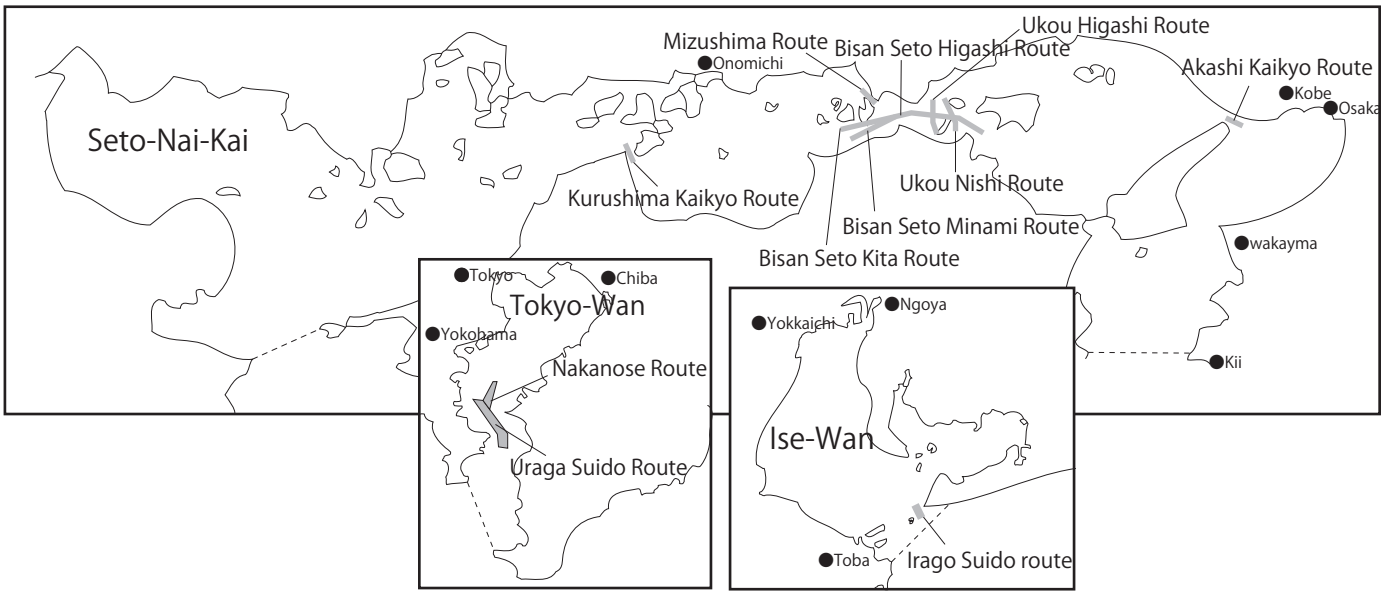
Reference

Traffic route under Maritime Traffic Safety Law



Legally required equipment for small vessels (Smooth water area,except for passenger vessels,fishing vessels,sailing vessels)

Mooring	Two mooring ropes / ※Anchor and anchor rope(or chain)	※It is unnecessary for the vessel which navigates without anchoring.
Life-saving	Life jackets /Life buoy / ※Two red hand flare	※It is unnecessary for the vessel which navigates only through the river.
fire extinguisher	※Two fire extinguishers	※it is unnecessary if a outboard boat is provided with the red bucket.
Drainage	Bilge pump or ※bucket.,bailer	※it is unnecessary if a outboard boat is provided with the bilge pump.
Navigation aid	※1 Steam whistle,Signal bell,Sound signal device ※2 Mast-head light,one pair of sidelights or combination light, stern light,anchor light ※3 Two red light・※4 Three anchoring ball(black ball) ※5 Radar reflecter	※1 Steam whistle is unnecessary for the vessel under 12m. Signal bell is unnecessary for the vessel under 20m. Sound signal device is unnecessary for the vessel has a steam signal. ※2 The vessel under 7m(speed under 7knot) needs one white light, the vessel under 12m need one white light and bi-colored light. they are unnecessary for the vessel which doesn't navigate at night. ※3 It is unnecessary for the vessel under 12m. ※4 A vessel under 12m needs two black ball. ※5 It is unnecessary for the vessel which doesn't navigate at night.
Others	Screw driver / Wrench / Plier・※Plug wrench	※Electric ignition engine

Beaufort wind scale

	Land conditions	Sea conditions	m/s	Knot
0	Calm. Smoke rises vertically.	Flat.	0.0 ～ 0.2	＜1
1	Wind motion visible in smoke.	Ripples without crests.	0.3 ～ 1.5	1 ～ 3
2	Wind felt on exposed skin. Leaves rustle.	Small wavelets. Crests of glassy appearance, not breaking	1.6 ～ 3.3	4 ～ 6
3	Leaves and smaller twigs in constant motion.	Large wavelets. Crests begin to break; scattered whitecaps	3.4 ～ 5.4	7 ～ 10
4	Dust and loose paper raised. Small branches begin to move.	Small waves with breaking crests. Fairly frequent white horses.	5.5 ～ 7.9	11 ～ 16
5	Branches of a moderate size move. Small trees begin to sway.	Moderate waves of some length. Many white horses. Small amounts of spray.	8.0 ～ 10.7	17 ～ 21
6	Large branches in motion. Whistling heard in overhead wires. Umbrella use becomes difficult. Empty plastic garbage cans tip over.	Long waves begin to form. White foam crests are very frequent. Some airborne spray is present.	10.8 ～ 13.8	22 ～ 27
7	Whole trees in motion. Effort needed to walk against the wind. Swaying of skyscrapers may be felt, especially by people on upper floors.	Sea heaps up. Some foam from breaking waves is blown into streaks along wind direction. Moderate amounts of airborne spray	13.9 ～ 17.1	28 ～ 33
8	Some twigs broken from trees. Cars veer on road. Progress on foot is seriously impeded.	Moderately high waves with breaking crests forming spindrift. Well-marked streaks of foam are blown along wind direction. Considerable airborne spray.	17.2 ～ 20.7	34 ～ 40
9	Some branches break off trees, and some small trees blow over. Construction/temporary signs and barricades blow over. Damage to circus tents and canopies.	High waves whose crests sometimes roll over. Dense foam is blown along wind direction. Large amounts of airborne spray may begin to reduce visibility.	20.8 ～ 24.4	41 ～ 47
10	Trees are broken off or uprooted, saplings bent and deformed. Poorly attached asphalt shingles and shingles in poor condition peel off roofs.	Very high waves with overhanging crests. Large patches of foam from wave crests give the sea a white appearance. Considerable tumbling of waves with heavy impact. Large amounts of airborne spray reduce visibility.	24.5 ～ 28.4	48 ～ 55
11	Widespread damage to vegetation. Many roofing surfaces are damaged; asphalt tiles that have curled up and/ or fractured due to age may break away completely.	Exceptionally high waves. Very large patches of foam, driven before the wind,cover much of the sea surface. Very large amounts of airborne spray severely reduce visibility.	28.5 ～ 32.6	56 ～ 63
12	Very widespread damage to vegetation. Some windows may break; mobile homes and poorly constructed sheds and barns are damaged. Debris may be hurled about.	Huge waves. Sea is completely white with foam and spray. Air is filled with driving spray, greatly reducing visibility.	32.7 ～	64 ～