



NSW Air Ambulance and Virgin Australia  
non-technical skills course:  
Aiming higher and reaching further  
through collaborative aviation partnerships.





## The course





Who?	<ul style="list-style-type: none"><li>– Designed and delivered by: Virgin Australia, NSW Air Ambulance and aviation contractor operational staff</li><li>– Participants: Pilots, operations staff, engineers, flight nurses and all support staff</li></ul> <div></div>
What?	<ul style="list-style-type: none"><li>– Two day NTS bridging course</li></ul>
When?	<ul style="list-style-type: none"><li>– Monthly face to face course</li></ul>
Where?	<ul style="list-style-type: none"><li>– Virgin Australia training centre</li></ul>
Why?	<ul style="list-style-type: none"><li>– Bespoke and relevant to our operations.</li></ul>



Course content based on:  
CAAP SMS-3(1) and MAPP (Mavin and Dall'Alba, 2010)

Decision making

Situational awareness

Leadership  
and  
teamwork

Automation

Communi-  
cation

Conflict  
resolution

Fatigue  
mgmt

Stress, info  
processing  
and  
workload  
mgmt

Culture

Threat and  
error mgmt



# NSW Ambulance

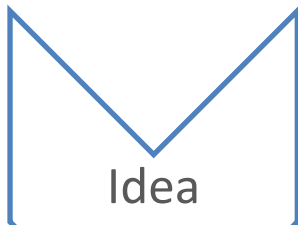
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## The process



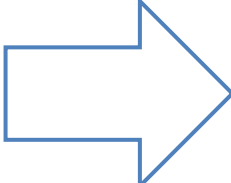


## Background



- PACDEFF 2013
- Witnessed VA course in action (no gorilla!)
- Epiphany! – Let's aim higher and reach further'



- Informal negotiation
  - Contractor negotiation
  - Virgin Australia negotiation
- 
- Contract



- Top level buy-in required by two organisations
- Negotiations with two safety departments
- Multidisciplinary, multi-organisation 'think tank.'



## Background

Course build

- Initial input from all disciplines
- Big group  $\implies$  smaller group
- Revisions by VA NTS learning design team

Train the trainer

- EOI to all groups to select facilitators
- Facilitators chosen on merit - interest and passion
- Three day TTT course – VA and AA facilitated
- TTT focused on content and facilitation skills

Roll out and review

- TTT feedback, final revision  $\implies$  course launch
- Course rolled out– managers represented in first course
- Course review, revisions and final version delivered.

