Bow Doors and Inner Doors - Retrospective Application of UR-S8, as amended 1995, to existing Ro-Ro Passenger Ships

1. The structural condition of bow doors and inner doors, especially the primary structure, the securing and supporting arrangements and the hull structure alongside and above the doors, are to be specially examined and any defects rectified.

2. The requirements of S8.8 concerning operating procedures of the bow door and inner door are to be complied with.

3. The following measures are to be complied with by all existing ro-ro passenger ships with the date of building before the 30th June 1996, including, when not differently deliberated by the competent flag Administrations, ships only engaged on domestic sea voyages.

   a) The location and arrangement of inner doors are to comply with the applicable requirements of the SOLAS Convention and with S8.1.2d.

   b) Ships with visor door are to comply with S8.6.2g requiring redundant provision of securing devices preventing the upward opening of the bow door. In addition, where the visor door is not self closing under external loads (i.e. the closing moment $M_y$ calculated in accordance with S8.3.1c is less than zero) then the opening moment $M_o$ is not to be taken less than $-M_y$. If drainage arrangements in the space between the inner and bow doors are not fitted, the value of $M_o$ is to be specially considered.

   Where available space above the tanktop does not enable the full application of S.8.6.2g, equivalent measures are to be taken to ensure that the door has positive means for being kept closed during seagoing operation.

   c) Ships with visor door are to comply with S8.6.2h requiring securing and supporting devices excluding hinges to be capable of bearing the vertical design force ($F_z - 10W$) without exceeding the permissible stresses given in S8.2.1a.

   d) For side-opening doors, the structural arrangements for supporting vertical loads, including securing devices, supporting devices and, where applicable, hull structure above the door, are to be re-assessed in accordance with the applicable requirements of S8.6 and modified accordingly.

   e) The securing and locking arrangements for bow doors and inner doors which may lead to the flooding of a special category space or ro-ro space as defined in the S8.1.3 are to comply with the following requirements:

      - Separate indicator lights and audible alarms are to be provided on the navigation bridge and on each panel to indicate that the doors are closed and that their securing and locking devices are properly positioned.

      - The indication panel is to be provided with a lamp test function. It is not to be possible to turn off the indicator light.

      - The indication panel on the navigation bridge is to be equipped with a mode selection function “harbour/sea voyage”, so arranged that audible alarm is given if the vessel leaves harbour with the bow doors or inner doors not closed or with any of the securing devices not in the correct position.

      - A water leakage detection system with audible alarm and television surveillance are to be arranged to provide an indication to the navigation bridge and to the engine control station of any leakage through the doors.