



TRAFICOM

Liikenne- ja viestintävirasto

Merenkulun automaation tiedonvaihdon työpaja

10.12.2019
Dynamicum

IMO ajankohtaista

To facilitate the regulatory scoping exercise:

The degrees of autonomy are:

Degree one: *Ship with automated processes and decision*

support: Seafarers are on board to operate and control shipboard systems and functions. Some operations may be automated and at times be unsupervised but with seafarers on board ready to take control.

Degree two: *Remotely controlled ship with seafarers on board:*

The ship is controlled and operated from another location. Seafarers are available on board to take control and to operate the shipboard systems and functions.

Degree three: *Remotely controlled ship without seafarers on*

board: The ship is controlled and operated from another location. There are no seafarers on board.

Degree four: Fully autonomous ship: The operating system of the ship is able to make decisions and determine actions by itself.

FIRST STEP:

Identify provisions in IMO instruments which:

.A apply to MASS and **prevent MASS** operations; or

.B apply to MASS and do not prevent MASS operations and **require no actions**; or

.C apply to MASS and do not prevent MASS operations but may need to be **amended or clarified**, and/or may contain gaps; or

.D **have no application** to MASS operations.

SECOND STEP:

The most appropriate way of addressing MASS:

.I **equivalences** as provided for by the instruments or developing **interpretations**; and/or

.II **amending** existing instruments; and/or

.III developing **new instruments**; or

.IV **none of the above** as a result of the analysis.

IMO ajankohtaista

Nämä automaatiotasot

**EIVÄT OLE TEKNISIÄ
MÄÄRITELMIÄ**

Vaan kriteerejä säännöstön arvioinnille

IMO ajankohtaista

- ▶ .1 the use of the terms "***shipboard systems and functions***" would not only encompass navigation and engine control, but also other operations including cargo handling and control, emergency situations, and others;
- ▶ .2 the use of the term "***seafarers***" should be understood as persons competent to perform the designated duties and responsibilities on board the ship; and
- ▶ .3 the issue of having ***other persons*** on board (e.g. passengers, other personnel, etc.) should be taken into consideration during the second step (analysis).

AUTOMAATIO IMO:ssa

MASS RSE menossa MSC, FAL ja LEG

NCSR alakomitean työohjelmassa

- ▶ 7 Revision of the Guidelines for **vessel traffic services** (resolution A.857(20))
- ▶ 8 Consideration of descriptions of **Maritime Services** in the context of **e-navigation** (2.11)
- ▶ 9 Updating of the GMDSS master plan and guidelines on **Maritime Safety Information (MSI)** (OW 6)

FAL Komitean työohjelmassa

- ▶ 5 Application of **single window** concept
- ▶ 6 Review and revision of the IMO Compendium on Facilitation and **Electronic Business**, including additional **e-business solutions**
- ▶ 7 Developing guidance for authentication, integrity and confidentiality of content for the purpose of **exchange via maritime single window**
- ▶ 8 Consideration of descriptions of **Maritime Services** in the context of **e-navigation**

IMO ajankohtaista

▶ Suomi tuottanut arviot:

▶ Oikeudellinen komitea (LEG):

▶ SALVAGE

▶ Meriliikenteen helpottaminen (FAL):

▶ FAL Yleissopimus

▶ Meriturvallisuuskomitea (MSC):