## Instructional design and methodology



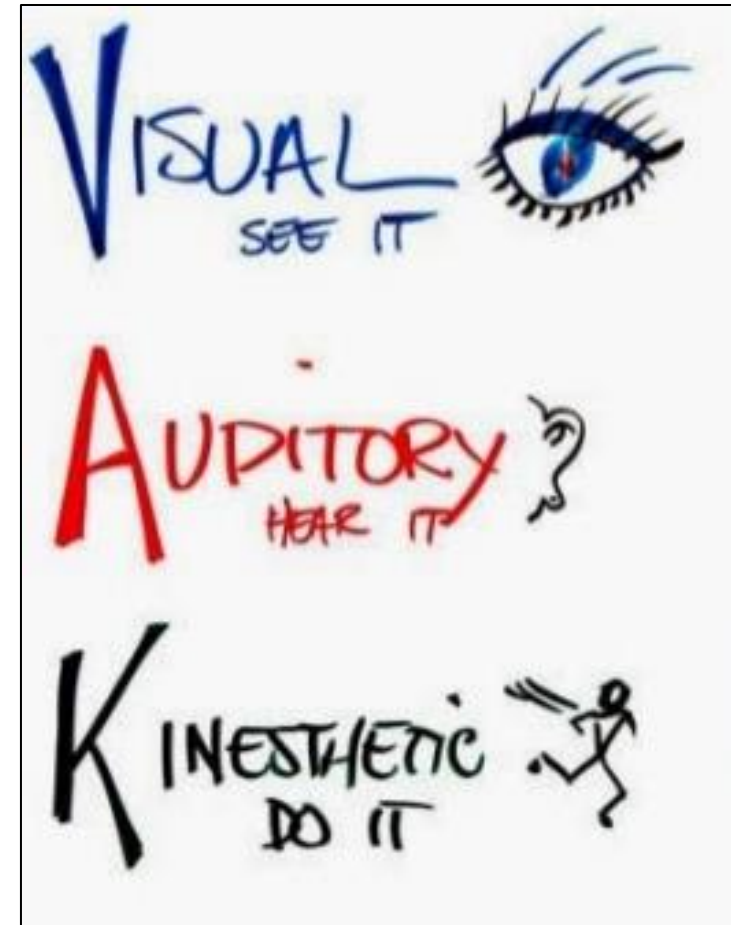


## ADDIE instructional design methodology

Analysis	<ul style="list-style-type: none"><li>– Multi-cultural - Pilots, Engineers, Flight Nurses, Midwives, Aeromedical Operations Officers, ground handlers, support and administration staff</li></ul>
Design	<ul style="list-style-type: none"><li>– Constructively aligned – Learner centred</li><li>– Based on the VAK model</li></ul>
Development	<ul style="list-style-type: none"><li>– Multiple learning and teaching strategies</li><li>– Multiple learning materials</li></ul>
Implementation	<ul style="list-style-type: none"><li>– TTT – roll out – review</li><li>– Facilitated by multi-cultural staff</li></ul>
Evaluation	<ul style="list-style-type: none"><li>– Assessment - multiple choice exam</li><li>– Course feedback sheet.</li></ul>

## Delivery philosophy

- Adult education
- Facilitated not instructed
- Simple VAK model.



## Learning strategies

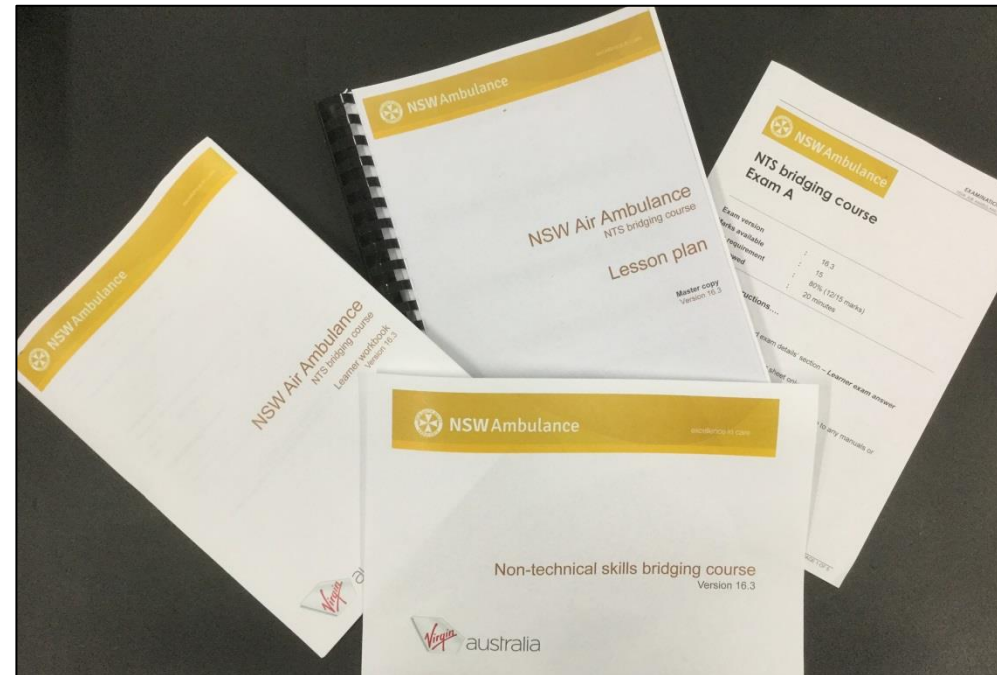
- Simulation/empathy game flagship activity
- Discussions
- Brainstorms
- Group activities
- Videos, multimedia
- Structured debrief
- Interactive lectures
- Case studies
- Crosswords/games
- Assessment.





