

TRL 1

EU Basic principles observed

NASA Basic principles observed and reported

TRL2

EU Technology concept formulated

NASA Technology concept and/or application formulated

TRL 3

EU Experimental proof of concept

NASA Analytical and experimental critical function and/or characteristic proof-of concept

TRL 4

EU Technology validated in lab

NASA Component and/or breadboard validation in laboratory environment

TRL 5

EU Technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)

NASA Component and/or breadboard validation in relevant environment

TRL 6

EU Technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)

NASA System/subsystem model or prototype demonstration in a relevant environment (ground or space)

TRL 7

EU System prototype demonstration in operational environment

NASA System prototype demonstration in a space environment

TRL 8

EU System complete and qualified

NASA Actual system completed and "flight qualified" through test and demonstration (ground or space)

TRL 9

EU Actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)

NASA Actual system "flight proven" through successful mission operations