▶ SOLAS SOLAS yleissopimuksen luvut

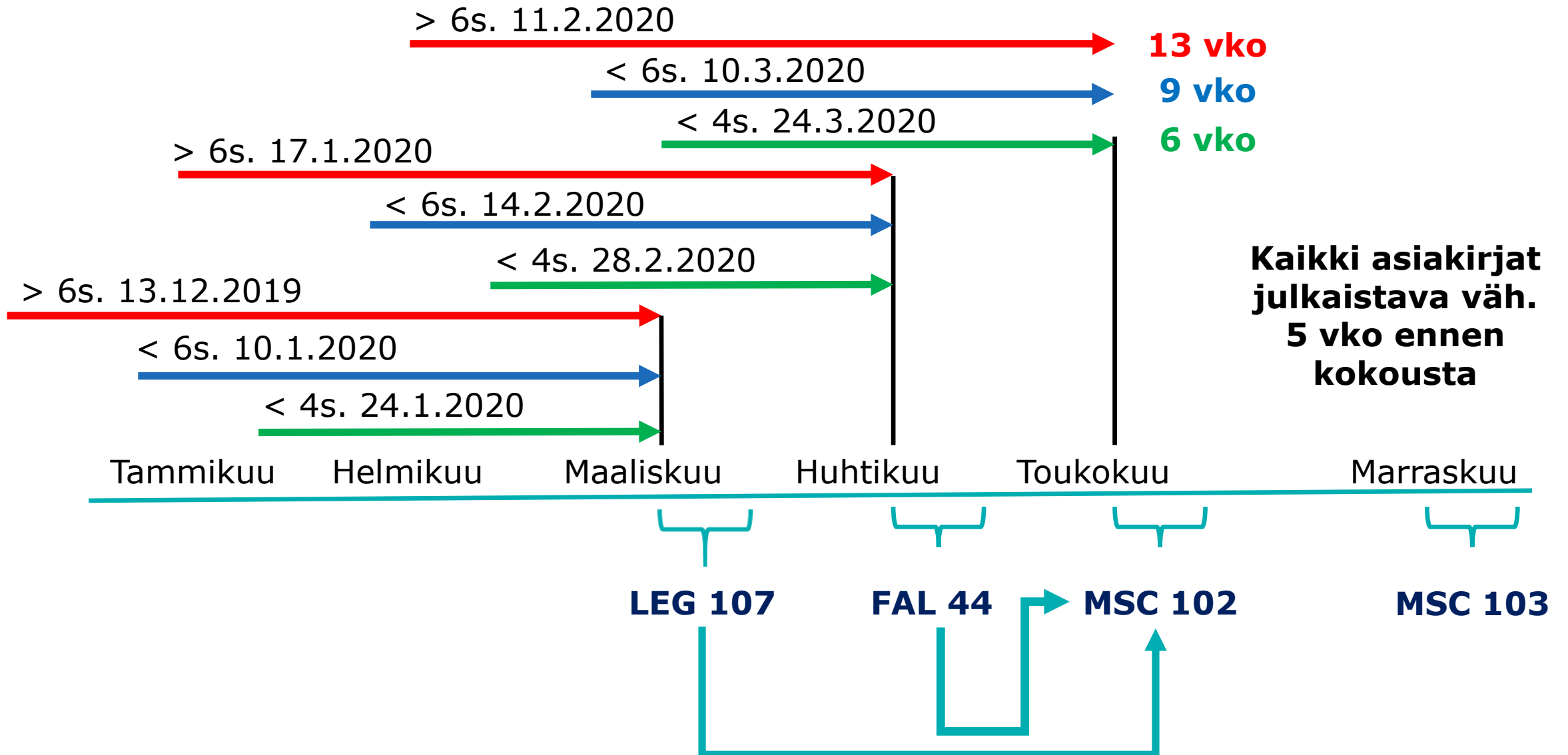
▶ XI-1 (special measures to enhance maritime safety),

