

The US recognizes the value of French/Eurocontrol proposed alternatives for Package 1 as a prototype vehicle and supports the evolutionary development of validated SARPs with the first package targeted for ATNP/2 in 1996.

The US does not support Package 1 proposed alternative, as defined, as the basis for an ATN implementation, unless its deficiencies are corrected. These deficiencies are a direct result of the lack of support for QOS. Lack of QOS/Security in IDRP (or in any mobile route distribution scheme) makes separation of AISC and ATSC traffic over ITU restricted (sub)networks impossible to accomplish in all configurations. Specifically, ground routers greater than one hop from the router directly connected to the air/ground subnetwork (denoted air/ground router) have no means of determining which air/ground routers support AISC or ATSC packet transfer. Additionally, the avionics routers and the air/ground routers must have policy modules, yet to be defined, which are consistent in their path choices. Otherwise, the avionics router may choose an air/ground router for a particular traffic type which is not supported by the ground router.

The US also requires that Package 1 not assume full ATN ground connectivity as this is not operationally feasible in the Package 1 time frame. Aircraft cannot assume that contact with a single ground router ensures connectivity with all ATN ground systems.

The US supports the concept of removing IDRP from the air-ground link. The US has identified air-ground bandwidth utilization and avionics cost and complexity as risk areas for successful ATN implementation and operation. Removing IDRP from the air-ground link mitigates these risks in the Package 1 time frame. Removal of IDRP from the air-ground link in Package 1 also removes the concern of IDRP equipped legacy aircraft should IDRP prove untenable as an air-ground solution.

Given the air-ground bandwidth concerns, the US requires that compression be supported by the routers operating over the air-ground link.

Mobility via IDRP (ground network) remains a risk to ATN operational suitability. As documented in ATNP WG2 WP/8, the ATN employs a mobility solution that is unproven and does not follow industry direction for mobile internetworking. The US intends to investigate alternate means of providing mobility in the Package 1 time frame to ensure success of the ATN, in the event that operational requirements cannot be met with IDRP based mobility solutions. The US will provide ICAO with information and specifications for a non-IDRP based mobility scheme, consistent with industry direction, as a risk mitigation exercise.

US software vendors have proposed the notion of a "minimal IDRP" on the aircraft. This potential solution has not been investigated in depth at this time. The US plans to investigate this solution as a mitigation to the risk of avionics complexity and cost.

As part of Package 1 specification, the US recommends that a minimum set of operational requirements for Package 1 be developed. Alternative Package 1 schemes can then be evaluated against these requirements.

The US requires that Package 1 be subject to validation and configuration control as agreed for ATN validation. This validation includes assessments of operational suitability.