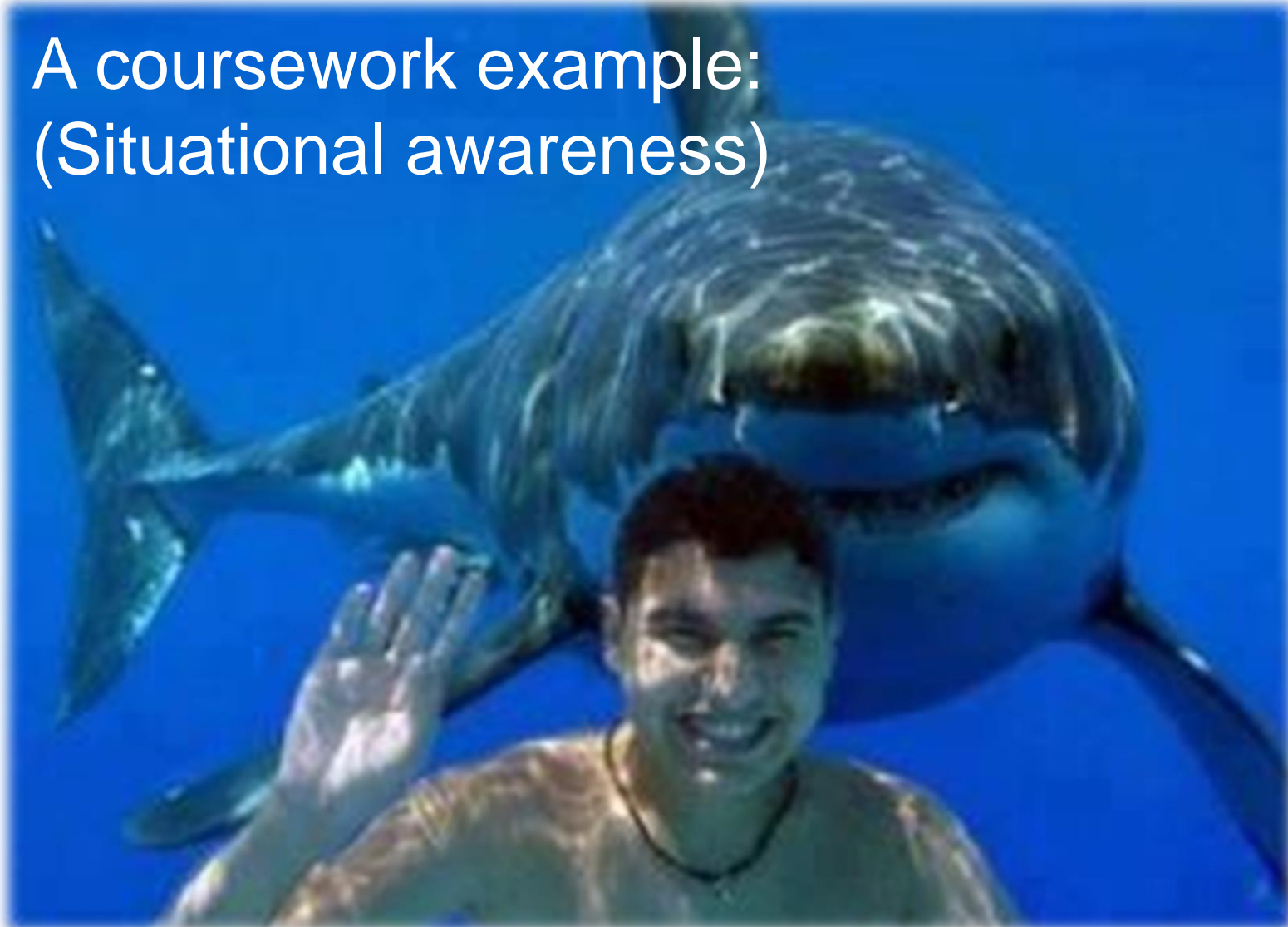
## Learning resources

- Lesson plan
- Facilitator guide
- PowerPoint
- Activity folder
- Learner workbook
- Assessment.





