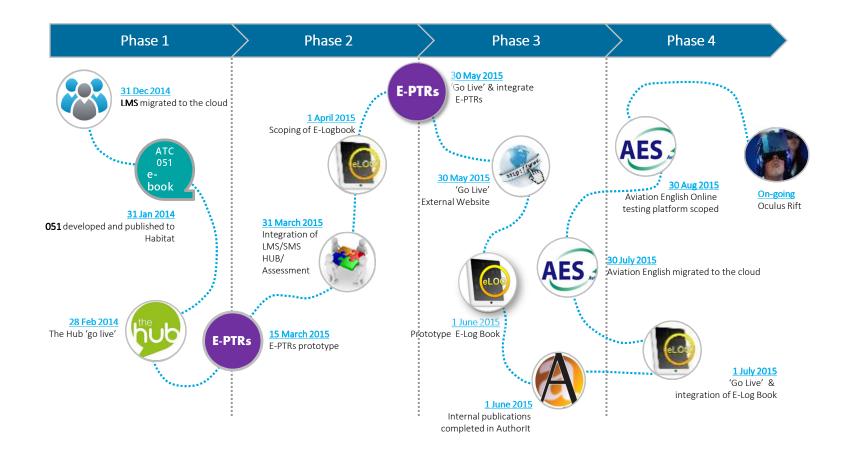


AKO - Airways Knowledge Online





AKO - Roadmap 2014 - 2015









On the Cloud

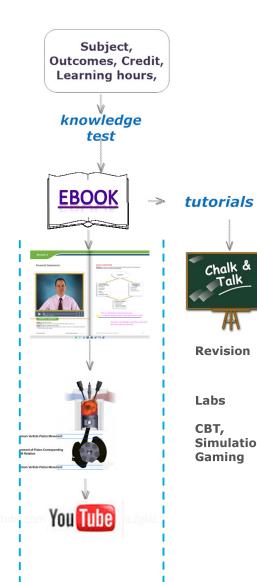
Flexible

Interactive

Building passion and understanding

Raising the bar

Reducing instructor effort



Chalk &

Revision

Labs

CBT, Simulation,

Gaming

AKO 051









Partnerships with Universities



Headlines

- Airways is delivering Ab initio training in partnership with internationally recognised Universities
- Paradigm shift in the delivery of ATC training using elearning, simulation and gaming technologies
- Trainee funded or through Employer Scholarship
- ANSP responsible for OJT, ATC license and initial rating

Adding value by:-

- Harnessing technology to improve training success rates
- Reducing the total cost of training
- Delivering employment ready graduates
- Meeting learner and employer expectations for qualified and highly skilled workforce





The Journey so far....

Changing - Traditional class to e-learning, with content designed by learners, in flexible socially connected learning communities.

Challenges— There is a fine line between bleeding edge and leading edge. Its what you don't know, and there is never enough money or people!

Opportunities – Paradigm shift in ATC training. Safe and highly skilled aviation workforce meeting the needs of learners and employers.

Risks – Failure to meet learner expectations resulting in the best and brightest not attracted to the aviation industry.









Our journey towards a paradigm shift in ATC Training – some ideas worth sharing ©

Thanks for your time



MIR VV/YS
making your world possible