



**NOTA MAKLUMAT DAN PANDUAN MERIN**  
**MARINE INFORMATION AND GUIDANCE NOTE**

**NMPM 21/2000**

**JABATAN LAUT SEMENANJUNG MALAYSIA**

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**PENGURUSAN SUMBER ANJUNGAN**  
***BRIDGE RESOURCE MANAGEMENT***

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**Nota kepada Pemilik Kapal, syarikat, Nakhoda, Pegawai Dek dan Pelaut**

*Note to ship Owners, companies, Masters, Deck Officers and Seamen*

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Syarikat dikehendaki untuk mengeluarkan garis panduan bagi prosedur anjungan, dan mengutamakan kegunaan senarai semak bersesuaian pada kapal dengan mengambil kira panduan negara dan antarabangsa<sup>1</sup>.

2. Syarikat dikehendaki untuk menggariskan panduan kepada nakhoda dan pegawai awasan di atas setiap kapal berkaitan perlunya mengkaji bagaimana awasan sumber anjungan dibentuk dan digunakan, berdasarkan kepada pengurusan sumber anjungan seperti berikut:

i. mempunyai jumlah individu yang berkemampuan untuk memastikan kesemua tugas dijalankan dengan berkesan;

ii. kesemua ahli awasan berkecualan dan sihat menjalankan tugas mereka secara cekap dan efektif. Pegawai awasan hendaklah mengambil-kira faktor-faktor ini sekiranya ahli awasan mempunyai pembatasan dalam kecekapan atau kesihatan mereka dalam menjalankan tugas navigasi atau membuat keputusan operasi;

iii. tugas-tugas hendaklah diberikan kepada individu secara terang tanpa apa-apa kekeliruan dan individu yang diberikan tugas hendaklah menfahamkan bahawa mereka memahami tanggungjawabnya;

*Companies are required to issue guidelines on proper bridge procedures, and promote the use of check-lists appropriate to each ship taking into account national and international guidance<sup>1</sup>.*

2. *Companies are required to issue guidance to masters and officers in charge of the navigational watch on each ship concerning the need for continuous reassessment of how bridge-watch resources are being allocated and used, based on bridge resource management principles as follows:*

*i A sufficient number of qualified individuals should be on watch to ensure all duties can be performed effectively;*

*ii all members of the watch should be appropriately qualified and fit to perform duties efficiently and effectively or the officer in charge of the watch should take into account any limitation in fitness or qualifications of the available individuals in making navigational and operational decisions;*

*iii duties should be clearly and unambiguously assigned to specific individuals, who should confirm that they understand their responsibilities;*

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<sup>1</sup> Refer to the current edition of the ICS Bridge Procedures Guide

iv. tugas-tugas hendaklah dijalankan mengikut kepentingan dan keutamaan yang jelas;

v. tiada seseorang ahli awasan diberi tugas-tugas yang sukar atau melebihi had keupayaan individu tersebut menjalankan tugasnya dengan berkesan;

vi. individu hendaklah diperuntukkan kelokasi dimana mereka boleh menjalankan tugas mereka dengan cekap dan berkesan, dan sekiranya keadaan memerlukan, individu hendaklah diperuntukkan semula ke lokasi lain;

vii. pegawai awasan hendaklah memastikan bahawa penukaran tugas atau lokasi ahli-ahli awasan tidak akan menurunkan tahap menjalankan tugas mereka secara cekap dan berkesan;

viii. perkakasan dan kelengkapan untuk menjalankan tugas secara berkesan hendaklah sentiasa tersedia untuk ahli-ahli awasan yang berkenaan;

ix. komunikasi diantara ahli-ahli awasan hendaklah jelas, serta-merta, dipercayai dan berkaitan dengan tugas pada masa itu;

x. aktiviti tidak perlu atau yang boleh menimbulkan gangguan hendaklah dielakkan, ditindas atau dialihkan;

xi. kesemua peralatan anjungan hendaklah beroperasi dengan baik dan sekiranya tidak, pegawai awasan hendaklah mengambil kira keadaan peralatan yang tidak berfungsi dalam proses pembuatan keputusan operasi;

xii. kesemua maklumat yang perlu hendaklah dikumpul, diproses, diterjemahkan dan dipermudahkan untuk ahli awasan yang memerlukan maklumat berkenaan dalam menjalankan tugas mereka;

xiii. peralatan yang tidak perlu tidak sepatutnya diletakkan di anjungan atau tempat kerja; dan

*iv tasks should be performed according to a clear order of priority;*

*v no member of the watch should be assigned difficult tasks or additional duties beyond his capacity to perform such tasks or duties effectively;*

*vi individuals should be assigned at all times to locations at which they can most efficiently and effectively perform their duties, and individuals should be reassigned to other locations as circumstances may require;*

*vii members of the watch should not be assigned to different duties, tasks or locations until the officer in charge of the watch is certain that the adjustment can be accomplished efficiently and effectively;*

*viii instruments and equipment considered necessary for effective performance of duties should be readily available to appropriate members in charge of the watch;*

*ix communications among members of the watch should be clear, immediate, reliable and relevant to the business at hand;*

*x non-essential activity and distractions should be avoided, suppressed or removed;*

*xi all bridge equipment should be operating properly and if not, the officer in charge of the watch should take into account any malfunction which may exist in making operational decisions;*

*xii all essential information should be collected, processed, interpreted and made conveniently available to those who require it for the performance of their duties;*

*xiii non-essential materials should not be placed on the bridge or any work surface; and*

xiv. ahli-ahli awasan hendaklah senantiasa bersedia untuk bertindak-balas dengan lancar dan berkesan sejajar dengan perubahan perubahan keadaan.

*xiv members of the watch should at all times be prepared to respond efficiently and effectively to changes in circumstances*

Ketua Pengarah Laut / *Director General of Marine*  
Tarikh: 27hb April 2000