

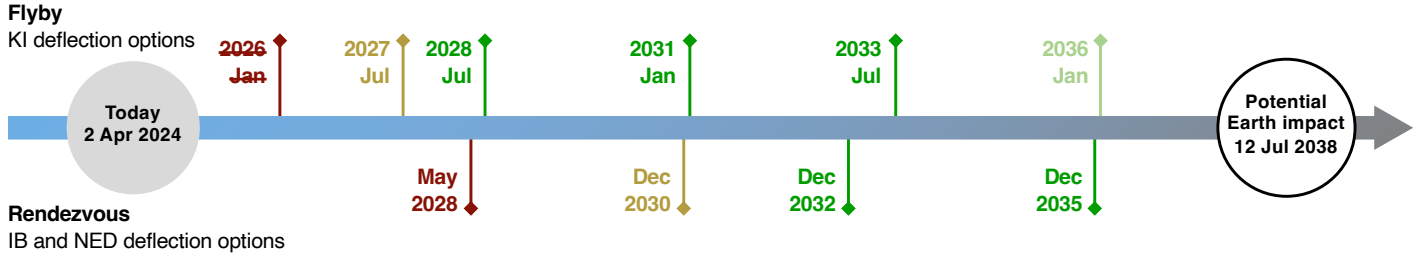
SPACE MISSION OPTIONS

Hypothetical Scenario

PLANETARY DEFENSE
INTERAGENCY
TABLETOP EXERCISE 5



MISSION OPTIONS BY ARRIVAL DATE



RECONNAISSANCE MISSION OPTIONS

FLYBY OPTIONS

Launch Date	Arrival Date	Relative Cost	Launch: Years from April 2024
Aug 2024	Jan 2026	\$\$	0.5
Nov 2025	Jul 2027	\$\$\$	1.5
Sep 2027	Jul 2028	\$	3.5
May 2029	Jan 2031	\$ - \$\$	5
Jul 2032	Jul 2033	\$ - \$\$	8
Aug 2034	Jan 2036	\$	10

RENDEZVOUS OPTIONS

Launch Date	Arrival Date	Relative Cost	Launch: Years from April 2024
Jun 2026	May 2028	\$\$\$\$	2
Jul 2028	Dec 2030	\$\$\$\$	4
Jul 2029	Dec 2032	\$\$\$	5
Jul 2033	Dec 2035	\$\$\$	10

EARTH IMPACT PREVENTION MISSION OPTIONS

Mission	Time Frame			Date of			# of Launches for Deflection					
	Launch	Years from April 2024	Arrival	KI Deflection	NED Deflection	IB Deflection	50th Percentile			90th Percentile		
							KI	NED	IB	KI	NED	IB
IB or NED	Jun 2026	2	May 2028	-	Aug 2028	April 2036	-	1	3	-	1	18
KI	Sep 2027	3.5	Jul 2028	Jul 2028	-	-	1-2	-	-	7	-	-
IB or NED	Jul 2028	4	Dec 2030	-	Feb 2031	April 2036	-	1	4	-	1	>20
KI	May 2029	5	Jan 2031	Jan 2031	-	-	1-2	-	-	8	-	-
IB or NED	Jul 2029	5	Dec 2032	-	Aug 2033	April 2036	-	1	11	-	1	>20
KI	Jul 2032	8	Jul 2033	Jul 2033	-	-	1-2	-	-	7	-	-
NED	Jul 2033	9	Dec 2035	-	Feb 2036	<i>not feasible</i>	-	1	>20	-	1	>20
KI	Aug 2034	10	Jan 2036	Jan 2036	-	-	2	-	-	12	-	-

KI: Kinetic Impactor; IB: Ion Beam; NED: Nuclear Explosive Device

Spacecraft development schedule, assuming development starts immediately:

Red: >2 years faster than standard. Yellow: ~1 year faster than standard. Green: standard schedule is possible.