A coursework example:  
(Situational awareness)



## Rock the vote!

- Go to: <http://pingo.pb.de/>
- Just type in pingo and it should go to the site

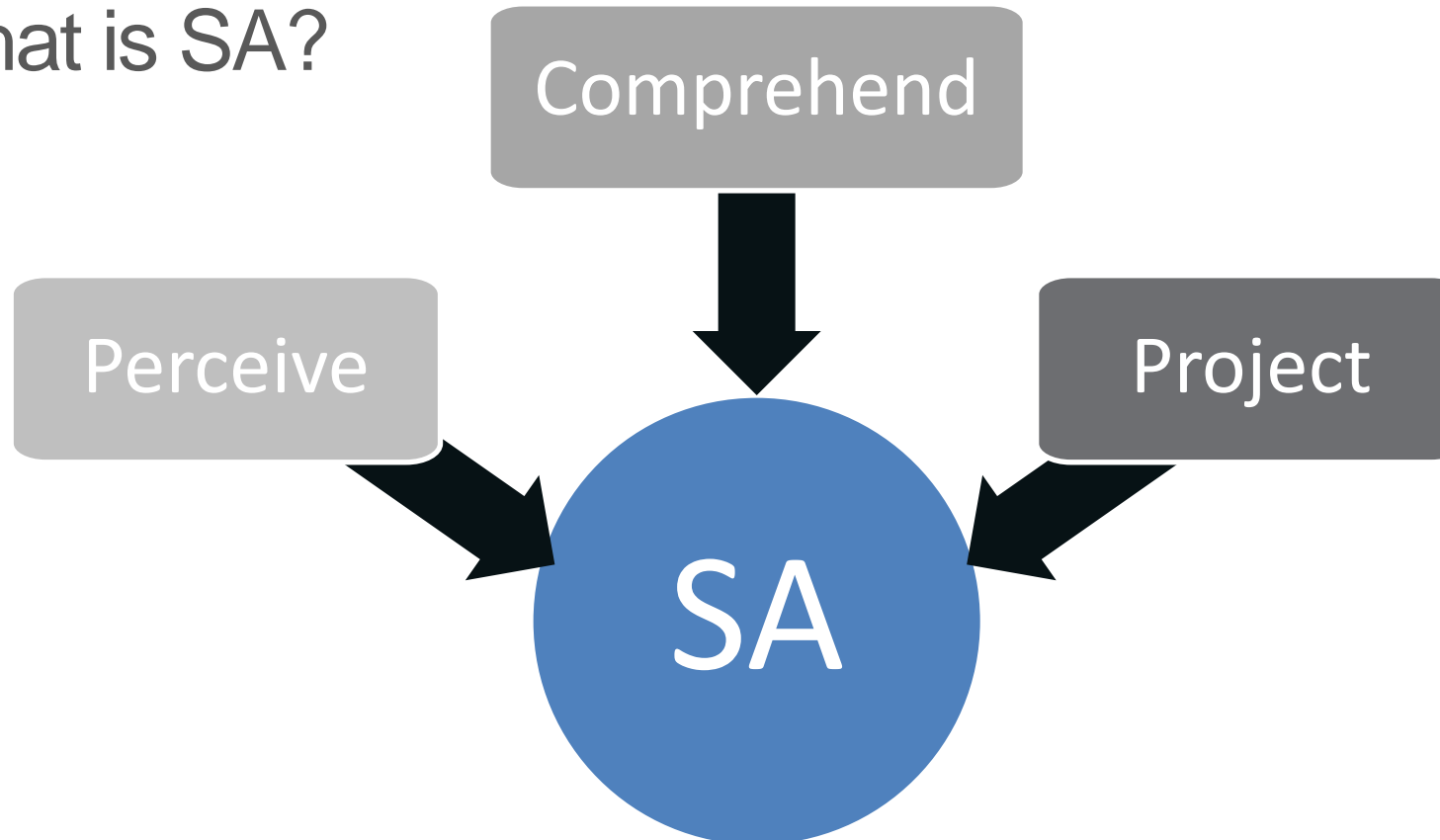
**Rock the vote!**

- Type in access code as directed
  - click 'Rock the vote'
