NextGEN



The Next Generation Air Transportation System, or NextGen, is a transformative change in the management and operation of how we fly, which will reduce delays, save fuel and lower carbon emissions. This comprehensive initiative integrates new and existing technologies, including satellite navigation and advanced digital communications. Airports and aircraft in the US national airspace system (NAS) will be connected to NextGen's advanced infrastructure and will continually share information in realtime to improve air transportation's safety, speed, efficiency and environmental impacts. The combined initiatives that make up NextGen will provide a better travel experience.

www.faa.gov/nextgen/nnew

NNFW

NEXTGEN NETWORK ENABLED WEATHER

Data sharing is a key NextGen component getting the right information to the right people at the right time. This is especially important when it comes to weather information. About 75 percent of air traffic delays are due to bad weather, which



can also pose a safety risk to aircraft. NextGen Network Enabled Weather (NNEW) will provide same-time access to a unified weather picture. This will enable collaborative and dynamic decision making among all users of the NAS and gives them the ability to proactively plan and execute aviation operations ahead of weather impacts.

NNEW will also integrate better weather information into the air traffic controllers' decision support tools. This will improve the quality of controllers' decisions and greatly reduce their workload during bad weather.

NNEW is a significant FAA contribution to an interagency effort to provide quick, easy and cost-effective access to weather information for all NAS users. It will define and provide the FAA's interface to the National Weather Service's 4-Dimensional Weather Data Cube (4-D Wx Data Cube). A subset of the data published to the 4-D Wx Data Cube will be designated the Single Authoritative Source (SAS). The SAS is a representation of all available weather information and is consistent in time, space and among weather elements, which is necessary for collaborative air traffic management decisions.