Strategic approach to introduce Wingships to the Pacific Region

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Wingship offers a potential low carbon solution.

On the basis of what we have learnt to date, this could be a game changing technology.
1st Korean Blue Green Symposium introduced Wingships to Region.

Korea has sponsored visits to view the prototype in Masan by RMI, Tuvalu and USP. Korea has resourced missions to Fiji, Kiribati, Tuvalu and now RMI.
These are the key benefits claimed for this technology:

- Three times cheaper price and no additional infrastructure
- Three times faster speed: 100+ knots
- Three times less fuel consumption and CO₂ emission

※ Comparison to High Speed Craft (HSC)
Speed & Fuel Consumption

- Lower fuel cost & Faster speed

51 g/p km
180 km/h

143 g/p km
80 km/h

\( g/p\ km \): fuel consumption in gram to transport one passenger for one kilometer

Price per seat

- Lowest price

0.2M USD WINGSHP
0.25M USD HSC
0.67M USD Helicopter
0.74M USD Aircraft

Payload

- Same Engine

- More Capacity
Are Wingships ready for service now?

- Nearly. Korea has built a proto-type that has been certified by Lloyd’s for 500 km range and can operate in 3.5m sea state and 35 knots head wind.

- Wingships are not a solution for all scenarios, all transport routes or all transport needs:
  - Landing and take-off zones in sheltered water are needed

- They are not yet in commercial production or proven in a competitive commercial market.

- Korea is offering a range of financing options, including loans and leases
Sounds too good to be true!
What’s the down side?

Wingship have strong potential as a ‘game changer’ - BUT ....

• They have never been tested under in Pacific islands operating environment:  
  – We are a long way from anywhere if something goes wrong.  
  – We have no experience with this type of technology

• We need to carefully consider:
  – safety  
  – maintenance  
  – training/qualifications  
  – insurance,  
  – legal regulatory/licencing frameworks  
  – operating structures  
    • Government operated?  
    • SOE?  
    • Private operators?  
    • PPP?  
    • One operator for Micronesia? One operator for each country?
What is the path forward?

STEP 1  We need to be able to independently verify the claims made by the manufacturer.
   a. Technical validation – does the technology really do all it says it does?
   b. Economic assessment within a Pacific operating scenario?
   c. Regulatory assessment – what is the rule book Pacific States would need to adopt and abide by

As part of this we need to fully understand:
   • How would we pay?
   • How would we train ship and shore crews?
   • How would we maintain these vessels?
   • How do we ensure full safety compliance?

STEP 2  Proof of Concept trials in a real Pacific Operating Environment
   a. 2 ships + basic support infrastructure
   b. 2 years on selected routes
   c. Expert support and validation

STEP 3  Financing modalities for Regional replication and scaling
   – How can this be best provided?
     • Commercial loan/lease modalities?
     • Carbon financing/GCF modalities ?
     • Bilateral assistance modalities?
Kommoltata

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