- Wait for further instructions. 😊





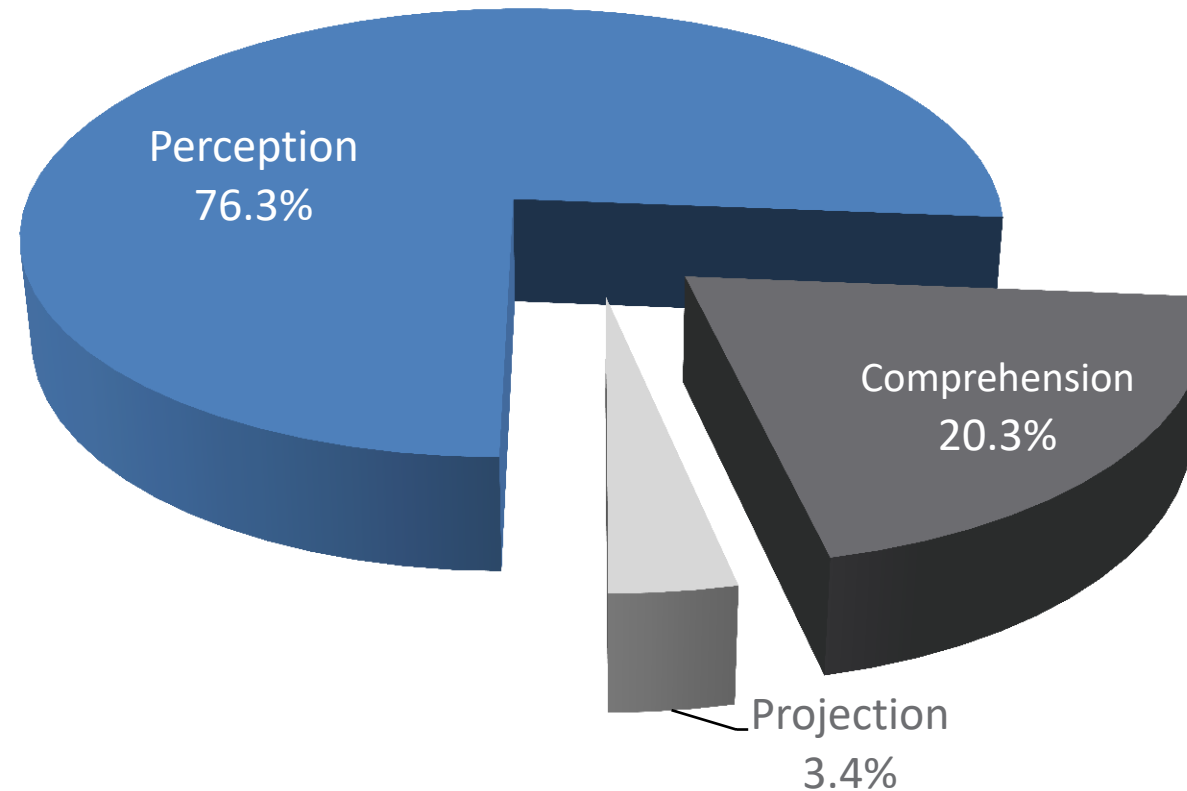
## What is SA?



Situational awareness is the perception of the elements in the environment, the comprehension of their meaning, and the projection of their status in the near future.