▶ XI-2 (special measures to enhance maritime security) ja

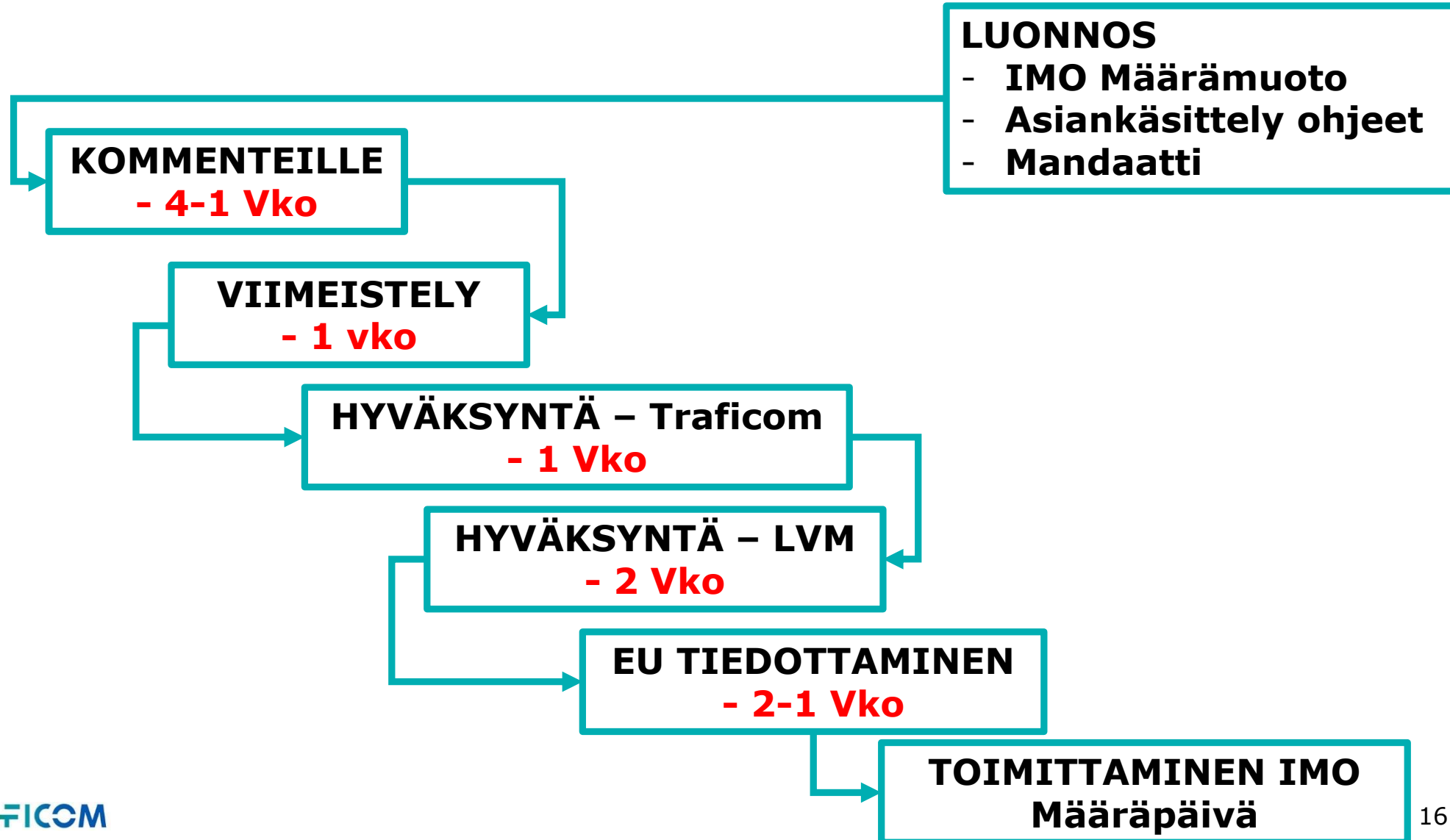
▶ XIV (safety measures for ships operating in polar waters) näihin liittyvine säännöstoineen

- ▶ (Code for Recognized Organizations, Casualty Investigation Code, Code on Enhanced Programme of Inspections during the Surveys of Bulk Carriers, International Ship and Port Facility Security Code, International Code for Ships Operating in Polar Waters)

IMO aikataulu



IMO Prosessi Suomen esitykselle



Kiitos

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