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INTERNATIONAL PORT TRAFFIC SIGNALS

Taking into account that internationally standardized port traffic signals would be of great assistance to seafarers and enhance maritime safety, the Maritime Safety Committee at its fiftieth session approved the attached recommendations on international port traffic signals prepared by the Sub-Committee on Safety of Navigation (NAV 29/11, annex 5) for circulation to Member Governments.

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ANNEX 5

# IALA/IAPH/PIANC RECOMMENDATIONS FOR PORT TRAFFIC SIGNALS

## INTRODUCTION

The only current international agreement on unification of Port Signals is the Lisbon Agreement of October 1930, drawn up under the auspices of the League of Nations. It was signed by 14 countries but finally ratified by very few of them.

This agreement provides only very basic day and night signals, using lights and day shapes to the standard of the technology of the time.

In the view of Lighthouse and Port Authorities, the basic Lisbon signals did not meet the needs of modern shipping, using complex port entrances, sometimes with heavy traffic. Thus, the Authorities concerned designed signals of their own, sometimes based on the Lisbon signals and sometimes not. This has led to a large variety of signals in use requiring the mariner to refer to many reference books to comprehend even the simplest signals.

Therefore, the 3 international organizations which have responsibility in the field of Port Signals namely:

1. International Association of Lighthouse Authorities (IALA);
2. International Association of Ports and Harbors (IAPH);
3. Permanent International Association of Navigation Congresses (PIANC);

jointly decided that the whole question of Port Signals should be reviewed.

Thus, in 1974, they set up a technical committee with representatives from all 3 organizations drawn from 17 countries to study not only Port Signals, but also Tidal and Gale Warning Signals which were also dealt with in the Lisbon Agreement.

The Committee, assisted by a working group, completed its task in September 1981, and agreed a set of Port Traffic Signals which were felt to be suitable to meet modern requirements and simple to memorize.

With regard to the revision of Gale Warning Signals, it was considered that this was within the province of the World Meteorological Organization (WMO) and this organization has been asked to avoid in future the use of signals which may be confused with Port Traffic Signals.

It was also decided that in the light of available modern technology, it was unnecessary to lay down a uniform set of rules for tidal signals. The signals provided in the Lisbon Agreement have largely been superseded by signals with alpha-numeric displays or other direct means of indicating water depth.

The proposals of the Committee were endorsed by the 3 sponsoring organizations and are recommended for use by their members.

## THE PRINCIPLES OF THE SYSTEM OF PORT TRAFFIC SIGNALS

It is intended that the rules for Port Traffic Signals shall be followed to control traffic movements in ports and port approaches. However, where no other conflicting rules exist, the appropriate authority may also use them to control traffic in other situations: for instance at locks or movable bridges. In view of the availability of modern technology, only lights are used.

The basis of the system is that there are:

- Main messages, which should be displayed through simple signals easy for the mariner to commit to memory.
- Additional information, for instance for ports with a complex layout, or complicated traffic situation, which can be displayed through the use of auxiliary signals exhibited together with the main ones, the comprehension of which would need the use of nautical documents.

It may be that in some ports only one or two of the main messages and signals will suffice, for example "Vessels shall not proceed", "Vessels may proceed, two way traffic". There may also be cases where the only message needed is "serious emergency".

At ports where signals are used, every vessel must be able to follow a clear and explicit instruction. This means that a signal of some kind must always be displayed. However, in the case of a port where only the "serious emergency" signal is used, there is no need to display any signal in normal circumstances.

In many situations, messages will not be the same in every direction and the signals will be directional. Some signals, however, may be "all round" when intended for all vessels simultaneously. This can be true for signals 1, 2 and 4.

The "serious emergency" signal must be flashing. All other signals may be fixed, or slow occulting. Slow occulting will be particularly useful when

background flare is a problem. However, in a given location, a mixture of fixed and occulting lights must not be used.

The main message always comprises 3 lights vertically disposed. This enables the mariner immediately to recognise it as being a Port Traffic Signal and not an aid to navigation. The vertical disposition of the lights in the Main Message was chosen, as horizontal disposition of lights can lead to problems of parallax when viewed from extreme angles.

In some cases, each vessel of special group of vessels must receive specific instructions to proceed and all other vessels must not proceed. In such cases, Signal 5 is to be used. The specific instructions to the relevant vessel or vessels may be given either by an Auxiliary Signal or by some other means of communication such as VHF radio, signal lamp or patrol boat.

An exemption message has been devised to accompany signals Nos. 2 and 5 to permit vessels navigating outside the main channel to disregard the main message.

Auxiliary messages may be necessary to give information additional to that of the Main Message. The relevant signal is added as required, normally to the right of the column carrying the Main Message and normally utilising only white or yellow lights.

In places where both white and yellow lights are displayed as auxiliary signals, great care must be exercised as in certain conditions of visibility it is very difficult for the observer to decide whether a light is white or yellow when the other colour is not displayed simultaneously.

Although auxiliary signals normally use yellow or white lights, in exceptional cases, red or green lights may also be used for this purpose. However, this may adversely affect the identification of the main signal. Furthermore, as red means "do not proceed" and green means "proceed", confusion might ensue if these two colours are displayed together.

The above considerations led to formulation of five rules and the development of the signals and messages as illustrated.

## RULES FOR PORT TRAFFIC SIGNALS

1. The Main Movement message given by a Port Traffic Signal shall always comprise 3 lights vertically disposed. No additional light shall be added to the column carrying the main message.

2. Red lights indicate "Do not Proceed".

3. Green lights indicate "Proceed, subject to the conditions stipulated".

4. A single yellow light displayed to the left of the column carrying main messages Nos. 2 or 5, at the level of the upper light, may be used to indicate that "Vessels which can safely navigate outside the main channel need not comply with the main message".

5. Signals auxiliary to the main signal may be devised by the appropriate Local Authority. Such auxiliary signals should employ only white and/or yellow lights and should be displayed to the right of the column carrying the main message.