## Percentage of SA errors



Loss of situational awareness is identified in approximately 85% of incident reports.  
(Australian Transportation Safety Board)



## Situational awareness activity

- Pay attention to the video
- No talking or comments
- There will be a short quiz on the completion of the video
- There are no tricks
- There are two columns on the quiz page
- Fill in 'Your answer' column
- Please don't guess - this is not a test.



# NSW Ambulance

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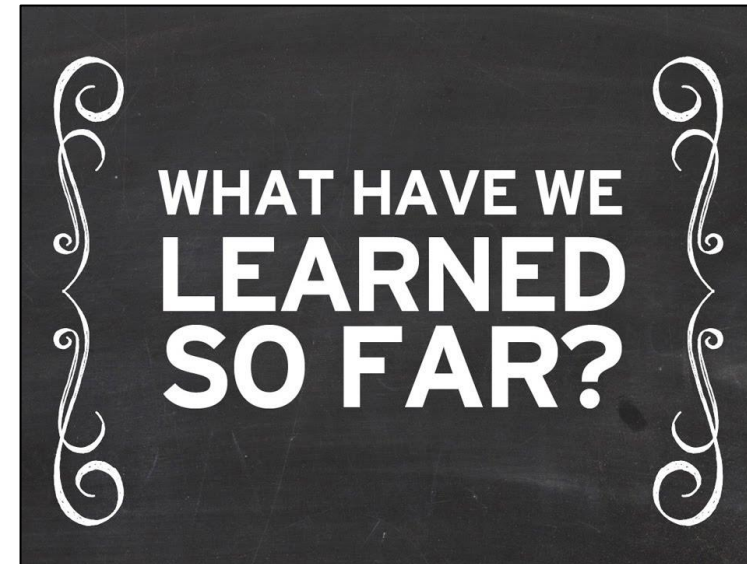


QUESTION		ANSWER
1.	What was the date of the incident?	05/08/13
2.	How many cars do you see respond initially?	Two
3.	What was the name of the TV station reporting the incident?	Euronews
4.	Is the landing gear up or down?	Up
5.	Which wing impacts the ground first?	Left
6.	How many people (passengers, pilots) exit the aircraft?	None
7.	Is there fire, fire and smoke or just smoke at the scene?	Fire and smoke
8.	What colour/s make up the tail portion of the aircraft?	Red, white and blue
9.	How many people wearing safety vests run towards the wreckage?	Four
10	What colour are the safety vests?	Yellow fluoro
11	How many additional people are at the crash site (on the grass near the plane)?	Two.



## Outcomes and lessons

- MASSIVE thank you to VA/Belinda Warner for entertaining a crazy idea!
- Top level 'buy in' is essential
- Challenges of negotiating in a multi-cultural, multi-organisational system
- Limiting number in course build
- Considerable administration required – workload
- Neutral venue
- Chatham House Rules.





## Course feedback

*'Upbeat, lively, lots of interaction, extremely varied'*

*'Thank you all very much – will be able to use lots of what I have learnt with this course'*

*'Much improved over previous CRM'*

*'Great to mix with co-workers we usually don't get to meet'*

*'An education I wish I'd received earlier in my years. Very conducive to further growth as a person and employee'*

*'Relevant to aeromedical'*



## Questions and contacts



Mark Holmes:  
RN, RM, BN (with Distinction), MM PGradCertNurs (Aviation),  
PGradCertNurs (Nurse Education), Flight Nurse Educator

[meholmes@ambulance.nsw.gov.au](mailto:meholmes@ambulance.nsw.gov.au)



Belinda Warner:  
Leader, NTS  
Flight Operations  
Virgin Australia



Jana Ewing:  
NTS Learning Designer  
Flight Operations  
Virgin Australia



John Davison:  
First Officer, A330  
Virgin Australia



Kiralee Tynan:  
Training Advisor  
Flight Operations  
Virgin Australia

[nts.admin@virginaustralia.com](mailto:nts.admin@virginaustralia.com)