BEBS No.5

Candidate Scenario Title: NextGen Minimum Capable Priority (TFM Delay Distribution)

Operational Description	This scenario provides two alternative mechanisms to modify GDP/AFP[1] slot allocation algorithms and change flight priorities in favor of equipped flights: a) **Full Priority,** and b) **Restricted Priority**. a). The Full Priority mechanism first ignores unequipped flights and allocates slots to equipped flights. The rest of the slots are then allocated to unequipped flights. b). Under the Restricted Priority equipped flights still receive priority slots, but unequipped flights are *guaranteed* not to receive ground delays that exceed a predefined threshold beyond the ground delay they otherwise would have received.
Target Operational Time Frame	2013 - TBD
Technology (equipage) Targeted	Could be adapted for any equipage (different restrictions can be applied to different equipage levels
Impact on equipped and capable a/c	Equipped aircraft receive priority slots during the GDP/AFP, thus they experience minimal ground delays.
Impact to non-equipped and not capable a/c	Unequipped and not capable aircraft absorb most of the ground delays. The negative impact (ground delay increase) on unequipped aircraft in total minutes of delay will be equal to the positive impact (ground delay reduction) on equipped aircraft. Note: The difference in average delay will vary with the number of equipped flights.
Impact on NAS efficiency or capacity	BEBS candidate can accelerate the equipage process and thus enable other concepts that improve the overall efficiency of the NAS.

1 When arrival demand is expected to exceed capacity of an airport for an extended period, a GDP is issued. Under a GDP, domestic flights destined for the capacity-constrained airport receive a ground delay. First-come, first-served has been used by the Air Traffic Management System as a de facto standard. When there is a demand and capacity mismatch, the capacity is divided into small units to be allocated to each flight -- called "slots". The slots are allocated to flights based on a Ration-By-Schedule (RBS) algorithm.